

Berkshire Regional Planning Commission Clearinghouse Review Report

SUBJECT: Big Y Supermarket
EEA#: 14577
LOCATION: LEE
ESTIMATED COST: \$9 million
REVIEW TYPE: Expanded ENF
PROPONENT: Big Y Foods, Inc. c/o SK Design Group, Inc.
COMMENTS DUE: May 21, 2010

PROJECT DESCRIPTION:

The project consists of the redevelopment of the former “Diesel Dan’s” site off Rte. 102 in Lee, immediately south of the Rte. 20 intersection. According to the EENF, the project site consists of four (4) separate, contiguous parcels. The existing site contains two (2) residential properties and two (2) commercial properties. The property contains a truck fueling facility with a small retail store and a vacant motel/restaurant. The owner has purchased two (2) homes fronting on Rte. 102 to demolish as part of the development. The entire site is 9.8 acres. Currently, 4.7 acres are impervious surface. The EENF states that 4.0 acres of land will remain impervious post-development. The Housatonic River is the western border of the site and nearly the entire site is located within the 100-year floodplain. The redevelopment consists of 53,100 square feet of shopping center, 48,000 square feet of which is the anchor Big Y grocery store.

The project will require an Order of Conditions from the Lee Conservation Commission, review from the Division of Fisheries and Wildlife (DFW) Natural Heritage and Endangered Species Program (NHESP) and an Access Permit from the Massachusetts Highway Department (MHD). Additional permits that will be required include a NPDES Construction General Permit, a Special Permit from the Lee Planning Board, and a variance from parking standards and a Special Permit for work in the floodplain from the Lee Zoning Board of Appeals. A Chapter 91 License and a 401 Water Quality Certification from the Department of Environmental Protection (DEP) may be required. The project site has been impacted by numerous releases of oil and/or hazardous materials and is classified as a Tier 2 site under Chapter 21E and is being regulated under the Massachusetts Contingency Plan (310 CMR 40.00). The site has a deed restriction for an Activity and Use Limitation (AUL). Since no state funding is involved, MEPA jurisdiction is limited only to activities subject to a state permit: transportation, stormwater, wetlands, waterways, rare species, wastewater and hazardous waste.

CONSIDERATIONS AND POTENTIAL ISSUES:

Transportation

Section 6.0 of the EENF addresses on and off-site traffic volume increase. The proponent estimates that the development will generate 3,796 new trips on weekdays with a peak hour in the evening of 380 trips and 6,471 new trips on Saturdays with a midday hour of 416 trips (remember those are entering and exiting trips). Staff met with the proponent and established the framework for evaluating existing and future traffic conditions, expressly focusing on peak hour traffic due to weekenders and tourists. BRPC staff and proponent compromised that using peak season counts with a one (1%) percent annual growth rate would project 2015 traffic volumes for reasonable comparison within this study.

The proponent also considers other intersections along the corridor and provides a HCS (Highway Capacity Software – a program that evaluates levels of service at intersections) analysis for several congested intersections. Their findings are such that regardless of implementing intersection improvements adjacent to this site, there will be no improvement in function at those other intersections along US 20 and State Hwy. 102.

LOS Analysis for Traffic Study Area				
Intersection	Peak Hour	2010 Existing	2015 No-Build	2015 Build
1. US 20 at I-90 Off-Ramp	Evening	C	C	C
	Sat-Midday	C	C	C
2. US 20 at State Hwy. 102	Evening	C	C	C
	Sat-Midday	C	C	C
3. US 20 at Prime Outlets Driveway	Evening	B	B	B
	Sat-Midday	B	B	C
4. State Hwy. 102 at Tyringham Rd.	Evening	C	C	F
	Sat-Midday	C	C	F
5. State Hwy. at Old Pleasant St. (Northern Intersection)	Evening	E	C	C
	Sat-Midday	D	E	E
6. Site Drive at Old Pleasant St.	Evening	A	A	A
	Sat-Midday	A	A	A
7. Old Pleasant St. at Louis St.	Evening	A	A	A
	Sat-Midday	A	A	A
8. Old Pleasant St. at Margerie St.	Evening	A	A	A
	Sat-Midday	A	A	A
9. Old Pleasant St. at Lana St.	Evening	A	A	A
	Sat-Midday	A	A	A
10. State Hwy. 102 at Old Pleasant St. (Southern Intersection)	Evening	B	B	B
	Sat-Midday	B	B	C
11. Park St. at Housatonic St.	Evening	E	E	E
	Sat-Midday	F	F	F
12. Main St. at Park St.	Evening	F	F	F
	Sat-Midday	F	F	F
13. Main St. at Center St.	Evening	F	F	F
	Sat-Midday	F	F	F

*As provided in Table 6-5 of the EENF. **2015 Negative Build differences emboldened.***

The traffic analysis further substantiates warrants for a traffic signal at the intersection of State Hwy. 102, Tyringham Road, and the development's main driveway. A signal improved the projected level of service at that intersection from failure (LOS F) to adequate (LOS C), post development. The proponent wishes to install a signal and coordinate timing through MassDOT with the other signals along the travel corridor. The proponent should explain how preferred traffic control and signal phasing is selected (e.g. stops signs, turning lanes, roundabout, protected turning movements, etc.)

On-site transit circulation

The proposed transit circulation configuration, as described at the site visit, is not clearly indicated within the EENF. BRTA and the local Lee shopper shuttle provide transit service in the site's vicinity.

Parking

Although the proponent provides an explanation and intends to reduce parking below Town standards, there may be additional opportunities to reduce parking and the impervious surfaces from drive aisles.

Non-motorized access and amenities

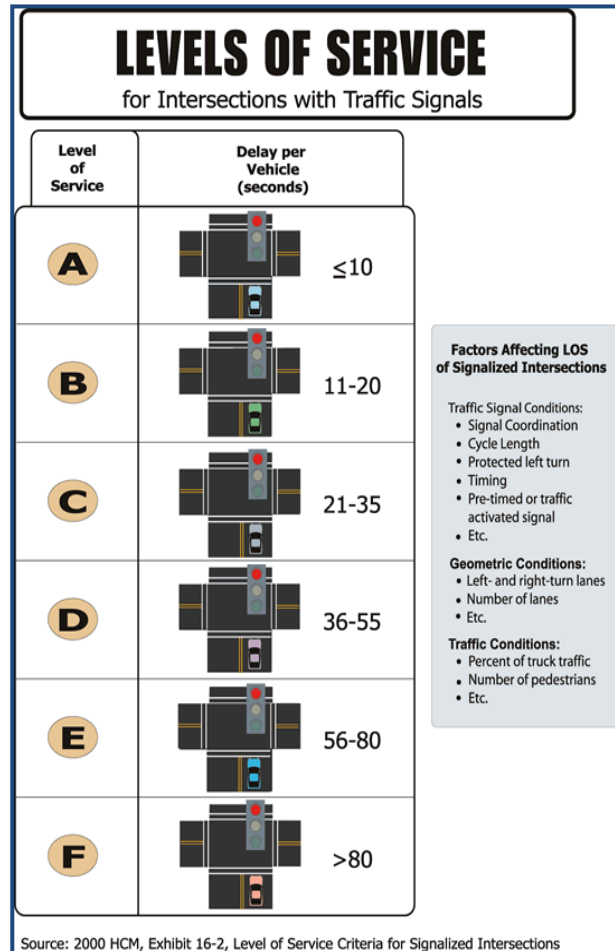
The proponent should clearly define internal pedestrian access and locations for bicycle lockers and racks.

Wetlands and Waterways

The project site contains the following Resource Areas that are protected under the MA Wetlands Protection Act:

- Bank;
- Bordering Vegetated Wetlands (BVW);
- Bordering Land Subject to Flooding; and
- Riverfront Area

No bank or BVW will be impacted as a result of this project. Incremental compensatory storage will be provided in the form of building demolition and parking lot re-grading. The property contains a total of 204,080 SF of Riverfront Area. Of that amount, approximately 151,975 SF (74%) is degraded. The proposed work will not be located any closer to the river than the existing Riverfront Area disturbances. The new planting corridor improves approximately 21,000 SF of the existing degraded Riverfront Area. The proposed planting corridor runs the entire length of the site and varies from 35' to 60' wide. The existing graveled surface will be replaced with six (6") inches of topsoil and planted with various shrubs, trees and ground cover. A portion of the corridor will contain grass swales, tree box filters, and similar stormwater management devices.



Stormwater

The project site consists of 9.8 acres of previously developed land. The proposed development *decreases* impervious surfaces by approximately 30,000 square feet as compared to existing conditions. The overall drainage system has been designed to reduce peak runoff rates to pre-construction conditions.

Stormwater management measures will be designed in accordance with DEP's Stormwater Management Policy. An Operations and Maintenance Plan for the Stormwater Management System has been developed for this project and was included as an appendix to the EENF. The stormwater management measures include best management practices designed to achieve greater than 80% removal of total suspended solids (TSS). The project is considered a land use that has higher potential pollutant loads (LUHPPL) due to traffic that exceeds 1,000 vehicle trips per day. Therefore, unlined infiltration devices cannot be employed in the main drive or parking area in accordance with the Stormwater Management Policy.

The following design features are included in the EENF and accompanying plans:

1. The drainage system in the northerly portion of the parking area has been designed with a new subsurface drainage system consisting of deep-sump (and hooded) catchbasins, a Stormceptor ©, piping, and a "dry" extended detention basin (with forebay).
2. The drainage system for the southerly portion of the parking area has been designed with deep-sump (and hooded) catchbasins, piping, a large sediment forebay, and approximately 500 linear feet of water quality swale.
3. The smaller sub-areas immediately around the building have been designed with above-ground structures due to the relatively flat grades in the area. These include tree box filters, sediment forebays and bio-retention cells.

Each of the outfalls will be lined with new shade trees which will eventually help to reduce water temperatures for the discharges. Where provided, catchbasins will be fitted with oil/water separators, providing 280 gallons of storage each. No new outfalls to the Housatonic River are proposed. The northerly detention basin will share its outfall with an existing 36" concrete drain pipe, which conveys runoff into the river from nearby public roadways.

Rare Species Habitat

A portion of the project site is located in designated significant habitat. The state listed species is a species of fish, the Longnose Sucker (*Catostomus catomus*). According to the EENF, the project will not result in a take or the alteration of habitat. An application will be forwarded to the Natural Heritage and Endangered Species Program (NHESP) for review under the Massachusetts Endangered Species Act (MESA).

Alternatives Analysis

BRPC reviewed the four alternatives that were submitted as part of the EENF. Three of the alternatives are valid: the No-Build, the Preferred Alternative, and the Reduced Build Alternative. The travel plaza alternative is irrelevant because it does not advance the goals as stated in the current proponent's scope. The document generally explains how these alternatives differ from each other regarding total land alteration, wetland and rare species impacts, and number of parking spaces, summarized in table 2-1. BRPC agrees that, if an expansion of the site is inevitable, the Preferred Alternative is an improvement over existing conditions. However, the preferred alternative has a larger overall footprint and impervious surface area, and includes more square footage in the wetland buffer zone than the reduced build alternative and potentially, what is necessary for adequate function of the site even if the larger parking field and additional 5,000 square foot retail store are preserved.

Greenhouse Gas (GHG) Emissions

The project is subject to the MEPA Greenhouse Gas Emissions Policy and Protocol.

Base rates for greenhouse gases are calculated from both building energy utilization and mobile sources. Mobile source emissions are calculated by VMT change within the traffic study area, multiplied by 550.4 g/mi. Delay at intersections is not considered within this analysis.

Several opportunities listed in the EENF conserve energy within the proposed buildings. Energy conserving building techniques, such as improved insulation and lighting, proposed in the EENF as GHG reducing measures for the newly constructed buildings.

The proponent is proposing that the energy measures being proposed will reduce GHG emissions of the new development by 11.5% over baseline energy code construction. This reduction, combined with mobile source reductions, reduces CO₂ emissions by 9.3% of the baseline scenario.

The Town of Lee is considering the optional Massachusetts Appendix 120.AA at its annual meeting on May 13, 2010. If the Town adopts this provision, the proponent should revise the GHG emissions report to establish the baseline for alternatives analysis at compliance within the 'Stretch Energy Code'.

As part of the GHG emission mitigation strategy, the proponent commits to:

1. Energy Management Systems and Building Commissioning
2. High Efficiency Refrigeration Systems
3. Waste Heat Recovery
4. High-Efficiency HVAC systems, including sealed and tested ductwork.
5. Energy-Efficient Envelope and Windows
6. Energy-Efficient Lighting including day lighting, motion sensors, LED exterior lighting, and lighting levels below Code limits.
7. Energy Star Appliances
8. Water Conservation
9. Recycled and local materials during construction
10. Recycling facilities and waste reduction
11. Cool Roofing Materials

The proponent indicated, at the site visit, that this development would include PV energy generation. The EIR should contain a revised GHG analysis including this commitment, as well as describe other measures that Big Y is undertaking company-wide to implement renewable energy resources. Additionally, PV installation may counteract the use of 'cool' roofing materials.

RECOMMENDATIONS

This project has reached a mandatory EIR threshold for the generation of 3,000 or more new average daily trips on roadways providing access to a single location. The proponent has submitted an Expanded ENF requesting a Single EIR.

Recommendations to MEPA for the EIR and State Permitting Issues:

BRPC believes that the proponent's request for a single EIR should be granted. The EIR should include all issues requiring state permits. Based on our more detailed comments, the EIR scope should include the following:

1. The proponent should provide a more complete alternatives analysis in order to ascertain which site layout minimizes overall impacts to land, wetlands, rare species and sensitive receptors. The EIR should fully explain any trade-offs inherent in the alternatives analysis, such as increased impacts on some resources to avoid impacts to other resources.
2. Alternatives analysis is an iterative process; the proponent should further refine the selected preferred alternative to minimize additional impacts and reduce effects of past development on the site.
3. The proponent should enhance erosion control efforts and establish of firm limits of construction activities given the significant encroachment into the Riverfront Protection Area. We recommend the proponent establish an erosion and sediment control plan and frequently monitor the installation and function of erosion control devices during all phases of construction.
4. If this project results in the alteration of designated significant habitat or a "take" of rare or endangered species it would require a permit under MESA. NHESP should require that the proponent develop a Conservation and Management Plan that meets the terms of the permit. This project will discharge both treated stormwater runoff and overflow into the Housatonic River potentially altering designated significant habitat. Care should be taken to limit work within the environmental windows as determined by NHESP. The proponent should continue to work closely with NHESP throughout the MEPA and MESA process and abide by their recommendations.
5. The Town of Lee is considering the optional Massachusetts Appendix 120.AA at its annual meeting on May 13, 2010. If the Town adopts this provision, the proponent should revise the GHG emissions report to establish the baseline for alternatives analysis at compliance within the 'Stretch Energy Code'.
6. The EIR should analyze alternative configurations at the main drive more thoroughly, focusing specifically on vehicle delay and GHG emissions alternatives. Although the proponent provides evidence that improvements at the intersection of the main entrance to the site, along with Tyringham Rd. and Route 102, are needed, the proponent does not provide a roundabout alternative in addition to the proposed traffic signal. The GHG analysis is not required to consider mobile source pollution resulting from delay at the intersection, however, the proponent should evaluate whether a roundabout can accomplish the same level of service objectives as the proposed signal while increasing average speeds for vehicles entering/leaving and bypassing the site to further reduce GHG emissions. We believe that a roundabout in this location maybe particularly feasible because the main truck and non-motorized movements are entering and exiting this proposed development at secondary access points. Additional right-of-way may not be necessary to install a roundabout.

7. The proponent should provide alternatives for mobile source emissions through an analysis of delay within the traffic study area. Off-site deterioration of LOS at three other intersections may offset GHG reductions as proposed for mobile sources through the amenities and programs offered within the development.
8. The proponent should determine transit and non-motorized access and amenities in the EIR if they intend to include them in the GHG reduction strategy for mobile sources.

Recommendations to Lee Boards and Commissions for the Local Permitting Process:

1. The Town of Lee should determine that it has the appropriate rules and regulations in place to hire outside consultants, at the proponent's expense, to review the project for zoning, infrastructure, transportation, wetlands, rare and endangered species and floodplain impacts. This potentially affects most local boards and commissions which have jurisdiction over some part of this project, including but not limited to the Planning Board and Conservation Commission.
2. The Town should continue to proactively engage the proponent during the entitlement process. Information should coordinate across the various boards, departments and agencies that will have to deal with aspects of this project and the developer to scope out the issues and information that will be necessary to carefully consider the project.
3. The proponent should take extreme care not to introduce invasive species, given the sensitive nature of the site, which includes Priority Habitat for Rare Species, Riverfront Protection Area, and Bordering Land Subject to Flooding.
 - a. The proponent should consider using an alternative method of silt-fencing and straw-baling to reduce the risk of the inadvertent introduction of invasive species since hay bales frequently contain seed stock from invasive plants. Alternatives include straw bales in place of hay bales or double silt fences, silt socks, or coconut fiber material which can be staked like a silt fence and obviates the need for hay bales. These products are available from a variety of manufacturers.
 - b. Similarly, the proponent should carefully select all fill materials to protect against the introduction of invasive species.
 - c. The proponent should provide a decontamination station for fishermen's waders/gear at if the public is able to access the Housatonic River accessed through this development. The proponent should maintain and enhance the state approved zebra mussel signage and decontamination information that currently exists at the site.
4. Again, given the sensitive nature of the site, careful management of refueling and servicing of construction equipment and the consideration of the use of biodegradable plant-based hydraulic fluids is warranted.

Overall, this EENF adequately serves as a scoping document for a unified EIR, and we believe that it generally explains the site reconfiguration, alternatives, and final potential impacts of the project.

Other recommendations:

1. The proponent should work further with BRTA to designate transit circulation on the site and provide amenities that encourage the use of transit equally to passenger vehicles.
2. The proponent should consider constructing non-motorized linkages in concert with the Town of Lee's current efforts to plan multi-use paths.
3. The proponent should amend the O&M post-construction document. Maintenance of stormwater BMPs, especially for in-ground structures, is not intuitive. The plan should provide clear guidance so that a facility manager can follow the directions and maintain proper function of the BMPs. Built-up sediment reduces storage capacity and proper treatment function. We recommend the proponent:
 - a. Identify the legally-bound responsible party.
 - b. Provide clear, practical guidance on when to clean the sediment/debris from the basins. The plan should state at what level the accumulated sediment should be cleaned out. This includes measurements for both the in ground structures and sediment forebays.
 - c. Provide guidance on how to clean the sediment from the basins to answer these questions: Does the facility manager hire a contractor? Is the removal and destruction of established plants appropriate? Is a wetland permit needed for the work? Where is the removed sediment disposed of?
4. The plan should include a site map with the stormwater infrastructure clearly labeled.
5. The proponent should consider, to the extent feasible, reducing the amount of disturbed area (later to be turf) around the northern portion of the project.
6. The planting plan should list native plants only. The use of native vegetation is most important in areas adjacent to wetland areas. Turf areas should use a deep-rooted grass or groundcover that reduces compaction and increases infiltration.
7. The proponent should increase the quantity of trees with native, salt-tolerant stock, to enhance aesthetic appeal and provide cooling shade in the large open parking area.
8. The proponent should provide substantive information regarding the placement of a solar PV array on the new grocery/retail building, as indicated at the on-site meeting on May 5, 2010. The DOER in Boston and the Center for Ecological Technology in Pittsfield are sources of information.
9. BRPC respectfully requests that the Secretary stipulate that any future development proposed on this site proceed through the MEPA EIR review process, so to quantify and analyze the cumulative impacts of all stages of development, including work conducted as part of this project.

These comments as presented to the BRPC Clearinghouse Review Committee on May 13, 2010.