



April 1, 2021

Doug Hartnett, P.E.  
Highpoint Engineering Inc.  
Canton Corporate Place  
45 Dan Road, Suite 140  
Canton, MA 02021

**Re: King Devens, LLC – 33 Jackson Road Level II Unified Permit Application (#D21- 035)**

Dear Mr. Hartnett,

We have completed our initial review of the above referenced application. Below are the comments from the DEC and MassDevelopment. Review comments on the site plan, stormwater, landscaping, and traffic study from our peer review engineers are being provided in separate letters.

**Please Note:** The applicant is encouraged to submit a response to comments using this electronic file. Responses should be added after each comment as individual paragraphs with italicized colored text. Responding in this manner will improve clarity and context of responses and will expedite review time.

**Devens Engineering Comments:**

- Traffic Report
  - Traffic report references two (2) intersections of Jackson/Lake George – There is no Lake George north intersection with Jackson and an intersection of Lake George and Barbara Street – There is no Barbara St. Traffic engineer should confirm the actual location of these study points (i.e., 27 Jackson Rd driveway 7 53/57 Jackson Rd driveway?).
    - **Applicant Response: The Traffic Impact and Access Study will be revised to depict the corrected street names.**
  - Per previous correspondence, the traffic consultant has indicated that turn lanes are recommended at the entrances to 33/45 Jackson Road (see attached). Please require the applicant to develop final plans for these turn lanes, with review and approval of MassDevelopment, and construct them prior to receipt of CO.
    - **Applicant Response: The Engineer has submitted the conceptual Jackson Road/Site Access turn lane plan to the DEC and Devens Engineering for preliminary review of scope. Upon approval of the conceptual plan by Devens Engineering, the final design plans will be prepared and reviewed with Devens Engineering with construction schedule to be coordinated with MassDevelopment, Devens Engineering, and Devens DPW.**
- Stormwater Report:
  - “Methodology:
    - Section **MUST** start with a statement acknowledging that the outfall is connected to a system which directly discharges to the Nashua River, an impaired waterway, and that the connected portion of the site system has been designed to be fully compliant with all

requirements of the MA MS4 General Permit and conditions of the Devens NOI including reduction of applicable impairments in the Nashua R. The overall stormwater system should be reviewed by the DEC consultant to ensure that the proposed system adequately addresses all relevant issues.

- Applicant Response: The Stormwater Report will be revised to include a statement regarding site drainage outfall connection to the Nashua River, and required compliance with the MA MS4 General Permit, the Devens NOI, and address required compliance with discharge limits for regulated constituents.
- Para on page 4 that references a conversation with me as the basis for a number of assumptions is erroneous. Our conversation was information, and the applicant was directed to confirm all assumptions with the DEC.
  - Applicant Response: The design assumptions referenced on Page 4 of the Stormwater Report have been verified through review of the record Jackson Road Reconstruction Project design documents including plans and reports, assumptions, and conclusions provided by Devens Engineering. The Project watershed and hydrologic analysis assumptions align with the Jackson Road Reconstruction Project design assumptions assigned to the Project site by MassDevelopment's consulting engineer. The same design assumptions were incorporated into the previously approved 45 Jackson – Lot 1 stormwater management design.
- “Post-Development Condition” – pg. 8 - Provide justification for this design condition (i.e., 25 yr. storm handled on-site & remainder released to det. pond).
  - Applicant Response: The post-development design condition referenced on pg. 8 is referenced in the report as an attachment to the Post-Development Hydrologic Analysis. This includes a post-development watershed table summary obtained from the Jackson Road Reconstruction Project watershed analysis. This table notes that for “Watershed 4” and “Watershed 5”, within which the Project site is located, the “Developer must provide on-site water quality treatment, groundwater recharge and detention for up to the 25-year event. Detention in excess of the 25-year event (up to the 100-yr event) will be provided for in the Detention Basin at Lot 12 (and Lot 13).”

Therefore, the Project site drainage system design provides collection, pre-treatment, and infiltration of total rainfall up to the 25-year event on site. Rainfall events exceeding the 25-year event will overflow through the Project site drainage system, which is proposed to be interconnected to the municipal drainage system that discharges to the municipal stormwater pond for additional flood control.
- “Stormwater mitigation” – pg. 10 - Describe how site system addresses impairment components in Nashua R. (i.e., phosphorous, etc.)
  - Applicant Response: A separate description will be provided for how the Project reduces Phosphorous (P) and other stormwater impairment constituents prior to discharge to the Nashua River. We note that the stormwater design provides pretreatment and infiltration/recharge of over 5” of total rainfall. This far exceeds the

recommended pretreatment and infiltration of recommended rainfall amounts with respect to land use for effective P removal prior to discharge to an impaired waterway.

- Is the connected flow from Bldg. 1 accounted for in the calculations?
  - Applicant Response: The hydrologic analysis accounts for Building 1 flows that exceed the 25-year storm. These flows bypass through the Building 3 site, with connection to an existing drain-pipe stub at the west area of the site adjacent to the municipal stormwater pond.
- Report should address impacts from the construction of the parking garage.
  - Applicant Response: The report will be revised to clarify that the increased impervious area within the contributing watershed is accounted for. The stormwater management system within the footprint of the parking garage will be revised to minimize contributing flows from the site to subsurface infiltration facilities located within the garage footprint. The design intends to either preserve the proposed infiltration facilities within the garage footprint during construction of the parking garage or reconstruct these facilities if disturbed during parking garage construction.
- Plans:
  - Need to demonstrate that DPW & WMLP vehicles can maneuver into and along the relocated section of access road in order to perform required repairs/maintenance of the municipal detention pond and 69kv transmission lines.
    - Applicant Response: A separate turning study for DPW and WMLP vehicles will be provided to Devens Engineering for review. The Engineer will request the largest fleet vehicle size from the respective agencies and/or request a vehicle template for demonstration of acceptable maneuvering.
    - Unlikely that the SGC will survive these vehicles passing over them – recommended the paved surface be extended down to the connection with the existing access road.
      - Applicant Response: The SGC will be removed, and the paved surface of the access road will be extended to the gutter edge of the site driveway.
  - Plans need to include recommended addition of turn lanes.
    - Applicant Response: The Jackson Road/site access turn lanes will be added to the Plans upon approval of the conceptual plan by Devens Engineering. The concept plan is included in the Traffic Report submitted.
  - How far from base of walls along SW sideline (SW access road) will need to be cleared? This area has historically been very wet – how is that going to be addressed?
    - Applicant Response: The Plans have been revised to provide a minimum 10' natural landscape buffer within the property setback in response to DEC staff comments.

The Project site is designed as a fill condition on the backside of the walls (i.e., the base of the wall is at existing grade elevation). The Applicant's Engineer will review this condition in more detail in the field and propose any specialty excavate and backfill requirements if warranted.

As usual we reserve the right to provide additional questions/comments as they may arise.

**Devens Utilities Comments:**

Utilities Plan C600:

- Proposed sewer manholes PR-SMH-7 and PR-SMH-9 are very shallow, only 3.6' from rim to invert. Is this deep enough to allow traditional SMH construction with cone section, etc., as shown on SMH Detail A3 on Dwg C800?
  - **Applicant Response:** The inverts will be lowered as necessary for the pipes to enter the manhole below the cone section.
  
- The size of the 2 sewer pipes connecting the building services to PR-SMH-7 and PR-SMH-9, respectively, are not shown.
  - **Applicant Response:** The Plans will be revised to show the pipe sizes and materials for all sewer pipes.
  
- An 8" sewer stub extension is shown being left for a future garage but a corresponding water stub in the vicinity of the future garage is not shown. Should there be a water stub left in that vicinity?
  - **Applicant Response:** The sewer stub is proposed to collect interior floor drains for the garage. A domestic water service is not anticipated for the future garage. A fire service is not anticipated for the garage as it will not be sprinklered.
  
- A proposed gate valve with cap is shown at the end of the water main run directly behind the building. Is this for a possible future connection?
  - **Applicant Response:** Providing a gate valve at cap point is good practice to allow for potential future connection or looping of the water system. Based upon updated building plumbing design, the domestic and fire protection water services will be re-routed from the south driveway to the utility room. This will be depicted on the revised Plans.

Site Details Dwg C800:

- A callout on the enlargement section of Drop SMH Detail C2 indicates the manhole is to be a "precast doghouse sewer manhole." But the adjacent section of that detail shows what appears to be a traditional, non-doghouse style manhole. Please explain the discrepancy.
  - **Applicant Response:** The Building 3 sewer force main connection design will be revised in coordination with recent revisions to the Building 1 municipal sewer relocation design that has been reviewed with Devens Utilities. No "doghouse" or drop-over SMH is proposed under the Building 3 design. A drop manhole is still

proposed to detail the future Building 3 interior drop sewer connection to the SMH installed under the Building 1 contract.

Site Details Dwg C805:

- Proposed sewer pump station in Detail B1 is an E-ONE Triplex, with its typical relatively small volume wet well/reservoir. The proposed force main from the E-ONE to the gravity sewer line is also relatively small at 2-inches in diameter. This pump system may be suitable as long as it can handle the proposed sewer flow. Documentation should be provided to indicate the proposed pumping system will be adequate to handle the proposed flows.
  - **Applicant Response:** The Applicant will provide documentation to indicate the proposed pumping system will be adequate to handle the proposed flows. A final sewer pump station plan will be submitted to Devens Utilities for review prior to construction.

Irrigation Plan L400:

- Note indicates there will be a private site well to serve irrigation needs but the location of the site well does not appear to be shown. The project proponent should confirm that the plan is to install a private site well and not connect to the public water supply for irrigation.
  - **Applicant Response:** The Applicant intends to use private on-site wells as source water for irrigation and is currently planning the installation of test wells to determine available water yield with respect irrigation demand for the campus development plan. The Applicant will discuss with Devens Utilities if there is any potential private well shortfall that would require use of public water supply for irrigation.

**Devens Fire/Public Safety:**

1. Fire Alarm Wire will need to run from a Pedestal on Jackson down to the building
2. Hydrant within 100 feet of the FDC
3. At least 1 Dry Standpipe with FDC & hydrant within 100 feet will be required in the parking garage.
4. Builder should consider Heat detectors along lower deck and horn strobes throughout parking garage.
5. Builder will need to have Fire Alarm and Sprinkler Contractors submit final plans for approval by the Fire Department prior to starting work.
  - **Applicant Response:** The Applicant will make any required revisions to the Plans to meet the requirements of the Devens Fire Department and Public Safety. A separate fire apparatus maneuvering study will be submitted to the Department to demonstrate adequate maneuvering capability with respect to the revised Plans.

**DEC Staff Comments:**

1. The overall site plan appears to be over-designed, resulting in a number of regulations not being able to be met. The Applicant should re-design the overall site layout in a manner that will allow them to complete all required site improvements on-site, keep structures out of setbacks, and preserve existing vegetation in these areas to the maximum extent practicable. These changes may also provide additional opportunities to integrate more low-impact development stormwater design measures throughout the site.
  - **Applicant Response:** The Applicant will revise the Plans to maintain a 10' wide natural vegetation buffer along the north, west, and south property lines to the extent practicable. To accomplish this the north driveway has been consolidated with the north parking field, and the south driveway and parking field has been relocated further from the south property line. Retaining walls will be relocated outside of the building setback of 10'.
  
2. Topographic alterations within building setback areas that are wooded are not permitted. All healthy existing trees with a minimum 12" caliper within the setback shall be preserved.
  - **Applicant Response:** The Applicant will revise the Plans to maintain a 10' wide natural vegetation buffer along the north, west, and south property lines to the extent practicable and maintain trees with minimum 12" caliper within the setback. Retaining walls will be relocated outside of the building setback of 10' to further preserve natural tree growth.
  
3. All grading and landscaping requirements need to be met within the parcel boundary.
  - **Applicant Response:** The Applicant will verify the grading and landscape requirements are met within the parcel boundaries. We note that where required, landscape waiver requests have been made for reduced tree count in front of the second-floor entrance and the west side slope.
  
4. Setbacks – retaining walls need to meet setbacks. Lake George property boundary has a front yard setback requirement of 25', not 10'. Please correct.
  - **Applicant Response:** The retaining walls along the north setback have been eliminated through consolidation of the north driveway/parking field. The retaining walls along the south setback have been relocated a minimum of 11' from face of wall to property line. The front yard setback will be corrected on the revised Plans.
  
5. Show specimen trees in and within 100 feet of property boundary and ID what is being preserved.
  - **Applicant Response:** The boundary tree survey has been completed. Existing trees, including trees to be retained will be depicted on the revised Plans.
  
6. Remove FAR lot area hatching from all plans.
  - **Applicant Response:** The FAR lot hatching will be removed from the revised Plans.

7. Future property line label looks incomplete (“subject”?)
  - Applicant Response: Perimeter boundary lot lines are depicted in bold line type. Interior lot lines approved for Building 1 under the Level 1 permit are depicted in medium greyscale. Future interior lot lines for Building 3 are depicted in light greyscale
8. FAR listed as 0.50 however, this is for Industrial uses. Office FAR is 0.25 and R&D is 0.35. We realize a tenant has not been selected but please clarify.
  - Applicant Response: The Applicant intends to develop and lease this building as a primary biomanufacturing use, consistent with the Request for Use Determination as an Industrial Use previously submitted and reviewed by the DEC.
9. Trail access – buffer from facility (not walking right along fence line)
  - Applicant Response: The Applicant has walked the potential realigned trail access and as identified a location that places the trail within the natural landscape and does not impact mature trees. We understand DEC staff discourage extending the trail down natural steep slopes at the entrance point at Lake George Street. The trail ultimately connects the Lake George Street turnout with the existing municipal stormwater basin access path. Final alignment of the Lake George Trail will be established in the field in consultation with DEC staff.
10. Traffic Study: Please note, we have requested deletion of all references to “St. Barbara St.” – this will just create confusion in the future. St. Barbara was an old Army Road and never given any status as an improved or public way. The paved portion of “Barbara St.” was removed in 2000.
  - Applicant Response: The Traffic Study has been revised to reference the corrected street and will be resubmitted for review.
11. Where buildings encroach on undisturbed wooded areas, the DEC may determine that such encroachment would have a significant adverse effect on the viewshed. To mitigate this adverse effect, the DEC may require that additional trees of at least 4" caliper or clusters of 3" caliper minimum to be planted. This should be taken into consideration for the parking areas between the viewshed sensitive receptors and the building.
  - Applicant Response: The Applicant notes this comment and will review if additional tree plantings in this area can be achieved without negatively affecting growth due to plant density.
12. Lighting for parking garage? Need details. Viewshed impacts?
  - Applicant Response: The Applicant will submit revised site lighting plans that accommodate revisions to the site plan in response to previous comments, and to depict parking garage rooftop lighting. The Applicant has directed the design team to provide luminaire cut-off shields on the sensitive receptor side of light poles to reduce potential visual impacts. This will be reviewed in more detail with the DEC after submission of revised Plans.

Please provide any responses and supporting information to these and all peer review comments by April 16, 2021. In the meantime, feel free to contact me with any questions.

Sincerely,



Neil Angus, AICP CEP, LFA, LEED AP  
Environmental Planner  
Devens Enterprise Commission



DEVENS ENTERPRISE COMMISSION  
33 Andrews Parkway • Devens, MA 01434 • Phone: (978) 772-8831 • Fax: (978) 772.8831