



Painted Hills EIS Review

September 19, 2019

Mr. Read Stapleton, AICP
DOWL
720 SW Washington St, Ste 750
Portland, OR 97205

Subject: Review of Draft EIS, dated May 31, 2019

Dear Mr. Stapleton:

Thank you for the draft environmental impact statement (DEIS) you provided for review. This letter is intended to identify issues and topics on which the City, as the lead agency for whom the DEIS has been prepared, requests additional research and examination in order to meet its requirements under SEPA (chapter 43.21C RCW).

Alternatives assessment

SEPA requires that environmental impact statements present and analyze reasonable project alternatives, one of which is to be considered a “no action” alternative. You have presented the “no action” alternative and a single project alternative that is based on essentially the same grading and floodwater management approach as the subject proposal. There should be a more extensive discussion of how the issue of reasonable project alternatives was considered. The DEIS should discuss how the concept of reasonable alternatives (WAC 197-11-440(5)(b), 197-11-786) was used to limit the identified alternative to a proposal so similar to the subject proposal. There should be a discussion of how the single project alternative was determined to have a lower environmental cost or decreased level of environmental degradation than the subject proposal. WAC 197-11-440(5)(b). The City is concerned that the DEIS does not adequately explain other potentially feasible and more environmentally benign development alternatives of the site that avoids or minimizes impacts to the flood zone and other environmental aspects of this area as required by SEPA and recommends that you present and analyze such an alternative in the DEIS.

Flood Hazard Management

The City’s consultant engineer has reviewed the underlying CLOMR Application completed by WEST Consultants and the Flood Control Narrative provided by Whipple Consulting Engineers (collectively referred to as the “hydraulic model materials”) as described in its comment letter to

the City dated August 1, 2019 and provided to Whipple Consulting Engineers on August 28, 2019. An overall completeness and methodology review indicated that the analysis is close to a complete FEMA submittal. However, the greater intensity of land use at the site as a result of the proposal requires detailed discussion of risks associated with the off-site and on-site storm drainage and channel improvements that are proposed. The components of the floodwater management system need to be addressed in relation to potential points of failure and consequences of failure. In general terms the DEIS should contain a discussion of risk assessment and develop an analysis of changes in hazards, exposure, and vulnerability at the site and in the surrounding community as a result of this proposal. This discussion should encompass short- and long-term actions that are necessary to ensure that the flood control system remains in optimal operating condition in perpetuity. This points to several risk assessment topics that will need to be addressed more fully in the DEIS. The following is a general statement of such topics. Each topic should be developed with an appropriate level of detail. Other, different risk assessment topics may also be indicated as you address this issue. The topics listed below are descriptive of the kind of risk assessment that the City requests in the DEIS, and are not to be understood as limitations on this subject or as the sole considerations that need to be addressed.

- **System failure potential** – The flood management system described in the DEIS relies on a coordinated set of interrelated systems, which appear to include the following premises:
 - Floodwaters will be managed, in part, through significant conveyance facilities and infiltration facilities;
 - Chester Creek flows enter the proposed development from the south;
 - The floodwater flows will be adequately conveyed through the conveyance facilities around the southern and then eastern side of the proposed development to the proposed drywell gallery at the northeast corner;
 - There is sediment removal through a bioswale and settling pond;
 - The drywell gallery will percolate at predicted rates;
 - The subterranean groundwater mounding at the infiltration facility will have no adverse off-site impacts;
 - Unnamed tributary flows from the east will be captured in a pipe system and conveyed to an offsite pit which will be widened, deepened, and have drywells installed to infiltrate stormwater;
 - The overall system of conveyance facilities and drywell galleries will continue to operate at optimal condition in perpetuity without any appreciable change or deterioration in system performance over time and notwithstanding potential changes in circumstances related to external factors such as varying levels of system degradation, impact from extreme weather events, such as snowfall occurrences followed by sudden warming, offsite development activity, or other occurrences.

The DEIS should clearly list these (or other applicable) premises and describe them fully. The DEIS should provide references as appropriate to justify their use as planned for this

proposal. The DEIS should describe potential risks or losses associated with hazards that this system may present, including identifying possible points of failure within the system. These risks should include discussion of potential events (from mild to extreme) within and across given periods of time and specific to place of possible impact. Because the proposed project will purportedly also remove offsite areas from the floodplain, consequences of its removal should also be addressed in conjunction with the risks and losses discussed above. Finally, the hydraulic model materials should be incorporated by reference to the DEIS.

- **System failure impacts** – The DEIS should investigate impacts of system failure, identifying and explaining what will happen if individual components of the system fail to work as planned. The DEIS should also identify recourse for any system failure for each potential point of vulnerability. This discussion should help reviewers assess the probability of types of system failure for different foreseeable events and the adverse consequences of system failure.
- **Ground water impact** – The hydraulic model materials supporting the design of the onsite infiltration system appears to be based upon a single drywell test (documented in IPEC reports dated June 28, 2016 and August 21, 2017) that is located on the western edge of the infiltration system. Given that the infiltration system is a critical component for the system to work as anticipated, more discussion regarding the use of the single drywell test as the basis for the infiltration and percolation analysis and risks associated with such reliance should be included, or additional tests from within the proposed infiltration system area should be conducted to further support the infiltration and percolation analysis.

Additionally, the DEIS should discuss whether modifying the distribution of the onsite infiltration that occurs near Chester Creek will negatively impact groundwater inflows and thus reduce base flows to Chester Creek, as it is designated as a Type F (fishbearing) stream on Washington Department of Natural Resources maps.

- **Gustin Pit groundwater impact** – The offsite “Gustin Pit” had no mounding analysis done to assess downgradient impacts at that site. The DEIS should discuss risks of not conducting an analysis and potential impacts, or alternatively if the applicant conducts the analysis, then it should be incorporated into the DEIS.
- **System maintenance** – The DEIS assigns responsibility for flood control system maintenance and operations to the project’s homeowners association. The DEIS should state all expectations for system maintenance and operation. This discussion should identify contingencies for all foreseeable risks in the event that system maintenance and operation is not performed. If the homeowners association becomes insolvent or is poorly equipped or trained to maintain the stormwater management system, describe contingency plans to ensure that risks, including system failure, do not materialize. The DEIS should identify a more fully guaranteed approach to funding and sustaining system maintenance to ensure the system is adequately maintained in perpetuity and that liability

for system maintenance and performance will not fall to the general public or to any governmental agency, including the City of Spokane Valley or Spokane County.

Transportation impacts during construction

The DEIS provides an estimate of the number of truck trips to manage the export and import of earth and gravel for the proposal, noting that nearly 400,000 cubic yards of material will be moved through the use of approximately 12,500 truck trips. The DEIS averages out the trips across four years of construction, presuming a steady flow of movement every business day of the year. This is unlikely and seems to overlook potential construction-related transportation impacts as well as opportunities to mitigate those impacts. The DEIS should take a more detailed look at truck impacts to the roadway system, to local traffic, identification of the most likely routes of travel, and when fill-related truck transportation is likely to occur along those routes. This analysis should examine variability in trip generation occurrence through the expected duration of construction. Phases of construction, seasonality, and intensity of use of the street system by other users (e.g., school busing schedules, work rush hours), should all be analyzed in conjunction with expected trip generation patterns during project construction. The potential that more intense use of the street system than projected, or that construction-related transportation may take longer than projected, should be discussed.

The DEIS should also review axle loads and likely pavement impacts to the surrounding street system, particularly those local access and collector routes relied upon for site access and haul routes, as well as mitigation measures to minimize such pavement impacts.

Grading and fill

Information about the source of the fill materials should be provided, describing how the proponent will ensure that only clean fill is used. In addition, the discussion of type of fill material should address impacts that large scale importation of different types of fill may have on future development or the operation of the floodwater management system, such as decreased groundwater infiltration due to use of fill that does not provide the same level of infiltration as current soils. Finally, given the extent of necessary fill and estimated time to import the fill, there should also be more detailed discussion of erosion control during the course of importing the fill, including implications of failure of identified erosion control strategies.

Multi-family access

The proposed access road to the multi-family development site is in the 100-year flood plain. Impacts and possible mitigation measures, such as through alternative alignment, should be considered in the DEIS.

Procedure

The DEIS should describe the process this project will follow to integrate local project approvals with other agency determinations. Currently, the City believes that submission of the CLOMR application is dependent upon completion of the EIS process and review and approval of other project permits. This process should be discussed, as well as how or whether local approvals for the project would reference FEMA's expected review and action on the CLOMR and subsequent LOMR. The DEIS should describe how the likely range of FEMA actions during the CLOMR

review may interrelate with the DEIS and the local land use applications and decisions in the event of revisions to the project that may arise during FEMA review.

FEMA may provide conditions that could influence the project's design or could inform the City's potential conditions of approval. However, the City is the permitting local agency. The DEIS should explain this relationship, the relative timing of agency actions, and how the outcome of FEMA's review can influence the applicant's and the City's responses. The possibility of supplemental environmental review, or re-visiting the elements of the project after FEMA review of the CLOMR, should be considered. If the applicant believes a different process may be warranted, it should provide discussion of that analysis, as well as necessary support.

Respectfully,



Lori Barlow, AICP
Senior Planner

Cc. Bryan Walker, Black Realty Inc.
Todd Whipple, Whipple Consulting Engineers
John Hohman, Deputy City Manager
Henry Allen, PE, Sr. Engineer