

May 18, 2022

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

Re: 839 Upper Union Street- Proposed Warehouse

Dear Mr. Rondeau:

BETA Group, Inc. (BETA) has reviewed the revised documents for the project entitled: *Proposed Industrial Development, Union Street Business Park II, 839 Upper Union Street* in Franklin, MA. This letter is provided to present BETA's findings, comments and recommendations. BETA will continue the prior comments that remain relevant and/or are being answered in this submission. The response from Bohler to the prior review will be

BASIS OF REVIEW

In conjunction with this revision, BETA received the following items:

- Plans (17 sheets) entitled: *Proposed Site Plan Documents for TMC Holdings & Development 2,LLC* dated 02/01/2022, revised 05/17/22 prepared by Bohler Engineering of Southborough, MA.
- Existing Wetlands Flow Analysis dated May 17,2022
- Proposed Wetlands Flow Analysis dated May 17,2022
- Water Quality Volume Calculations dated May 17,2022
- Comment Response Letter to the Planning Board from Bohler, dated May 17,2022.
- Utility Easement Deed recorded in Norfolk County Registry of Deeds, Bk 29957, Pg 156
- CONTECH Engineered Solutions-CDS Guide.

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 January 1, 2015
- Zoning Map of the Town of Franklin, Massachusetts, attested May 1, 2015
- Stormwater Management Chapter 153 From the Code of the Town of Franklin, Adopted May 2, 2007
- Subdivision Regulations Chapter 300 From the Code of the Town of Franklin, current through January 9, 2012

INTRODUCTION

The proposed work is located within the approximately 3.60-acre parcel at 839 Upper Union Street, further identified as Franklin Assessor's Parcel #314-20-001 (the "Site"). The Site is located within the Industrial (I) zoning district and is on the opposite side of Upper Union Street from Interstate I-495. Several smaller Industrial-zoned lots are located along Upper Union Street adjacent to the I-495 highway layout. An easement associated with the New England Power Company (NEPC) abuts the rear of the Site. An existing 30-foot-wide utility easement exists along the rear of the Site, adjacent to the NEPCO easement.

The Natural Resources Conservation Service (NRCS) soil maps indicate the presence of the following soil types:

Mr. Gregory Rondeau, Chairman May 18, 2022 Page 2 of 11

• Woodbridge Fine Sandy Loam with a Hydrologic Soil Group (HSG) rating of C/D (very low infiltration potential).

The Applicant proposes to construct a 42,750 \pm sq. ft. warehouse within the center of the Site, oriented east to west. A perimeter roadway will be constructed around the warehouse with parking areas and garage door access along the north and south sides of the building. Access from Upper Union Street will be provided with a 30-foot-wide paved driveway that will connect with the perimeter roadway near the center of the Site. Vertical granite curbing will be installed at the entrance driveway along Upper Union Street to a point 15 \pm feet onsite. The remainder of the paved surfaces will be encompassed by a 12-inch cape cod berm. Additional proposed features include fencing, lighting, signage, landscaping, transformers, and utilities (water, sewer, gas, electric, telephone, and cable).

Stormwater management system has been modified to address the prior comments. Specifically, the revisions are

- The existing subsurface infiltration system at 837 Upper Union Street will no longer accept flows from this site.
- The proposed subsurface infiltration system on site has been increased in size to store the volume equal to 1.0" of runoff from all of the proposed impervious surfaces on site in accordance with the requirements of the bylaw.
- Two area drains have been added to the landscaped areas at the rear of the site. Runoff collected by these drains will be piped and discharge towards the wetlands at the westerly edge of the parcel.
- Catch basin treatment inserts will be added to all the catch basins 837 Upper Union Street to bring the site into compliance with Standard 4 of the stormwater standards.
- The detention basin at 837 Upper Union Street will be cleaned and cleared of vegetation in accordance with normal O & M requirements.

The Bohler response to the comments from the 2nd review will be highlighted in yellow. BETA's response will be highlighted in blue. Additional comments submitted by BETA will also be highlighted in blue.

FINDINGS, COMMENTS AND RECOMMENDATIONS

DRAWING REQUIREMENTS (§185-31)

Drawings must be prepared in accordance with the Zoning Bylaw (§185-31).

DR3. In accordance with the requirements of §185-31.C.(3).(k), identify the limit of the existing tree line on the plans and depict if any additional removal of natural vegetation will occur.

Bohler Response: The site currently is almost entirely bare and is not comprised of any wooded area requiring a tree line. Areas of vegetation to be removed have been identified on Sheet C-201.

BETA: that point is correct at the present however, at the time of the as built survey (03-23-2021) conducted by Control Point Associates, Inc. which is verified by satellite imagery, vegetation on the site had naturally reestablished itself. Show the tree line from the survey on the grading sheet. It is BETA's opinion that this will be relevant if a drainage analysis is required to satisfy the stormwater concerns.

Bohler Response (5/17): The existing tree line has been added to the plans.



BETA3: No further comments.

- DR4. Provide sight line information at the Site entrance in accordance with §185-31.C.(3).(t).
 Bohler Response: Sight line information has been provided on Sheet C-301.
 BETA: The sight line is shown. Sight line north may be obstructed by the proposed sign.
 Bohler Response (5/17): The proposed sign has been shifted slightly to allow be outside of the sight line.
 BETA3: No further comments.
- DR1. Provide data for proposed buildings describing the on-site generation of noise (generators, mechanical cooling, compactors, etc.) and odors (§185-31.C.(3).(r)

Bohler Response: It is anticipated that no significant noise-generating equipment will be used on-site. Each office within each tenant space will be equipped with a mini-split HVAC system with a cooling capacity of 15,000 btu. These units will be located on the roof above each office. The maximum sound pressure rate for each unit is 49 decibels. The proposed project also does not anticipate any significant odor-generating equipment.

BETA: No further comments. It must be noted that there is a reference to "Office Use" in the response, but none has been accounted for in the Zoning Summary.

BETA3: BETA will defer this question to the Board.

SIDEWALKS (§185-28)

A 6' wide sidewalk is proposed along the frontage in Upper Union Street as required by this section of the by law.

S1. Provide a sidewalk construction detail **Bohler Response (5/17):** A sidewalk detail has been added to Sheet C-902 of the Site Plans. **BETA3: No further comments**

TREE PLANTING (§185-30)

In accordance with this section, street trees must be planted every 30 feet in a row 30-50 feet back from the right-of-way. On the Landscape Plan (sheet C-701), the calculation for tree planting is based on a frontage distance of 455 feet. The frontage is 513.06 feet. Correct the calculation and show the additional trees required. In addition, BETA recommends that the list as proposed be forwarded to the Tree Warden for approval as required since several the proposed trees are ornamental varieties.

Bohler Response: The proposed number of street trees has been revised per the updated frontage Additionally, the applicant will forward the plan to the Tree Warden for review.

BETA: Tree numbers are correct. Waiting on approval of species by tree warden.

Bohler Response (5/17): Bohler has submitted the Landscape Plan to the Tree Warden and are awaiting his feedback. His response will be forwarded to BETA upon approval.



Mr. Gregory Rondeau, Chairman May 18, 2022 Page 4 of 11

BETA3: No further comments. Waiting on species approval from tree warden

PARKING, LOADING AND DRIVEWAY REQUIREMENTS (§185-21) AND SCREENING (§185-35)

The Project proposes to provide a total of 90 parking spaces including four (4) ADA spaces around the building in a linear fashion along two (2) sides. As shown, the building will be divided into 15 separate units, each with a personnel access doorway and an at grade access garage door. No loading docks are proposed based on the garage door access.

The dimensions of the parking spaces are shown as nine (9) feet by 19 feet with a 28-foot access aisle. Americans With Disabilities Act (ADA) regulations require a minimum of four (4) ADA-accessible spaces for lots ranging from 75 to 100 spaces. One (1) shall be van accessible with a 96-inch-wide access aisle and the remaining 3 parking spaces are to be served by a 60-inch-wide access aisle. The four (4) accessible spaces provided meet these requirements.

There are two (2) proposed pavement cross sections. A heavy-duty pavement cross section with a cement concrete base will be provided at the Site entrance. Except for the Site entrance, all proposed pavement areas onsite will have a 12-inch cape cod berm along the edge. Aisle widths will all be 28-feet-wide; however, it will be 30-feet-wide at the Site entrance. All landscaped areas will be along the outside edge of the parking areas or between the building and the edge of the perimeter roadway pavement along the east and west face of the building.

BETA provides the following comments relative to the parking, loading access and landscaping:

P2. The access driveway into the site is not in accordance with the approved site plan from 2005. In that approval, the entire site was accessed from a single driveway in front of the building at 837 Upper Union Street. The connection from this driveway entrance into this site is in place and located at the southeast corner of the lot. The pavement projects onto this lot approximately 38 feet.

Bohler Response: The proposed project involves a stand-alone lot with a separate business located upon it. Thus, a single access driveway serving the site is warranted.

BETA: BETA will defer this issue to the Board

Bohler Response (5/17): Comment acknowledged

P3. Show sight distances at the entrance. (See Comment DR4)

Bohler Response: Sight line information has been provided on Sheet C-301.

BETA: The sight line is shown. Sight line north may be obstructed by the proposed sign.

Bohler Response (5/17): The proposed sign has been shifted slightly to allow be outside of the sight line.

BETA3: No further comments.

P4. In accordance with §185-21.C.5., parking lots for 20 or more cars shall contain or be bordered (within 5 feet) by at least one tree per ten (10) spaces. The two (2) outside parking areas will require a minimum of two (2) trees within five (5) feet of the spaces. As depicted on the landscape plans, the



Mr. Gregory Rondeau, Chairman May 18, 2022 Page 5 of 11

trees provided do not meet this requirement. The quantity is not sufficient, and the distance exceeds five (5) feet from the spaces.

Bohler Response: The area within 5' of the parking is either building face, a 3:1 slope, has a light pole in the island or is less than 3' of planting area between a retaining wall and the back of curb. The proposed trees were placed in areas that are fairly level and will provide optimum planting conditions. Trees are placed within 5' of parking where possible. A minimum of 2 trees have been shifted to be within 5' of parking.

BETA: The trees are not within 5' of the parking and BETA recommends that the waiver be requested

Bohler Response (5/17): The applicant respectfully requests a waiver from this requirement.

BETA3: BETA defers this issue to the Board.

LIGHTING (§185-31.C(4)(E))

Project Lighting Plans (C-705, C-706, and C-707) indicate that a total of 13 light poles on concrete bases will be installed onsite. No site lighting was indicated to be mounted on the face of the building. A photometric plan was provided.

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

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

L1. There is some minor spillage off the lot on all 4 sides of the parcel from the light poles around the perimeter of the pavement areas. In accordance with §185-31.C.4.E, "No site feature or activity shall create glare or illumination beyond a site's property line" BETA recommends that the applicant either request the waiver or modify the light pole locations.

Bohler Response: The Lighting Plan has been revised to eliminate light spillage to the maximum extent practicable. The applicant respectfully requests a waiver for the remaining minor light spillage.

BETA: BETA Will defer the issuance of the waiver to the Board

Bohler Response (5/17): Comment acknowledged

STORMWATER MANAGEMENT

As previously noted, the proposed stormwater management design has been modified in response to earlier comments. The roof area and a portion of the existing driveway pavement will now discharge into a proposed subsurface infiltration system along the north side of the building. All runoff from the remianing impervious areas on site will be collected in deep sump catch basins with hoods and directed to an 18-inch stub at the northwest corner of the Site. Flow from this stub will go to the detention basin at the 837 Upper Union Street site. To maintain runoff volume to the wetlands at the westerly edge of the site, 2 area drains will be placed in the landscaped areas at the rear of the buildings and piped towards the wetland area.



Mr. Gregory Rondeau, Chairman May 18, 2022 Page 6 of 11

Based upon the time that has passed since the development at 837 Upper Union in 2005, the stormwater improvements on site will maintain compliance with the stormwater standards. The existing stormwater facilities at 837 Upper Union will be used to satisfy the requirements of Standard 2 Peak Flow Rate Attenuation. This basin was designed in 2005 to attenuate peak flow rates from both sites. However, the basin was also designed in 2005 to provide treatment for the runoff as well as peak flow rate attenuation. The treatment capability of the basin has been reduced by the latest revisions to the standards. Thus, as noted in previous reviews, the runoff from the site at 837 Upper Union now no longer meets the standards. In order to bring this site into conformance with Standard 4 TSS Removal, the applicant is now proposing to install proprietary filter inserts at all of the catch basins on the site at 837 Upper Union Street in order to meet this standard.

The Project will disturb greater than one (1) acre of land; accordingly, the Applicant must submit a Notice of Intent (NOI) under the National Pollutant Discharge Elimination System (NPDES) to the Environmental Protection Agency for coverage under the Construction General Permit (CGP). The Applicant must also provide a Stormwater Pollution Prevention Plan (SWPPP).

The Project is subject to the Massachusetts Stormwater Management Standards (Stormwater Regulations §153-16) and Stormwater Management Plan requirements (§153-15). The applicant has provided the design calculations prepared by Engineering Design Consultants, Inc. dated April 22,2005 that were submitted in conjunction with the previous Site plan approval. The conclusion in the drainage memorandum stated:

"The proposed subject project has been designed to utilize the existing stormwater management system that was designed and constructed with consideration of the additional area in Phases 2 and 3 of the Union Street Business Park in 2005, but ultimately not constructed. The project proposes to decrease flows to both the sediment forebay and detention basin as well as the underground infiltration system from what they were designed and approved for. Bohler has reviewed the 2005 approved Union Street Business Park design plans and drainage analysis and found them to be in general conformance with all current local and state stormwater management rules and regulations."

BETA found that the stormwater design from 2005 does not conform to the current Stormwater Standards. Any additional flow to these BMPs will impact their ability to meet these two (2) Standards to the level they are now. The following comments are provided to support a more detailed future review by BETA:

SW3. The detention basin at 837 Upper Union Street was designed as an extended dry detention basin. In accordance with Volume 2, Chapter 2 of the standards, the basin shall store the 2-year storm volume for a minimum of 24 hours. The original design did not meet this Standard. In addition, at the time of the original design, the TSS Removal rate for an Extended dry basin was 70%. Under the current Standards, it is only 50%. Accordingly, all the runoff from the existing impervious surfaces which currently flow through the detention basin do not achieve the 80% TSS Removal Rate required under the standards. Based upon these facts, any additional flow through this basin would negatively impact the ability of the basin to provide any TSS removal.

Response: The proposed drainage system has been revised to include multiple additional BMPs onsite to provide the required TSS removal. A proposed underground infiltration system with an isolator row has been added to provide the required TSS removal prior to infiltration. Also, a Contech CDS2015-4-C water quality unit has been added at the end of the treatment train (DMH-6) to provide additional TSS removal on-site prior to connecting to the existing drainage stub. This water quality unit has been sized accordingly. TSS removal calculations have been added to Appendix C of the



Mr. Gregory Rondeau, Chairman May 18, 2022 Page 7 of 11

updated Drainage Memorandum.

BETA: Based upon our review of the calculations, the stormwater system as proposed will meet the requirements of Standard 4 for treatment. However as noted, the existing detention basin does not mee the current requirements of an Extended Dry Detention Basin. Any additional volume of runoff routed through the basin would only serve to diminish whatever TSS Removal capability the basin currently serves for the runoff from 837 Upper Union Street development.

Based upon the existing conditions topographic plan, there is a sizable depression along the easterly property line which most probably acted as an infiltration basin and prevented any of the runoff from this site to flow into the basin at 837 Upper Union. The only discharge off site is through the wetlands at the back left corner of the site. It is BETA's opinion that if you wish to use the basin at 837 Upper union to attenuate peak flow rates then the existing flow into the basin must be brought into compliance with standard 4 to offset the potential impact on the current treatment provided by the basin for the runoff from the existing site at 837.

Bohler Response (5/17): Comment acknowledged. Per discussion with BETA and Town Staff, the proposed project has been revised to include the installation of FABCO StormSacks within all existing catch basins on the abutting lot to provide additional TSS removal. Additionally, design and performance standards for the Contech water quality unit has been included herein to provide data regarding the CDS units TSS removal standards.

BETA3: Except for the runoff that flows to the wetlands beneath the NEPCO Easement, the remainder of the site will flow towards the basin at 837 Upper Union Street. Essentially this will match the analysis conducted in 2005 regarding peak flow rates. The addition of the catch basin inserts at 837 Upper Union will eliminate the requirement for the basin to continue to provide any treatment in accordance with the standards. Thus, the basin can now serve as a detention basin which serves only Standard 2 for peak flow rate attenuation. As previously noted by the design engineer, the proposed site will not generate the flows anticipated in the original design. Specifically, in accordance with the original design calculations,

- The total impervious proposed on site (87,210 sq. ft.) is less than anticipated in the 2005 design calculations (129,100+ sq. ft.), and
- The subsurface system will accept runoff from approximately 57,000 square feet of the proposed 87,210 sq. ft. (66.0%) Runoff rates from this system will also be reduced from the original design.

Thus, the detention basin at 837 should perform better than anticipated in 2005 and peak flow rates will be less than as designed.

SW4. At the time of the original construction in 2005 there was no requirement to file an NOI with the EPA for the proposed construction activity. However, today the applicant will be required to file an NOI with the EPA and develop a SWPPP. The applicant will also have to file with the DPW for the same. A sample SWPPP was included in the Drainage Memorandum, however it will need to be modified to reflect the revised drainage design.

Bohler Response: A eNOI and SWPPP will be filed with the EPA and DPW prior to construction. The Operation and Maintenance Plan has been revised to include additional measures per the revised drainage design.



BETA: As previously noted, the applicant will need to file with the DPW for a Stormwater Permit that will address the erosion and sediment controls for the site.

Bohler Response (5/17): Comment acknowledged.

BETA3: No further comments

Based on the comments above, BETA recommends that the design engineer:

1. Assess the existing stormwater system to determine its current efficiency and determine if in fact additional flow can be directed through either of the 2 BMPs to meet Standard 2 (Peak Flow Attenuation) without impacting the ability of the existing system to meet the current design requirements of Standards 3 & 4.

Bohler Response: The 2005 drainage analysis and design has been analyzed and the existing drainage system was designed and constructed to accommodate a significantly less amount of impervious area than what is being proposed. In addition to a decrease in impervious area, the proposed drainage design has been revised to include an underground infiltration system that will collect and infiltrate approximately 66.1% of the site's impervious area. With the decrease in impervious area from what the existing drainage system was designed for, and the addition of a new underground infiltration system, the proposed project will decrease the peak runoff rates and volumes calculated in the 2005 design for all storm events. Bohler has reviewed the as-built plan and 2005 approved design plans and found that the drainage system was constructed in general conformance with the approved design.

BETA: The existing stormwater system at 837 Upper Union Street does not meet the standards as they are now espoused. By delaying this portion of the site development for 17 years, it is BETA's opinion that you have lost the right to utilize the performance standards as espoused in 2005 for this continuation of the development. The basin as configured does not meet the design requirements for an extended basin as outlined in Volume 2 Chapter 2 of the current standards. Accordingly, the runoff from the existing site which enters the basin through the forebay will receive only 44% TSS removal. Since the existing site does not meet the "Deminimus standard" a weighted average for TSS Removal cannot be used.

Bohler Response (5/17): Comment acknowledged. Per discussion with BETA and Town Staff, the proposed project has been revised to include the installation of FABCO StormSacks within all existing catch basins on the abutting lot to provide additional TSS removal.

BETA3: Since the applicant is proposing to bring the existing site into compliance with Standard 4, the basin will no longer need to meet the design requirements for an Extended dry detention basin and will now function as a detention basin. It will provide some TSS Removal (25%) but this will be over and above the treatment provided by the inserts.

2. Provide the required BMPs on the applicants site to meet Standards 3 & 4 (Recharge & Water Quality) exclusive of the BMPs on 837 Upper Union Street.



Bohler Response: The proposed drainage design has been revised to include an underground infiltration system that will capture and recharge approximately 57,570 SF of impervious area comprised of the entire rooftop area and a portion of the paved parking area. This results in approximately 66.1% of the proposed site's impervious area. The proposed underground infiltration system has been designed with an isolator row that will provide pretreatment for the portion of the paved parking area directed to the underground system. An inlet control structure has been designed with a weir that has been sized to direct the first inch of runoff towards the isolator row. The rooftop runoff which is considered "clean water" will be sent directly to the underground system. Additionally, a Contech CDS2015-4-C water quality unit has been added at the end of the treatment train (DMH-6) to provide additional TSS removal on-site prior to connecting to the existing drainage stub. This water quality unit has been sized accordingly. Please refer to Appendix C of the updated Drainage Memorandum for applicable stormwater calculations.

BETA: BETA agrees with the assessment that the stormwater improvements on site have been brought into compliance with Standards 3 & 4.

Bohler Response (5/17): Comment acknowledged. Per discussion with BETA and Town Staff, the proposed project has been revised to include the installation of FABCO StormSacks within all existing catch basins on the abutting lot to provide additional TSS removal.

BETA3: See response to No. 2 above.

3. The applicant is proposing to use the existing basin at 837 Upper Union to meet the requirements of Standard 2 for Peak Flow Rate Attenuation. In the past in similar situations where proposed changes in a site where the final basin was not in compliance with the standards, the Board has required the applicant to maintain the current peak flow rate to this basin. Since the site has been sitting vacant for 17 years, it is BETA's opinion that the design of the stormwater improvements on this site should be consistent with the Boards previous position. If the applicant wants to use the existing basin to meet Standard 2 than the site should either be less than or equal to existing peak flow rates into the basin or the basin should be brought into compliance with the current standards.

In addition, there is a certain amount of runoff that is flowing into the wetlands at the northeast corner of the site. The site grading will effectively reduce this watershed area tributary to the wetlands which in turn will reduce the flow rates and volumes into the wetlands. If the site grading remains unchanged, the site stormwater improvements should be modified to supplement the natural runoff and maintain the existing flow conditions.

Bohler Response (5/17): Per conversations with BETA and Town Staff, the proposed project has been revised to send a portion of landscaped areas towards the wetlands. The additional area will match the pre-development volumes to maintain the existing wetland flows. Please refer to the existing and proposed wetland flow calculations included herein. Additionally, updated pipe sizing calculation have been included herein to show the velocity at the wetland flared end section is 2.19 fps, which does not require the need for a riprap apron.

BETA3: Based upon the calculations submitted, the watershed area now tributary to the wetlands will match the current runoff volume. Peak rates may increase slightly, however, the increased performance of the basin based upon the reduced impervious watershed area will offset this minor increase.



Mr. Gregory Rondeau, Chairman May 18, 2022 Page 10 of 11

STORMWATER STANDARDS SUMMARY

Based upon the revisions, the proposed site will meet the stormwater standards and the use of the existing detention basin at 837 Upper Union will not impact the water quality of the discharge from the basin. However, the following comments should be answered to demonstrate full compliance with the standards.

STANDARD 4-WATER QUALITY

- In accordance with the standards, calculations shall be submitted by the manufacturer which document compliance with the TSS Removal rates assumed by the designer for the inline water quality unit.
- 2. The TSS Removal rate for the Treatment train that flows from the catch basins through the Isolator Row includes the pretreatment requirement. In the past BETA has assumed that the Isolator row will meet the pretreatment requirements and combined with the infiltration structure will provide 80% TSS Removal. Adjust the table accordingly.

STANDARD 8- LONG TERM OPERATIONS & MAINTENANCE.

- 1. The easement document provided demonstrates that the applicant does have the right to both "tie in and connect to and use the underground conduits, appurtenances and facilities now or hereafter located under the surface of the condo parcel for the purpose of allowing for the flow of stormwater from the LLC parcel into the Detention Basin". The same document paragraph 3. <u>Maintenance</u> subparagraph (a) states " (a) The trust shall be solely responsible for the maintenance, repair and replacement of the Detention Basin and the Drainage Conduits so as to keep the same in good operating condition, provided however..... that costs incurred...... shall be split evenly with the LLC". The applicant should demonstrate to the Planning Board that the LLC has the right to maintain the basin and install and maintain the catch basin inserts or document that the Trust will accept this maintenance requirement.
- 2. The O & M Plan for the site should be updated to reflect the recent revisions, including all manufacturers data associated with the FABCO catch basin inserts.
- 3. If necessary, the O & M plan for 837 Upper Union should be updated to include the inserts and update the requirements for the detention basin.

STANDARD 10-ILLICIT DISCHARGE STATEMENT

1. Provide a signed Illicit Discharge statement

WETLANDS PROTECTION (§181)

The Project proposes work within Areas Subject to Protection and Jurisdiction of the Franklin Conservation Commission, including BVW, the 25-foot Buffer Zone, the 50-foot Buffer Zone, and the 100-foot Buffer Zone. Therefore, the Applicant is required to submit an NOI to the Town of Franklin Conservation Commission and must obtain an Order of Conditions to complete the proposed work.

A Notice of Intent has been filed with the Conservation Commission and the design engineer has modified the site design in response to the comments from the Commission. Based upon the revisions to the stormwater design, runoff into the wetlands from the proposed site will closely match existing peak flow rates and



Mr. Gregory Rondeau, Chairman May 18, 2022 Page 11 of 11

volumes. Accordingly, the hydrologic conditions which currently supports the vegetation will be maintained in the proposed conditions.

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

Very truly yours, BETA Group, Inc.

D. James

Gary D. James, P.E. Senior Project Manager

cc: Amy Love, Town Planner

Job No: 4830 - 83

"\\beta-inc.com\ma\Projects\4800s\4830 - Franklin On-Call Peer Reviews\83-839 Upper Union Street\Reports\2022-03-07 389 Upper Union Peer Review.docx"





TOWN OF FRANKLIN DEPARTMENT OF PUBLIC WORKS Franklin Municipal Building 257 Fisher Street Franklin, MA 02038-3026

May 17, 2022

Mr. Greg Rondeau, Chairman Members of the Franklin Planning Board 355 East Central Street Franklin, MA 02038

RE: Site Plan – Union Street Business Park, #839 Upper Union Street

Dear Mr. Chairman and Members:

We have reviewed the submitted materials for the subject project and offer the following comments:

- 1. While the grading plan shows proposed cuts of 2 to 3 feet over the existing water mains that run along the front and rear of the site, the applicant has indicated that the contractor will verify the location and elevation of the existing water mains prior to construction and to lower the water mains to provide a minimum cover where necessary. DPW requires a minimum of 5 feet of cover over water mains.
- 2. The area drain in the southeast corner of the site should connect to the proposed drain system at a manhole structure rather than a wye connection.
- 3. The drainage design will need to show that it meets the Town's Stormwater bylaw section 153-16 which requires on site retention of the volume of runoff equal to or greater than 1" multiplied by the total post-construction impervious surface.
- 4. The design proposes a connection to the drainage system and stormwater basin on the adjacent property. Whereas the existing basin appears to be overgrown with vegetation and there is various debris and trash evident along the common property line and the rear of the adjacent property, the proposed work should also include maintenance of the existing basin and removal of the debris and trash.

Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

2016

Michael Maglio, P.E. Town Engineer

From:	Joseph Barbieri <jbarbieri@franklinma.gov></jbarbieri@franklinma.gov>
Sent:	Thursday, April 28, 2022 7:59 AM
То:	Nick Dewhurst
Cc:	Amy Love; Randy Miron; Matthew Clark
Subject:	Re: 839 Upper Union Street Fire Department Approval
Categories:	Filed by Newforma

EXTERNAL: Use caution with attachments and links.

Hello,

Thank you for reviewing this and adding the additional hydrant. This would meet our requirements.

Please let me know if you have any other questions.

Joseph Barbieri, Deputy Fire Chief Franklin Fire Department 40 West Central St. Franklin, MA 02038 FD #: (508) 528-2323 Fax: (508) 520-4912 Direct Office Line (508) 553-5571

This email is intended for municipal / educational use only and must comply with the Town of Franklin and Franklin Public School's policies and state/federal laws. Under Massachusetts Law, any email created or received by an employee of The Town of or Franklin Public Schools is considered a public record. All email correspondence is subject to the requirements of M.G.L. Chapter 66. This email may contain confidential and privileged material for the sole use of the intended recipient. Any review or distribution by others is strictly prohibited. If you are not the intended recipient please contact the sender and delete all copies.

From:	Joseph Barbieri <jbarbieri@franklinma.gov></jbarbieri@franklinma.gov>
Sent:	Wednesday, April 27, 2022 9:58 AM
To:	Nick Dewhurst
Cc:	Amy Love; Randy Miron
Subject:	Re: 839 Upper Union Street Fire Department Approval
Categories:	Filed by Newforma

EXTERNAL: Use caution with attachments and links.

Hello,

Thank you for reaching out. I believe I had reviewed this previously and the only comment I had made was regarding a request for an additional fire hydrant closer to the main entrance. Typically when we pull into a complex we are looking for the closest hydrant to lay in. I don't believe there was a hydrant on the same side of the street closeby. We would not necessarily see the hydrant in the back right away. An additional hydrant near the main entrance/parking lot would be helpful to us. The hydrant in the back is good for us if that's where the sprinkler room FDC gets located.

The turning analysis looks good.

Please let me know if you have any questions.

-Joe

Joseph Barbieri, Deputy Fire Chief Franklin Fire Department 40 West Central St. Franklin, MA 02038 FD #: (508) 528-2323 Fax: (508) 520-4912 Direct Office Line (508) 553-5571

This email is intended for municipal / educational use only and must comply with the Town of Franklin and Franklin Public School's policies and state/federal laws. Under Massachusetts Law, any email created or received by an employee of The Town of or Franklin Public Schools is considered a public record. All email correspondence is subject to the requirements of M.G.L. Chapter 66. This email may contain confidential and privileged material for the sole use of the intended recipient. Any review or distribution by others is strictly prohibited. If you are not the intended recipient please contact the sender and delete all copies.

Town of Franklin

355 East Central Street Franklin, Massachusetts 02038-1352



Phone: (508) 520-4907 www.franklinma.gov

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

DATE:	May 17, 2022
TO:	Franklin Planning Board
FROM:	Department of Planning and Community Development
RE:	Upper Union St Site Plan

The DPCD has reviewed the above referenced Site Plan application for the Monday, May 23, 2022 Planning Board meeting and offers the following commentary:

General:

- 1. The site is located on Upper Union St in the Industrial Zoning District (Assessors Map 314 Lot 020-001).
- 2. The applicant is proposing to construct a 42,750 sq/ft multi-tenant industrial building with parking, drainage and landscaping.
- 3. Review letters have been received from DPW, Fire and BETA.
- 4. The Applicant has not requested any waivers.
- 5. The Applicant is still in front of the Conservation Commission and the next meeting will be May 26th.

Applicant has submitted the following documents:

- 1. Revised Site Plans
- 2. CDS Design and Performance Standards
- 3. Comment Response Letter from Engineer
- 4. Existing Wetlands Flow
- 5. Pipe Size Calculations
- 6. Proposed Wetland Flows
- 7. Upper Union-Utility Easement
- 8. Water Quality Volume Calculations

Comments:

- 1. The Applicant has provide 90 parking spaces were as 43 are required.
- 2. The Applicant is proposing Cape Code Berm throughout the site, except, as required, the entrance is Vertical Granite Curb. *The Planning Board requested Concrete or granite curbing*.
- 3. Planning Board may inquire what the hours of operation will be. Applicant to provide.
- 4. Handicap spaces are located across from the entrance ways. The Planning Board may want to consider adding the spaces next to the buildings.
- 5. Elevations and signage have been provided by the Applicant.
 - 6. The Planning Board requested certificate of ownership be submitted from the abutting property owner to allow to use the drainage system. *Easement Deed provided.*

RECEIVED AND RECORDED NORFOLK COUNTY REGISTRY OF DEEDS DEDHAM, MA

CERTIFY

Milliam P. O'Donnell, Register NOT NOT WILLIAM P. O'DONNELL, REGISTER RECTPROCAL EASEMENT ACREEMENT OFFICIAL OFFICIAL

This RECIPROCAL EASEMENT AGREEMENT (the "Agreement") is made this 10th day of May, 2012 (the "Effective Date"), by and between Union Street Park Business Park Condominium Trust under Declaration of Trust dated June 5, 2006, recorded with the Norfolk County Registry of Deeds at Book 23834, Page 467, as amended (the "Trust") having a mailing address of 581 Boylston Street, Boston, MA and Union Street Business Park, LLC, a Massachusetts limited liability company (the "LLC") having a mailing address of 581 Boylston Street, Boston, MA.

WHEREAS, LLC is the owner of the real property fronting on Upper Union Street, Franklin, Massachusetts shown as "Lot - 2" on a plan entitled "Plan of Land Union Street Business Park Franklin, Massachusetts (Norfolk County)" dated February 2, 2012, recorded with the Norfolk County Registry of Deeds at Plan Book 614, Page 30, (the "Plan"), which lot was conveyed to the LLC by instrument recorded with said Registry of Deeds immediately prior hereto (said lot being hereinafter referred to as the "LLC Parcel"); and

WHEREAS, the Trust is the unit owners association under MGL c. 183A with respect to the Condominium known as Union Street Business Park Condominium (the "<u>Condominium</u>") created by Master Deed recorded with said Registry of Deeds in Book 23834, Page 439, as amended (the "<u>Master Deed</u>"), and as such is vested with title to the land which is part of the common areas and facilities of the Condominium, which land is shown as "Lot-1" on the Plan (said lot being hereinafter referred to as the "<u>Condo</u> <u>Parcel</u>"); and

WHEREAS, there are certain utility facilities located on the LLC Parcel to which connection must be made for the continued provision of certain utilities to the Condo Parcel subsequent to the conveyance of the LLC Parcel; and

WHEREAS, there is a detention basin (the "<u>Detention Basin</u>") located on the Condo Parcel as shown on the Plan, into which storm water from the LLC Parcel must drain; and

WHEREAS, the Trust and the LLC desire to grant to each other certain rights and easements over their respective abutting properties for their mutual benefit, all as herein provided.

NOW, THEREFORE, in consideration of Ten Dollars (\$10), the mutual covenants and agreements contained in this Agreement and other consideration each to the other paid, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. <u>Grant of Easement by LLC</u>. The LLC hereby grants to the Trust and its successors and assigns, as appurtenant to the Condo Parcel, the perpetual, non-exclusive right and easement to tie in and connect to and use, the utility lines,

conduits, appultenances and facilities now or hereafter located under the surface of the LLC Parcel (collectively, the "<u>Utility Conduits</u>") for the purpose of providing electric, telephone and cable dtility services to the Condo Parcel. C O P Y C O P Y

2. <u>Grant of Easement by Trust.</u> The Trust hereby grants to the LLC and its successors and assigns, as appurtenant to the LLC Parcel, the perpetual, non-exclusive right and easement to tie in and connect to and use the underground conduits, appurtenances and facilities now or hereafter located under the surface of the Condo Parcel (collectively, the "<u>Drainage Conduits</u>") for the purpose of allowing for the flow of storm water from the LLC Parcel into the Detention Basin located on the Condo Parcel.

3. Maintenance.

The Trust and LLC agree for themselves and their successors and assigns, as follows:

- (a) The Trust shall be solely responsible for the maintenance, repair and replacement of the Detention Basin and the Drainage Conduits so as to keep the same in good operating condition, provided, however, that in doing so, the reasonable, actual out of pocket costs incurred thereby to parties unrelated to the Trust or its beneficiaries shall be split evenly with the LLC;
- (b) The LLC shall be solely responsible for the maintenance, repair and replacement of the Utility Conduits so as to keep the same in good operating condition, provided, however, that in doing so, the reasonable, actual out of pocket costs incurred thereby to parties unrelated to the LLC or its members shall be split evenly with the Trust;
- (c) The party incurring such costs (the "<u>Performing Party</u>") shall deliver a written invoice to the other party, together with reasonable back up documentation therefor, seeking reimbursement of one-half of the costs so incurred thereby, and the other party shall reimburse the Performing Party within twenty (20) days of the delivery of such invoice. In the event the reimbursement is not timely made, the Performing Party shall be entitled to bring suit to collect the same together with interest from the date the payment was due and payable until paid at the annual rate of fifteen percent (15%), plus attorneys' fees and costs of collection incurred, whether or not suit is actually commenced; and
- (d) In the event that a party (herein a "<u>Defaulting Party</u>") fails to perform its obligations as set forth hereinabove, and the other party (a "<u>Non-Defaulting Party</u>") notifies the Defaulting Party of such failure in writing but such failure continues for a period of thirty (30) days after such written notice, the Non-Defaulting Party LLC shall have the right, at its option, in addition to any other remedies available at law or in equity, to perform such obligations (and an easement for such purposes shall be deemed granted hereby) and thereafter, the Defaulting Party shall reimburse the Non-Defaulting Party for the reasonable, actual out of pocket costs incurred by the Non-Defaulting Party, such reimbursement to be made within twenty (20) days of delivery of an invoice

therefore containing reasonable documentation of such costs. Notwithstanding the foregoing, in the case of emergencies, the Non-Defaulting Party shall have the right to exercise the aforesaid option after written or draf notice to the Defaulting Party upon such lesser period of time as is reasonable under the circumstances.

4. <u>Indemnification</u>. Each party hereby indemnifies, defends and saves the other party harmless from any and all liability, damage, causes of action, suits, claims, judgments or expenses (including without limitation attorneys' fees and costs) arising from personal injury, death, or property damage resulting from the breach of any of the obligations of such party under this Agreement or the exercise of the rights granted hereunder.

5. <u>**Rights of Successors.**</u> This Agreement shall bind and inure to the benefit of the parties hereto, and their respective heirs, representatives, lessees, successors and assigns. The singular number includes the plural and the masculine gender includes the feminine and neuter.

6. <u>Severability.</u> In the event that any easements or agreements contained herein or any portion thereof is declared invalid or void by any competent court having jurisdiction, then such action shall in no way affect the enforceability of any other portion of this Agreement.

7. <u>Waiver; Termination</u>. No waiver of the rights or obligations created by the terms of the grant hereunder shall be construed to be a waiver of any other rights or obligations under this Agreement nor shall any failure to enforce any rights be construed as a waiver of any other right or obligation hereunder.

8. <u>Remedies.</u> Either party shall have the right to enforce this Agreement by obtaining appropriate injunctive relief, including specific performance, or by an action for damages, provided, however, that rescission of this Agreement shall not be a remedy available to either party for any breach by the other.

9. <u>Notices.</u> Any notice, request, demand, approval or consent given or required to be given under this Agreement shall be in writing and shall be (i) mailed by United States certified mail, postage prepaid, return receipt requested, (ii) delivered by recognized overnight courier or (iii) delivered in hand, to the respective party at their principal address set forth in the introductory paragraph of this Agreement, as such address may be changed by written notice given in the manner required hereby.

10. **Further Assurances.** The parties hereby agree to execute any and all documents reasonably requested by the other to confirm or otherwise effectuate the terms and provisions contained in this Agreement, provided that such documents shall neither (a) increase a party's liability hereunder; or (b) materially and adversely affect a party's rights hereunder. In addition to the foregoing, the parties hereto agree that they will hereafter grant to the other party by suitable recordable instrument upon request thereby, any additional rights or easements that are required in order to (a) allow and ensure the

continued use of the Condo Parcel and the improvements thereon as currently used; and (b) to allow for the development and use of the LLC Parcel.

OFFICIAL OFFICIAL

11. <u>Covenants fiot Conditions.</u> The covenants and Peasements contained herein, whether affirmative or negative in nature, shall be construed as covenants and not as conditions, and to the fullest extent legally possible all such covenants shall run with the land.

12. <u>Headings.</u> The headings herein are for convenience and reference only and in no way define or limit the scope and content of this Agreement or in any way affect its provisions.

13. <u>Governing Law.</u> This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts.

14. <u>Counterparts.</u> This Agreement may be executed in several counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument

15. <u>Power and Authority.</u> Each party represents, covenants and warrants to the other that it has full power and authority to execute and deliver this Agreement and to carry out all covenants to be performed by it hereunder; that the individuals signing below have been duly authorized to execute this Agreement on behalf of the respective party. The LLC and the Trust further represent to the other that neither has provided rights or allowed rights to accrue to any other party which are inconsistent with the rights granted in this Agreement.

16. <u>Entire Agreement</u>. This Agreement contains the entire agreement between the parties with respect to the matters set forth herein and no modifications of this Agreement shall be binding upon any of the parties hereto unless evidenced by an agreement in writing, signed by the parties hereto after the date hereof.

IN WITNESS WHEREROF, the undersigned have executed this Agreement as an instrument under seal as of the Effective Date.

UNION STREET BUSINESS PARK CONDOMINIUM TRUST

BY: UNION STREET BUSINESS PARK LLC, TRUSTEE

BY: ABRAHAM PROPERTIES, INC., MANAGER

LASP NICHO ABR HAM, ľ OF **FRESIDENT**L COPY

UNION STREET BUSINESS PARK,

LLC

N O T A N

OFFICIAL

СОРҮ

· ·

BY: ABRAHAM PROPERTIES, INC., MANAGER

By MICHOLAS P. ABRA BAM,

PRESIDENT

Commonwealth of Massa Chusetts

				- 1									- 1			
Worcester, ss. ^O	F	F	Ι	С	Ι	А	\mathbf{L}		0	F	F	Ι	С	Ι	А	L
		С	0	Ρ	Υ						С	0	Ρ	Υ		

On this 10th day of May, 2012 before me, the undersigned notary public, personally appeared the above-named Nicholas P. Abraham, known to me or proved to me through satisfactory evidence of identification, which was a Massachusetts Drivers License, to be the person whose name is signed on the preceding document, and acknowledged to me that he signed it voluntarily for its stated purpose, as President of Abraham Properties, Inc., the Manager of UNION STREET BUSINESS PARK, LLC.

21

Notary Public: Richard Mann My commission expires: 9(25)13

Seal:

COMMONWEALTH OF MASSACHUSETTS

Worcester, ss.

On this 10th day of May, 2012 before me, the undersigned notary public, personally appeared the above-named Nicholas P. Abraham, known to me or proved to me through satisfactory evidence of identification, which was a Massachusetts Drivers License, to be the person whose name is signed on the preceding document, and acknowledged to me that he signed it voluntarily for its stated purpose, as President of Abraham Properties, Inc., the Manager of UNION STREET BUSINESS PARK LDC, the Trustee of Union

Street Business Park Condominium Trust.

Notary Public: Richard Mann My commission expires: 9)27)13

Seal:



May 17, 2022

Franklin Planning Board 355 East Central Street Franklin, MA 02038

Re: 839 Upper Union Street- Proposed Warehouse

Dear Planning Board Members:

Bohler Engineering is in receipt of a comment letter from BETA Group, Inc., dated May 12, 2022 and Department of Public Works, dated May 17, 2022. On behalf of Applicant TMC Holdings & Development Group, Bohler offers the following responses. For clarity, the original comments are in **italics** and BETA., responses **italics bold**, while our responses are directly below in **bold** type. Please note that previously addressed comments have been removed for clarity.

BETA Group, Inc Comments

Drawing Requirements (185-31)

- Comment #DR3.In accordance with the requirements of 185-31.C.(3).(k), identify the limit of the
existing tree line on the plans and depict if any additional removal of natural
vegetation will occur.Response (5/6):The site currently is almost entirely bare and is not comprised of any wooded
area requiring a tree line. Areas of vegetation to be removed have been
identified on Sheet C-201.BETA: that point is correct at the present however, at the time of the as built
survey (03-23-2021) conducted by Control Point Associates, Inc. which is
verified by satellite imagery, vegetation on the site had naturally
reestablished itself. Show the tree line from the survey on the grading sheet.
It is BETA's opinion that this will be relevant if a drainage analysis is required
to satisfy the stormwater concerns.
- Response (5/17): The existing tree line has been added to the plans.



Comment #DR4.	Provide sight line information at the Site entrance in accordance with 185-31.C.(3).(t).
Response (5/6):	Sight line information has been provided on Sheet C-301.
	BETA: The sight line is shown. Sight line north may be obstructed by the proposed sign.
Response (5/17):	The proposed sign has been shifted slightly to allow be outside of the sight line.

Schedule of Lot, Area, Frontage, Yard And Height Requirements

Comment #S1	Provide a sidewalk construction detail.
Response (5/30):	A sidewalk detail has been added to Sheet C-902 of the Site Plans.
Tree Planting	
Comment	In accordance with this section, street trees must be planted every 30 feet in a row 30-50 feet back from the right-of-way. On the Landscape Plan (sheet C-701), the calculation for tree planting is based on a frontage distance of 455 feet. The frontage is 513.06 feet. Correct the calculation and show the additional trees required. In addition, BETA recommends that the list as proposed be forwarded to the Tree Warden for approval as required since several the proposed trees are ornamental varieties.
Response (5/6):	The proposed number of street trees has been revised per the updated frontage. Additionally, the applicant will forward the plan to the Tree Warden for review.
	BETA: Tree numbers are correct. Waiting on approval of species by tree warden.
Response (5/17):	Bohler has submitted the Landscape Plan to the Tree Warden and are awaiting his feedback. His response will be forwarded to BETA upon approval.



Parking, Loading and Driveway Requirements and Screening

Comment #P2.	The access driveway into the site is not in accordance with the approved site plan from 2005. In that approval, the entire site was accessed from a single driveway in front of the building at 837 Upper Union Street. The connection from this driveway entrance into this site is in place and located at the southeast corner of the lot. The pavement projects onto this lot approximately 38 feet.
Response (5/6):	The proposed project involves a stand-alone lot with a separate business located upon it. Thus, a single access driveway serving the site is warranted.
Response (5/17):	BETA: BETA will defer this issue to the Board Comment acknowledged.
Comment #P3.	Show sight distances at the entrance. (See Comment DR4).
Response (5/6):	Sight line information has been provided on Sheet C-301.
	BETA: The sight line is shown. Sight line north may be obstructed by the proposed sign
Response (5/17):	The proposed sign has been shifted slightly to allow be outside of the sight line.
Comment #P5.	In accordance with §185-21.C.5., parking lots for 20 or more cars shall contain or be bordered (within 5 feet) by at least one tree per ten (10) spaces. The two (2) outside parking areas will require a minimum of two (2) trees within five (5) feet of the spaces. As depicted on the landscape plans, the trees provided do not meet this requirement. The quantity is not sufficient, and the distance exceeds five (5) feet from the spaces.
Response (5/6):	The area within 5' of the parking is either building face, a 3:1 slope, has a light pole in the island or is less than 3' of planting area between a retaining wall and the back of curb. The proposed trees were placed in areas that are fairly level and will provide optimum planting conditions. Trees are placed within 5' of parking where possible. A minimum of 2 trees have been shifted to be within 5' of parking.
	BETA: The trees are not within 5' of the parking and BETA recommends that the waiver be requested.
Response (5/17):	The applicant respectfully requests a waiver from this requirement.



<u>Lighting</u>	
Comment #L1.	There is some minor spillage off the lot on all 4 sides of the parcel from the light poles around the perimeter of the pavement areas. In accordance with §185- 31.C.4.E, "No site feature or activity shall create glare or illumination beyond a site's property line" BETA recommends that the applicant either request the waiver or modify the light pole locations.
Response (5/6):	The Lighting Plan has been revised to eliminate light spillage to the maximum extent practicable. The applicant respectfully requests a waiver for the remaining minor light spillage.
	BETA: BETA Will defer the issuance of the waiver to the Board

Stormwater Management

- Comment #SW3 The detention basin at 837 Upper Union Street was designed as an extended dry detention basin. In accordance with Volume 2, Chapter 2 of the standards, the basin shall store the 2-year storm volume for a minimum of 24 hours. The original design did not meet this Standard. In addition, at the time of the original design, the TSS Removal rate for an Extended dry basin was 70%. Under the current Standards, it is only 50%. Accordingly, all the runoff from the existing impervious surfaces which currently flow through the detention basin do not achieve the 80% TSS Removal Rate required under the standards. Based upon these facts, any additional flow through this basin would negatively impact the ability of the basin to provide any TSS removal.
- Response (5/6): The proposed drainage system has been revised to include multiple additional BMPs on-site to provide the required TSS removal. A proposed underground infiltration system with an isolator row has been added to provide the required TSS removal prior to infiltration. Also, a Contech CDS2015-4-C water quality unit has been added at the end of the treatment train (DMH-6) to provide additional TSS removal on-site prior to connecting to the existing drainage stub. This water quality unit has been sized accordingly. TSS removal calculations have been added to Appendix C of the updated Drainage Memorandum.

BETA: Based upon our review of the calculations, the stormwater system as proposed will meet the requirements of Standard 4 for treatment. However as noted, the existing detention basin does not mee the current requirements of an Extended Dry Detention Basin. Any additional volume of runoff routed through the basin would only serve to diminish whatever TSS Removal capability the basin currently serves for the runoff from 837 Upper Union Street development.

Based upon the existing conditions topographic plan, there is a sizable depression along the easterly property line which most probably acted as an infiltration basin and prevented any of the runoff from this site to flow into the basin at 837 Upper Union. The only discharge off site is through the wetlands at the back left corner of the site. It is BETA's opinion that if you



wish to use the basin at 837 Upper union to attenuate peak flow rates then the existing flow into the basin must be brought into compliance with standard 4 to offset the potential impact on the current treatment provided by the basin for the runoff from the existing site at 837.

- Response (5/17): Comment acknowledged. Per discussion with BETA and Town Staff, the proposed project has been revised to include the installation of FABCO StormSacks within all existing catch basins on the abutting lot to provide additional TSS removal. Additionally, design and performance standards for the Contech water quality unit has been included herein to provide data regarding the CDS units TSS removal standards.
- Comment #SW4 At the time of the original construction in 2005 there was no requirement to file an NOI with the EPA for the proposed construction activity. However, today the applicant will be required to file an NOI with the EPA and develop a SWPPP. The applicant will also have to file with the DPW for the same. A sample SWPP was included in the Drainage Memorandum, however it will need to be modified to reflect the revised drainage design.
- Response (5/6): A eNOI and SWPPP will be filed with the EPA and DPW prior to construction. The Operation and Maintenance Plan has been revised to include additional measures per the revised drainage design.

BETA: As previously noted, the applicant will need to file with the DPW for a Stormwater Permit that will address the erosion and sediment controls for the site.

Response (5/17): Comment acknowledged.

Based on the comments above, BETA recommends that the design engineer

- 1. Assess the existing stormwater system to determine its current efficiency and determine if in fact additional flow can be directed through either of the 2 BMPs to meet Standard 2 (Peak Flow Attenuation) without impacting the ability of thexisting system to meet the current design requirements of Standards 3 & 4.
- Response (5/6): The 2005 drainage analysis and design has been analyzed and the existing drainage system was designed and constructed to accommodate a significantly less amount of impervious area than what is being proposed. In addition to a decrease in impervious area, the proposed drainage design has been revised to include an underground infiltration system that will collect and infiltrate approximately 66.1% of the site's impervious area. With the decrease in impervious area from what the existing drainage system was designed for, and the addition of a new underground infiltration system, the proposed project will decrease the peak runoff rates and volumes calculated in the 2005 design for all storm events. Bohler has reviewed the as-built plan and 2005 approved design plans and found that the drainage system was constructed in general conformance with the approved design.

BETA: The existing stormwater system at 837 Upper Union Street does not meet the standards as they are now espoused. By delaying this portion of the site development for 17 years, it is BETA's opinion that you have lost the right to utilize the performance standards as espoused in 2005 for this continuation of the development. The basin as configured does not meet the



design requirements for an extended basin as outlined in Volume 2 Chapter 2 of the current standards. Accordingly, the runoff from the existing site which enters the basin through the forebay will receive only 44% TSS removal. Since the existing site does not meet the "Deminimus standard" a weighted average for TSS Removal cannot be used.

- Response (5/17): Comment acknowledged. Per discussion with BETA and Town Staff, the proposed project has been revised to include the installation of FABCO StormSacks within all existing catch basins on the abutting lot to provide additional TSS removal.
 - 3. The applicant is proposing to use the existing basin at 837 Upper Union to meet the requirements of Standard 2 for Peak Flow Rate Attenuation. In the past in similar situations where proposed changes in a site where the final basin was not in compliance with the standards, the Board has required the applicant to maintain the current peak flow rate to this basin. Since the site has been sitting vacant for 17 years, it is BETA's opinion that the design of the stormwater improvements on this site should be consistent with the Boards previous position. If the applicant wants to use the existing basin to meet Standard 2 than the site should either be less than or equal to existing peak flow rates into the basin or the basin should be brought into compliance with the current standards.

In addition, there is a certain amount of runoff that is flowing into the wetlands at the northeast corner of the site. The site grading will effectively reduce this watershed area tributary to the wetlands which in turn will reduce the flow rates and volumes into the wetlands. If the site grading remains unchanged, the site stormwater improvements should be modified to supplement the natural runoff and maintain the existing flow conditions.

Response (5/17): Per conversations with BETA and Town Staff, the proposed project has been revised to send a portion of landscaped areas towards the wetlands. The additional area will match the pre-development volumes to maintain the existing wetland flows. Please refer to the existing and proposed wetland flow calculations included herein. Additionally, updated pipe sizing calculation have been included herein to show the velocity at the wetland flared end section is 2.19 fps, which does not require the need for a riprap apron.



Department of Public Works Comments

Comment #1	While the grading plan shows proposed cuts of 2 to 3 feet over the existing water mains that run along the front and rear of the site, the applicant has indicated that the contractor will verify the location and elevation of the existing water mains prior to construction and to lower the water mains to provide a minimum cover where necessary. DPW requires a minimum of 5 feet of cover over water mains.
Response:	Comment acknowledged. The Utility Plan has been revised to require 5 feet of cover over the water mains.
Comment #2	The area drain in the southeast corner of the site should connect to the proposed drain system at a manhole structure rather than a wye connection.
Response:	Comment acknowledged. The plans have been revised to include a manhole in lieu of a wye connection.
Comment #3	The drainage design will need to show that it meets the Town's Stormwater bylaw section 153-16 which requires on site retention of the volume of runoff equal to or greater than 1" multiplied by the total post-construction impervious surface.
Response:	Comment acknowledged. The underground infiltration system has been revised to retain the 1" water quality volume. The underground infiltration system size has been increased and the outlet control structure weir has been raised to provide the required volume. Please refer to the updated Water Quality Volume Calculations included herein.
Comment #4	The design proposes a connection to the drainage system and stormwater basin on the adjacent property. Whereas the existing basin appears to be overgrown with vegetation and there is various debris and trash evident along the common property line and the rear of the adjacent property, the proposed work should also include maintenance of the existing basin and removal of the debris and trash.
Response:	Comment acknowledged. Notes have been added to the Drainage Plan requiring the contractor to remove all vegetation, debris and trash from the existing detention basin.



We trust the above as well as the attached information are sufficient for your review of the project. Should you have any questions or require additional information, please do not hesitate to contact me at (508) 480-9900. Thank you.

Sincerely, **Bohler**

Nick Dewhurst

Randy Miron

Copy: Matt Clark, TMC Holdings & Development Group