

March 20, 2024

Mr. Gregory Rondeau, Chairman
Franklin Planning Board
355 East Central Street
Franklin, MA 02038

**Re: 6 Forge Parkway
Site Plan Peer Review**

Dear Mr. Rondeau:

BETA Group, Inc. has reviewed the proposed site plans for the proposed development entitled “**Site Development Plans for 6 Forge Parkway**” located in Franklin, Massachusetts. This letter is provided to inform you of our findings, comments, and recommendations relative to the proposed development.

BASIS OF REVIEW

The following documents were received by BETA and formed the basis of the review:

- Application for Approval of a Site Plan, dated July 6, 2022, including the following attachments:
 - Form P
 - Certificate of Ownership (Quitclaim deed)
 - Certified Abutters List
- Plans (24 sheets) set entitled: **Site Development Plans for 6 Forge Parkway, Franklin, MA**, Prepared by Allen & Major Associates, Inc. Woburn, MA dated February 05,2024.
- Architectural plans (2 sheets) entitled **Forge Parkway Warehouse**, Schematic First floor Plan and Exterior Elevations prepared by PROCN and dated January 27,2024.
- **Drainage Report, 6 Forge Parkway, Franklin, Massachusetts**, prepared by Allen & Major Associates, Inc. dated February 5,2024.

Review by BETA included the above items along with the following, as applicable:

- **Zoning Chapter 185 From the Code of the Town of Franklin**, current through October 2019
- **Zoning Map of the Town of Franklin, Massachusetts**, attested to April 30, 2019
- **Stormwater Management Chapter 153 From the Code of the Town of Franklin**, Adopted May 2, 2007, including amendments dated February 17, 2021.
- **Subdivision Regulations Chapter 300 From the Code of the Town of Franklin**, current through January 1, 2016
- **Wetlands Protection Chapter 181 From the Code of the Town of Franklin**, dated August 20, 1997
- **Town of Franklin Best Development Practices Guidebook**, dated September 2016

INTRODUCTION

The project site includes one parcel, assessors Map 272, Lot 5, with a total area of 5.91 acres located at 6 Forge Parkway in the Town of Franklin (the “Site”). The Site is located within the Industrial District. Route

140 and the Commuter Rail Line are located along the northerly edge of the site. The lot to the east is a vacant lot which is in the Business District. The Site is not located in the Water Resource District.

The existing Site is primarily a vacant parcel of land. A portion of the entrance driveway into the adjacent lot at 4 Forge Parkway is located on the parcel. There are several utility easements along the frontage and the southerly property line which are associated with the overall development and the stormwater collection system on the 2 abutting lots at 4 & 8 Forge Parkway.

Topography at the Site is generally directed east and north. A rip rap lined swale along the Route 140 Right of Way intercepts runoff from the site and directs it east towards the railroad and an area of vegetated wetlands at the northeast corner of the parcel. According to data available from MassGIS, this wetland resource area connects to Mine Brook further to the east. Based upon the topography, it appears that a portion of the site was graded and flattened in conjunction with the development of the 2 abutting lots. Grades east and north of this area are very steep. The development at 8 Forge Parkway is approximately 14-15' higher than the site with slopes down to the edge of the existing driveway into 4 Forge Parkway and the previously disturbed area. There are 3 stormwater discharge points onto the site from 8 Forge Parkway along the southerly property line. Two of these outfalls will be impacted by the proposed development. Most of the proposed development will be located within this previously disturbed area. The Site is not located within a FEMA mapped 100-year floodplain, an NHESP-mapped estimated habitat of rare or endangered species, or any other critical area. NRCS soil maps indicate the presence of Charlton-Hollis-Rock Outcrop complex with a Hydrologic Soil Group (HSG) rating of A (high infiltration potential), and Canton fine sandy loam with HSG B (medium infiltration potential).

The project proposes to construct a 35,250± sq. ft. warehouse facility with loading docks and a ramp at the rear of the site. The building will be divided into two separate tenants. 2,000 sq. ft. of office space will be provided for each tenant in the front of the building. Access into the site will be a shared driveway with 4 Forge Parkway for 270± feet. The 2 existing access driveways into the parking lot at 4 Forge Parkway will be maintained with a single-entry point to the proposed structure beyond the 2nd access point. Parking will be provided along the front and northwest corner of the building. Driveway access will be provided around the entire building, with the pavement area at the rear of the building dedicated to truck movement for access to the ramp and 4 loading docks. Utilities including gas, sewer, and electric will be brought in from Forge Parkway and/or stubs that were provided for future development. Water will be brought in from an easement and main at 8 Forge Parkway. Stormwater management is proposed via a new subsurface infiltration system at the rear of the building and a smaller subsurface system at the start of the driveway. Associated landscaping will be provided primarily along the front of the building and the entrance driveway. A precast concrete block retaining wall ranging in height from 3-7', will be installed along the southerly edge of the development to support the slope down from the parking at 8 Forge Parkway. A similar type of wall will be installed at the northwest corner of the development adjacent to the RTE 140 Right of Way, which will support the grades associated with the development to a height of 3-7'. No lighting is shown on the site plans.

FINDINGS, COMMENTS, AND RECOMMENDATIONS

GENERAL

- G1. The locus map identifies the wrong lot and should be corrected. It appears to show 25 Forge Parkway as the locus.

ZONING

The Site is located within the Industrial Zoning District. Lots surrounding the site are also located in the Industrial Zoning District except for the vacant lot to the east, which is located in the Business Zone. The proposed development is to construct a 35,000+ sq. ft. warehouse office, which is an allowed use in the Industrial zone.

SCHEDULE OF LOT, AREA, FRONTAGE, YARD, AND HEIGHT REQUIREMENTS (§185 ATTACHMENT 9)

The existing lot meets the requirements for lot area, depth, frontage, and width, although it incorrectly notes the width as 46'. A Zoning Schedule for the proposed conditions is shown on Sheet C-102.

- Z1. As previously noted, the lot width in the table should be changed to reflect the definition under the bylaws. In addition, the circle should also be shown on the plan.
- Z2. Based upon the presence of the office space, a Special permit from the Planning Board is required in accordance with the bylaws.
- Z3. The table indicates that the maximum building height and stories are to be determined. The architectural plans indicate that the building height will be 29'-6", however they do not note the number of stories. These figures should be on the table.

PARKING, LOADING AND DRIVEWAY REQUIREMENTS (§185-21)

As previously noted, access to the Site will be a common driveway from Forge Parkway which will be shared with the existing use at 4 Forge Parkway. The 2 existing openings into the 4 Forge Parkway site will be maintained and the access into the site will be a 24' wide continued access driveway into the development. Loading docks and an access ramp into the building will be provided at the rear of the building for each tenant.

Parking requirements defined by the Zoning Bylaw are for office and Warehouse Uses, 1 space is required per 400 sq. ft. of gross floor area; for Warehouse use 1 space is required per 1,000 sq. ft. of gross floor area. The areas provided in the parking requirement summary result in a total required parking space count of 42 spaces. 51 spaces are provided on site.

- P1. Correct the table to indicate that 51 standard spaces are provided not 49.
- P2. The entrance driveway is approximately 500' long before it gets to the site development. In addition, there is only one way entrance driveway. BETA recommends that the access driveway alignment be forwarded to the fire department for their review.
- P3. The lot line between 4 & 6 Forge Parkway is in the middle of the existing access driveway. The existing conditions plan does indicate that there are any easements on the parcel which indicate that either party has access and utility rights. BETA recommends that easements associated with this driveway and utilities be shown on the plans.
- P4. Just before the driveway enters the site development area, the rip rap slope on the left side will extend off the property. Note 15 on sheet C-103 indicates that A temporary Easement may be required. BETA recommends that the designer document the ability to obtain the easement from the abutter for this construction.
- P5. In accordance with §185-21.C(5) of the bylaws, "**Parking lots for 20 or more cars shall contain or be bordered within five feet by at least one tree per 10 parking spaces,....**" For the proposed

51 spaces this would equate to 6 trees. The Landscaping Plan on Sheet L-101 shows 18 trees around the front parking lot and entrance driveway.

SIDEWALKS (§185-28)

No public sidewalks are proposed under this project. There are sidewalks across the frontage on Forge Parkway. A concrete sidewalk is proposed across the front of the building to access the front doorway entrances into the building. No other sidewalks are proposed to provide pedestrian access around the building or out to Forge Parkway.

CURBING (§185-29)

C1. Based upon the site plans, the entirety of the parking lot, including the access drive and loading dock areas will have vertical precast concrete curbing.

SITE PLAN AND DESIGN REVIEW (§185-31)

The project has been submitted for Site Plan Review and is required to conform to the requirements of this section. There is no proposed site lighting shown on any of the site plans or architectural plans.

SP1. There are 2 preliminary architectural plans included in the submission including all 4 elevations and a floor plan.

SP2. There is no site lighting identified or shown on the plans. In accordance with §185-31, C(3)(l), A photometric plan with sufficient illuminance values, to determine compliance with §185-31.1C(4)(e) is required.

SP3. Plans should indicate if any signs are being proposed and provide a detail if applicable.

SP4. In accordance with §185-31, C(4)Review criteria. The Planning Board shall approve a site plan only upon its determination.....

(b) Reasonable use is made of building location, grading, and vegetation to reduce visibility of structures, parking area, outside storage, or other outdoor service areas (e.g., waste removal) from public views.

Based upon the 2021 Aerial imagery available it is difficult to determine if the vegetation along route 140 is sufficient to screen the loading docks from view from the roadway. In addition, because of the steep grades to the floor of the valley from the loading docks area will be covered in riprap without any vegetation. BETA recommends that the applicant provide additional information to the Board to allow that determination to be made.

UTILITIES

Each of the structures will be provided with new service connections to the utilities in East Central Street for sewer, water, and stormwater. Electricity and communication will be connected overhead. Detailed review of utilities is anticipated to be provided by the DPW and Fire Chief, as applicable.

STORMWATER MANAGEMENT

The overall impervious surface coverage across the site will be approximately 103,000 sq. ft. and overall site disturbance will exceed 1.0 acre and it is therefore subject to the stormwater by law. Two proposed subsurface infiltration systems will be provided on site to treat and infiltrate the runoff from the site. The first system will be located north of the access driveway at its starting point at the edge of the existing driveway into 4 Forge Parkway parking lot. It will treat and infiltrate the runoff from the first 75' of the

entrance driveway. The 2nd will be located behind the building and will infiltrate and treat the runoff from the remainder of the proposed development.

STORMWATER MANAGEMENT REGULATIONS (CHAPTER 153)

The project proposes to disturb land in excess of one acre within the Town of Franklin. It is therefore subject to the Stormwater Management Regulations. The project is also required to comply with the Town of Franklin Best Development Practices Guidebook (BDPG). Compliance with these regulations is outlined below and throughout the following sections.

SUBDIVISION REGULATIONS - STORMWATER MANAGEMENT REGULATIONS (§300-11)

Additional requirements for stormwater management are outlined in §300-11 of the Town of Franklin Subdivision Regulations.

SW1. The applicant has proposed the use of PVC and HDPE pipe for the stormwater collection system. In accordance with §300-11.B(2.a) the pipe should be RCP.

MASSDEP STORMWATER STANDARDS

The project is subject to the Massachusetts Stormwater Standards as outlined by MassDEP. Compliance with these standards is outlined below:

NO UNTREATED STORMWATER (STANDARD NUMBER 1): *No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.* The project proposes two new outfalls at the rear of the parcel. The first is a new outfall from the proposed stormwater improvements. The second is a new outfall which will collect the 2 existing outfalls along the southerly property line and redirect this flow to the rear of the parcel.

SW2. Runoff from a portion of the existing access driveway flows to the Forge Parkway system. The calculations should address the issue of compliance with the standards for this portion of the site.

SW3. There are 2 outfalls along the southerly property line that discharge onto the parcel from 8 Forge Parkway onto the proposed development area. Each of these discharge points are located within easements on the subject parcel. The design proposes to pipe this flow to the east and discharge to a point on the easterly slope below the fill line. Each of these discharge points currently flows through an existing stormwater feature and/or an area that will qualify them for LID credits. Accordingly, collecting this runoff and piping it directly to a discharge will result in an untreated discharge point. The treatment and infiltration provided for these 2 existing discharge points must be maintained by the proposed design.

SW4. Since there will be vehicular access into the building, floor drains will be required and connected with the existing municipal sanitary sewer collection system. This flow will need to flow through an oil water separator prior to discharge into the system. It should be shown on the plan and a detail provided.

POST-DEVELOPMENT PEAK DISCHARGE RATES (STANDARD NUMBER 2): *Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.* The project proposes a net increase in impervious area and changes to site hydrology. Stormwater runoff will be mitigated via 2 new subsurface infiltration BMPs. Calculations indicate a decrease in peak discharge rate to all design points.

SW5. The existing discharge culverts coming from the south have not been included in the overall analysis. By routing these 2 discharge points directly to the wetlands at the northeast corner of

the parcel (DP 3) the design will decrease the Tc for this flow. The change in peak flow rates associated with this routing should be accounted for in the design. The calculations provided only document that the capacity of the proposed culvert will be greater than the 2 existing tributary culverts.

RECHARGE TO GROUNDWATER (STANDARD NUMBER 3): *Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to maximum extent practicable.* NRCS soil maps indicate that soil in the area of proposed infiltration system is Charlton-Hollis-Rock complex with a Hydrologic Soil Group (HSG) rating of A (high infiltration potential) and a Canton fine sandy loam with a Hydrologic Soil Group (HSG) rating of B (Moderately high infiltration potential). The proposed subsurface infiltration system will provide the static storage volume required for all the impervious surfaces on site.

- SW6. The existing impervious surfaces at the front of the site which will continue to flow into the Forge Parkway System should not be excluded from the overall recharge requirement.
- SW7. The 2 existing discharge culverts from the southerly parcel each discharge to a potential infiltration area. Directly routing this flow to the rear of the parcel will bypass this potential. This should be addressed in the report.
- SW8. Based upon the size of Infiltration system 2, in accordance with the stormwater standards, 2 additional test pits within the limits of the system are required.
- SW9. There is no test pit data for proposed infiltration system 1 at the 4 Forge Parkway entrance driveway. The bottom of the stone beneath the chambers will be set at Elevation 271.50. This elevation is 2.5' lower than the existing stormwater basin at the rear of the 4 Forge Parkway site. The nearest test pit TP-8 encountered ledge and groundwater at 13'. The plans state that test pits will be conducted at the time of construction. However, BETA recommends that a test pit be conducted during the design phase to ensure that the design can be implemented, since the design options for this location are limited by space constraints.
- SW10. The fill slope along the northerly edge of Infiltration system 2 is greater than 3:1 as it extends from the crest at elevation 273.0± to a low point at Elevation 241.0 at the northeast corner. For grades steeper than 2:1, the designer is proposing a riprap covered slope. The design has proposed an impermeable liner along the down gradient edge of the system. However as noted the liner will only extend as deep as the excavation limits associated with system installation. Based upon the elevation BETA recommends that the system be setback a minimum of 50' from the slopes greater than 3:1.
- SW11. At the northeast corner of Infiltration System 1, there will be a need for approximately 6' of fill below the lower stone layer. In addition, there is approximately 3' of fill above the original A & B horizon soils which must be removed. The detail for the system should be modified to identify the limits of excavation and specify the backfill material.

TOTAL SUSPENDED SOLIDS (STANDARD NUMBER 4): *For new development, stormwater management systems must be designed to remove 80% (90% per Town Bylaw) of the annual load of Total Suspended Solids (TSS).*

The project is required to treat the 1.0-inch water quality volume per Town Bylaws. The proposed infiltration systems will provide the static storage needed to comply with the standards and the bylaws. Pretreatment for the primary system at the rear of the parcel will be through deep sump catch basins,

proprietary separators, and an isolator row prior to infiltration. The treatment and infiltration facility at the front of the parcel will utilize a proprietary inlet control and a rain garden as pretreatment prior to infiltration.

SW12. The impervious surface area tributary to CB 1 is greater than 0.25 acres. In accordance with Volume 2, Chapter 2 of the standards, the impervious surface area tributary to a deep sump catch basin should be less than 0.25 acres. BETA recommends that this design be modified to meet the criteria.

SW13. The TSS removal rate for the proprietary separator should be limited to 45% which reflect actual rates achieved as documented by the EPA.

HIGHER POTENTIAL POLLUTANT LOADS (STANDARD NUMBER 5): *Stormwater discharges from Land Uses with Higher Potential Pollutant Loads (LUHPPLs) require the use of specific stormwater management BMPs.* The project is not considered a LUHPPL – **not applicable.**

CRITICAL AREAS (STANDARD NUMBER 6): *Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas.* The project is not located within a critical area – **not applicable.**

REDEVELOPMENT (STANDARD NUMBER 7): *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.* The Site has been designed to meet the standards without considering the redevelopment issues associated with the site.

EROSION AND SEDIMENT CONTROLS (STANDARD NUMBER 8): *Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.* As the project proposes to disturb greater than one acre of land, it will be required to file a Notice of Intent with EPA and develop a Stormwater Pollution Prevention Plan (SWPPP). Erosion control measures are depicted on the plans include silt fence, inlet protection, stabilized construction entrance, dust control, and designated stockpile area.

SW14. The applicant is reminded that a Stormwater permit from the Franklin DPW is required based upon the size of the disturbance.

OPERATIONS/MAINTENANCE PLAN (STANDARD NUMBER 9): *A Long-Term Operation and Maintenance Plan shall be developed and implemented to ensure that stormwater management systems function as designed.* A Stormwater Operation and Maintenance Manual was provided with the Stormwater Management Report.

SW15. There is a list of Supplemental Information noted on page 25 of the drainage report. Each of these items should be attached directly to the O & M manual for the site and issued as a single document.

ILLICIT DISCHARGES (STANDARD NUMBER 10): *All illicit discharges to the stormwater management system are prohibited.* A signed Illicit Discharge Compliance Statement was provided with the submission.

Mr. Gregory Rondeau, Chairman

March 20, 2024

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

Very truly yours,
BETA Group, Inc.

A handwritten signature in blue ink, appearing to read "Gary D. James". The signature is fluid and cursive, with the first name "Gary" being the most prominent part.

Gary D. James, PE
Senior Project Engineer

cc: Amy Love, Planner