RESPONSE TO AGENCY COMMENTS

HARBOR POINT PHASE 3 DETAILED DEVELOPMENT PLAN HARBOR POINT – PARCEL 4 MIXED USE BALTIMORE WORKS SITE, BALTIMORE, MARYLAND JANUARY 12, 2022

The Detailed Development Plan (DDP) was prepared November 1, 2021.

Comments were issued by the Maryland Department of the Environment (MDE), dated December 13, 2021. Comments were issued by the United States Environmental Protection Agency (USEPA), dated December 21, 2021. The collective Agency comments are presented below. Each comment is followed by the response from Harbor Point Development LLC (HPD). This Response to Comments accompanies a revised DDP.

MDE COMMENTS AND RESPONSES

I. MDE General Comments

- A. Listing of Contents of the DDP: There are many documents that make up the DDP, and the list of appendices at the end of the Narrative is not complete nor accurate: for example, it lists all of the control documents as Appendix B, but the first page of the Drawings describes them as Appendix C. The Narrative should contain a table listing each document that supports the DDP, with a list of its appendices provided in the order in which they appear, to help reviewers and users of the documents be able to find and refer to specific documents in a more organized manner.
 - HPD Response: HPD has double-checked the documents; the Table of Contents and appendices appear to be accurate and in the correct order. The Environmental Control Plans are contained in Appendix B. All of the drawings are contained in Appendix C. Confusion may be arising because the EN-series drawings depict "environmental controls", which is similar to but not the same as the "Environmental Control Plans" contained in Appendix B. This is consistent with all previously approved DDPs for Harbor Point.
- B. Data Access: As noted in the DDP, MDE and the United States Environmental Protection Agency (USEPA) must be granted access to the real-time air monitoring data network and the construction webcam when they become available.
 - > HPD Response: Acknowledged.
- C. USEPA Comments: Any comments by the USEPA must also be addressed satisfactorily.
 - > HPD Response: Acknowledged.

- D. Post-Construction Land Use Controls: As noted in MDE's comment on the Conceptual Development Plan, an environmental covenant specifying land use controls will be issued following implementation of the DDP. In addition to those land use controls previously mentioned, MDE will include a requirement for the potential conversion of either the rental apartments or hotel rooms into residential condominium units. Specifically, the restriction will include:
 - 1. Conversion to Residential Condominium Ownership on Upper Floors: Prior to conversion of rental apartment units on upper floors to residential condominium ownership, the Property owner, or designated agent, shall either:

(a) Cause an Environmental Consultant to submit a written work plan for review and approval for the collection of confirmatory soil samples and/or additional vapor samples to the Department via email to mde.landrestoration@maryland.gov, at least six (6) months prior to any planned conversion to residential condominium ownership. The soil and/or vapor samples must demonstrate that contaminants do not exceed the Department's established residential cleanup standards such that remedies and land use controls are no longer necessary; or

(b) Provide the Department the following: (1) certification that a single entity will be responsible for operation, maintenance, and anticipated repairs of *the caps (including buildings slabs)* as required in the land use controls set forth in Paragraphs of this Environmental Covenant, which shall include the entity name, mailing address, and a contact person; (2) certification that notification and access requirements for tenants will apply to unit owners; and (3) documentation that the entity shall maintain a financial assurance mechanism acceptable to the Department in an amount sufficient to cover a rolling period of thirty (30) years of operation, maintenance, and anticipated repairs of *(list all remedies)* as required in the land use controls set forth in Paragraphs of this Environmental Covenant.

2. Future Redevelopment – Fee Simple Residential Dwellings: The Property shall not be used for fee simple residential dwellings, including freestanding homes, duplexes, townhouses, and condominium dwellings on the ground floor. This restriction may be removed if the current or future Property owner, or designated agent causes an Environmental Consultant to submit a written work plan for review and approval by the Department for the collection of confirmatory soil samples and/or additional vapor samples to the Department via email to mde.landrestoration@maryland.gov, at least six (6) months prior to any planned construction of fee simple residential units. The submitted work plan must include the collection of soil and/or vapor samples and all analytical results from the confirmatory samples must demonstrate that any property where a residential unit will be located meets the Department's established residential cleanup standards.

> HPD Response: Acknowledged.

II. MDE Comments Relating to the Narrative

A. <u>Schedule:</u> Section 4.2, on page 7 of the narrative (PDF page 11): The schedule listed is inaccurate – the document was not submitted to the agencies on August 20, etc. The schedule should be revised

to reflect accurate submission dates and projected review completion dates as provided for in the Covenant.

- > **HPD Response**: A revised schedule is provided.
- B. <u>Infiltration</u>: Section 6.2, Pages 14-15 (PDF Pages 19-20): Please include a discussion of the manner in which the reduction in infiltration by the addition of the proposed structures will impact groundwater levels, and how the stormwater infiltration system will be operated to maintain the groundwater levels in this area to prevent desiccation of the slurry wall along Wills Street.
 - HPD Response: The infiltration well system was reviewed/approved as a Minor Modification to the Area 1, Phase 1 DDP by EPA on July 31, 2017 and MDE on August 11, 2017. Three (3) of the five (5) infiltration wells have already been installed and are being actively used. The infiltration system is being operated as intended in the approved Minor Modification. We are showing that the original system will be completed as part of this last off-cap phase. Also, keep in mind that the slurry wall was reinforced in this area with interlocked steel sheeting as approved in the Area 1, Phase 1 DDP.

III. MDE Comments Relating to Other Elements of the Proposal

- A. Appendix B, Construction Air Monitoring Plan (CAMP), Section 2.1, Pages 3 and 4 (PDF pages 6 and 7), and Figure 2 (PDF page 12): As is indicated by the wind roses provided for the Baltimore area (Appendix B of the CAMP), the wind in the area is frequently from the west and northwest. The CAMP omits a monitoring station in this often-downwind direction. It is noted that there are occupied dwellings immediately east of this project across Caroline Street. Therefore, an additional air monitoring station, preferably along the eastern property boundary either in the depicted location of the meteorological monitoring station or in the approximate middle of the eastern boundary of the project just north of the meteorological station, is required. The other stations appear to be reasonably located.
 - HPD Response: Air monitoring station PFAM-1 has been moved to the eastern boundary, collocated with the weather station, and the text and drawing have been revised accordingly.
- B. Appendix C, the Drawings:

Sheet C2.00 and others: The drawing depicts trees to be planted along Wills Street. Please ensure that all trees proximal to the bentonite slurry wall incorporate the root barrier depicted on Sheet EN1.02, Detail E, to prevent possible intrusion of roots into the slurry wall over time.

HPD Response: Trees will be planted along the Wills Street ramp, which rises in grade as one moves to the south. Trees are not proximate to the hydraulic barrier. Moreover, the hydraulic barrier throughout this area is covered with a concrete protective slab, which precludes the need for the root barrier.

C. Materials Handling Plan

1. Section 3.1.1. #2, Page 5 (PDF Page 7), first line, last word: There appears to be an unnecessary "and". Also, please provide an explanation regarding why soil from Area 3 (below the warning layer) may be placed as fill under the linear park or hotel without additional sampling but must not be placed under the garage/residential building. The property as a whole is considered residential unless it will be legally subdivided. Given the sparse data for this area, if the linear park will consist of exposed soil (as shown on several drawings), confirmation sampling must be collected to demonstrate the soils meet residential standards.

HPD Response: To clarify, the development will be eventually subdivided into three parcels: hotel, park, and main building, and the entire project will be capped by the buildings, hardscapes, and similar well-established engineering controls. Additionally, based on the construction sequence, Area 3 soils are not likely to be used as fill. For simplicity, in the event that Area 3 soils are being considered for reuse on the project, items #1 and #2 in this section will be combined and re-stated as follows: "Soils excavated from the planned development depths in Area 3 (either above or below the warning layer) may be reused as fill <u>under</u> a capped area of the Project without further testing."

2. Section 3.4, Page 6 (PDF Page 8): Please revise this section to include reference to the "Innovative Reuse and Beneficial Use of Dredged Material Guidance Document" and "Fill Material and Soil Management Fact Sheet." The MDE recommends use of the Confirmation of Suitability forms for any material that will be moved to another Property. The forms are available at: <u>https://mde.maryland.gov/programs/Marylander/Pages/dredging.aspx</u>

- > **HPD Response**: The text has been revised accordingly.
- D. The erosion and sediment control plan approval, Storm Water Pollution Prevention Plan (SWPPP) approval, and any required discharge permits must be obtained prior to the start of work. Please submit approved copies of the plans (or a copy of the approval if no changes were made) within 14 days after receipt.
 - > HPD Response: Acknowledged.

USEPA COMMENTS AND RESPONSES

A. USEPA DDP Narrative Comments

1. <u>Section 4.1.1</u>

Section notes that the existing sheet pile retaining walls along Point Street and Wills Street were not designed as support of excavation (SOE) structures, and will require a bracing system of walers and rakers that will internally brace the sheet pile walls during construction of the lowest portions of the proposed structure. It is further noted that design of the temporary bracing system will be a delegated design item as part of the contractor's SOE scope of work; however, no mention of the envisioned temporary bracing system is noted on the structural plans provided for review. Recommend including a note in the foundation plans (and details where applicable) stating the need for the temporary bracing system, potential for interference with proposed piles and pile caps, and the need for the temporary bracing system design and layout to be coordinated with the project structural engineer.

HPD Response: The foundation plans currently include a note at two locations on S1.01S indicating that the existing sheet pile walls are to be braced during excavation and installation of pile caps.

2. <u>Section 5.1.5</u>

Section states that the building structures and ground floor slabs of the Project buildings will be pilesupported; however, this is inconsistent with Section 5.2.3 of the DDP Narrative as well as review of the structural plans, which state that the ground floor slabs will be slab-on-grade construction.

HPD Response: The ground floor slab is a concrete slab on grade. The description in section 5.1.5 has been updated to reflect.

3. <u>Section 5.2.2</u>

Section States that AASHTO No. 57 stone will be placed below the pile caps, in contact with the pile shafts. Pile cap details on Sheet S2.00 state that the stone below pile cap is at contractor's option. Confirm whether this stone is optional or mandatory. Section states that the pile caps whose excavated subgrade elevation will be below the historical high-water table will be protected with a waterproof membrane as a contingency to prevent building exposure to CrVI-impacted water. Reference to this waterproof membrane is not found on the foundation plans and details sheets, nor the Environmental Controls Plan and Details.

HPD Response: AASHTO No. 57 stone is not environmentally necessary and will be used at contractor's option in the event that the subgrade is not at the proper elevation. This section of the DDP Narrative has been revised accordingly. The waterproofing membrane is shown and labeled on Detail G on drawing S2.00. The EN1.02 Environmental Controls Details drawing has been updated to make note of the waterproof membrane.

4. <u>Section 5.3.1</u>

This section states that utilities will be constructed in a "clean" utility corridor, featuring geotextile lining and clean backfill material as shown on Drawing EN1.02. Review of Detail G on Drawing EN1.02 makes no mention of clean backfill material nor geotextile lining. The general materials notes on EN1.02 provides physical requirements for controlled structural fill but no criteria for fill cleanliness.

HPD Response: Detail G has been revised to show the geotextile. The clean fill requirement for all fill soil and stone placed above the geotextile has been added to the General Materials Notes.

5. <u>Section 5.3.2</u>

Section discusses sewer extension from the existing sewage pumping station to the southeast of the Project but does not mention the sewer relocation work to occur in the southwest corner of the site. Section should be revised to include the sewer demolition and relocation work.

> **HPD Response**: Acknowledged. The text has been revised accordingly.

6. <u>Section 7.2.6</u>

Section states that a possible mitigating measure for peak particle velocities exceeding the limiting value of 2.0 in/s would be to reduce the pile driving hammer energy. While this can be an effective measure to reduce detected vibrations, the reader is cautioned that a reduction in the hammer energy correspondingly reduces the energy delivered to the pile tip during installation and will affect the pile termination criteria for the end of driving. If reduction in hammer energy is envisioned, it is recommended that this scenario is included in the pile dynamic testing program so that the contractor can determine the pile termination criteria for each of the possible hammer energies anticipated during production.

> HPD Response: Acknowledged.

B. USEPA Material Handing and Management Plan Comments

1. <u>Section 3.1.1</u>

Section states that soils excavated from above the warning layer in Area 3 may be reused as fill under the liner of the park or the hotel but not under the garage/residential building. Is this meant to keep materials generated from Areas 3 within the limits of Area 3, or is the reasoning for this related to the end use of the area? Please elaborate.

> **HPD Response**: This item is resolved in the response to MDE comment III.C.1.

2. <u>Section 3.6</u>

Paragraph 2 of this section states that Area 3 excavation surfaces during intrusive activities will be covered by geotextile as soon as practical during the excavation sequence to limit wind-blown dust emissions.

What type of geotextile is envisioned for this application? How will geotextile be anchored to the subgrade?

- HPD Response: This section has been clarified with following additional sentence following the reference to the geotextile covering: "The geotextile will meet the specifications provided on Drawing EN1.01, and will be secured with driven stakes or by placing approved fill on the geotextile."
- 3. <u>Section 4.1</u>

Paragraph 4 of this section states that the Area 1 sheet pile reinforcement excavation is still being used for stormwater calculations applied to Parcel 4. Please elaborate why this is the case.

HPD Response: We have removed the reference to Area 1. For the sake of calculating this stormwater volume, we used a 4000 sf pile cap excavation.

C. USEPA Stormwater Pollution Prevention Plan Comments

1. Section 3.2.3

Section states that surface runoff will be diverted away from open excavations by berms; however, no reference to bermed excavations can be found in the plans and details.

HPD Response: We have added a sketch of a typical bermed excavation to EN1.02, as Detail H.

D. USEPA Drawing Set Comments

1. <u>S1.01N & S1.01S</u>

Note 5 states that the concrete slab on grade will be placed a compacted granular base and 6 mil vapor retarder. The typical slab-on-grade details on Sheet S2.01 show the vapor retarder layer on only one of the six slab-on-grade details. Please confirm whether the vapor retarder is intended for use beneath the full extent of slab-on-grade areas, and if so, revise details to show vapor retarder throughout.

- > **HPD Response**: Confirmed, the vapor retarder is intended for use beneath the full extent of the slab on grade. Details on S2.01 have been revised.
- 2. <u>Sheet S2.00</u>
 - a) On Detail C, the minimum bar embedment for tension piles is listed for P-3 piles but not for P-1 and P-2 piles. Recommend including the bar embedment for all three pile types in this detail.
 - HPD Response: The 15'-0" reference to embedment in Detail C/S2.00 has been deleted to eliminate this discrepancy. The embedment lengths are indicated in Detail B/S2.00.

- b) On Detail C, the minimum bar embedment listed for the P-3 pile is 15 feet. This is inconsistent with Detail B, which lists 20-foot embedment for #18 bars and 15-foot embedment for #14 bars. Confirm correct embedment with respect to bar size and revise details accordingly.
 - HPD Response: The 15'-0" reference to embedment in Detail C/S2.00 has been deleted to eliminate this discrepancy. The embedment lengths are indicated in Detail B/S2.00.
- c) On Detail G, Elevator Sump Pit Detail, there is an unspecified dashed line over the excavated subgrade that is presumably meant to depict the impermeable membrane to be placed over the subgrade of pile cap excavations that are below the high water table elevation, as discussed in Section 5.2.2 of the DDP Narrative. Detail G does have a leader that states "waterproof continuous at elevator sump, typ all around", but the leader points to a dashed line that is embedded below the top of the stone bedding layer. Detail G should be revised to clearly label the intended geosynthetic materials and their placement beneath the proposed elevator sumps.
 - HPD Response: The heavy dashed line beneath the stone subgrade is geotextile fabric. Labels have been added for clarity. The dashed line between the stone and concrete is the waterproofing.
- d) Consider re-labeling Detail G as "Elevator Sump Pit and Stair Pile Cap Detail" to include all pile caps whose subgrade is below the high water table elevation.
 - HPD Response: The detail only applies to sump pits, so label will remain as is. Detail H/S2.00 is applicable to these other areas (elevators and stairs). We have added a callout for the waterproofing in this detail similar to what is shown in detail G/S2.00.
- e) On Detail H, the dashed lines over the excavation subgrade and beneath the top of the stone aggregate layer are unlabeled. Detail H should be revised to clearly label the intended geosynthetic materials and their placement beneath the proposed pile cap at shear wall locations.
 - > **HPD Response**: Agreed, we have clarified the callouts for the geosynthetics and waterproofing.
- f) The pile cap details show an inconsistent stone aggregate thickness beneath the cap, with 4 inches shown beneath the typical pile cap detail and 3 inches shown beneath the cap at the elevator sump and shear wall cap details. Is this inconsistency intentional?
 - HPD Response: The typical pile cap detail has been revised to show 3" of stone below the pile caps to match with the shear wall cap details.
- 3. <u>Water Plan and Profile, Water Detail and Notes</u>

Are any measures for additional protection of the potable water utilities against potential contaminants proposed?

> **HPD Response**: No, other than all utilities on the Project will be installed in clean utility corridors.