

February 3, 2023

Karen Sherman, Town Planner
Town of Holliston
703 Washington Street
Holliston, MA 01746

Subject: Transportation Peer Review Comments – Supplemental Review No. 3
555 Hopping Brook Road
Holliston, MA

Dear Ms. Sherman:

MDM Transportation Consultants, Inc. (MDM) is pleased to provide you with the following supplemental transportation review comments for proposed warehouse development at 555 Hopping Brook Road in Holliston. These comments have been prepared based on review of the documents identified below and serve to augment our prior comments as documented in review letters dated February 19, 2020; December 23, 2020; and February 4, 2021 and incorporated herein by reference.

The currently proposed warehouse development represents a notable reduction building size from 800,000 sf to 550,000 sf supported by 236 passenger vehicle parking spaces and 100 dock spaces. Notably, prior sensitivity analyses submitted by the Applicant are not only based on conservatively higher industrial-park trip levels for the Site, but also a notably larger building than currently proposed. The sensitivity analysis indicates that under these higher trip levels at full park buildout the proposed intersection mitigation at Hopping Brook Road/Washington Street including signal control will provide sufficient capacity to accommodate peak period traffic volumes. These offsite improvements will be subject to review and approval by MassDOT as part of an Access Permit Application to be submitted by the Applicant. These improvements are to be completed by the Applicant prior to occupancy of the proposed warehouse facility. MDM concurs that these proposed roadway improvements, along with Applicant commitments to pedestrian-related improvements leading to or at the Upper Charles Trail crossing, will appropriately address project impacts and enhance pedestrian safety in the area.

MDM also notes that the Applicant has also previously committed to a traffic monitoring program to be implemented over a five (5) year period from occupancy to regularly measure actual project traffic activity as well as overall Hopping Brook Park activity that will enable comparisons to projected trips that serve as the basis for the mitigation. MDM further acknowledges that such traffic monitoring is anticipated as part of the MassDOT Section 61 Finding for the Hopping Brook Park. Post-occupancy monitoring will ensure that actual site traffic impacts are in line with projections included in the Site filings and analysis would provide a basis for the Town to require Applicant to present remedial measures if impact thresholds are exceeded.

Revised site plans for the project are aligned with a traditional warehouse use. We further note that any substantial deviation from these projected trip levels or programming assumptions that are specific to the CRG Warehouse Facility would be cause for MassDOT to require the Applicant to amend the Access Permit to be issued for the subject project, including consideration of further mitigative actions as may be appropriate to address these deviations.

Documents Reviewed

MDM has reviewed the following documents to gain an understanding of the project and determine if industry standards have been applied in determining the potential impacts of the project. The following supplemental documents were reviewed:

- *Updated Transportation Impact Assessment – Proposed Warehouse, Hopping Brook Business Park, Holliston, Massachusetts*, prepared by Vanasse and Associates, Inc. dated November 7, 2022
- *Layout & Materials Plan, 555 Hopping Brook Road* prepared by Engineering Design Consultants, Inc. as updated through September 1, 2022
- *Mitigation Correspondence to Holliston Planning Board, CRG Integrated Real Estate Solutions, 555 Hopping Brook Road, Holliston MA* prepared by Lynch, DeSimone & Nylen, LLP dated November 7, 2022

Proposed Development

The proposed building comprises 550,000 sf to be supported by a proposed parking supply of 236 spaces for employees/visitors and 160 trailer spaces. This represents a notable building size

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reduction from the previously proposed 800,000 sf facility and an associated net reduction of 164 spaces.

Comment 1: MDM notes that the proposed parking supply is reasonably aligned with peak parking demand characteristics for the warehouse land use category (Land Use Code 150) as published by the Institute of Transportation Engineers (ITE) in Parking Generation Manual, 5th Edition. For reference, ITE Parking Generation predicts that average peak parking demands for a 550,000 sf warehouse facility is calculated at between 214 spaces and 258 spaces (average peak and 95th percentile confidence level) which corresponds well to the revised site plan and defined programming for the building as warehouse use.

Project Generated Traffic

Trip estimates for the Project are based on characteristics published by the Institute of Transportation Engineers (ITE) in Trip Generation 10th for Land Use Code (LUC) 150 - Warehouse. On this basis, projected net new trip generation is estimated to range from 94 to 105 vehicle-trips for weekday peak hours and 958 trips daily; corresponding truck-related trips range from 12 to 16 peak-period trips to 258 daily truck-trips. Relative to prior trip projections for a larger 800,000 sf warehouse facility as documented in Applicant's prior November 2020 TIA this represents a net 160 to 180 vehicle-trip reduction during peak weekday traffic periods.

Comment 2: MDM generally concurs with projected site trip generation on the basis that the Applicant expressly acknowledges that alternate "High Cube" warehouse uses such as Fulfillment Center (Sort and Non-Sort), Parcel Hub and Transload categories are not anticipated/proposed tenants of the 550,000 sf building. We further note that application of more recent ITE Trip Generation 11th Edition trip rates for warehouse use yield similar or lower trips than reported in the updated November 2022 TIA.

Operational Analysis

Operational (capacity and queue) analyses presented in the November 2022 TIA assume a 7-year design horizon and buildout of the Hopping Brook Road business park including the proposed 550,000 sf warehouse facility. With implementation of proposed geometric and traffic signal improvements at Washington Street/Hopping Brook Road, peak-hour traffic operations at full park buildout are projected to be LOS C or better.

Comment 3: MDM finds that submitted analysis to be consistent with good industry practices and present a reasonable basis to quantify operations that indicate ample and unconstrained

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roadway infrastructure will be available to support the project, consistent with prior analyses submitted by Applicant.

Sensitivity Analysis

As a point of reference, MDM requested and Applicant provided prior sensitivity analyses for future buildout of Hopping Brook Business Park assuming an Industrial Park land use category. This prior analysis was based on a larger 800,000 sf building as industrial park use (ITE Land Use Code 130) to present a worst-case scenario for sensitivity purposes. Prior application of ITE LUC 130 trip rates to the remaining 700,000 sf buildout of the park in combination with either a warehouse use or industrial use assumption for the 800,000 building would generate materially higher trips than assumed in the November 2020 TIA and provides an appropriate basis for testing the ability for proposed improvements to properly accommodate future traffic activity. The operational analyses presented in the sensitivity analysis follow generally accepted traffic engineering practices and protocols, indicating acceptable overall delays (LOS D or better) for the Hopping Brook Road/Washington Street intersection. Under the scenario that the previously proposed 800,000 sf building operates as a traditional warehouse use, and assuming future buildout of the park using the higher Industrial Park trip rates, operations are at LOS C overall for all intersection movements except those vehicles leaving the park turning left, which may have slightly longer but acceptable delays and queues.

MDM concluded in our February 4, 2021 review that the sensitivity analysis using higher Industrial Park trip rates for build out and assumption of warehouse use for the larger (previously proposed) 800,000 sf indicated proposed improvements will adequately support future traffic needs.

Comment 4: The proposed smaller building area, reduced parking and retention of previously-proposed improvements at Washington Street/Hopping Brook Road will result in a net reduction in Site trip activity relative to prior proposals and sensitivity analysis that will be well accommodated by proposed infrastructure to be implemented by the Applicant.

Mitigation

Applicant proposes transportation-related mitigation that includes the following:

- Commitment to average daily vehicle trips of 958 and average daily truck trips of 258 with funding for Town enforcement of these trip numbers.

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- Trucks associated with the Project shall be restricted to only using the Route 16 from the site entrance to and through Milford to access Interstate Route 495; restricting trucks to take a left turn out of the Hopping Brook Industrial Park.
- No trucks are allowed to use South Street in Holliston as there are now legal restrictions prohibiting through trucking on South Street.
- CRG shall donate to the Town four (4) rectangular rapid flash beacons pedestrian crosswalk system units to serve Upper Charles Trail crossings. CRG shall make improvements to the Upper Charles Trail crossing at Hopping Brook Road in compliance with MUTCD standards.
- CRG will install bike racks to encourage bicycle use to and within the site with provisions for clearly marked bicycle lanes and/or "sharrow" markings on the site circulating lanes that lead to Hopping Brook Road which in turn connects to the Upper Charles Trail.
- In addition, pursuant to MEPA and the Section 61 Findings by Mass Highway, CRG will provide the Town with the equipment, construction necessary for, and installation of the traffic signalization and road configuration project pursuant traffic signalization plans reviewed and approved by the town and its peer traffic review engineer.

Comment 5: MDM generally concurs with the proposed transportation-related mitigation proposed by Applicant which addresses our prior recommendations including pedestrian-related safety enhancements at the Upper Charles Trail crossing at Hopping Brook Road. However, we note that RRFB equipment has been installed at the Upper Charles Trail crossing at Hopping Brook Road by others and another location (Church Street crossing) has also been equipped with same. *Applicant should therefore consider alternative mitigation/funding to further enhance pedestrian/bicycle safety along Hopping Brook Road including for instance marked bike lanes/shoulder markings/sharrows or repair of the roadway as appropriate and where needed to address pavement deterioration between the Site and the Upper Charles Trail.*

Specific monitoring protocols should be developed by the Applicant; MDM notes that the Applicant previously committed to a traffic monitoring program to be implemented over a five (5) year period from occupancy to regularly measure actual project traffic activity as well as overall Hopping Brook Park activity that will enable comparisons to projected trips that serve as the basis for the mitigation. Monitoring protocols should include a mechanism for

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confirming that truck activity generated by the facility are reasonably conforming to cited truck turn and truck route restrictions.

Regarding signal improvements at Washington Street/Hopping Brook Road, Applicant should confirm/clarify that all required design, permitting, construction and close-out of improvements is the sole responsibility of the Applicant in connection with the Project.

Site Plan Comments

The proposed site layout plan includes appropriate pedestrian accommodation features (sidewalks), bicycle parking and EV charging positions/stations that are consistent with prior requested elements. In our reviews of the project.

Comment 6: *Site plan should be updated to reflect the following additional elements/exhibits:*

- *Crosswalk markings at the Hopping Brook Road and Driveway intersection;*
- *MUTCD-compliant signs and markings including STOP signs, centerline markings, edge line markings as appropriate;*
- *Swept path analysis/exhibits that demonstrate ample maneuvering area is available to and within the Site to accommodate largest responding emergency vehicles (Holliston tower/ladder vehicle) and trucks (WB-67 design vehicles);*
- *Designation of preferentially-located carpool/vanpool parking spaces to encourage shared trip making to the site;*
- *Clarification of how many bike parking positions will be made available at the Site with commitment to expand capacity based on actual demand over time.*

MDM appreciates the opportunity to provide Transportation Planning & Engineering Services to the Town of Holliston and we look forward to discussing our findings at the upcoming Planning Board hearing. If you have any questions or concerns, please feel free to contact this office.

Sincerely,



Robert J. Michaud, P.E.
Managing Principal

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