



September 2, 2025

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

**Re: Lot 2 Forge Parkway
Site Plan Peer Review**

Dear Mr. Rondeau:

BETA Group, Inc. is pleased to provide engineering peer review services for the proposed project entitled “**Site Plan, Lot 2 Forge Parkway**” located in Franklin, MA. This letter is provided to outline our findings, comments, and recommendations.

Basis of Review

The following documents were received by BETA:

- Application Package including:
 - Form P Approval of a Site Plan
 - Certificate of Ownership
- Site Plans (9 sheets) entitled: **Site Plan, Lot 2 Forge Parkway, Franklin, Massachusetts**, dated July 07, 2025, prepared by United Consultants, Inc, of Wrentham, MA
- Drainage Analysis for Site Plan, Lot 2 Forge Parkway, dated July 07, 2025, prepared by United Consultants, Inc. of Wrentham.
- Plan entitled: Pre & Post Development Watershed Maps, Lot 2 Forge Parkway, dated July 07, 2025, prepared by United Consultants, Inc. of Wrentham.
- Plan entitled: Stormwater Facilities Plan, Lot 2 Forge Parkway, dated July 07, 2025, prepared by United Consultants, Inc. of Wrentham.
- Plan entitled; **Lot 2 Forge Parkway-Franklin, MA, Site Lighting Plan, Photometrics & Schedules**, prepared by Sk & Associates, dated July 28, 2025.

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

- **Massachusetts Wetlands Protection Act 310 CMR 10.00** effective October 24, 2014
- **Massachusetts Stormwater Handbook** effective January 2, 2008 by MassDEP
- **Stormwater Management Chapter 153 From the Code of the Town of Franklin**, Adopted May 2, 2007
- **Wetlands Protection Chapter 181 From the Code of the Town of Franklin**, dated August 20, 1997
- **Town of Franklin Best Development Practices Guidebook**, dated February 2021

1.0 SITE AND PROJECT DESCRIPTION

The project site is a single parcel, identified by the Town of Franklin Assessor's Office as Map 272 parcel 001 with a total area of 130,961± sq. ft. located at the intersection of West Central Street and Forge Parkway in the Town of Franklin (the "Site"). The Site is located on the east side of Forge Parkway and is located within the Business Zoning district. The existing lot is a vacant parcel which is bordered by 2 existing commercial users to the east along West Central Street. To the south, the Franklin Rail Service runs through a New York Central railroad right of way. South of the railroad right of way the land is zoned industrial. The front half of the lot along West Central Street is primarily occupied by wetlands which discharge west beneath Forge Parkway. As noted, the front half of the site is a flagged wetland which is also within a FEMA designated flood zone. South of the wetland limits, the grade slopes sharply up to the railroad with an overall height differential of 35±'. NRCS soil maps indicate the presence of Hollis-Rock outcrop-Charlton Complex, Windsor Loamy Sand, Udorthents-Loamy, and Freetown Muck in the wetland areas.

The project proposes to erect a new 11,200 sq. ft. 2-story Office-Warehouse building. Because of the grades, retaining walls will be required around all 4 sides of the development area. Access will be from the northbound lane of Forge Parkway, which in this area is a divided highway. Pavement will be provided around three sides of the proposed building. Parking is proposed along the front and sides of the building and access to two 16' wide overhead doors is proposed at the rear (east end) of the building. Overall, 29 parking spaces with two accessible spaces will be provided. As previously noted, retaining walls will generally be erected around the entirety of the proposed building with only two gaps, at the entrance and along the south side adjacent to the railroad. Along the north and east edge, the walls will vary in height from 2 to 15 feet, containing the fill on site. The wall along Forge Parkway will vary in height from 2 to 11.5 feet, supporting the fill on Forge Parkway. The wall along the south adjacent to the railroad will vary in height from 2 to 10 feet, supporting the railroad embankment. All proposed utilities, including water & sewer, will come from the existing municipal facilities in Forge Parkway. A new water service will be extended from the existing service at the front of the lot. In addition, a new fire hydrant will be provided at the front left corner of the building. Additional site features include vertical concrete curbing, site lighting, and landscaping. The proposed Stormwater management consists of four catch basins to collect pavement runoff and all runoff, including the roof area, will be directed into a new subsurface infiltration system behind the building.

2.0 WAIVERS

The Applicant has requested only 2 waivers from §300-11: Stormwater Management related to proposed drainage piping, which are discussed below.

3.0 TOWN OF FRANKLIN ZONING REQUIREMENTS

The project is subject to the Town of Franklin zoning regulations outlined under Chapter 185. Review comments related to the zoning bylaw are provided in the following sections.

The project proposes a combination of Warehouse and Office use and is located within the Business zoning district. Each of these uses is permitted by right in this district, although it should be noted that any use that requires more than 15,000 gallons per day will require a special permit from the Zoning Board of Appeals.

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

The project will comply with dimensional requirements for frontage, lot width, front yard, building height, building coverage, and maximum impervious coverage.

- Z1. The side yard as proposed will be 9'. In accordance with the bylaws, the required side yard setback is 20'. In this instance, the Applicant is depending upon the language of §185-25 which states that *"In commercial and industrial areas, side yard and or rear yard requirements shall be waived where said lots are adjacent to an existing railroad."* Because the underlying Zone is Business, and is not specifically noted in the bylaws, BETA will defer this issue to the Board whether the bylaw applies to the zone or is the application of the bylaw specific to the use.

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

See Section 5 below.

EARTH REMOVAL (§185-23)

As previously noted, the project will require extensive earth moving activities in the development area. Three (3) retaining walls will be required which will essentially encapsulate the entirety of the development area. Overall, as noted on Sheet 4, the site will require a net 5,177 cubic yards of fill. (7,037 fill-1,860 cuts)

SIDEWALKS (§185-28) AND CURBING (§185-29)

The project is located within the Business zone and thus sidewalks are required along street frontage. There is an existing sidewalk along the front of the lot on Forge Parkway. Sidewalks on site will be limited to the west and south face of the building to provide access to building entrances at the office area.

- Z2. Based upon the construction details on sheet 9, it appears that precast vertical concrete curbing will be used around the paved areas. BETA recommends that the curbing be labeled on sheet 3 to eliminate any confusion.

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. The submission complies with this section except as noted below:

- Z3. BETA recommends that a description of traffic circulation, safety and capacity be provided in sufficient enough detail for the Board to make a determination of whether a traffic impact analysis is necessary (§185-31. C.(3)(s)).
- Z4. Sight line information at the entrance should be provided (§185-31. C.(3)(t)). BETA also recommends that the applicant look at the issue associated with the existing grades (6.66% slope) in Forge Parkway at the proposed entrance.
- Z5. An engineered design for the retaining walls should be provided prior to approval.

LANDSCAPING AND SCREENING (§185-35)

Refer to Landscape and Grading section below.

4.0 TRAFFIC IMPACT AND ASSESSMENT

No traffic data or site assessment was provided with the filing.

SITE ACCESS AND CIRCULATION

Access to the Site will come from the north bound side of Forge Parkway. Forge Parkway is a divided roadway and there are no openings in the Middle Island that will allow traffic to access the site from the south bound side. The nearest island opening is approximately 500' south at 2 Forge Parkway. Interior

access will proceed either around the front of the building to the parking spaces in front of the office or to the north of the building which will access the loading docks at the rear of the structure. All access aisles to the parking spaces will be 24' wide. Beyond the parking spaces at the rear of the building, the driveway width will be reduced to 20' and over 100' of pavement will be provided behind the overhead doors for maneuvering.

A stop sign and right-turn only sign is proposed at the driveway entrance.

- T1. Confirm that the proposed configuration has been reviewed by the Town Fire Department.
- T2. The access aisle for the front parking lot is located within 8'± of the property line at the front southwest corner of the parking lot. The applicant should either revise the layout or request the waiver from §185-21.C.(1) for off street parking within 10' of the right of way.
- T3. Include turning exhibit for WB-67 semi-trailer or largest expected vehicle through the Site.

PARKING AND LOADING

Required parking is defined by §185-21.B of the Town Zoning Bylaw. The parking summary for the proposed building is as follows.

Use Designation	Criteria	Building Area	Required Parking
Office	1 space per 250 SF of floor area	4,000 Sq. Ft.	16 Spaces
Warehouse/Loading	1 space per 1,000 SF of floor area	9,200 Sq. Ft.	10 Spaces
Total			26 Spaces

The project proposes 26 parking spaces, including two (2) spaces designed to be van accessible, in accordance with 521 CMR 23.2.1.

Parking spaces are 9 feet wide and 19 feet long: aisle widths are 24' except at the southeast corner of the building where the driveway width is reduced to 20'.

No areas have been designated for trailer parking. Two (2) overhead doors provide at-grade access into the building at the rear of the structure.

5.0 SIGNAGE AND LIGHTING

The project proposes various signs including accessible parking signs, van accessible designation, and a stop sign. Details are provided for these 3 signs. However, no detail for the right turn only sign has been provided.

A photometric plan has been provided indicating six (6) wall mounted fixtures on the building and one pole mounted fixture at the rear of the site.

The Illuminating Engineers Society of North America (IESNA) recommends the following illuminance for parking lots:

Level	Horizontal Illuminance (Min)	Vertical Illuminance (Min.)	Uniformity Ratio (Max/Min)
Basic Maintained Illuminance	0.2	0.1	20/1
Enhanced Security Illuminance	0.5	0.25	15/1

Luminance within the parking lot is generally consistent with the above table.

SL1. Provide detail for "Right Turn Only" sign.

6.0 UTILITIES

Proposed utilities depicted on the plans include domestic water, fire service, including one new hydrant, and sewer service. An MDC Gas Trap is shown on the plan to treat runoff from the floor of the warehouse. There are no references on the plan regarding electric, gas and telecommunications connections. However, there is an existing transformer and meter pad on the front southwest corner of the lot.

U1. Since the existing gas main in Forge Parkway is on the opposite side of the right of way, the plans should indicate if a gas service will be brought onto the site.

7.0 LANDSCAPE TREATMENT & GRADING

The project proposes three (3) deciduous trees and several areas of naturalized plantings around the perimeter of the disturbance area. The trees will be set in the landscaped islands and along the outside edge of the pavement.

Per §185-21.C(5), the project is required to provide 1 tree per 10 parking spaces. For 26 spaces, 3 trees are required. The landscaping plan includes 3 trees, which will satisfy this requirement.

The project includes outdoor parking for 10 or more cars and loading docks and is thus required to provide screening in accordance with §185-35. There is no residential use within 500' of the proposed development area, thus this portion of the bylaw is not applicable to the site.

The outer slopes to the south and east will be planted with a conservation seed mix. All the landscape islands and foundation edging will be mulched.

8.0 STORMWATER MANAGEMENT

The proposed development will be a new development. As outlined in the Hydro-CAD analysis, the development will result in overall impervious surfaces totaling 38,126 sq. ft.

The proposed stormwater management design consists primarily of a single subsurface infiltration system, which will infiltrate and treat all the runoff from the proposed impervious surfaces associated with the development area.

Roof runoff will be collected and piped directly to the subsurface system in two locations at the front and rear of the building. All the runoff from the paved surfaces will be collected by 4 catch basins located around the site. Each of these basins will be proprietary separators that will provide the pretreatment needed for the subsurface infiltration system. The subsurface system will be located along the northerly edge of the building beneath the parking lot.

GENERAL

SW1. It appears that the proposed infiltration system layout is partially within the 50' buffer from the limit of the bordering vegetated wetlands. In accordance with the stormwater standards, all infiltration systems must be setback a minimum of 50' from the waters of the Commonwealth, which includes wetlands. BETA recommends that the designer reconfigure the proposed infiltration system to meet this setback.

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. The Applicant has requested several waivers from these regulations.

SW2. BETA defers to the Town regarding the waiver from §300-11. B.(2)(a) to allow use of SDR 35 PVC (roof drains) and HDPE drainage pipe (connection to subsurface system) instead of reinforced concrete pipe and to allow less than 42" of cover over the top of the pipe when using Class V RCP.

BEST DEVELOPMENT PRACTICES GUIDEBOOK

The project is required to comply with the requirements of the Town of Franklin 2021 Best Development Practices Guidebook (BDPG). Notes have been added to the Landscape Plan which indicate that all plantings are in accordance with the Town of Franklin Best Development Practices Handbook.

MASSDEP STORMWATER STANDARDS

The project is subject to the Town regulation §153-14.A and therefore must comply with the Massachusetts Stormwater Standards as outlined by MassDEP. Compliance with these standards is outlined below:

LOW IMPACT DEVELOPMENT (LID) TECHNIQUES

No LID measures are proposed.

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 one new outfall from the proposed subsurface infiltration system. A rip rap apron is proposed at this outfall to prevent any erosion.

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 to mitigate increases to runoff rates with the use of a subsurface infiltration system. The proposed infiltration system will discharge to the wetlands at the peak of the 100-year frequency rainfall only. Calculations show a decrease for all other rainfall events.

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 the development area is primarily composed of human transported materials. Test pits conducted across the site indicate that the site is underlain by Class I soils with groundwater levels ranging from 45" to greater than 134" at the rear of the site. Design exfiltration rates were based on actual in-situ testing results.

Groundwater recharge is proposed for all runoff from the proposed new site development area. The static storage volume provided exceeds what is required for all the impervious areas on site, which includes the existing parking and building roof area.

Drawdown Calculations have not been provided, however, based upon the exfiltration rate and depth of the system, this is not a concern.

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

The project is also subject to §153-16 of the Town of Franklin Stormwater Management Regulations which stipulates treatment requirements for new development projects. The project will retain the volume of runoff equivalent to 1.0" x the total impervious surface area (§153-16.B.1(a)). 100% of the impervious surface area is tributary to the infiltration measures. Pretreatment for flow into the infiltration systems will be 45% TSS Removal based upon the treatment provided by the proprietary separators.

The project includes the following treatment trains:

Treatment Train	SCM 1 Pretreatment	SCM 2	TSS Removal %
Pond 1	Separator (Contech CDS 1515-3)	Subsurface infiltration system	80%

In accordance with the EPA guidelines, the project has been designed to provide at least 90% TSS removal and at least 100% total phosphorus and nitrogen removal for all the new impervious surface areas.

A Long-Term Pollution Prevention Plan is included in the O&M Plan.

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. (Not applicable)*

CRITICAL AREAS (STANDARD NUMBER 6): *Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas. (Not applicable)*

REDEVELOPMENT (STANDARD NUMBER 7): *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable. (Not applicable)*

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, a Notice of Intent will be required to file with EPA including development of a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP was not provided with the submission; the checklist indicates a SWPPP will be issued prior to land disturbance. Erosion control measures are depicted on the plans including compost sock, and a stabilized construction entrance.

SW3. The applicant is reminded that in accordance with the bylaws, a Soil Erosion and Sediment Control plan and Stormwater Management plan must be approved by the DPW prior to the start of construction.

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.*

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SW4. Provide signature of owner on the O&M Plan (§153-18.B.5).

SW5. Provide brief description of maintenance requirements for each stormwater SCM, including all paved and landscaped areas.

ILLICIT DISCHARGES (STANDARD NUMBER 10): *All illicit discharges to the stormwater management system are prohibited.*

SW6. The Illicit discharge statement should be signed by the Owner. However, the statement indicates that it will be signed and submitted with the SWPPP and the Town of Franklin stormwater permit application. BETA will defer this to the DPW.

9.0 SUMMARY

Based on our review of the Project documents and plans, the Applicant should provide additional information to the Planning Board to demonstrate compliance with the MassDEP Stormwater Management Standards, the Town of Franklin regulations, and generally accepted engineering practices.

The primary issues remaining are the

- Final alignment of the proposed stormwater infiltration system
- The application of the side yard setback relief for this proposed development
- The setback of the parking lot from the right of way and
- The traffic issues at the front entrance relative to the approach grades on Forge Parkway and the lack of access from the south bound side.

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

Very truly yours,
BETA Group, Inc.



Gary D. James, PE
Senior Project Manager