



May 9, 2013

Town of Hopkinton  
Planning Board  
18 Main Street  
Hopkinton MA, 01748

Attn.: Mr. Ken Weismantel, Chairman

Re: 78 West Main Street – Dunkin' Donuts  
Site Plan and Traffic Peer Review

Dear Mr. Weismantel:

BETA Group, Inc. is received supplemental/revised documents in response to BETA's April 17, 2013 peer review letter and April 22, 2013 Planning Board meeting. The following is a status of comments.

#### BASIS OF REVIEW

BETA received the following items:

- Response to comment letter addressed to Mr. Ken Weismantel, dated May 3, 2013 from Bohler Engineering
- Plans (14) entitled *Site Development Plans for Dunkin Donuts and Mixed Use*, dated March 25, 2013, revised April 29, 2013 prepared by Bohler Engineering, Southborough, MA.
- Plans (3) entitled *Dunkin' Donuts, 78 West Main St., Hopkinton, MA*, dated August, 14, 2012, prepared by MJ Tavares Associates, Lynnfield, MA.
- *Stormwater Drainage Report* dated March 26, 2013, revised May 3, 2013 prepared by Bohler Engineering, Southborough, MA.

#### PROJECT DESCRIPTION

The existing lot has 33,315 sq. ft. and fronts West Main Street with additional access on High Street. A portion of the project site includes the previously abandoned portion of High Street. Plans and descriptions of the utility easement within High Street have not been found. Abutting parcels include business and residential. The site is within the Rural Business District and is also within the Water Resource Protection Overlay District. According to the Natural Resources Conservation Service on-line soils database, the site is comprised of "Narragansett Silt Loam" soils, hydrologic group rating B.

The proposed project includes the construction of a 1-story, 3,000 sq. ft., wood framed building with a Dunkin Donuts (proposed use is allowed under zoning). Parking includes 24 spaces of which 1 will be ADA accessible.

## ZONING REVIEW

### Article VII Rural Business (BR) District

#### Dimensional Requirements

Minimum lot frontage, setback from street line, side and rear yards have been provided. The lot is currently non-conforming with respect to lot area where 45,000 sq. ft. is required; the lot size is 33,315 sq. ft. The proposed uses; restaurant retail & office are permitted in this district. Required landscaping is shown along the street frontage and screening is shown along abutting Residential zoned area.

- Z1 *BETA1: Zoning table on sheet 4 indicates maximum building height is 33'-11 ¾", while the building elevation on sheets X-2 & X-2.1 indicate a height of 35' 7" since the maximum height in this district is 35 feet (§210-22.G) this should be clarified. See comments SU1 below. Bohler1: The proposed building height will be less than 35-ft. The building has been reduced in height and size and is shown as "<35-ft" in the Zoning Table. BETA2: Height dimensions removed from sheets A-2 & A-2.1 – issue resolved.*
- Z2 *BETA1: Provide documentation indicating proposed loading operations (§210-26.A). Bohler1: Loading will occur in the drive-aisle opposite the patio as to not impact any parking areas. As mentioned at the hearing, deliveries are expected during off-peak times, 1-2 times per week and the truck will be on-site for approximately 30 minutes. BETA2: Information provided – issue resolved.*

### Article XII Water Resources Protection Overlay District

The proposed use is allowed within this overlay district.

### Article XVIII Supplementary Regulations

Parking quantity and size of spaces meet requirements (A & B).

- SU1 *BETA1: One (1) tree is provided along the edge of the proposed parking lot. Provide required trees (1 per 8 spaces) or request waiver (§210-124.). Bohler1: 14 evergreen trees are provided along the residence on the northern side of the property. Additionally there are 2 shade and ornamental trees within the property, meeting this requirement. BETA2: Provide on additional parking lot tree in addition to screen trees – issue remains outstanding.*
- SU2 *BETA1: Consider adding evergreen shrubs within the buffer area adjacent to the abutting residence. Proposed evergreen tree height can be reduced. Bohler1: As requested, additional shrubs have been added along the residence on the northern side of the property. BETA2: Requested plantings provided – issue resolved.*
- SU3 *BETA1: Consider alternate species of deciduous shrub as Cornus serica may get too large for the space provided. Bohler1: The Landscape Architect who prepared the Landscape Plan feels there is ample space for this species of shrub with proper maintenance. BETA2: BETA defers to the landscape architect of record.*
- SU4 *BETA1: Remove paved snow storage area or revise so people cannot park in this location. Bohler1: This area is needed to allow for cars to turn around. BETA2: Recommend that space be shorted to discourage parking in this location to leave it open for turn-around.*

Article XX Site Plan Review

Project meets the requirement of a "Major Project"

§210-136.1 Site Plan Standards

There were no wetlands observed within proximity of the site. Unique natural or historic features were not observed on the site. Minimal tree, vegetation and soil are to be removed. Proposed development is proposed to be screened from residential abutters. Proposed utilities are shown underground. Exposed storage areas are shown screened. Project is not expected to be a significant generator of noise or odors. A sidewalk is shown along the frontage of West Main Street. Site lighting appears adequate with no spillage to residential properties. Parking areas are designed to engineering standards. The Site Plan complies with Zoning except as noted above.

- SP1 *BETA1: Recommend providing additional screening of abutting residential lot and proposed dumpster with evergreen shrubs in addition to what is already shown (§210-136.A).* Bohler1: As requested, additional shrubs have been added along the residential line. The dumpster has been relocated to the rear of the building further away from the residences. A 6 foot vinyl fence is proposed to fully enclose the dumpster area. *BETA2: Requested plantings and screening provided – issue resolved.*
- SP2 *BETA1: Provide data supporting one-way exit from parking lot to West Main Street. Provide truck turning movement (WB50) from parking lot (loading area) onto High Street and then to Elm Street (§210-136.L).* Bohler1: A truck exhibit is attached. *BETA2: Requested information provided – issue resolved.*
- SP3 *BETA1: Police and Fire should provide comments (§210-136.O).* Bohler1: No response needed. We will happily address any comments received.
- SP4 *BETA1: See specific comments related to Stormwater below (§210-136.P).* Bohler1: No response needed.
- SP5 *BETA1: Provide screening of proposed transformer (§210-136.Q).* Bohler1: Screening has been provided around the sides of the transformer to the extent allowable by the utility company. *BETA2: Screening provided – issue resolved.*
- SP6 *BETA1: Provide detail of screening of proposed dumpster (§210-136.R).* Bohler1: A detail of the 6' solid vinyl fence is provided on Site Plan Sheet 12. *BETA2: Detail provided – issue resolved.*

Site Plan Review Submission Requirements and Procedures (Planning Board)

Site Plan Standards

Requirements not raised above in previous sections are included below.

- SR1 *BETA1: Provide information for proposed demand on water and sewer, number of employees, calculation of existing and proposed lot coverage (4).* Bohler1: As can be seen on Sheet 6, it is anticipated the site will generate 480 GPD of water/ wastewater per Title V. The proposed Lot Coverage is approximately 62.6% whereas the existing was 19.5%. *BETA2: Requested information provided – issue resolved.*

## TRAFFIC

The proposed site consists of 24 parking spaces with access provided via three driveways; two driveways on West Main Street (including an all access driveway and a right turn out only driveway) and a full access driveway on High Street (via Elm Street).

In general The Traffic Impact Study was prepared according to industry standards and has sufficiently determined the impact of this development. The traffic volumes were analyzed during the weekday morning, weekday evening, and Saturday midday peak hours.

BETA conducted a site visit in order to confirm the status of the existing conditions. There are no sight distance issues along West Main Street.

The traffic volumes that were collected were properly adjusted for seasonal variations in traffic volumes and for potential future traffic growth. The traffic associated with other approved developments was also included as directed by the Town.

The trip generation of the proposed development was calculated and distributed to the local roadways according to industry standards. BETA requested trip generation networks to confirm the traffic volume calculations were performed accurately. The requested information has been received. No further review is necessary. The Existing, No Build, and Build peak hour traffic volumes were properly calculated.

The intersection operations analysis of these peak hour conditions were also conducted according to industry standards. The analysis shows the signalized intersection of West Main Street at Lumber Street can accommodate the additional traffic associated with the development with little additional delay.

The following issues remain unresolved:

*T1 BETA1: Modify the driveways along West Main Street to restrict left turn access and egress along West Main Street. Potential suggested modifications include:*

- While maintaining the western driveway as a right turn exit only, modify the eastern driveway to allow right turn entrance and exit movements only.*
- Eliminating the western driveway and adding a route around the west side of the building that connects to High Street, while only allowing right turn entrance and exit movements at the eastern driveway.*

*Bohler1: The full access driveway on West Main Street is now proposed as a right-in / right-out driveway. BETA2: Plans revised to eliminate left turns in and out of site, however island proposed may not deter vehicles enough – Board may want to discuss.*

*T2 BETA1: Provide Parking Generation calculations to confirm that the parking zoning requirements are adequate to accommodate the parking demand of the development. Bohler1: The previously proposed retail and office uses have been removed. The proposed 24 spaces comply with Zoning and Operational needs. BETA2: Parking requirements reduced with revised design – issue resolved.*

*T3 BETA1: Demonstrate that the 4 foot stone wall at the edge of the parking lot aisle and the outdoor seating area do not create a sight distance issue. Bohler1: The 4 foot stone wall has been moved 5 feet from the edge of the drive-aisle, providing adequate sight distance for vehicles. BETA2: Plans revised to provide improved sight distance – issue resolved.*

## STORMWATER

The project proposes to capture stormwater runoff for the site in deep sump catchbasins, route flows through water quality (Stormceptor) units to a subsurface infiltration system. Runoff for up to the 25 year storm event will be contained on site with overflow for larger event discharging via overflow of the catchbasin in the northwest corner of the site onto High Street.

SW1. *BETA1: Stormwater Drainage Report indicates that the project site will be 62.5% impervious which requires a stormwater management permit (SMP) from the Planning Board (§172-2.B.(3)) Bohler1: The regulations are unclear. As the site is under 1-acre, we question whether this is a requirement. BETA2: BETA defers to Board for interpretation.*

Massachusetts Stormwater Management Standards:

The project is subject to the Stormwater Management Standards (Stormwater Regulations (SWR) 7.0). The following are the 10 standards and relative compliance provided by the submitted documentation.

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 to capture, convey, treat and infiltrate stormwater runoff on-site - complies with standard.

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 calculations provided with this design indicate that there will not be an increase in the peak rate of runoff from this site as a result of this project.

SW2. *BETA1: Revise calculation using the Northeast Regional Climate Center Atlas of Precipitation Extremes for the Northeastern United States and South East for rainfall data (SWR Appendix E.1.i). Bohler1: As requested we have revised the calculations to use the referenced data. BETA2: Revision not received – issue remains outstanding.*

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.*

Plans indicate providing country drainage for the majority of the site utilizing natural infiltration throughout the site. There are two borings (logs provided) located within the vicinity of the infiltration system, one shows refusal at 3 feet below grade, the other shows groundwater measured at 9' – no surface elevation was provided at this boring location.

SW3. *BETA1: Seasonal high groundwater elevations are based on redox features in soils which are readily apparent in boring. Three deep hole test should be conducted by a registered soil evaluator to determine depth to seasonal high groundwater elevation and soil characteristics at the elevation of the proposed infiltration system. (SWR Appendix B.19) Bohler1: Additional test pits were conducted and are provided in the Drainage Report dated 5/3/2013. We have conservatively adjusted the SHGW from 377 to 378 to address the results from the test pits. BETA2: Requested information provided – issue resolved.*

SW4. *BETA1: Mounding analysis is required if the bottom of the infiltration system is less than 4 ft from the seasonal high water table and the recharge is proposed to attenuate the peak discharge from a 10-year or greater 24-hour storm. Indicate whether the proposed system satisfies this condition. Bohler1: The revised system is not less than 4 feet from the seasonal high water table. BETA2: Mounding analysis not needed – issue resolved.*

80% TSS Removal (Standard Number 4): *For new development, stormwater management systems must be designed to remove 80% of the annual load of Total Suspended Solids.*

Stormwater runoff from the road flows through deep sump catchbasins and Stormceptor unit, providing greater than 44% TSS removal before the infiltration system. Total TSS removal exceed 80% – complies with standard.

Higher Potential Pollutant Loads (Standard Number 5): *Stormwater discharges from Land Uses with Higher Potential Pollutant Loads require the use of specific stormwater management BMPs.*

This project is classified as a high intensity parking lot generating greater than 1,000 vehicle trips per day making this a Land Use with Higher Potential Pollutant Loads (LUHPPL). The project proposes appropriately sized Stormceptor units to capture petroleum products that may be in high concentrations – complies with standard.

Critical Areas (Standard Number 6): *Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas.*

This project is not located within a DEP mapped aquifer contribution zone (Zone II) however it is located within the Water Resource Protection Overlay District. The project proposes appropriately sized BMPs to capture pollutants. All stormwater runoff from the site up to the 25 year storm event will be recharged on site – complies with standard.

Redevelopment (Standard Number 7): *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.*

This project does not meet the definition for a redevelopment project – not applicable

Construction Period Erosion and Sediment Controls (Standard Number 8): *Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.*

Project site is less than 1 acre in area therefore neither a notice of intent with EPA or a Stormwater Pollution Prevention Plan is required. The plan proposes an erosion control barrier around the site and a stone construction entrance.

SW5. *BETA1: Relocate stabilized construction entrance for trucks to access site off High Street during construction.* Bohler1: As requested, the construction exit has been relocated. *BETA2: Construction entrance relocated – issue resolved.*

SW6. *BETA1: Proper care and maintenance of sedimentation controls are required to prevent premature failure of the infiltration system.* Bohler1: No response needed.

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.*

An Operation and Maintenance Plan was included in the Stormwater Drainage Report.

SW7. *BETA1: Provide a map to include with the Long-Term Operation and Maintenance Plan to locate BMPs to be maintained (SWR Appendix D.2).* Bohler1: The Grading & Drainage Plan will be used and shows the proposed BMP's.

SW8. *BETA1: Provision for the Planning Board or its designee to enter the property at reasonable times and in a reasonable manner for the purpose of inspection (SWR Appendix D.3.e).*

SW9. *BETA1: Provide signatures of owners (SWR Appendix D.3.f)*



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*BETA2: Recommend condition for applicant to provide final, stand-alone complete Long Term Operations and Maintenance Plan and Maintenance Agreement for review and approval.*

*Illicit Discharges (Standard Number 10): All illicit discharges to the stormwater management systems are prohibited.*

An Illicit Discharge Compliance Statement was included – complies with standard.

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

Very truly yours,  
BETA Group, Inc.



Philip F Paradis, Jr., PE  
Senior Project Manager

Site Plan Review 78 West Main Street Review Letter 5-9-13.docx