

February 29, 2024

Mr. David Koerner
Prologis, L.P
7584 Morris Court
Allentown, PA 18106

Re: Technical Deficiency #2
7464 & 7600 Linglestown Road
Application No. E2203223-002
APS No. ID No. 1080331
West Hanover Township, Dauphin County

Dear Mr. Koerner:

The Department of Environmental Protection (DEP) has reviewed the above referenced application package and has identified the following technical deficiencies.

Technical Deficiencies

1. Technical Deficiency 7 from DEP's Technical Deficiency Letter dated June 30, 2023 has not been adequately addressed. **Provide a discussion of the potential impacts to the functions and values of the remaining wetlands, onsite and immediately offsite, from the reduction in vegetated buffer. The statement that the impacts have been minimized is not a demonstration that the loss will not result in significant adverse impact to the functions and values of the wetlands and watercourses. [25 Pa. Code §§105.14(b)(4), 105.16(d) & 105.18a(b)(1)]**

The ER response states that the existing forested areas consist of few species with a dominance of invasive shrub species but does not provide an expanded discussion on the species composition. The response also states that the proposed plantings will enhance the riparian buffer. However, for example, less than 10 trees are proposed at the top of the slope along the eastern end of the parking lot and are spaced at approximately 50 feet on center. The existing forested area in this location will be converted to "lawn" (as per the plans) and slopes will be approximately as steep as they currently are, and possibly steeper in some areas. No stormwater BMPs are proposed at the bottom of most of this slope so the assertion in the application that filtration will be enhanced post construction appears unfounded. The application has not demonstrated that the loss of woody buffer vegetation will not result in an adverse impact, specifically to Wetland A, Wetland B, Wetland H, or Stream 1 or 2, and should be revised to do so.

2. Technical Deficiency 8 from DEP's Technical Deficiency Letter dated June 30, 2023 has not been adequately addressed. **Explain how the loss of 0.47 acres of Wetland C will not result in a significant adverse impact to the remainder of the wetland. It's acknowledged that the cover memorandum states the discussion is located in Module S3.G, but a discussion could not be located. [25 Pa. Code §105.18a(b)(1)]**

Sheet ISP 1.0, identifies nearly 0.49 acres of impact to Wetland C, but Module S3.D of the Environmental Assessment states that 0.28 acres of impact are proposed. In addition, the total wetland impacts at the site are unclear. Module S3.H states that 0.42 acres of wetlands will be impacted, but Module S3.D states that 0.57 acres of wetlands will be impacted. The application should be revised to be complete and accurate.

3. Technical Deficiency 11 from DEP's Technical Deficiency Letter dated June 30, 2023 has not been adequately addressed. **Provide cross sections through Level Spreaders 2 and 3, (BMP11) and Wetland H showing existing and proposed ground surface, groundwater, and restrictive layer elevations, and extents of the proposed level spreader. [25 Pa. Code §105.13(e)(1)(i)(G)]**

The groundwater elevation is depicted as being approximately 8 feet below the ground surface elevation in Wetland A at Level Spreader 5 which does not appear to be accurate based on topographic conditions and adjacent test pit data, and because seeps are identified as a source of hydrology in the wetland delineation report. In addition, it's unclear why the groundwater appears to be exiting the restrictive layer instead of running on top of it in the cross sections for Level Spreaders 2 and 3. The application should be revised to be complete and accurate and ensure that designed appropriately above the restrictive layer and groundwater elevation .

4. Technical Deficiency 13 from DEP's Technical Deficiency Letter dated June 30, 2023 has not been adequately addressed. **Approximately 81 linear feet of the floodway of Stream 2 is shown to be temporarily impacted on the Overall Wetlands & Stream Impact Summary plan sheet which, based on the information provided in the application, will be a result of construction equipment access. Clarify what is being done in this area and provide a plan to restore the stream and floodway post-construction. [25 Pa. Code §105.21(a)(1)]**

The ER response is inconsistent regarding whether temporary stream impacts will occur. The note added on Sheets 13.3 and 14.2 states that no stream impacts will occur, but further states that any disturbance in the stream shall be restored. In addition, 60 feet of temporary stream impacts are shown on Sheet ISP 1.0, the need for which is unclear. The note should be revised to clarify that no disturbance in the watercourse will occur. References to temporary impacts should be removed from the application or those impacts should be clearly justified, and a restoration plan should be provided.

5. Technical Deficiency 15 from DEP's Technical Deficiency Letter dated June 30, 2023 has not been adequately addressed. **What appears to be a permanent outfall is shown discharging to Stream 2 on the Overall Wetlands & Stream Impact Summary plan sheet. Provide the following [25 Pa. Code §§105.13(e)(1)(i)(G) & 105.21(a)(1)]:**
 - b. **A cross section through the stream and rip rap showing existing and proposed conditions.**

The note added on Sheets 13.3 and 14.2 states that no stream impacts will occur, but further states that any disturbance in the stream shall be restored. In addition, 60 feet of temporary stream impacts are shown on Sheet ISP 1.0, the need for which is unclear. The note should be revised to clarify that no disturbance in the watercourse will occur. References to temporary impacts should be removed from the application or those impacts should be clearly justified, and a restoration plan should be provided.

6. Technical Deficiency 17 from DEP's Technical Deficiency Letter dated June 30, 2023 has not been adequately addressed. **The application states that groundwater is not a significant source of hydrology to the wetlands and that "direct impingement of precipitation and runoff are estimated to be the major contributing sources of hydrology to the impacted wetlands". However, based on other data provided in the application, including, but not limited to, the statement that signs of a seasonal high water table were observed in the test pits, the assertion that hydrology in the wetlands is primarily from direct precipitation and runoff does not appear to be accurate. Therefore, provide a detailed hydrologic study which includes, at a minimum, the information outlined below [25 Pa. Code §§ 105.14(b)(4), 105.16(d); 105.18a(b)(1); & 105.191]:**
 - a. **A demonstration that the remaining portions of the watercourses onsite and immediately offsite will not be adversely impacted by the proposed site activities. Adverse impacts could include but not be limited to diminution or increases of flow (hydrology), decrease in available wetted aquatic habitat, obstruction of fish and other aquatic life passage, alterations to the macroinvertebrate community, etc. The evaluation should take into account changes in drainage area and changes to upslope infiltration volumes that recharge the watercourses and/or wetlands. It should also include a demonstration of the remedial measures taken to restore the hydrologic regime to pre-existing conditions for each wetland and watercourse.**

Volumes were provided in the ER response that appear to show no significant reduction, but the volumes are misleading. For example, as outlined on "Table 1. Pre/Post Construction Drainage Areas, Infiltration Volumes and SWM Contributions" (page 227 of 456 of the EA), BMP 6 is identified as providing post construction BMP infiltration volume. However, the BMP is located down gradient of the wetland, and it unlikely to provide any meaningful hydrology input. In addition, BMP 8 (also identified as providing PCSM infiltration to supplement hydrology in Wetland C is near the down slope edge of the wetland and is unlikely to provide hydrology to the upslope portion of the wetland.

It's acknowledged that BMP 3 is identified as providing hydrology to Wetland D, and that Wetland D is upslope of Wetland C. However, assuming that Wetland D is supplied by the BMP and is connected to Wetland C, only 3.87 acre-inch of volume would be available to supplement Wetland C, which is still significantly less than the identified change in infiltration upslope of Wetland C. Furthermore, since the mapped restrictive layers appear inaccurate, do not extend beyond the

proposed grading, and because groundwater elevation mapping was not provided, DEP cannot confirm that water from BMP 3 will in fact provide any hydrology to Wetland D or, subsequently, Wetland C.

BMP 12 is shown to supply hydrology to Wetland A but, in absence of groundwater mapping and, basing the anticipated groundwater flow path on surface topography alone, it appears hydrology will be supplied below the upslope extent of the wetland, potentially resulting in an adverse impact to the wetland. The BMP location should be revised as necessary based on groundwater flowpaths, to supply hydrology to the upslope end of the wetland.

In addition, the application has not demonstrated how flow in the remainder of Stream S2 will be supplemented. The technical deficiency remains, in full.

- b. A demonstration that any changes to hydrology, including groundwater and surface water flow paths and volumes will not result in a significant adverse impact to the wetlands onsite and immediately offsite, and addresses the fact that the water will only be directed at portions of the remaining wetlands in some instances. Note, it's not appropriate to supplement groundwater volume inputs by increasing surface water runoff to the wetlands or watercourses.**

Volumes were provided in the ER response that appear to show no significant reduction, but the volumes are misleading. For example, as outlined on "Table 1. Pre/Post Construction Drainage Areas, Infiltration Volumes and SWM Contributions" (page 227 of 456 of the EA), BMP 6 is identified as providing post construction BMP infiltration volume. However, the BMP is located down gradient of the wetland, and it unlikely to provide any meaningful hydrology input. In addition, BMP 8 (also identified as providing PCSM infiltration to supplement hydrology in Wetland C is near the down slope edge of the wetland and is unlikely to provide hydrology to the upslope portion of the wetland.

It's acknowledged that BMP 3 is identified as providing hydrology to Wetland D, and that Wetland D is upslope of Wetland C. However, assuming that Wetland D is supplied by the BMP and is connected to Wetland C, only 3.87 acre-inch of volume would be available to supplement Wetland C, which is still significantly less than the identified change in infiltration upslope of Wetland C. Furthermore, since the mapped restrictive layers appear inaccurate, do not extend beyond the proposed grading, and because groundwater elevation mapping was not provided, DEP cannot confirm that water from BMP 3 will in fact provide any hydrology to Wetland D or, subsequently, Wetland C.

BMP 12 is shown to supply hydrology to Wetland A but, in absence of groundwater mapping and, basing the anticipated groundwater flow path on surface topography alone, it appears hydrology will be supplied below the upslope extent of the wetland, potentially resulting in an adverse impact to the

wetland. The BMP location should be revised as necessary based on groundwater flowpaths, to supply hydrology to the upslope end of the wetland.

In addition, the application has not demonstrated how flow in the remainder of Stream S2 will be supplemented. The application has not demonstrated that the project will not result in a significant adverse impact to the wetlands onsite and immediately offsite. The technical deficiency remains, in full.

- c. Mapping showing the groundwater elevation and flow path changes in the pre and post construction condition and demonstrates the groundwater elevations will remain relatively unchanged.**

Revised groundwater elevation mapping could not be located. It was clarified during the call with the applicant on November 8, 2023 that the previously identified groundwater elevation in bedrock was the aquifer (deep groundwater) elevation. The applicant asserts, and DEP agrees, that the onsite wetlands are unlikely to rely on deep groundwater for hydrology inputs. Mapping of existing shallow groundwater should be provided as previously requested.

- d. Mapping showing restrictive layer elevations and a discussion regarding how the project may affect these layers.**

It appears errors remain with the restrictive layer elevations. The "Preconstruction Restrictive Layer and Groundwater Flow" (Sheet 1 of 2) shows a restrictive layer that is above the current ground surface elevations in some areas. An example is near the southcentral portion of the site where the ground surface elevation is shown as being elevation 555 but the restrictive layer is identified as elevation 580. It's also unclear why the restrictive layer mapping doesn't extend at least to the edge of the proposed limit of grading. The comment remains in full.

7. Technical Deficiency 18 from DEP's Technical Deficiency Letter dated June 30, 2023 has not been adequately addressed. **You must obtain and provide evidence of E&S approval before an approved 105 permit can be issued. [25 Pa. Code § 105.13(g)]**

The approval was not provided in the ER response. The comment remains in full.

The additional comments resulting from the previous review of the revised material have not been adequately addressed:

- b. If the design revisions to address the outstanding comments identified in this memo result in changes in impacts to waters of the Commonwealth, provide a revised Overall Wetlands and Stream Impact Summary plan clearly depicting all of the proposed impacts, both temporary and permanent.**

It's unclear if temporary impacts to Stream 2 are proposed and the impacts to each wetland are not consistent throughout the application. The application should be revised to be complete and accurate.

- e. **Provide a revised Environmental Assessment including revisions to all applicable Modules that clearly document and discuss the impacts as currently proposed.**

Utilities are proposed to cross the wetland in the roadway footprint. The subfacilities and ARIT should include these utilities.

Additional comments resulting from this current review:

As stated previously, utilities are proposed under the roadway in wetlands. Show them on the profile and cross-sectional views of the culvert crossing. If long term operation and maintenance will be conducted by other entities, provide GP registrations for the utilities.

You must submit a response for each of the above deficiencies. You may request a time extension, in writing, before March 14, 2024 to respond to deficiencies beyond the ten (10) business days. Requests for time extensions will be reviewed by DEP and considered. You will be notified in writing of the decision either to grant or deny, including a specific due date to respond if the extension is granted. Time extensions shall be in accordance with 25 Pa. Code §105.13a(b).

Please submit an electronic copy to the DEP's Public Upload (PU) system at (<https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/Home>). For ease of review, the DEP requests a single upload with multiple files versus a single upload with one large document. In the Submission Notes, please note that this is a resubmission of E2203223-002 in response to the Technical Deficiency #2 letter dated 2/29/2024. Use the following form information:

Resubmittal: No
Permit #/Project #: E2203223-002
Fee Exempt: No

Pursuant to 25 Pa. Code §105.13a of DEP's Chapter 105 Rules and Regulations you must submit a response fully addressing each of the significant technical deficiencies set forth above. Please note that this information must be received within ten (10) business days from the date of this letter, on or before March 14, 2024, or DEP may consider the application to be withdrawn by the applicant.

If you believe that any of the stated deficiencies is not significant, instead of submitting a response to that deficiency, you have the option of asking DEP to make a decision based on the information with regard to the subject matter of that deficiency that you have already made available. If you choose this option with regard to any deficiency, you should explain and justify how your current submission satisfies that deficiency. Please keep in mind that if you fail to respond, your application may be withdrawn or denied.

Should you have any questions regarding the identified deficiencies, please call Jason Shirey at 717.705.4818, and refer to Application No. E2203223-002 to discuss your concerns or to schedule a meeting. The meeting must be scheduled within the 10-day period allotted for your reply, unless otherwise extended by DEP. You may also follow your application through the review process via *eFACTS on the Web* at: <http://www.ahs2.dep.state.pa.us/eFactsWeb/default.aspx>.

Sincerely,

Jason Shirey

Jason Shirey
Aquatic Biologist II
Waterways & Wetlands Program

Bethany A. Kavulich

Bethany A. Kavulich, P.E.
Civil Engineer Manager, Hydraulic
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cc: Todd Stager, Pennoni (email)