March 6, 2023

Town of Billerica
Planning Board
365 Boston Road
Billerica, Massachusetts 01821

Attn.: Ms. Erika Oliver Jerram, Director of Planning and Community Development
Ms. Katherine Malgieri, Senior Planner

Re: 298 Concord Road Peer Review Planning

Dear Ms. Jerram and Ms Malgieri:

BETA Group, Inc. has reviewed documents submitted for a project entitled as ***Proposed Buildings 298 Concord Road Billerica, Massachusetts***. This letter is provided to outline BETA's findings, comments and recomendations.

Basis of Review

The following documents prepared by Bohler were received by BETA and will form the basis of the review:

- ***Site Plan Special Permit Package for Proposes GMP Lab Facilities 298 Concord Road, Billerica Massachusetts*** dated January 31, 2023 including the following attachments:
  - Cover Letter
  - Project Narrative
  - Form S Application for Site Plan Special Permit
  - Special Permit Checklist
  - Traffic Assessment
  - Quitclaim Deed
  - Site Aerial Exhibit
  - Certified Abutters List
  - Fire Truck Turning Exhibit
  - Site Photos
  - Overall Exhibit
  - Parking Summary Tables
- Site Plans (17 sheets) entitled ***Proposed Site Plan Documents for KS Partners Owned & Managed Proposed GMP Lab Facility Location of Site: 298 Concord Road Town of Billerica, Middlesex County, Massachusetts Map 86, Block 108, Lot 5*** dated January 25, 2023

Review by BETA Inc. will include the above items along with the following:

- ***Zoning By-Law of the Town of Billerica*** updated through October 2022.
- ***Zoning Map of the Town of Billerica, Massachusetts*** last updated October 11, 2016

Introduction

The partially developed 44.4± acre project site, comprised of assessor's map 86 block 108 lot, is located on the east side of Concord Road and west side of Route 3. The existing development comprises 3 partially vacant office buildings. The project parcel is within the Industrial Zoning District. Abutting properties are also in the industrial district while properties on the west side of Concord Road as well as a few on the east side are within the Rural Residence District. Light manufacturing, and R&D are uses allowed by right.

A perennial stream (Mill Brook) flows through the parcel and a wetland on-site. There are also mapped wetlands on the east side of the property. Portions of the subject parcel are located within the FEMA mapped 100-year flood zone a flood zone shown on Green Engineering Map (59). The property is not in proximity to or estimated habitats of rare of endangered species. NRCS soil maps indicates the presence of Charlton-Urban land-Hollis complex with Hydrologic Soil Group Rating (HSGR) A (high infiltration).

Applicant proposes to demolish buildings 298 and 300 and construct a 121,630± sq. ft. footprint Lab Facility with a 45,000± mezzanine with associated parking, loading, landscaping, utility services, and stormwater management systems within the limits of the existing parking area.

The Applicant is seeking a special permit for reduced green strip requirements. Access to the site will be through existing driveways off Concord Road and Old Concord Road.

The project includes work within wetland resource areas, including buffer zones to bordering vegetated wetlands areas and bordering land subject to flooding which will require obtaining an Order of Conditions from the Billerica Conservation Commission. The project will disturb more than an acre of land as well as within or within proximity of mapped flood zones and therefore require a Stormwater permit from the Board of Health. Stormwater management systems will need to comply with the MassDEP Stormwater Management Standards and the Billerica Stormwater Management Bylaw and regulations.

ZONING

INDUSTRIAL (§5.C.8.)

The project parcel is within the Industrial (I) Zoning District. The proposed uses of Office, Research Facility and Light Manufacturing are allowed by right.

FLOOD PLAIN OVERLAY DISTRICT (§5.E.1.)

Portions of the Site are within the Flood Plain Overlay District. All proposed work is outside the FEMA mapped 100-year flood zone.

SITE PLAN APPROVAL (§6)

CONTENTS

SP1. Provide location, height, size and design of all proposed signage (§6.E.4.r.).

SP2. Provide location of and screening methodology for trash enclosures (§6.E.4.s.).

SP3. Provide location and description of a permanent benchmark on or adjacent to the property (§6.E.4.w.).

SP4. Provide description of maximum number of employees for the proposed building only and identification of any federal or state permits required for the project (§6.E.4.ee.).

SP5. Provide description of the hours of operation of the proposed use (§6.E.4,ff).

REVIEW CRITERIA

BUILDINGS, STRUCTURES, AND SITE CHARACTER (1): See all comments provided herein.

TRAFFIC (2): See Traffic Assessment Review.

PARKING, LOADING AND LIGHTING (3): See Parking and Loading and Lighting sections.

STORMWATER AND SITE DRAINAGE (4): See review letter for stormwater, floodplain and wetlands for Conservation Commission and Board of Health under separate cover.

UTILITIES (5): See Utilities section.

TOWN SERVICES (6): BETA defers to the Town of Billerica.

VEGETATION AND LANDSCAPING (7): See Landscape Treatment section.

WETLANDS (8): See review letter for stormwater, floodplain and wetlands for Conservation Commission and Board of Health under separate cover.

DIMENSIONAL REGULATIONS (§7)

The parcel meets the requirements for lot area, frontage, front, side, and rear yards, lot coverage, and green space. The development meets the maximum height requirement but the existing building to remain does not, but the site plans indicate this is an existing nonconformity. The parcel does not meet the requirement for building perimeter and the lot perimeter Green Strips. Refer to landscaping section below regarding Green Strip findings.

TRAFFIC ASSESSMENT REVIEW

The Applicant's traffic engineering consultant, McMahon Associates, compiled a brief Traffic Assessment in a memorandum dated January 31, 2023. The assessment provided a summary trip generation for the existing two office buildings and the proposed Good Manufacturing Practice (GMP) building. A discussion of the provided parking was also provided.

TRIP GENERATION

Site trip generation was estimated based on the Institute of Transportation Engineers *Trip Generation Manual, 11th edition.* The Assessment utilized Land Use Code 140 (Manufacturing) and 710 (General Office Building) and concluded that the proposed Manufacturing building would generate fewer trips than the existing Office buildings. The comparison suggests a reduction in 192 weekday morning peak hour trips, 171 weekday evening peak hour trips, and 1272 weekday daily trips. BETA notes that in the previous assessment for 300 Concord Road, the Trip Generation assessment utilized Land Use Code 760 (Research and Development Center) for the purposes of the GMP building. Land Use 760 generates more trips than the Manufacturing land use, but still results in a net reduction in trips when compared to General Office. Based on the above, BETA finds the above comparison and methodology to be appropriate.

SITE ACCESS AND CIRCULATION

The proposed site proposes to utilize the existing system of access drives. It proposes to provide pedestrian access via a sidewalk from the rear door, along the building to the existing sidewalk that connects to the adjacent Technology Park to the south.

SA1. Provide an overall pedestrian access plan for the site (campus).

SA2. Provide information on bicycle accommodations.

The proposed parking assumes up to 133 spaces will be shared in a larger parking area to the rear of the building. The plans provide access to enter and exit the building from that side. If the accessible spaces are to be retained, ensure there is an accessible path to those spaces and the building door. The front of the building provides 11 accessible spaces and shows two stair sets with railings. The accessible spaces are shown at the same grade as the adjacent sidewalk.

SA3. Confirm the access to the building meets the accessibility requirements.

SA4. Consider adding a barrier to prevent cars from parking on and blocking sidewalk.

PARKING AND LOADING (§8)

The proposed plan is to expand an existing 57 space (west) parking area to provide 117 spaces. The Site Plan assumes that at least 133 spaces will be shared or otherwise accessed amongst the larger parking area with other buildings. In the rear of the building, 44 existing spaces are being removed to provide adequate loading space for larger vehicles to enter and depart the proposed loading dock area. The Site Plans provide a summary of required and proposed parking based on the Town's Bylaws, which shows the site plan meets requirements. BETA evaluated parking demand based on the Institute of Transportation Engineers *Parking Generation, 5th Edition* which found the Manufacturing use generates a lower demand (153) than that defined by Town bylaws (252). Assessing the Site as Research and Development results in parking demand of about 430 spaces, which is larger than the Bylaw.

Based on the parking table on C-301, the current demand for the site (buildings 296 & 298) is 609 spaces where a total of 1,158 spaces will be available. If the previously approved 300 Concord Road were built as well, the parking demand is 885 where a total of 763 spaces are provided as shown on EXH-1. The approval of 300 Concord Road has a condition to construct an axillary parking if needed.

All new parking spaces are shown as 9 feet by 19 feet with min. 24' access aisles.

SIGNS AND LIGHTING (§9)

Other than regulatory signs (parking and stop), the submitted documents do not indicate two signs; a monumental sign at the northern side of the Site and a stop sign at the southern side of the Site.

SL1. Provide sign location and details for any proposed new building signage.

A lighting plan has been provided showing location, height, and specification for 3 – 25 foot high light poles in the west parking lot as well building mounted light at the build access points.

SL2. Provide details of light poles and luminaires.

UTILITIES

The project plans indicate connections to public water, sanitary sewer, gas, telecommunications, and electric services. A new 8-inch ductile pipe water main will circle 3 sides of the new building. Sewer will be piped to the existing sewer pump station at the northeast corner of the building. Four new hydrants are proposed around the building for firefighting activities. Electric transformers and generators are located on the northeast corner as well. Water and sewer demand is projected lower than the existing office buildings to be demolished.

U1. Provide an inspection report for the existing sewer pump station.

LANDSCAPE TREATMENT

The Applicant has requested a Special Permit to reduce (73.4%) the required building perimeter (75%).

The Applicant has requested a Special Permit to reduce the width of the required green stirp along the northern property line from 20 feet to 10 feet on the grounds that an existing parking easement must be maintained.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.

Tyler de Ruiter, PE, PTOE
Senior Project Engineer

Philip F Paradis, Jr., PE,
Associate

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