

Second Stage PUD for Southwest Waterfront - 7th Street Recreation Pier (Z.C. Case No. 11-03E)

ZONING COMMISSION COMMENTS

	COMMENT	ACTION
1.	The Commission requested additional architectural drawings and renderings of the proposed 7 th Street Recreation Pier. The drawings should show greater technical detail on the design of the pier, and additional renderings should be provided from different vantage points that already submitted. The Commission would also like to receive a rendering that shows an overall view of the pier in relation to other buildings and the surroundings (“birds eye view”)	As part of this prehearing statement, the Applicant has provided additional design detail on a the 7 th Street Recreation Pier, including additional detail on the proposed fire feature at the pier terminus and the floating wetlands, and additional renderings from several different vantage points, including one showing an overall view of the pier and its relationship to the surrounding context. This additional information is attached as <u>Exhibit B</u> .
2.	Information was requested on the proposed engineered wood material, Kebony, that will be used to construct the pier and other elements of the proposed project.	The Kebony material proposed for the 7 th Street Recreation Pier is not an engineered material, rather, it is a natural wood material that is treated with a bio-based liquid that permanently modifies the cellular structure of the wood, resulting in a highly-durable material that offers many of the same aesthetic and performance characteristics of premium tropical hardwoods without causing the same environmental impacts to produce. Kebony decking is being used in a number of other pier and public space applications elsewhere in Phase 1 of the Southwest Waterfront redevelopment project. Additional information from the manufacturer regarding the Kebony process and material characteristics is attached as <u>Exhibit C</u> .
3.	The Commission requested additional information on the design and maintenance of the proposed floating wetlands, including details	The Applicant has hired Biohabitats, Inc, one of the nation’s leading environmental and conservation designers, to design the proposed floating wetland system. This expertise will result in a floating wetland system that is planted and designed to be aesthetically beautiful, provide a plant palette that

	on flood protection and how they are anchored to the bottom of the Washington Channel.	attracts a wide range of bird species, and ensures the longevity and success of the installation. The plant palette has been designed to include native sedges and rushes around the outer edge of the floating wetlands which frame and protect the more desirable flowering species on the interior of the floating wetlands. Species to be expected in the wetlands include great blue heron, red-winged blackbirds, mallards, and egrets. The wetlands will also serve as a physical refuge for small fish that feed on the decaying plant material. A variety of fish species and turtles are likely to populate the wetlands, including perch, striped bass, largemouth bass, and herring. As shown on the detail provided in Exhibit B, Sheet 2.33, the floating wetlands will be anchored from the underside of the structural frame using an elastic mooring system secured to the channel bottom with helical-type or similar anchors. The elastic mooring unit is connected to a galvanized steel cable that limits the lateral movement of the floating wetland during normal wind conditions and tidal fluctuations. The elastic unit also stretches during changes in water elevation. The quantity and size of the anchor components will be based on the anticipated forces on the wetlands during flood conditions. The length of the mooring cable will be designed to accommodate normal tidal fluctuations as well as accommodate potential flood conditions.
4.	The Commission requested additional information regarding the design and operation of the fire feature proposed at the terminus of the pier, including the frequency with which it would be operational.	The proposed fire feature at the terminus of the 7th Street Recreational Pier will be composed of a stainless steel sculptural screen composed of several rods of varying length that are arranged and welded together in a manner that is evocative of an actual bonfire. The fire feature will have an approximate diameter of 86-inches, an approximate height of 120-inches, and will be surrounded by an approximate 18-inch seat wall. The fire feature is intended to operate year-round from dusk into the evening to create a special and inviting gathering place for the public at night. The burner element will be protected within the stainless steel screen structure. The burner is supplied with natural gas and electricity from below the pier, and is equipped with a fail-safe circuit to ensure gas does not leak or

	create a health hazard in periods of high wind. Should the pilot flame be blown out, the fail-safe circuit will automatically close the natural gas supply valve. The fire feature has been designed to prevent accidental contact with the fire. Set atop a plinth of cast stone, the fire feature is raised approximately 18-inches above the surface of the pier to create a first level of separation between the public and the fire. Furthermore, the flame is shielded within the protective stainless steel screen structure that wraps the entire burner element and establishes a 24-inch buffer between the face of the screen and the burner. The designed buffer ensures people are unable to reach the flames accidentally or intentionally. With respect to operation, the controls for the fire feature will be located either on or next to a nearby light pole, and within 10 – 15 feet of the fire feature, as required by design specifications. As currently designed, ignition and extinguishment of the fire feature will be accomplished using an electrical ignition switch that will require key access to prevent unauthorized access, usage, and/or tampering. Extinguishment of the fire feature will also be possible using an emergency shut off valve located in plain view of the fire feature, at the pilot burner valve within the stainless steel structure, and landside at the point of connection in the adjacent garage. Additional details pertaining to the design and operation of the fire feature, including lighting and extinguishing protocols and safety features, are provided on <u>Exhibit B, Sheets 2.36 and 2.37</u>. The fire feature is being designed and engineered by Fire Features, a subsidiary of Colombo Construction Corporation based in Brooklyn, New York. Fire Features is the premier sculptural fire design company in the world, with installations in both public and private locations such as The Barnes Museum in Philadelphia, the Steel Stacks in Bethlehem, Pennsylvania, and the recently renovated Washington Hilton in Washington, DC.
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5.	Information was requested on whether additional approvals are required from the U.S. Army Corps of Engineers (USACE) in order to construct the pier.	Pursuant to Permit No. 2011-00766, dated July 31, 2012, as modified on February 27, 2015, the Applicant has obtained the necessary permits from the USACE to construct the 7 th Street Recreation Pier, as designed.
6.	The Commission requested the Applicant to submit additional details on safety and accessibility relative to the areas of the pier that are sloped or have steps, and information regarding safety along the unprotected southern edge of the pier where no guardrail is proposed.	As shown in the supplemental architectural drawings and plans provided in <u>Exhibit B</u> of this prehearing statement, the cove-like shape of the 7th Street Recreational Pier's lower southeastern edge has been designed to facilitate engagement with the water. Instead of providing a continuous guardrail, the proposed design includes a series of benches to visually mark the edge of the pier, while still allowing people to directly access and occupy the pier edge. The bench design has been specifically adapted to the edge condition by incorporating a sloped face oriented toward the water. As a result, the bench geometry also functions as a backrest for visitors that choose to sit on the deck surface and recline against the benches. Finally, regarding the areas of the pier where transitions to higher and lower elevations are accomplished through sloping of the pier surface, these areas will be protected, where necessary, by a railing out at the pier terminus, or belvedere, or a raised curb that is composed of the same Kebony material as the pier surface that will serve as an edge restraint and clearly identify the cross-sloping portions of the pier. Stepped areas of the pier will be detailed to provide visual and tactile queues of their presence.
7.	The Commission requested information regarding flood protection of the proposed 7 th Street Recreation Pier.	The 7 th Street Recreation Pier is designed to accommodate hydrodynamic forces associated with flooding up to the Base Flood Elevation (i.e. 100 year flood). These include impact forces associated with waves and drag forces associated with currents. The top elevation of the pier varies from EL +12.2 at the bulkhead, down to EL +6.0 at the saddle near the center of the pier, and finally up to EL +13.5 at the pier terminus, or Belvedere. The current Base Flood Elevation is at EL +11.3, and the highest observed water level at the PUD site since 1932 being EL +9.75 (October 17, 1942). These elevations are based upon DC Department of Public Works Datum (DCDPW).

		The pier is also designed to accommodate wind, ice and seismic loading. The floating dock is anchored to a series of guide piles designed to accommodate extreme lateral loads and are tall enough to accommodate the Base Flood Elevation combined with the maximum associated wave height. The mechanical and electrical components located below the Base Flood Elevation are designed to industry standards to prevent unsafe conditions if submerged and to require minimal, if any, repair in the event of an extreme flood.
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OFFICE OF PLANNING COMMENTS

	COMMENT	ACTION
1.	The Applicant should provide more information on its discussions with the residents and other interested parties at the Gangplank Marina, specifically as it relates to the dock and pier transition plan.	The Applicant has had several meetings with the leadership, committees, and the full membership of the Gangplank Slipholders Association (GPSA) on the proposal for the 7th Street Recreation Pier. These meetings have included discussions on the design of the pier itself, as well as on the updated dock and pier transition plan that was submitted as part of the Applicant's initial statement submitted on November 20, 2015. On February 6, 2016, GPSA President, Kathy Heet, submitted a letter in support of the application (Case Record, Exhibit 11). The Applicant is continuing to meet with GPSA and will provide an updated transition plan as part of the 20-day supplemental prehearing submission.