4.8 TRANSPORTATION COMMENTS AND RESPONSES

4.8.1 Introduction

The Proposed Action has been modified in response to comments raised and concerns expressed during the review of the Patterson Crossing Retail Center DEIS and to further mitigate the impact associated with the project. The total square footage of the reduced scale project is 382,560 with a 28,000 square foot garden center, down from the 405,850 square feet with a 28,200 square foot garden center proposed under the plan presented in the DEIS. This change reduces traffic to and from the site, simplifies the access road, and eliminates loading areas facing residences. It also shortens the emergency access, and widens part of the main access road. FEIS Appendix J contains revised trip generation rates for the site based on the reduced square footage.

Three additional studies are included in the FEIS. A Warrant analysis is provided in Appendix I indicating a signal is warranted at NYS Route 311 and Terry Hill Road under existing conditions and at NYS Route 311 and the site access under build conditions. Traffic data is provided in Appendix I of the FEIS. A combined sensitivity and signal coordination analysis is provided in the FEIS Appendix J for NYS Route 311 from the site access through the Interstate 84 exit 18 interchange. The sensitivity analysis also reanalyzes the NYS Route 311 intersections with Fair Street and NYS Route 164.

A preliminary plan for funding transportation improvements was discussed in the DEIS and based on subsequent meetings with the New York State Department of Transportation (NYSDOT) and Putnam County Department of Highways and Facilities a more detailed plan has evolved. As noted in the DEIS, the developer would fund improvements to NYS Route 311 at the site access road which would be widened and signalized. FEIS Appendix K outlines the anticipated improvement plan and the party proposed to be responsible for implementing and/or funding such improvements. In some cases the Applicant would bond improvements that would only be constructed if warranted after the completion of the project and approved by the responsible agency. Additional information on how these improvements would be funded is shown in FEIS Appendix K.

Should Patterson Crossing not be built, the improvements committed to by the Applicant, some of which would address existing problems on the network, would not be funded in the near term. For example, the NYS Route 311 and NYS Route 164 improvement would be delayed, the County would not have additional funds to offset the Terry Hill Road and NYS Route 311 safety and capacity intersection improvements and the improvements proposed for the exit 18 interchange would not be implemented.

FEIS Appendix L provides a capacity analysis for the internal site intersections based on a sensitivity to Saturday holiday traffic. This analysis is based on the revised site layout with reduced square footage.

Based on the March 19, 2007 letter from Glenn T. Boucher, Regional Highway Work Permit Coordinator of the NYSDOT, Region 8, the following improvements would be the responsibility of the Applicant and would be subject to the Highway Work Permit Process:

1. At the request of the NYSDOT, the Applicant investigated the use of both modern roundabouts and signals with turn lanes to improve the Interstate 84 eastbound and

westbound ramp connections with NYS Route 311. During a meeting on November 13, 2007 between the Applicant and the NYSDOT (refer to the memo from John Collins Engineers, P.C. to the NYSDOT dated November 13, 2007 contained in Appendix A), the NYSDOT stated that, due to "wetlands and grading considerations", the installation of signals and turn lanes would "be the preferred improvements for the interchange upgrades."

2. The proposed access on NYS Route 311 would be improved with right and left turn lanes and a new traffic signal.

3. The Barrett Hill Road and NYS Route 52 intersection would be monitored for a traffic signal and a bond would be established to fund such improvements.

4. The NYS Route 164 and NYS Route 311 intersection would be monitored for a traffic signal and a bond would be established to fund such improvements.

5. Fair Street at NYS Route 311 improvements would be coordinated with the County. The revised improvement at this intersection, a wide curb radius at NYS Route 311, is documented in Appendices J and K of this FEIS.

In addition, the Applicant and Putnam County are working together to develop additional improvements at the NYS Route 311 and Terry Hill Road intersection which would include a left turn lane on NYS Route 311, a separate right turn lane on Terry Hill Road and a potential traffic signal. The Applicant has developed a concept plan for NYS Route 311 and Terry Hill Road that would be implemented by Putnam County. See the July 13, 2007 letter from Patterson Crossing Realty, LLC and the August 22, 2007 letter from County Executive Robert J. Bondi contained in the Correspondence Appendix of this document .

The following would be the responsibility of the NYSDOT:

1. Continuing redesign and acceleration of the schedule for the reconstruction of the NYS Route 311 and NYS Route 164 intersection.

2. Revising the NYS Route 52 and NYS Route 311 signal timings as needed.

The Barrett Hill Road and NYS Route 52 improvement is not likely to be implemented by the NYSDOT within the time frame of this project, however the Applicant will bond a traffic signal at this location.

Other area projects sometimes have their own designated improvements. Based on the Statement of Findings for the Kent Manor project, the Kent Manor Applicant would bond a center receiving lane on NYS Route 52 at Horse Pound Road which would improve safety at that location. The Kent Manor Applicant would coordinate with the NYSDOT concerning the need for and installation of this improvement at NYS Route 52 and Horse Pound Road intersection.

Comments on the traffic section of the DEIS were provided by the following state agencies:

1. Glenn T. Boucher, Regional Highway Work Permit Coordinator, New York State Department of Transportation (NYSDOT),
2. Darrin J. Scalzo, Division Permit Coordinator, New York State Thruway Authority, and

3. Marilyn Shanahan, Chief, SEQRA Coordination Section, New York State Department of Environmental Protection (NYCDEP).

In addition, the following consultants submitted comments:

1. Wendy C. Cimino, P.E. PTOE of Creighton Manning Engineering (CME), LLP for the Town of Kent Planning Board (review limited to study area intersections in the Town of Kent),
2. Neil A. Wilson, AICP, LRC Planning Services for the Town of Kent and Town of Kent Town Planning Board,
3. Ronald J. Gainer, P.E., David J. DeBaie, P.E., PTOE, Stantec Consulting Services Inc. for the Town of Patterson Planning Board, and
4. John Canning, P.E., Adler Consulting for the Croton Watershed Clean Water Coalition.

4.8.2 Comments and Responses

Comment 4.8-1 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Information such as detailed intersection descriptions and raw turning movement data was not included in the DEIS.

Response 4.8-1: *Forty-eight pages of raw turning movement data was provided to the Town of Patterson traffic consultant, for review prior to finalizing the DEIS. Descriptions of the roads were included in Section 4.8 of the DEIS. In addition, Appendix K of the DEIS contains aerial photographs of the twelve intersections assessed. Intersection information was included in Table 4.8-6, existing level of service tables, and level of service work sheets provided as part of the DEIS. FEIS Table 4.8-1 provides additional information on the studied intersections.*

The Applicant notes that SEQRA (617.9 (b) 1) requires that "EISs must be analytical and not encyclopedic," and since key intersection data can be found in the aforementioned places, repeating it or providing further detail was not deemed necessary.

The following table summarizes some key aspects of the existing intersections as noted in the DEIS.

Table 4.8-1
Study Intersections
(Existing Conditions)

Intersections	*Traffic Control*	*Legs*	*Arterial Left turn lane*	*Aerial Photo Page (DEIS)*
NYS Route 52/ NYS Route 311	*traffic signal*	*3*	*no*	*K-8*
NYS Route 311/ Terry Hill Road	*stopped controlled*	*4*	*no*	*K-5*
NYS Route 311/ Longfellow Drive	*stopped controlled*	*3*	*no*	*K-5*
NYS Route 311/ Ludington Court	*stopped controlled*	*3*	*no*	*K-6*
*NYS Route 311/ Eastbound Ramp of Interstate 84**	*stopped controlled*	*4*	*no*	*K-9*
*NYS Route 311/ Westbound Ramp of Interstate 84**	*stopped controlled*	*4*	*no*	*K-9*
NYS Route 311/ Ludingtonville Road	*stopped controlled*	*3*	*no*	*K-7*
NYS Route 311/ Fair Street	*stopped controlled*	*3*	*no*	*K-3*
NYS Route 311/ NYS Route 164	*stopped controlled*	*3*	*no*	*K-1*
NYS Route 52/ Barrett Hill Road	*stopped controlled*	*3*	*no*	*K-2*
NYS Route 52/ Horse Pound Road	*stopped controlled*	*3*	*yes*	*K-4*
Fair Street/ Terry Hill Road	*stopped controlled*	*3*	*no*	*I-1 FEIS*
*NYS Route 311/ Proposed site Access **	*traffic signal **	*3**	*yes **	*SITE PLAN **

** Two ramp legs are one-way only (one into and one out of the intersection).*

*** As proposed; intersection currently does not exist*

Comment 4.8-2 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): The Traffic Impact Study uses a 1.5% background growth rate per year to account for general growth in the study area. Discussion needs to be provided to explain why this growth rate was used.

Response 4.8-2: *The 1995 Regional Transportation Plan update anticipated regional population growth from 1995 through 2015 at 10 percent and labor force growth at 28 percent. This is less than a half percent growth in population and about a one percent growth in the labor force per year.*

More recent data, including that in the draft 2005-2030 Regional Transportation Plan Executive Summary dated April 2005, confirms that the 1.5 percent per year growth rate used is conservative as the document projects the following:

- *A population growth of 0.7 percent per year;*
- *A labor force expansion of 1 percent annually; and*
- *An increase in vehicle miles traveled of 0.5 percent annually*

Census projections (U.S. Census Bureau; generated by James A. Garofalo of TMA; using American FactFinder;<http;//factfinder.census.gov> October 13, 2006) for Kent

and Patterson from 2000 to 2005 indicate an increase in population of less than four percent over the five year period (from 25,411 to 26,340).

Review of NYS Route 52 peak hour traffic data from the Kent Manor SEIS indicates actual growth (background and projects) of approximately one percent per year from 1986 to 2005. Based on the historical data, the 1.5 percent per year background growth is anticipated to be very conservative (high) and therefore over estimates background growth, especially when accounting for traffic from projects in the area. Traffic associated with these projects is added to the background growth as well.

Also refer to Comment 4.8-20 from the NYSDOT that indicates a 1.5 percent annual growth is appropriate.

Comment 4.8-3 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): In general, the DEIS sections reviewed provide detailed technical data and documentation of the analysis conducted.

***Response 4.8*-3:** *Comment noted.*

Comment 4.8-4 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): It is noted that the sections of the report describing the proposed mitigation area are somewhat unclear. Each section of the DEIS should include a strong conclusion clearly outlining exactly what is proposed as mitigation by the Applicant. **[Similar comments were found in the following letters: Letter C-12, Edward Durkee, (9.22.06), Letter C-23, Daniel Kuchta, (9.25.06) and Letter C-50, Ronald and Sonya Taylor, (9.24.06)]**

***Response 4.8*-4:** *Each DEIS Chapter that identified an adverse impact has a section that identifies the potential mitigation measures to be incorporated into the Project as per the approved Scoping Document.*

The traffic mitigation program is set forth in FEIS Appendix K. A summary is provided below:

1. *NYS Route 164 and NYS Route 311 - NYSDOT would fund and construct geometric improvements as noted in the March 19, 2007 letter from Glenn T. Boucher, Regional Highway Work Permit Coordinator of the NYSDOT, Region 8 (See Appendix A) and the Applicant would bond for a signal.*
2. *NYS Route 311 and Fair Street - Applicant would install a wide curb radius on Fair Street.*
3. *NYS Route 311 and Interstate 84 westbound ramp - Applicant would improve with installation of turning lanes and traffic signal or roundabout.*
4. *NYS Route 311 and Interstate 84 eastbound ramp - Applicant would improve with installation of turning lanes and traffic signal or roundabout.*
5. *NYS Route 311 and Terry Hill Road - Applicant has provided preliminary concept plan. The County would construct left turn lanes on NYS Route 311, a right turn lane on Terry Hill Road, and signalize the intersection.*
6. *NYS Route 311 and NYS Route 52 - NYSDOT would re-time the signal as needed.*
7. *NYS Route 52 and Barrett Hill Road - Applicant would bond for a signal.*

8. *NYS Route 52 and Horse Pound Road - Kent Manor Applicant would bond for a center lane.*
9. *NYS Route 311 and project access road - Applicant would improve geometrics and provide traffic signal.*

Comment 4.8-5 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): The trip generation and trip distributions presented in the traffic report appear reasonable.

Response 4.8-5: *Comment noted. The same methodology has been applied to the trip generation for the reduced square footage proposed in the modified plan. The reduction in gross leasable floor area has resulted in a five percent reduction in trips.*

Comment 4.8-6 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Route 311/Ludington Court - We agree with the analysis presented in the traffic report and the conclusion that no capacity or accident related mitigation is required at this intersection as a result of the project.

Response 4.8-6: *Comment noted.*

Comment 4.8-7 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Route 311/Longfellow Drive - A drop in level of service will occur on Longfellow Drive intersection approach between the No-Build and Build conditions with an increase in the average vehicle delay of approximately 16 seconds during the peak hours. No mitigation has been proposed to address this drop in level of service. The report notes that the delay may be less due to platooning caused by upstream and downstream signals. This effect can be shown in the analysis by inputting data for upstream signals in the analysis. Regardless, the need for turn lanes at this intersection and/or other mitigation needs to be investigated and included in the report. An existing conditions schematic of this intersection needs to be included in Appendix K.

Response 4.8-7: *The Longfellow Drive/NYS Route 311 intersection existing condition is shown on Figure K-5 of the DEIS. A transportation improvement tied to the Terry Hill left turn lane is illustrated in Figure K-3 of the DEIS. This improvement is no longer planned. It is expected if exiting delays become excessive in peak hours that vehicles would shift to North Terry Hill Road to access NYS Route 311 via the signalized intersection at NYS Route 311, Terry Hill Road, and North Terry Hill Road.*

Other improvements such as a traffic signal and second exiting turn lane were considered. The Longfellow Drive traffic at 50 vehicles per hour in the peak is below levels needed to meet warrants for a traffic signal. Furthermore, with queues of only one vehicle the addition of another exiting lane would not address the delays. Expected exiting volumes in the peak hours are shown in Figures 4.8-10 and 4.8-11 of the DEIS.

Based on discussions with the NYSDOT no improvements are anticipated at this intersection.

Comment 4.8-8 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Route 311/Terry Hill Road - Based on the accident data presented in the report, it appears that almost all of the accidents occurring at this intersection are rear end or left-turn accidents.

More information on the circumstances surrounding these accidents and the need for mitigation should be presented and discussed in the traffic report.

Response 4.8-8: *Rear end accidents often occur as vehicles stop on through lanes to make left turns. Left turn accidents can occur when minor street traffic uses short gaps to make left turns. Installation of traffic signals on the network, can reduce left turning collisions, by providing gaps in traffic.*

Comment 4.8-9 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Route 311/Terry Hill Road - Further, the installation of a traffic signal and left-turn lanes is recommended in the existing conditions analysis. Regarding the signal warrant, volumes on the side street approach at this intersection are relatively low with the highest volume making a right-turn movement. As noted in the NYS codes, a portion of the right-turn volume should be removed from the side road traffic count before comparing to the warrant criteria. The report does not indicate if a percentage of the right-turns were removed when conducting the signal warrant.

Response 4.8-9: *Section 271.2 e (1) of the NYS Manual Uniform Traffic Control Devices (NYCRR 17B) indicates "Differences in the traffic conflicts typically experienced by left, through and right-turn vehicles from the side road approaches may indicate that some portion of the right-turn volume should be subtracted from the side road traffic count before comparing it with the warrants." In this case all the movements are sharing the same lane, therefore right turning vehicles experience delays as a result of conflicts of the left and through movements on the approach. The terminology of 'may' is a permissive condition where there is no requirement for design or application.*

In this case, the application of a warrant was done with a conservative approach (i.e. not to reduce the volume to see if the warrant could be met). Just because one or more warrants are met does not mean that a signal will be approved and installed. Specifically, warrants define "...the minimum conditions under which a signal may be justified." Furthermore, regarding the Manual of Uniform Traffic Control Devices 200.2 (g) "While this manual provides standards for design and application of traffic control devices, it is not intended to preclude use of sound traffic engineering judgment."

The Applicant is working with the County on progressing this improvement. Traffic counts from 2006 and updated signal warrant analysis are provided in FEIS Appendix I.

Comment 4.8-10 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Route 311/Terry Hill Road - Further, backup data on the daily distribution of traffic volumes (i.e, ATR data sheets) should be included for a review of the signal warrants.

Response 4.8-10: *Updated 2006 Automatic Traffic Recorder (ATR) data sheets and additional signal warrant data is provided in FEIS Appendix I.*

Comment 4.8-11 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Route 311/Terry Hill Road -The traffic study assumes that the stated mitigation will be completed prior to full development of the site in 2010. However, it appears that the improvements are

not currently planned by others. Therefore, based on the unacceptable level of service at this intersection, drop in level of service, and large vehicle delays in the Build condition, the improvements should be presented as mitigation from the project.

> ***Response 4.8-11:*** *The DEIS did not assume improvements would be implemented by 2010 and provided a Build Condition without improvements and without non-access improvements in place. The introduction to this chapter and FEIS Appendix K outline the anticipated area improvements. Some of the signal improvements are to be bonded but not installed unless actual volumes are sufficient to warrant the signals. For improvements not being progressed directly by the Applicant, the Applicant is working with the State and County on advancing them.*

Comment 4.8-12 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Route 311/Route 52 - The traffic report should identify the signal timing improvements required to maintain acceptable operating conditions in the build conditions as project mitigation.

> ***Response 4.8-12:*** *The signal timing improvements are identified for the No Build Condition and may occur prior to the development of the site. The Applicant discussed signal timing changes with the NYSDOT. Signal timing changes would be the responsibility of the NYSDOT and implemented based on actual traffic patterns. The DEIS capacity analysis assumed that traffic signal timing changes would take place, as noted. The reduction in site traffic by five percent and reduction in other area projects with the elimination of Hillcrest Commons office would reduce the potential need to re-time the signals.*

Comment 4.8-13 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Route 52/Barrett Hill Road - The traffic report should identify the turn lane and center median improvements required to maintain acceptable operating conditions in the build conditions as project mitigation.

> ***Response 4.8-13:*** *The improvement noted in the comment is illustrated in the DEIS Appendix K, Figure K-15. The State has included the left turn lane on the 2006-2010 Transportation Improvement Program. The Applicant proposes to bond a signal at this location as NYSDOT improvements are not expected to be completed in time for the project. No median center turning lane is planned. See FEIS Appendix K for proposed improvements.*

Comment 4.8-14 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Route 52/Horse Pound Road - The traffic report should identify the center turn lane improvement required to maintain acceptable operating conditions in the build condition as project mitigation.

> ***Response 4.8-14:*** *The improvement noted in the comment is illustrated in the DEIS Appendix K, Figure K-16. The center turn lane is a conditional improvement for the approved Kent Manor Project and would require permit approval by the NYSDOT. See FEIS Appendix K for proposed improvements.*

Comment 4.8-15 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): The HCS analysis for the Route 311/Site Access Driveway intersection needs to be included in Appendix K for review. Further, details on the traffic signal warrant and turn lane warrants at

this intersection also need to be included in the Appendix and described in detail in the report. Will the signal inter-connection be needed with the ramps or other intersections?

> ***Response 4.8-15:*** *The HCS analysis for the site access was noted in the DEIS Appendix K, Table of Contents and on pages K-79 and K-94. A warrant analysis is provided in Appendix I of this FEIS. A signal coordination was not assumed in the DEIS, but would improve operations as noted in the FEIS Appendix J sensitivity analysis.*

Comment 4.8-16 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): The accident data indicates more than half of the accidents on Route 52 (1035 to 1038) were rear end accidents. More information on the circumstances surrounding these accidents and the need for mitigation should be presented and discussed in the traffic report.

> ***Response 4.8-16:*** *Seven of the nine collisions occurred because vehicles followed too close, a common driver error. The increase in the number of traffic signals on the network should reduce speeds and improve safety in this area.*

Comment 4.8-17 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): Sight distance criteria is presented in the report, however, no analysis was done. A sight distance evaluation should be done and presented in the traffic report for the proposed site access intersection with Route 311.

> ***Response 4.8-17:*** *Sight distance information is presented on DEIS pages 4.8-34 and 4.8-35. The sight distance at the proposed access when looking right is 900 feet and when looking left is 790 feet. Both distances exceed the State requirement for this roadway. Regardless, this intersection is proposed to be signalized.*

Comment 4.8-18 (Letter A-1 Wendy C. Cimino, P.E., PTOE, September 21, 2006): The project will add traffic to the existing roadway network. These increases need to be quantified for each impacted roadway and the methodology described.

> ***Response 4.8-18:*** *Project related traffic to be added to the network was shown on DEIS Figures 4.8-8 and 4.8-9. Distribution of project related traffic was depicted on DEIS Figures 4.8-6 and 4.8-7. Revised trip generation numbers provided in FEIS Appendix J would reduce anticipated volumes by five percent. FEIS Appendix J also describes reductions in the traffic associated with other area projects.*

Comment 4.8-19 (Letter A-2 Glenn T. Boucher, Regional Highway Work Permit Coordinator, NYSDOT, September 28, 2006): The entire "No- Build Condition with Traffic Improvements" segment should be eliminated from future submissions unless the developer is proposing to include those improvements as part of the mitigation for the project. The developer can not assume that the improvements listed in this segment, specifically 5 new traffic signals, will be undertaken by the Department. The Department considers the existing traffic conditions in this area manageable and has no projects planned in the future to address the intersections summarized in this section. Therefore, the "No-Build condition without improvements" should be compared with the Build conditions of the proposed project to determine appropriate mitigation measures.

Response 4.8-19: *Subsequent to the submission of the DEIS, the Applicant met with the NYSDOT and Putnam County to finalize a traffic improvement program that would offset project impacts to the network. Refer to 4.8.1 Introduction above and FEIS Appendix K for information of the improvement program.*

The intent of the "No-Build with Traffic Improvements" condition presented in the DEIS is to illustrate the future need for network improvements even without the project. The DEIS does not imply or otherwise specify who would install any future signals at intersections of public roads.

Comment 4.8-20 (Letter A-2 Glenn T. Boucher, Regional Highway Work Permit Coordinator, NYSDOT, September 28, 2006): The 1.5% background growth rate used to project future No-Build traffic volumes is appropriate.

Response 4.8-20: *Comment noted.*

Comment 4.8-21 (Letter A-2 Glenn T. Boucher, Regional Highway Work Permit Coordinator, NYSDOT, September 28, 2006): Given the regional draw of this development and it's location relative to Interstate 84, the Department feels that a passby credit of 15% would be more appropriate than the proposed 25% passby credit used. The traffic volumes should be adjusted accordingly.

Response 4.8-21: *This reduction in the pass-by credit which affects the NYS Route 311 intersections with Interstate 84 ramps and the site access has been incorporated in of the sensitivity analysis performed for the reduced scale plan and is contained in Appendix J of this FEIS. See also Response 4.8-41.*

Comment 4.8-22 (Letter A-2 Glenn T. Boucher, Regional Highway Work Permit Coordinator, NYSDOT, September 28, 2006): A signal Warrant Analysis will be required for the intersection of the proposed site access drive and Route 311.

Response 4.8-22: *A signal warrant analysis for NYS Route 311 and the site access is provided in Appendix I of this FEIS.*

Comment 4.8-23 (Letter A-2 Glenn T. Boucher, Regional Highway Work Permit Coordinator, NYSDOT, September 28, 2006): As this project progresses through the State Environmental Quality Review process, the Department will continue to work with the Lead Agency and the applicant to develop a mitigation plan that maintains the integrity of the surrounding road network and allows the project to remain economically viable.

Response 4.8-23: *Comment noted. See FEIS Appendix K for updated mitigation information.*

Comment 4.8-24 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006 and Letter C-12 Edward Durkee, September 22, 2006): Pages 4.8-5 - 4.8-9, the referenced accident information does not include accident data maintained by the Town of Kent Police Department. The traffic report needs to be revised to consider this additional information.

Response 4.8-24: *Accident data is required by law to be submitted to the Department of Motor Vehicles for all collisions involving death, injury, or property damage in excess of a 1001 dollars. Other collisions do not have to be reported. For accidents involving death or injury all drivers and the police must file reports with the DMV (http://www.nysdmv.com/dmvfaqs.htm#accident).*

At the time the DEIS analysis was conducted traffic information was filed chronologically within each police department requiring a hand search of local accident data which was not required as part of the scope. The accident data provided by the state is a summary of accident data maintained by the Department of Motor Vehicles from all sources including the towns, County, and State law enforcement agencies.

The State of New York has been implementing a new program for recording and electronically transferring collision data. The TRaCS system (Traffic and Criminal Software) permits police and sheriff departments to electronically send collision data to the New York State Department of Motor Vehicles. This has expedited the availability of some but not all collision data. The collision data provided in the DEIS (1999 through 2002) has been supplemented by the two most recent years of incomplete collision data. Incomplete data for 2005 and 2006 is available as a result of TRaCS implementation. See FEIS Appendix J Attachment A.

Comment 4.8-25 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006 and letter C-28 Ray Mainiero, Submitted September 13, 2006): Pages 4.8-14, the analysis should include an assessment of school bus traffic including an assessment of the impact of frequent stops by school buses under the "Build Condition".

Response 4.8-25: *School buses stop in areas of residential development before and after school. These times as of October 2006 are listed below:*

- *Carmel High School and Carmel Alternative High School from 7:05 a.m. to 1:50 p.m.;*
- *George Fischer Middle School from 8:05 a.m. to 2:30 p.m.; and*
- *Matthew Patterson Elementary School, Kent Primary School, and Kent Elementary School from 9:20 a.m. to 3:30 p.m.*

Peak hour traffic generally starts between 4:30 and 5:00 p.m. on the weekdays and between 12:00 p.m. and 2:00 p.m. on Saturday. Thus, school buses generally affect the network traffic in the weekday morning up to about 9:30 a.m. while stores, even if open at this hour are generating a relatively low number of trips. Based on an October 12, 2006 conversation with the Carmel Central School District's transportation office, the regular school bus routes would be completed by 4:30 p.m. to 4:45 p.m. Therefore, the school buses would be making their last stops at the time when the project generated peak hour traffic may be starting. There are some out of district buses, late buses, and special education buses that would run as late as 6:15 p.m. Those buses would travel during the peak hour.

On Saturdays schools buses are not running regular routes.

There may be some temporary effects on traffic flow during the p.m. peak hour due to school buses. This effect would vary by the day of the week, seasonally, and year to year depending on the routes.

As the project site does not have a residential component there would be no new school bus stops within the site nor at the site entrance.

Comment 4.8-26 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.8-45, this section needs to be revised to firmly commit the owner/applicant to undertake the needed repairs and upgrades to those intersections and roadways that will experience a degradation in the level of service as a result of the project. Regardless of whether existing intersections are in need of repairs, the fact that the project will introduce an additional volume of traffic to those intersections that will further aggravate existing conditions obligates the project sponsor to implement the required upgrades. It is inappropriate to identify a project impact and then propose that another agency be responsible to implement the necessary mitigation. Without an absolute commitment by the applicant to implement measures to mitigate adverse traffic impacts of the project neither the Town of Patterson Planning Board nor the Town of Kent Planning Board will be able to adopt the findings required under 6 NYCRR 617.11 (5) of the SEQRA regulations and "certify that consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action in one that avoids or minimizes adverse environmental impacts will be the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable". The traffic report must be amended to identify needed mitigation and to commit the project sponsor to implement such mitigation at all intersections that will experience a drop level of service as a result of project generated traffic.

Response 4.8-26: *The Applicant has identified intersections needing improvements whether or not the project site is developed; this is appropriate as it would assist in getting improvements completed even if the project is not developed. The DEIS did not (and could not) commit to who would implement most of the improvements as discussions needed to be furthered and public input was important to these discussions. The FEIS identifies the responsible parties in Appendix K. SEQRA does not require applicants to mitigate all intersections that drop in level of service. This is not always economically feasible nor practical. Additionally, the NYSDOT highway design manual specifically notes, even for level of service E and F, there may be "...unreasonable costs or impacts associated with improving the level of service." A recent example of a project anticipated to lower the level of service at NYS Route 311 and NYS Route 52 and not mitigating that impact was the Kent Town Centre (Kent Town Centre DEIS page 3.5-20 and Statement of Findings adopted September 23, 2002).*

Ultimately, the lead and involved agencies will determine what is practicable based on information presented.

Comment 4.8-27 (Letter A-5 Darrin J. Scalzo, Division Permit Coordinator, NYS Thruway Authority, September 28, 2006): The additional volumes will significantly degrade the level of service and increase delays at the Interstate 84 ramps/Route 311 intersections if traffic mitigation improvements are not implemented. While the DEIS included analysis of

proposed improvements for these two intersections, there is no indication that the project developer will implement the traffic mitigation improvements to address the impacts resulting from the developing traffic, prior to the opening of the development. The traffic mitigation improvements need to be implemented prior to the opening of the proposed development; otherwise, the traffic operations along this section of Route 311 will significantly degrade.

> ***Response 4.8-27:*** *Refer to Response 4.8-11 regarding area transportation improvements. The Applicant has committed to improvements at the Interstate 84 ramp intersections with NYS Route 311. See FEIS Appendix K.*

Comment 4.8-28 (Letter A-5 Darrin J. Scalzo, Division Permit Coordinator, NYS Thruway Authority, September 28, 2006): The proposed development is expected to significantly increase the existing traffic through the project area. The DEIS indicates that the proposed development is expected to generate 1578 trips during the PM peak hour and 2504 trips during the Saturday peak hour. At the Interstate 84 Eastbound and Westbound intersections, the total generated volumes through both intersections are expected to increase by 54% and 128% during the peak PM hour and peak Saturday hour, respectively.

> ***Response 4.8-28:*** *Comment noted. The generated trips include vehicles already on NYS Route 311. The modified site plan has reduced leasable square footage, resulting in a five percent reduction in site generated traffic. See Response 4.8-27.*

Comment 4.8-29 (Letter A-5 Darrin J. Scalzo, Division Permit Coordinator, NYS Thruway Authority, September 28, 2006): We would request that any traffic mitigation plan with signalization of the Interstate 84 Eastbound and Westbound ramps include installation of queue detection on the Eastbound and Westbound off-ramps with interconnection to the traffic signals. The traffic signal preemption will prevent traffic queues from extending onto the Interstate 84 mainline.

> ***Response 4.8-29:*** *Installation of queue detection with preemption on the ramps would prevent queues from backing onto Interstate 84. The Applicant would install these if permitted as part of the signalized intersection improvements. Refer to Comment 4.8-27. Traffic signal preemption would not be used if unsignalized roundabouts are constructed.*

Comment 4.8-30 (Letter A-5 Darrin J. Scalzo, Division Permit Coordinator, NYS Thruway Authority, September 28, 2006): The Route 311 and Site access driveway intersection is a short distance from the Interstate 84 ramp intersection. A large number of left turns (over 700 vehicles during the Saturday peak hour) are expected to use the intersection to enter the proposed development with the potential of queues extending back to the Interstate 84 ramp intersections. Additional analysis should be performed to review the queues at this intersections and warrants for a traffic signal.

> ***Response 4.8-30:*** *A signal warrant analysis for the site access is provided in FEIS Appendix I. The modified site plan has reduced traffic into the site by five percent. Queue storage for left turning vehicles into the site is anticipated to be 600 to 800 feet long. At the time of final design, consideration would be given to providing either a queue detector or an extended actuated protected left turn phase to ensure the left turn lane does not back into the interchange. Queues are shown in DEIS Table 4.8-25 and Appendix J Table J-29 indicating no problem.*

Comment 4.8-31 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, NYC DEP, September 25, 2006): Based on the material reviewed, it appears that the consultant has used the person trips in the traffic intersection analysis and not vehicular trips. This procedure would cause over predicting of traffic impacts and possibly unnecessary traffic mitigation.

> ***Response 4.8-31:*** *The analyses are based on vehicular trips as specifically noted in the DEIS. For an example, the volume abbreviation on traffic analysis sheets of "vph" refers to vehicles per hour. Where trips are not vehicular trips they are specified as pedestrian trips. Also in the distribution and market analysis section within the traffic chapter, the discussion of population and patrons is related to vehicle trips not pedestrian trips.*

Comment 4.8-32 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, NYC DEP, September 25, 2006): The Final EIS should specify the version of the Highway Capacity Manual (HCM) used for the traffic analysis.

> ***Response 4.8-32:*** *The DEIS traffic analysis was conducted using the HCS version 4.1d as indicated in Appendix K of that document. This version was the appropriate version to use at the time the DEIS analysis was conducted. Since that time the HCM was updated. The analysis presented in this FEIS uses HCS version 5.21.*

Comment 4.8-33 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, NYC DEP, September 25, 2006): It is not clear if the existing smaller painted island had been considered in the existing, no-build, and build conditions (page 4.8-23).

> ***Response 4.8-33:*** *The DEIS noted, regarding the existing smaller painted island, that "[i]t has been included in the analysis of all future conditions." This statement refers to the No Build and Build Conditions with and without improvements. The analysis for Existing Condition does not consider the painted island.*

Comment 4.8-34 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, NYC DEP, September 25, 2006): Please explain why there is a warrant analysis proposed for the existing conditions.

> ***Response 4.8-34:*** *At certain locations, a signal is warranted under the Existing Condition. The warrant analysis provides an understanding of traffic conditions under current conditions.*

Comment 4.8-35 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, NYC DEP, September 25, 2006): The applicant should indicate whether no-build improvements have been accounted for under the build conditions.

> ***Response 4.8-35:*** *No Build transportation improvements were accounted for in the Build Condition with Improvements but not in the Build Condition without improvements.*

Comment 4.8-36 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, NYC DEP, September 25, 2006): It appears that there are no vehicle classifications counts. The FEIS should explain why these counts were not included.

Response 4.8-36: *Vehicle classification was done as part of most of the turning movement counts. The percent of heavy vehicles (trucks) is indicated on the traffic analysis sheets contained in DEIS Appendix K.*

Comment 4.8-37 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, NYC DEP, September 25, 2006): The DEIS provides detail with regard to the intersection where traffic conditions would be exacerbated by the proposed project. Currently, the DEIS fails to list the environmental, financial, or community impacts that would result from the future roadway improvements needed to absorb the additional traffic. The applicant commits to participate and fund (4.8-54) aspects of the necessary roadway improvements. Similarly, SEQRA calls on the applicant to identify these secondary impacts within the DEIS. This would include mention of the increase impervious surface and construction impacts.

Response 4.8-37: *The FEIS introduction and Appendix K herein outline the Applicant's participation in transportation improvements.*

There are two types of improvements being proposed: signal installations and road widening (generally in the form of creation of turning lanes). As a condition of the SEQRA approval, obtaining Highway Work Permits are required. The Highway Work Permits would include Maintenance and Protection of Traffic plans and stormwater management.

Traffic signal installation would require limited impervious surface for the traffic poles, cabinets and hand holds and are installed quickly generally requiring less than a week of construction.

Turn lanes require an additional strip of impervious surface generally 11 to 12 feet wide tapering down to the existing width. This work may occur over weeks and may include grading, new signing, and drainage.

Transportation improvements would reduce delay, reduce noise, and improve air quality over site development without the improvements. Secondary environmental impacts related to transportation improvements would not be significant.

No new roads, or modifications to the existing causeway over Lake Carmel are proposed as part of the Proposed Action. Improvements have been reviewed for eight of the thirteen intersections studied (twelve existing and the proposed project access road from NYS Route 311). Four are in the Town of Patterson and four are in the Town of Kent. The intersections subject to possible improvements, as set forth in an April 27, 2007 memorandum to the Putnam County Department of Highways and Facilities (included in FEIS Appendix A, Correspondence) are discussed below and summarized in Table 4.8-3.

NYS Route 311 and NYS Route 164

NYSDOT (March 19, 2007 letter from Glenn T. Boucher, Regional Highway Work Permit Coordinator of the NYSDOT, Region 8 - see Appendix A) advises that under the New York State Transportation Improvement Plan (TIP) certain lane improvements are anticipated at this intersection. These improvements will be funded by the State. It is expected that construction of the improvements by the State will coincide with the opening of Patterson Crossing Retail Center (NYSDOT letter dated March 19, 2007). These improvements are entirely under the NYS DOT's jurisdiction as NYS Routes 311 and 164 are both State roads. The applicant proposes to bond a traffic signal should one be warranted following the opening of the retail center.

NYS Route 311 and Fair Street (County Road 60)

The primary improvement at this intersection would be a curb widening of the right turn lane on Fair Street. This intersection improvement would be completed in cooperation with the County and NYSDOT.

NYS Route 311 and Westbound Ramp (Interstate 84, Exit 18) and
NYS Route 311 and Eastbound Ramp (Interstate 84, Exit 18)

These two locations will be directly impacted by traffic traveling to and from the proposed retail center. The westbound ramp requires improvements under the Existing Condition. The Applicant will help fund either a new integrated signal system at both ramps with associated geometric improvements or a roundabout. It should be noted that the NYSDOT has concluded that physical constraints limiting the amount of useable land in the area of these ramps could negate the use of the roundabout option (refer to John Collins, PC letter dated November 13, 2007 in Appendix A herein). The NYSDOT has agreed that they will issue a work permit for a viable mitigation program at these two Intersections (refer to NYSDOT letter dated March 19, 2007 in Appendix A herein).

NYS Route 311 and Terry Hill Road (County Road 46)

Improvements would include a right hand turn lane and island and a traffic signal to be implemented by the County (see County Executive letter August 22, 2007 in Appendix A herein).

NYS Route 311 and NYS Route 52

Mitigation primarily involves retiming of the existing traffic signal. These improvements are under the purview of NYSDOT and do not involve additional impervious surface (see NYSDOT letter dated March 19, 2007 included in Appendix A herein).

NYS Route 52 and Barrett Hill Road

Funding to improve this intersection with a left turn lane on NYS Route 52 is included in the NYSDOT TIP. The applicant has agreed to bond a signal should one be warranted within three years of opening of Patterson Crossing Retail Center.

NYS Route 311 and Patterson Crossing Retail Center Access Road

This new three-way intersection will become the main access into the Patterson Crossing Retail Center site. The conceptual improvement plan includes a new traffic signal and right and left hand turn lanes from NYS Route 311. The access road would have separate left and right turn lanes exiting the site. The NYSDOT has agreed to proposed improvements depicted in FEIS Figure K-4 (see NYSDOT letter dated March 19, 2007 included in Appendix A herein).

FEIS Table 4.8-2
Intersection Improvement Summary

Increase In Traffic From The Site	***Increase In Traffic From The Site***
Intersection	***Proposed Improvement Program***
NYS Route 311 and NYS Route 164	*NYSDOT adds geometrics (TIP) Applicant bonds signal ($100K)*
NYS Route 311 and Fair Street	*Applicant widens curb radii on Fair Street See Figure K-1*
NYS Route 311 and Ludingtonville Road	*None*
NYS Route 311 and Westbound Ramp	*Applicant to improve with signal and turn lanes or roundabout See Figure K-3*
NYS Route 311 and Eastbound Ramp	*Applicant to improve with signal and turn lanes or roundabout See Figure K-3*
NYS Route 311 and Ludington Court	*None*
NYS Route 311 and Longfellow Drive	*None*
NYS Route 311 and Terry Hill Road	*County adds signal, Terry Hill Rd. right turn lane/island, NYS Route 311 left turn lanes & Harvard Dr. island See Figure K-2*
NYS Route 311 and NYS Route 52	*NYSDOT to maintain and retime as necessary*
NYS Route 52 and Barrett Hill Road	*NYSDOT adds geometrics (TIP) Applicant bonds signal ($100K)*
NYS Route 52 and Horse Pound Road	*Kent Manor developer bonds center lane improvement*
Fair Street and Terry Hill Road	*None*
NYS Route 311 and Access Road	*Applicant installs signal and turn lanes*

Source: Tim Miller Associates, Inc., 2007.
NYSDOT letter dated March 17, 2007 (Appendix A)
County Executive Letter dated August 22, 2007 (Appendix A).

Any modification of State roads undertaken by NYS DOT would be subject to the provisions of two existing Memoranda of Understanding: one between NYS DOT and NYSDEC and one between NYS DOT and NYCDEP. Under the terms of these agreements, NYS DOT would be required to comply with the erosion and sediment control and stormwater management provisions of GP-0-08-001, and of GP-93-06, which is incorporated by reference into the WR&R. By complying with State and City stormwater regulations, impacts associated with erosion resulting from construction activities and increases in post-construction pollutant loading in stormwater from new impervious surfaces will be addressed.

Potential significant adverse impacts on surface water that could result from the noted safety improvements are expected to be further mitigated by the proposed on and off-site stormwater management facilities that exceed current statutory requirements and that will reduce existing phosphorous loads in New York City's watershed.

The Proposed Action has been modified and now includes proposed stormwater management facilities, beyond those required by NYCDEP and NYSDEC, that will treat runoff from portions of the Interstate 84 ramps, NYS Route 311, the Putnam County Highways Facility, and Concord Road. These practices, detailed in Appendix F of the December 21, 2007 SWPPP, will achieve an overall reduction in existing phosphorous loads of 8.28 lbs/yr in the New York City Watershed following construction of the project. Since any future residential development projects will be subject to New York State and City stormwater treatment requirements, the reduction in phosphorous loading that will result from treatment of runoff from the Interstate 84 ramps, NYS Route 311, Concord Road, and the Putnam County Highways Facility, is expected to offset any potential increases in phosphorous resulting from unforeseen secondary growth that may occur. Based upon the revised site development plan, and the effectiveness of the on- and off-site measures now proposed, post-construction phosphorous loads in the East Branch and Middle Branch Reservoirs are expected to be reduced from 10.08 lbs/yr to 9.46 lbs/yr and from 30.90 lbs/yr to 23.24 lbs/yr, respectively, following construction of the project.

Comment 4.8-38 (Letter A-9 Ronald J. Gainer, P.E., David J. DeBaie, P.E., PTOE, Stantec Consulting Services inc., September 25, 2006): The traffic study concludes that a single through travel lane will accommodate the traffic flow between the 1-84 ramps and the site driveway. This determination relies on capacity analysis which does not sufficiently define the coordinated operation of the assumed traffic signal control at the ramps and at the site driveway. The study should identify the extent of the queues under coordinated operation. All analysis should reflect the reduced lane capacity when queuing occurs.

Response 4.8-38: *As shown in the revised analysis provided in FEIS Appendix J, the eastbound movement from the site to the ramp would have two lanes, a right turn lane and a through lane. The westbound movement from the eastbound ramps would widen to separate left and through lanes. The general premise of the NYS Route 311 link operation between the eastbound and westbound Interstate 84 ramps and between the site access and the eastbound Interstate 84 ramps is that traffic enters on a single lane and exits on two lanes. The two lane exit is limited by green time provided by a signal. These traffic signals would be coordinated.*

Comment 4.8-39 (Letter A-9 Ronald J. Gainer, P.E., David J. DeBaie, P.E., PTOE, Stantec Consulting Services inc., September 25, 2006): The operation of the future traffic signals is shown to operate adequately, under the volume conditions presented, employing a 60-second cycle that includes short 18 second signal phases for eastbound NYS Route 311 past the site. Under fair weather conditions short cycle lengths may be adequate but vehicles on the NYS Route 311 grade will require significantly more time or multilane approaches under winter weather conditions.

Response 4.8-39: *NYSDOT data indicates winter traffic is lighter than average daily traffic. It is also likely, under poor driving conditions, the site would generate less traffic. As the volumes are lighter a longer green time could be assigned to NYS Route 311. In any event, the sensitivity analysis in FEIS Appendix J used a 100 second cycle length and the higher Saturday holiday site traffic volume to indicate that longer signal phases can be accommodated.*

Comment 4.8-40 (Letter A-9 Ronald J. Gainer, P.E., David J. DeBaie, P.E., PTOE, Stantec Consulting Services inc., September 25, 2006): The use of a short 60-second cycle at the 1-84 ramps is desirable to manage the queues on NYS Route 311 between the ramp intersections; however, the ability to use that cycle length for volume conditions higher than the observed March and April existing conditions should be demonstrated. The through volume level requiring an additional through lane should be identified.

Response 4.8-40: *A separate analysis presented in FEIS Appendix J indicates that even with a 100 second cycle length and the higher Saturday holiday site traffic volume, the storage length is adequate on interior links between the ramps.*

Comment 4.8-41 (Letter A-9 Ronald J. Gainer, P.E., David J. DeBaie, P.E., PTOE, Stantec Consulting Services inc., September 25, 2006): The traffic study should provide a higher level of confidence in the sufficiency of the existing NYS Route 311 roadway to provide access to the site by applying a more conservative trip generation and trip distribution estimates. Assuming that 25 percent of the site traffic will be drawn from NYS Route 311 overstates the proportion of the Route 311 traffic flow that will be drawn into the site and understates the proportion of 1-84 traffic that will be attracted to the site. A sensitivity analysis should be provided to demonstrate the reliability of the study findings under more conservative assumptions.

Response 4.8-41: *A sensitivity analysis is provided in FEIS Appendix J. See Response 4.8-21. This analysis uses a 15 percent passby rate and distributes the remaining 10 percent to and from Interstate 84.*

Comment 4.8-42 (Letter A-9 Ronald J. Gainer, P.E., David J. DeBaie, P.E., PTOE, Stantec Consulting Services inc., September 25, 2006): The presented analysis demonstrates the need for roadway improvements at many of the study intersections under the No Build condition and identifies that these improvements are not responsibility of the applicant. Without the ability to assure that these improvements are constructed, the applicant assumes that these improvements will be constructed in a timely manner to accommodate some of the development's access requirements. The traffic study should present a scenario including only those improvements for which there are assurances that the construction will occur, Namely, that which the applicant is committed to construct. This scenario will enable the assessment of the project's impact with and on the likely transportation network.

Response 4.8-42: *See Chapter 4.8 introduction and FEIS Appendix K which identifies the transportation improvements and the anticipated participation by the County, State, and Applicant. FEIS Appendix K contains revisions in the improvement program.*

Comment 4.8-43 (Letter A-9 Ronald J. Gainer, P.E., David J. DeBaie, P.E., PTOE, Stantec Consulting Services inc., September 25, 2006): The project site drive is proposed at 30 feet wide which is inadequate to allow two-way traffic and the passing of a stalled vehicle due to snow cover on the 7.96 percent grade. The width of the through lane plus the shoulder should be 18 feet wide to allow for the passing of a disabled vehicle. **[Similar comments were found in the following letter: Letter C-23, Daniel Kuchta, (9.25.06)]**

Response 4.8-43: *The site driveway has been modified to provide two lanes out of the site north of the Kent/Patterson Town Line and two lanes into the site south of that line. A median is provided to allow passing of disabled vehicles. Total cross sectional pavement width has been established at 39 feet (24 feet and 15 feet) which is greater than proposed in the DEIS (30 feet).*

Comment 4.8-44 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The development will add more traffic to the surrounding roadway network than projected. The traffic analysis performed for the DEIS assumes that only 75 percent of the traffic generated by the development will be "new trips" (page 4.8-37) added to the roadways in the study area. It assumes that the remaining 25 percent of the development traffic will come from motorists already passing the Site on NY Route 311 who will be attracted to the center ("passby trips", page 4.8-36). The volume of traffic on NY Route 311 is wholly insufficient to justify a passby credit of this magnitude. It is unrealistic to expect that one in six motorists passing the center on Route 311 during the weekday evening peak hour are going to drop in to the center and one in three motorists passing on Route 311 during Saturday peak hour will do so, which is what the data provided in the DEIS projects. (Based on our experience, a 15 percent pass-by credit during the weekday peak hour and a 10 percent pass-by credit during Saturday peak hour, representing a drop-in rate of one in eleven on weekdays and one in eight on Saturdays, are more realistic values). Since a smaller percentage of development traffic will be passby traffic, a larger proportion will be non-pass-by traffic, which will be added to the surrounding roadways. Thus, the center will generate more traffic than projected in the DEIS. **[Similar comments were found in the following letter and from the following members of the public during DEIS public hearings: Letter C-61, Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, (9.13.06), and Public Hearing, Oreon Sandler, (9.13.06)]**

Response 4.8-44: *The ITE recommended practice on trip generation notes that surveys show pass-by traffic is typically slightly higher during the Saturday peak (30 percent) than during the p.m. peak (26 percent) or conservative 25 percent used for the study for both peaks. The ITE trip generation numbers provide discreet numbers although the actual numbers may vary for two sites of the same size. The comment implies that the passby traffic would not occur at the levels stated in the DEIS as the through traffic is not high enough. The comment also implies that these trips would be replaced by non-through trips from the Towns. Another reviewer comment notes there is insufficient people in the town from which to draw these trips. The Lead Agency's traffic consultant review comment suggests the trips would be diverted from Interstate 84. Not all of these theories can be correct.*

The trip generation and passby trips are not a universal constant strictly applicable to every site. There is likely to be a change in the passby traffic if the volume of traffic

on NYS Route 311 significantly decreases or increases. Passby traffic is dependent on the through traffic volumes.

The trip generation analysis is conservative because it does not assume the NYS Route 311 reduction in passby traffic would result in a reduction in trips to the site.

In order to provide a conservative (high) trip generation rate and analysis, trip generation rates were not adjusted down. To test the sensitivity of the analysis to a lower passby trip rate it would be logical to assume, as suggested by the Lead Agency Traffic Consultant (Comment 4.8-41), that the difference in passby traffic would be diverted trips from Interstate 84. Interstate 84 has a daily volume of 56,000 vehicles or more than five times NYS Route 311. As the site does not have direct access to Interstate 84 these trips are considered diverted and not passby trips. Essentially such an analysis assumes the presence of Interstate 84 compensates for the NYS Route 311 volume and local population.

The subsequent sensitivity change reduces the passby traffic at the site entrance and redirects the traffic to the Interstate 84 ramps. Thus there are changes only at the site access point to NYS Route 311, and the ramp intersections with NYS Route 311. The five percent reduction in traffic from the modified site plan would reduce site traffic at all other external intersections as compared to the DEIS analysis. The sensitivity analysis for the change of passby traffic to diverted traffic is contained in FEIS Appendix J.

Comment 4.8-45 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): It is unlikely that the necessary improvements to provide acceptable traffic flow will be completed. The DEIS documents that "problems relating to poorly operating intersections in the vicinity of the proposed project exist under current conditions" (page 4.8-54). The DEIS continues by identifying improvements at eight of the existing intersections, none of which are specifically programmed to be completed in the foreseeable future (at best there might be some rehabilitation work on Route 311 for which "design would occur in 2010 and construction sometime thereafter" -page 4.8-22). The applicant's commitment to implementing the necessary mitigation measures at these intersections is limited to participating "in a significant way in the funding of intersection improvements in the area" (page 4.8-54). Without the applicant's commitment to fully fund the improvements, it is likely that these measures will not be implemented, at least not until well after the development has been completed or sold to another party. Then, after years of hearing about the congestion and more years programming funds, it is foreseeable that the State will eventually make some improvements which taxpayers will end up bankrolling. **[Similar comments were found in the following letters: Letter B-4 Marian H. Rose, Ph.D., President, CWCWC, (9.25.06) and Letter C-12 Edward Durkee, (9.22.06)]**

Response 4.8-45: *There is existing peak hour congestion in the transportation network and there would be additional congestion in the future regardless of Patterson Crossing Retail Center. These issues may exist for years without Patterson Crossing Retail Center as most are not currently programmed to be addressed by any government agency. Patterson Crossing Retail Center will bring about many improvements to the transportation network that otherwise would not be implemented.*

Comment 4.8-46 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The site has inadequate access which will block traffic on Route 311. Access to the Site is provided at a single driveway, A review of the intersection capacity analyses presented in the DEIS reveals that the intersection of the driveway with NY 311 is projected to be operating at 90 percent of capacity during the typical Saturday afternoon peak hour. These calculations are based upon the assumption that 270 of the 835 vehicles already passing the Site on Route 311 in the peak hour will drop into the Site (thereby reducing the volume of through traffic passing the Site, when, in reality, it is expected that only 125 vehicles will do so). Thus, an additional 145 vehicles will be passing through the intersection on Route 311 during this time period. Furthermore, some Saturdays will see less traffic activity at the center while others will see more. Indeed, the DEIS projects that traffic volumes at the center will be "about 16 percent higher during the holiday season" (page 4.8-38) than on a typical Saturday afternoon. Clearly, with the driveway projected to be operating within 10 percent of capacity on a normal Saturday, and traffic volumes projected to be 16 percent higher than normal during the holiday shopping season, and accounting for more-non-pass-by traffic, the intersection of the solitary Site driveway will not have sufficient capacity to accommodate the projected vehicular demand and congestion will ensue.

> ***Response 4.8-46:*** *The site access has been widened and simplified to provide additional queuing for exiting vehicles. In addition, the leasable floor area has been reduced by more than seven percent resulting in lower site generated traffic volumes. A sensitivity analysis (FEIS Appendix J) shows the operation of the NYS Route 311 intersection with the site access for Saturday holiday volumes without adjustments for the lower seasonal through traffic. This analysis is overly conservative because seasonal adjustment factors suggest there is an overall reduction in traffic. Hence the traffic shift from non-shopping trips to shopping trips would reduce through trips.*

Comment 4.8-47 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): Disruptions to the Site's solitary access will be enormously disruptive to residents of Echo Road and Concord Road and so inconvenient to visitors to the center as to undermine it's viability. The Site's solitary access driveway is approximately 1,300 feet long and is projected to carry approximately 17,000 vehicles per day. Invariably, there will be interruptions to service on the driveway. When this occurs, all vehicles on the Site will have to be directed to Echo Road, Concord Road to exit and, presumably, vehicles will not be allowed to enter the Site until the passable conditions are restored on the Site driveway. Both Echo Road and Concord Road appear to be less than 20 feet wide and are unsuitable to accommodate the thousand or so vehicles that will need to evacuate the site or to allowing emergency vehicles to get in to the site. The residents of this dense residential neighborhood will be overwhelmed on such occasions. Furthermore, the retail center's reputation will be tarnished if access to the development is disrupted in such a manner. It is for such reasons that current planning and engineering design requires that a second, fully functional driveway be provided for developments of even a moderate size, let alone on as large as Patterson Crossing. **[Similar comments were found in the following letters: Letter B-4, Marian H. Rose, Ph.D., President, CWCWC, (9/25/06) and Letter C-9 Joan Castiner, (9/25/06)]**

> ***Response 4.8-47:*** *The site access has been redesigned with a climbing lane to permit passing of entering vehicles stopped on the section of the access road in the Town of Patterson. Thus in an emergency, vehicles could exit the site drive even with emergency vehicles entering the site driveway and a stopped vehicle blocking a*

portion of the entrance in Patterson. With two exiting lanes in the Town of Kent, stranded exiting vehicles in Kent can also be passed. North of the service road crossovers are provided in the median for directing traffic around blockages. South of the service road, traffic can, in an emergency, be directed to use any of six access points to the service road as shown on FEIS Appendix L Figure L-3.

The emergency access has been redesigned and is proposed as 12 feet wide. The width of Echo Road and Concord Road, at 16 to 23 feet, would accommodate emergency vehicles needing to visit homes on these roads or gain access to the project site. There is no reason to believe the roads would be overwhelmed by emergency vehicles.

In the unlikely event that traffic would need to be evacuated from the site using the emergency access, a temporary impact would occur, lasting a short time. The emergency access will not be used as a general public access.

There are no known planning and engineering design standards that require a second fully functional driveway for a retail project of this size. See also Responses 4.8-122 and 4.8-231.

Comment 4.8-48 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The Site's main north/south internal roadway is inadequate to accommodate the size of the development. The DEIS asserts that an additional 10 percent of Site-generated traffic will occur on-Site (page 4.8-43). In fact, studies indicate that the internal trip generation for a project such as that proposed will be six times that projected. Using the same Institute of Transportation Engineers (ITE) trip generation equations which were used in the DEIS to determine that the 406,000 sf development would generate 2,152 trips during the Saturday peak hour, it is calculated that each of the individual store complexes (assuming each to be 101,500 sf in size) would generate 875 trips and thus, cumulatively, would generate 3,500 trips. Therefore, the volume of internal traffic would be the cumulative total (3,500 trips) minus the external trips (2,152 trips), an additional 1,348 trips, not the 215 trips projected in the DEIS.

Response 4.8-48: *This comment is not applicable to the project site as the site development is interconnected as described below and not a series of unconnected developments.*

There are frontage sidewalks and parking conveniently located for one-stop shopping at the site. The parking lots for nearly all the stores are interconnected by the road along the front of the major buildings permitting internal circulation without use of the main access road.

A specific use, such as a home improvement store, has lower trip generation than comparative shopping centers of the same size. For example the Home Improvement Store at 117,000 square feet would generate 287 trips p.m. peak hour trips while using the Shopping Center category for the analysis would generate 694 trips.

The proposed parking design is intended to discourage internal trips on the main north-south access road.

Comment 4.8-49 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): In reviewing the analyses of the internal intersections, it was noted that the turnaround at the north end of the main egress road was projected to experience a maximum queue of three vehicles. With the extra internal trip traffic described above and during the peak holiday season, it likely that the queue on the turnaround will spill back into the southbound through lane entering the Site and block access to the development.

Response 4.8-49: *The extra internal trips described in comment 4.8-36 are not applicable to this site. The modified site plan has eliminated the turn around, hence this comment is no longer applicable.*

Comment 4.8-50 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): In reviewing the analyses of the internal intersections of the electronic stores and the sporting goods stores with the main access road, it was noted that the analyses assumed only one vehicle would turn left out of either driveway to go to the stores in the rear on the Site. With the unrealistic expectation that there will be only a single left-turning vehicle and that internal traffic will be only 10 percent of the external traffic, the DEIS analyses indicate that each of these approaches would operate at 40 percent to 46 percent of capacity during the peak Saturday Hour. Left-turns at unsignalized intersections are critical and the internal traffic activity is expected to be six times the value evaluated. If even a small volume of traffic turns left out of these driveways, it is apparent that they will fail and extensive queues will form, particularly when the additional internal and holiday season traffic are appropriately accounted for.

Response 4.8-50: *The 10 percent internal rate is typical and commonly accepted by the New York State Department of Transportation. The shopping center is designed to encourage vehicles to enter at the point between major complexes for parking and for vehicles to park adjacent to two major complexes for improved pedestrian access. The major buildings are linear and allow pedestrian flow between buildings with limited interference from the main circulation and parking areas. Pedestrian activity between buildings are encouraged by site features. The analysis in the DEIS added a single left turn trip as it would be expected that nearly all drivers would make a right turn at the building frontage road to travel to the next building in order to acquire the nearest possible space to the entrance door rather than drive away from the building to which they are traveling.*

The road along the building frontages provides for internal trips without interfering with traffic exiting and entering the site. Southbound internal traffic is expected to go to the frontage road adjacent to the buildings and before seeking the closest parking space to the front door of the next destination rather than drive away from the intended destination in the direction of the main north-south access road. Few parking aisles have access to the main north-south road.

It is also important to understand the difference between vehicles and vehicles trips (also known as trip ends). One vehicle leaving one building parking area and going to another is two vehicle trips, one trip leaves the first building and the second trip arrives at the other.

FEIS Appendix L, internal traffic analysis uses a Saturday holiday internal trip distribution including additional right turns into driveways and left turns out of some driveways. The driveways are projected to work adequately under these conditions.

Comment 4.8-51 (Letter Marian H. Rose, Ph.D., President, CWCWC, September 7, 2006): Based on these considerations, it is apparent that the proposed circulation system, consisting primarily of the use of one main access road, is insufficient to serve then needs of the Site, with the result that it is expected that a substantial portion of visitors to the center would use the service road on the east side of the Site.

Response 4.8-51: *Refer to Responses 4.8-34 through 4.8-37B. Access to the east side service road from and to parking areas will be minimized through appropriate signage and access treatments allowing emergency vehicles access while prohibiting general use of the service road as an exit except from Building G.*

Comment 4.8-52 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The revised Traffic Impact Study should include a revised analysis to reflect a 15 percent pass-by credit during the weekday peak hour and a 10 percent pass-by credit during the Saturday peak hour.

Response 4.8-52: *A sensitivity analysis is provided in FEIS Appendix J which examines the Saturday condition with a 15 percent passby credit. Refer to Responses 4.8-21 and 4.8-41.*

Comment 4.8-53 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The SEIS should contain a commitment from the applicant to fund completion of the necessary mitigating measures. Alternatively the resolution of approval for the subject property should require that certificates-of-occupancy for the development will be conditioned upon the completion of these improvements by others. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Oreon Sandler, (9/13/06)]**

Response 4.8-53: *Refer to Responses 4.8-4, 4.8-23, 4.8-42, and FEIS Appendix K for description of mitigation measures and the responsibility for funding.*

Comment 4.8-54 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The SEIS should either propose a second driveway to access the Site or dramatically reduce the size of the project to a level which can be sustained by a single driveway and which is consistent with current engineering and planning philosophies.

Response 4.8-54: *Traffic to and from the site can readily be accomodated by the access proposed, as supported by the traffic studies included herein. With emergency access provided, the project is consistent with current engineering and planning "philosophies".*

Full access to the west would be to Concord Road or to another local road such as Brentwood Road, Greenridge Road, Lakeside, or Como Road. Reaching Como Road directly would require passing through a wetland, or a NYCDEP regulated watercourse. Connecting to any of these local roads would place traffic on local

residential streets which is not desired by the Applicant, the local residents nor is it appropriate for commercial or industrial uses.

No access can be provided to the east due to the interstate and interstate ramps which prohibit any such access. Grades are steep along the eastern portion of the property creating issues with roadway profiles. While the project site fronts on the Interstate 84 eastbound on-ramp, this would not be a functional or permitable form of access due to existing steep slopes and the fact that the ramp right of way was acquired by the NYSDOT "without access" (meaning connection to the ramp is not permitted).

The western part of the northern access to NYS Route 311 is blocked by a wetland and NYSDEP regulated watercourses. The access as planned maximizes queue distance to the Interstate 84 interchange and minimizes the site driveway grades.

Access at Fair Street was rejected. There are steep grades at site's frontage on Fair Street. Refer to Response 2.2-1 for additional information on alternate access road locations investigated by the Applicant.

In a letter dated July 29, 2004 (Appendix A, Correspondence), the Town of Kent recognized that the "...sole point of access to the project site is via Route 311..."

Comment 4.8-55 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The revised Traffic Impact Study should include a revised analysis to determine whether the internal intersections will have sufficient capacity to accommodate the additional internal traffic and holiday-season traffic (previously described and including left-turns on the electronics and sporting goods stores approaches to the main access road) to ensure that the Site's main access road will not fail and prevent motorists from using it to enter or exit the facility.

Response 4.8-55: *Internal traffic is examined for the Saturday holiday traffic peak hour in FEIS Appendix L. No internal intersections fail under these conditions.*

Comment 4.8-56 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The revised Traffic Impact Study should analyze the signalized intersection of Towners Road with NY Route 52 since 19 percent of Site traffic is projected to pass through this important intersection. **[Similar comments were found in the following letter and from the following members of the public during DEIS public hearings: Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, (9.13.06), and Public Hearing, Oreon Sandler (9.13.06)]**

Response 4.8-56: *The Towners Road and NYS Route 52 intersection is already signalized and was not included in the scope adopted for the DEIS. The Kent Manor project (as approved by the Town of Kent Planning Board) is anticipated to cul-de-sac off the western part of Towners Road reducing side road traffic through this intersection.*

Comment 4.8-57 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): Similarly, since more than half of the traffic generated by the project is projected to use Interstate 84 to get to and from the Site, the revised Traffic Impact Study should contain

ramp capacity analyses of the Interstate 84 ramps to and from Route 311 (particularly those on the south side of Route 311). **[Similar comments were found in the following letter and from the following members of the public during DEIS public hearings: Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, (9.13.06), and Public Hearing, Oreon Sandler (9.13.06)]**

> ***Response 4.8-57:*** *Refer to Responses 4.8-29 and 4.8-30. Although more than half of the traffic is projected to come to and from Interstate 84 about half of that traffic is anticipated to be diverted traffic that is already on Interstate 84. Studies identified in the ITE recommended practice for trip generation indicates diverted trips can represent 44 percent of p.m. peak hour trips and 56 percent of Saturday peak hour trips. If the intersections are signalized, ramps would be constructed not only with additional turn lanes for storage but also detectors to clear queues when necessary.*

Comment 4.8-58 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The revised Traffic Impact Study should specifically identify potential remedial measures at each of the following locations, which appear to be less safe presently (and thus, have the potential to be impacted by project traffic) based on their elevated accident rates, relative to the volume of traffic they serve:

- NY Route 311 at Terry Hill Road (it appears that wet pavement is a correctable feature);
- NY Route 311 at Ludington Court (a very low volume street with 4 accidents);
- NY Route 311 at the Interstate 84 ramps;
- NY Route 52 from milepost 1035 to 1038 (6 accidents/10th of a mile);
- NY Route 52 from milepost 1042 to 1044 (5.5 accidents/10th of a mile);
- NY Route 52 at Towners Road;
- NY Route 52 from milepost 1048 to 1050 (6 accidents/10th of a mile);

It is suggested that a review of the individual accident reports (Form MV 104) available from the Milbrook office of the New York State Police Accident Records Bureau would provide the best information upon which to base this evaluation. **[Similar comments were found in the following letter: Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, (9.13.06)]**

> ***Response 4.8-58:*** *Collision rates are not provided in the DEIS. All of the listed intersections were repaved and some slightly modified since the time of the accident summary. The following presents potential improvements at the subject intersections:*
>
> - *NYS Route 311 at Terry Hill Road (NYS Route 311 was repaved since the accident data. This intersection is proposed to be signalized with a right turn lane on Terry Hill Road northbound and left turn lanes on NYS Route 311).*
> - *NYS Route 311 at Ludington Court (This intersection should benefit from slower speeds and plattooning from adjacent traffic signals). See also comment 4.8-6.*
> - *NYS Route 311 at Interstate 84 ramps (These intersections were proposed to be signalized and have additional lanes added or be changed to roundabouts).*
> - *NYS Route 52 at Towners Road (Under the Kent Manor project a realigned Nichols road should nearly eliminate traffic on one approach).*
> - *See also Attachment A in FEIS Appendix J for discussion on accident data and updated accident information.*

Comment 4.8-59 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The revised Traffic Impact Study should contain a revised analysis of the intersection of NY Route 311 with NY Route 52, where there is effectively only one lane on westbound NY Route 311 as it approaches NY Route 52. The DEIS analysis incorrectly assumed that there were full left-and right-turn lanes on the causeway approach to NY Route 52. **[Similar comments were found in the following letter: Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, (9.13.06)]**

Response 4.8-59: *The DEIS discusses in detail the NYS Route 311 and NYS Route 52 intersection and Causeway and includes an aerial photo of the intersection. The actual NYS Route 311 approach width varies. The approach is wider than a single lane. It functions as a two lane approach with vehicles side by side at the signal. The analysis was done using an approach capacity narrower than normal lanes hence provides an analysis between a single lane and two full lanes. The analysis specifically notes the queue limitation that forces traffic to a single lane on the Causeway. The Causeway has no intersecting roads nor driveways that the single queue lane would block. At about 780 feet, the Causeway alone could sustain a queue of 30 vehicles.*

Comment 4.8-60 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The revised Traffic Impact Study should contain a revised analysis of the intersection of Horse Pound Road with NY Route 52 indicating that 19 percent of Site traffic is passing through the intersection. The DEIS analysis assumed that 10 percent of project traffic would materialize on NY Route 52 somewhere between Barrett Hill Road and Horse Pound Road. **[Similar comments were found in the following letter: Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, (9.13.06)]**

Response 4.8-60*: The analysis shows that nine percent of site traffic is passing through the NYS Route 52 intersection with Horse Pound Road. The remaining 10 percent of traffic that is accessing NYS Route 52 on this section of the roadway is coming from numerous residential streets, the most active being Towners Road which is signalized at NYS Route 52.*

The Kent Manor project Sponsor is bonding an improvement at the NYS Route 52 and Horse Pound Road intersection that will improve its operation. In addition the modified Patterson Crossing Retail Center site plan would reduce site traffic by five percent. Thus, no re-analysis is needed for the subject intersection.

Comment 4.8-61 (Letter B-1 John Canning, P.E., PTOE, Adler Consulting, September 7, 2006): The revised Traffic Impact Study should contain a revised analysis of the intersection of NY Route 311 with NY Route 164 indicating that 10 percent of Site traffic will travel to and from Patterson, Putnam Lake and the western portions of New Fairfield on NY Route 164. Based on our analysis, it is estimated that the difference between the 3% used and the 10% recommended will come from the west Interstate 84 (15%-5%=10%) and the east on Interstate 84(42%-2%=40%). **[Similar comments were found in the following letter: Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, (9.13.06)]**

Response 4.8-61: *A re-analysis of the NYS Route 164 and NYS Route 311 intersection was conducted and provided in FEIS Appendix J based on updated traffic information. The net decrease in traffic of 323 vehicles from the DEIS volumes is substantially more than the 79 vehicle increase suggested. Furthermore, the NYSDOT is improving NYS Route 22 at Interstate 684 potentially reducing traffic on NYS Route 164 and NYS Route 311. The Applicant will bond a traffic signal and that will mitigate the situation should a signal be warranted and approved by the NYSDOT. See Responses 4.8-12 and 4.8-21.*

Comment 4.8-62 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): Based on the project's size of 434,050 sq. Ft., the project will generate up to 23,000 vehicle trips on a Saturday on its access drive. (Comments of Traffic Engineer John Canning citing ITE standards). On average that is 3.5 to 5.3 times more the daily traffic on Rt. 311. (Town Comprehensive Plan at pg. 15).

Response 4.8-62: *The project as analyzed in the DEIS, 405,850 gross leasable square feet, has been reduced to 374,340 gross leasable square feet. The daily traffic on NYS Route 311 is based on the NYS 2005 Highway Sufficiency Ratings at 10,060 vehicles per day. From 15 to 25 percent of the site traffic is already on NYS Route 311 and is therefore not increasing NYS Route 311 traffic. More than half of the remaining site traffic would be limited to the segment between the site and Interstate 84. Further south and north of this area the site traffic represents a small portion of existing traffic. The only location where all site traffic meets the NYS Route 311 traffic is at the site entrance where the total lanes have been increased from two to six lanes (two lanes exiting the site, two turn lanes entering the site, in addition to the existing two lanes passing the site). See also Response 4.8-63.*

The proximity of the site to Interstate 84 allows traffic from distant locations along Interstate 84 to access the site without traveling on local roads through built up portions of the towns.

Comment 4.8-63 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): An average weekday would bring 17,600 vehicle trips (8,800 cars) on average, every day during the week - more than double the traffic counts on Rt. 311 identified in the Comprehensive Plan. To place the magnitude of the impact in context, it would be as if the number of families in both Towns increased by 36% and all drove to the project site every day, on top of the existing. Saturday traffic would be a worse nightmare - It would be as if every family in both Towns increased by 79% and all drove back and forth to the project site in addition to all the other cars and trucks on Rt. 311 on a Saturday.

Response 4.8-63: *Residents in the towns of Kent and Carmel make regular trips in the local road network to purchase the following categories of consumer products.*

- *Convenience Products – These are products that appeal to a very large market segment. They are generally consumed regularly and purchased frequently. Examples include most household items such as food, cleaning products, and personal care products. Because of the high purchase volume, pricing per item tends to be relatively low and consumers often see little value in shopping around since additional effort yields minimal savings.*

Consequently, marketers attempt to distribute these products in mass through as many retail outlets as possible.

- *Shopping Products – These are products consumers purchase and consume on a less frequent schedule compared to convenience products. Consumers are willing to spend more time locating these products since they are relatively more expensive than convenience products and because these may possess additional psychological benefits for the purchaser, such as raising their perceived status level within their social group. Examples include clothing products, personal services, electronic products, and household furnishings. Because consumers are purchasing less frequently and are willing to shop to locate these products, the target market is much smaller than that of convenience goods. Consequently, marketers often are more selective when choosing distribution outlets to sell their products.*

- *Specialty Products – These are products that tend to carry a high price tag relative to convenience and shopping products. Consumption may occur at about the same rate as shopping products but consumers are much more selective. In fact, in many cases consumers know in advance which product they prefer and will not shop to compare products. But they may shop at retailers that provide the best value. Examples include high-end luxury automobiles, expensive champagne, and celebrity hair care experts. The target markets are generally very small and outlets selling the products are very limited to the point of being exclusive.*

In addition to the three main categories above, products are classified in at least two additional ways:

- *Emergency Products – These are products a customer seeks due to sudden events and for which pre-purchase planning is not considered. Often the decision is one of convenience (e.g., whatever works to fix a problem) or personal fulfillment (e.g., perceived to improve purchaser's image).*

- *Unsought Products – These are products whose purchase is unplanned by the consumer but occur as a result of marketer's actions. Such purchase decisions are made when the customer is exposed to promotional activity, such as a salesperson's persuasion or purchase incentives like special discounts offered to certain online shoppers. These promotional activities often lead customers to engage in impulse purchasing.*

Looking at the Kent/Patterson marketplace, the most likely place for people to purchase these products puts them on the State Highway and often on Interstate 84 as such retailers are most easily accessible via these routes. There are very few such retailers within to the two towns.

Practically speaking, everyone that resides in the corridor that provides easy access from NYS Route 311 to Interstate 84 uses that route today and will continue to use it in the future. People go shopping today and will go shopping in the future, only the destination will be much closer. Traffic coming from points along Interstate 84 (exclusive of NYS Route 311) will not traverse

local roads to any great extent to get to Patterson Crossing Retail Center as there is no reason to do so.

The notion that volumes will increase significantly on NYS Route 311, south of the access to Patterson Crossing Retail Center and north of Interstate 84, is simply unsupported by what is projected to take place by the traffic analysis.

The comment suggests that "the magnitude of impact" is meaningful by measuring it as a percent increase. However, what matters is the operation of intersections at peak hour periods when demand is highest. Improvements at local intersections planned or bonded by the Applicant will improve peak hour conditions and improve traffic safety. Moreover, the other 20 hours of the day traffic will continue to flow easily as it does at the present time and will also benefit from the transportation improvements.

Comment 4.8-64 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): This cannot occur, Traffic would be brought to a standstill and the rural character of the community would be destroyed forever. The net effect would be as if all of the families in two additional Towns the size of Patterson and Kent decided to drive their car every day into Kent and Patterson severely disrupting our quality of life and the existing transportation network.

***Response 4.8-64**: The comment misrepresents the traffic analysis done for this project. See Response 4.8-63. The site location is ideally suited to minimize external traffic through the Towns. Transportation improvements are proposed to maintain adequate operation of the transportation network. Most project related traffic would travel from Interstate 84 and use NYS Route 311 between the site and Interstate 84. Some traffic (15 to 25 percent) is already on NYS Route 311 and passing the site. These trips would not contribute additional traffic to the public transportation network when the project is built. FEIS Appendix K contains a series of improvements measures intended to improve traffic flow.*

Comment 4.8-65 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): What multiple of daily traffic is deemed acceptable? Is there a multiple that would be acceptable? Is doubling the existing traffic too much? What about increasing traffic five-fold as here? Is ten times more traffic enough?

***Response 4.8-65:** Acceptable is subjective and has little to do with "multiples". The traffic analysis is based on review of the peak intersection capacities and traffic volumes and not daily traffic flows and capacities. As the traffic analysis is examining the peak 15 minutes of the peak hours, the rest of the day operates at conditions better than indicated.*

Comment 4.8-66 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): Can any further development occur following Patterson Crossing?

***Response 4.8-66:** No further development is proposed on this site. However, with the planned transportation improvements other development traffic can be accommodated in the surrounding areas of Kent and Patterson. Of Course*

depending on project size, the project sponsor(s) may also have to make additional traffic improvements.

Some "No Build" projects considered as part of the traffic analysis are no longer planned, indicating potential for further area, development exists. Any new development in the area including lapsed projects, would need to undergo environmental review prior to development. As part of their environmental review, traffic impacts would be assessed and mitigation, where required, would be developed.

Comment 4.8-67 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): Does increasing traffic by five-fold "lessen congestion in the streets" and promote public welfare?

Response 4.8-67: *The traffic is not increasing five fold, as noted in the DEIS Figures 4.8-8 through 4.8-11 and response 4.8-62. Mitigation measures as noted in FEIS Appendix K would lessen congestion in certain areas. Public welfare is promoted through transportation improvements, water quality improvements, easier access to consumer goods and services, generation of tax revenue with associated uses, and job creation to name a few.*

Comment 4.8-68 (Letter B-7 Cathleen Breen, Watershed Protection Coordinator, New York Public Interest Research Group, September 25, 2006): The DEIS asserts that the New York State Department of Transportation (NYSDOT) will address future traffic needs with a proposed roadway expansion, yet there is no NYSDOT supported data to suggest that this is the case. Instead, the SEIS must examine traffic impacts without the assumption that NYSDOT will expand any roadways. Given the environmental impact from increased traffic associated with retail centers, this must be adequately addressed in the Supplement DEIS.

Response 4.8-68: *The DEIS did not assume the NYSDOT would address future traffic. The DEIS stated that the Applicant would work with the State, and County to address traffic issues and a list of potential improvements is provided in FEIS Appendix K. The DEIS addressed the No Build Condition without roadway improvements and Build Conditions without roadway improvements (except the access improvements proposed to be paid for by the Applicant). The Build and No Build conditions without improvements do not include projects currently planned in the Transportation Improvement Program. As traffic conditions without improvements are already analyzed in the DEIS there is no reason to reanalyze them in a Supplemental DEIS.*

Comment 4.8-69 (Letter B-8 James M. Tierney, Watershed Inspector General, New York State Office of the Attorney General, September 25, 2006): Roadway Expansions are not certain to occur. The project's sponsor has assumed, without support, that State DOT would undertake the eight proposed roadway expansion projects. However, it is not at all certain that these roadways expansions would occur since, among other things, they would create significant water quality impacts.

Response 4.8-69: *See Response 4.8-68. The DEIS does not assume the NYSDOT would undertake the projects without support. Rather it states the Applicant would*

work with the County and State on the subject projects and that has been done (see FEIS Appendix K).

Refer to page 4.8-52 of the DEIS where it is stated the following: "Specifically, the Applicant is committed to participate in a significant way in the funding of intersection improvements in the area. In addition to the widening and signalization of Route 311 in front of the Applicant's property, the Applicant would work with the appropriate authorities to identify intersections where improvements are warranted as a result of the proposed action and would share in the cost of those improvements. The Applicant also commits to working aggressively with the Town, the County and the DOT towards funding an improvement program for road and infrastructure updates in the project vicinity to ensure that the intersections in the study area operate at levels acceptable to the NYSDOT into the future." For example the Applicant is providing the significant improvements at the NYS Route 311 and Interstate 84 intersections. Refer to Response 4.8-4. Refer to Response 4.5-36 for additional text on impacts to water quality from roadway expansion.

Comment 4.8-70 (Letter B-8 James M. Tierney, Watershed Inspector General, New York State Office of the Attorney General, September 25, 2006): The Project's sponsor also incorrectly assumes that an intersection that meets various DOT requirements for need will actually be the subject of a State DOT project. While the retail Project is proposed to be completed by 2010, according to State DOT, it has not budgeted or programmed the construction of any of the roadway projects desired by the Project's sponsor. Only one intersection is even slated for possible redesign and then only in 2012. The SEQRA lead agency should consult immediately with State DOT on this deficient aspect of the DEIS.

Response 4.8-70: *Refer to Response 4.8-69. The DEIS did not assume that proposed traffic improvements would be the responsibility of the NYSDOT. FEIS Appendix K identifies the improvement program and the parties that are anticipated to take responsibility for each improvement.*

Comment 4.8-71 (Letter B-8 James M. Tierney, Watershed Inspector General, New York State Office of the Attorney General, September 25, 2006): The DEIS should examine traffic impacts from the proposed Project without the assumption that any roadway expansions will be implemented by 2010 or thereafter - a situation that will likely result in a future projection of numerous severely congested intersections (level of service "E" and "F") under the State DOT rating system.

Response 4.8-71: *DEIS Tables 4.8-32 and 4.8-33 summarize the level of service under all five conditions noted below:*

- *Existing Condition*
- *No Build Condition*
- *No Build Condition with Transportation Improvements*
- *Build Condition*
- *Build Condition with Transportation Improvements*

Refer to Responses 4.8-11 and 4.8-157 regrading timing of the proposed improvements.

Comment 4.8-72 (Letter B-8 James M. Tierney, Watershed Inspector General, New York State Office of the Attorney General, September 25, 2006): State DOT indicates that it has not planned budgeted or programmed any of the ten roadway expansion projects identified in the DEIS. The only project that is even tentatively slated for design is the intersection of Route 52 and Route 311, and then only in 2012 - no money is budgeted for actual construction and the project is not on the State DOT program. Therefore, it is unlikely that these roadway projects will occur anytime near the 2010 construction completion date for the proposed Project. Moreover, the expansion of roads within phosphorus impaired portions of the Watershed are highly disfavored due to the potential of such projects to further degrade water quality. Consultations between the State DOT and the SEQRA lead agency are strongly encouraged.

Response 4.8-72: *DEIS Page 4.8-22 outlines the currently planned NYSDOT projects as noted in the Transportation Improvement Program. This program includes a design project in 2010 covering NYS Route 311 and NYS Route 52 from Horse Pond Road (County Road 48) or the entire study area in the Town of Kent and the interchange in the Town of Patterson. There is an armor coating project for Route 311 and Route 164. There are no projects for NYS Route 311 at Fair Street or Ludingtonville Road. Refer to the introduction to this chapter, Appendix K and Responses 4.8-11 and 4.8-157 for information on the proposed improvement plan coordination with the State and County, responsible party and timing. FEIS Appendix K describes how improvements would be implemented and is based on consultation with the State and County.*

Comment 4.8-48 indicates that decentralizing future retail traffic would produce even more network traffic. If such decentralization occurred, interchange improvements would still be necessary along with other improvements between the interchange and retail development.

It would not be responsible for local agencies to reject road improvement programs when such programs will benefit the public health and welfare. As noted in the traffic analysis, improvements are needed at many locations whether Patterson Crossing Retail Center is built or not. Using private funds to bring about public improvements along with applicable and appropriate stormwater management measures is a benefit of the project that the lead agency will need to consider as part of the criteria that will come into play in making a balanced decision as per the SEQRA requirements.

Comment 4.8-73 (Letter B-8 James M. Tierney, Watershed Inspector General, New York State Office of the Attorney General, September 25, 2006): If this is accurate, and the "assumed" roadway projects will not occur, the Lead Agency should consider requiring a re-assessment of traffic congestion impacts caused by the proposed Project without any roadway expansions - a circumstance that will likely result in very serious episodes of local traffic congestion. On the other hand, if expansions do occur, there will be additional severe impacts on water quality.

Response 4.8-73: *The notion that there will be severe impacts on water quality as a result of transportation improvements that may take place in the local network is unfounded and unsupported. The Applicant has met with Mr. Tierney's office subsequent to these comments and has advised that the project includes measures to treat untreated runoff from the state highway system, treat runoff from Concord*

Road properties and in this regard will result in a net benefit to local water quality. Moreover, Mr. Tierney's office was advised that improvements involving signalization and restriping will not produce additional impervious land in the watershed, or will be done on land that is graded and compacted.

The DEIS has provided an assessment of the traffic congestion impacts if transportation improvements are not made for both the No Build and Build Conditions. These are identified as No Build without improvements and Build without improvements.

Comment 4.8-74 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, Riverkeeper, September 25, 2006): These improvements on state-owned Interstate 84 and Route 311, as well as others, require commitments and funding from the New York State Department of Transportation (NYSDOT), which is the agency responsible for undertaking the improvement projects on state-owned roads.

Response 4.8-74: *This comment in incorrect. Improvements to State owned roadways require NYSDOT state permits. Funding may occur from a variety of sources including private parties. Refer to the letter from NYSDOT in Appendix A herein from NYSDOT and concurrence with the proposed traffic improvement plan.*

Comment 4.8-75 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, Riverkeeper, September 25, 2006): The applicant has failed, however, to provide any evidence to suggest that NYSDOT has planned, funded, or scheduled the improvements that would be required for the proposed action to move forward. The DEIS contains no contract between the applicant and NYSDOT to share the cost of improvements, no notice by the Town or County that they will fund an improvement plan, and no documentation from NYSDOT, the Town or County to suggest that the applicant's proposal is even remotely realistic. To assert that the applicant "will work with NYSDOT and others to fund and construct other improvements that would help alleviate traffic issues under the current conditions" is speculative, presumptuous, and without merit in the absence of any corroboration by the regulatory agencies. For these reasons, the Town Board cannot approve the proposed project until the required road improvements have been planned, reviewed, funded, scheduled and executed by the responsible parties.

Response 4.8-75: *This comment is incorrect. The Town can approve a project before improvements are planned, funded, scheduled, and executed. SEQRA requires that significant adverse impacts and mitigation to offset these impacts be identified not funded, scheduled and executed before a Proposed Action is approved. The NYSDOT requires SEQRA approval before the highway work permit for entrance improvements can be issued. Work on a state roadway can not be started until the SEQRA approval is made. The NYSDOT will not permit the installation of certain improvements, especially traffic signals, until warrants are met. The NYSDOT does not install traffic signals in advance of expected traffic from developments that may never be built. For this reason the Applicant has bonded signals at various locations as noted in FEIS Appendix K.*

SEQRA Findings will identify what improvements if any are to be done for any given project and when such improvements need to be implemented. Certain improvements will be completed prior to the opening of the development (i.e., site access intersection improvements) and others when and if the need arises, or as warrants are met, and only after the SEQRA approvals are given. Generally, detailed design work on roads improvements occur after site plan approvals are granted.

The Finding Statement under 617.2 (p) as noted below must weigh the issues and provide a rational for decision making. Physical improvements need not be in place before such decisions are made, and in fact the section implies that starting construction would mean a decision was already made contrary to SEQRA.

> *"(p) Findings statement means a written statement prepared by each involved agency, in accordance with section 617.11 of this Part, after a final EIS has been filed, that considers the relevant environmental impacts presented in an EIS, weighs and balances them with social, economic and other essential considerations, provides a rationale for the agency's decision and certifies that the SEQR requirements have been met."*

FEIS Appendix K addresses the scheduling of improvement projects, particularly those that would be bonded, as it is not certain if traffic would be sufficient for them to be installed. This Appendix also documents the part responsible for funding the individual projects. The initial planning and review is part of SEQRA, however detailed design and design review occur under the highway work permit process.

Comment 4.8-76 (Letter C-1 Carol F Arnold, September 21, 2006): As has been called for by others, including professionals, there needs to be a separate, more detailed and through, traffic study. Not only for Lake Carmel roads, particularly Terry Hill Road and Towners Road, but Fair Street and Routes 52, 311 and 22 also can be negatively impacted- increasing congestion and heavy traffic.

Response 4.8-76: *A detailed sensitivity analysis has been provided for NYS Route 311 at the site access and at the Interstate 84 interchange. (see FEIS Appendix J). Northern Fair Street intersections with NYS Route 311 and Terry Hill Road are examined in the DEIS, as were portions of NYS Route 52 and NYS Route 311. The greatest potential for impact on local Lake Carmel roads was evaluated using the Terry Hill Road and Fair Street intersection. This intersection of two County roads, the representative worst case for local intersection operation, was evaluated to be level of service B with Patterson Crossing Retail Center constructed.*

Towners Road has a traffic signal and is further removed than Terry Hill Road and thus was not included for study in the Project Scope.

Fair Street and Route 52 was not included in the DEIS scope. The NYSDOT has been independently looking at NYS Route 52 signals at Fair Street and NYS Route 301.

Traffic from the site is anticipated to drop by 91 percent by the time Horse Pound Road is reached, hence, intersections further south were not investigated.

NYS Route 22 was not included in the scope because of the distance from the project site and location in the transportation network. The NYSDOT has included on the TIP, plans to widen the section of NYS Route 22 immediately north of Interstate 684. (See Response 4.8-90).

Comment 4.8-77 (Letter C-1 Carol F Arnold, September 21, 2006): I am very concerned about the safety of our children, who walk and bike in the Lake Carmel park district, and the many children of the Carmel School District riding the school buses. **[Similar comments were found in the following letters and from the following members of the public during DEIS public hearings: Letter C-32 Anita Malpic, (8.23.06) and Letter C-51 Judith Terlizzi, (9.14.06) and Public Hearing, Susan Russo, (9.14.06)]**

Response 4.8-77: *Most of the Lake Carmel Park District would be unaffected by Patterson Crossing Retail Center traffic that is primarily on the State roadways. Pedestrian traffic on NYS Route 311 would benefit from installation of signals on the network that would introduce gaps in traffic. Refer to Response 4.8-25 and 4.8-134 for a discussion on school bus safety.*

Comment 4.8-78 (Letter #C4, Elena Bao, September 25, 2006): The purpose of adding traffic signals to Route 311 is to shift capacity from Route 311 to our side streets? But throughout the DEIS the Applicant said there would be no impact to local roads! **[Similar comments were found in the following letter: Letter C-44 Peter Riebold, (9.22.06)]**

Response 4.8-78: *The intent of shifting capacity is not to shift traffic onto local roads but to make it easier for traffic to leave the local road network. The shifting of capacity to the side streets allows vehicles from the side streets to more safely enter the arterial (i.e., NYS Route 311). Improving the safe movement from the minor streets to the arterial is not only acceptable it is desirable. Traffic signals would also improve the safety of pedestrians crossing the arterials. Hence the traffic signal mitigations can have a positive impact on local road intersections with NYS Route 311 and NYS Route 52.*

Comment 4.8-79 (Letter #C4, Elena Bao, September 25, 2006): "Network improvements will reduce delays to acceptable levels"? The Applicant's project will be adding thousands of vehicles per hour to our roadways. It is unacceptable for the Applicant to state that these traffic modifications will yield a benefit to the community when all we'll get for spending millions of dollars is thousands more cars per hour and a minimum level of service from our roadways. These traffic infrastructure modifications are not being planned to benefit the community, they are being planned to accommodate a grossly over scaled development for an inappropriate location. No traffic agency has given any indication these infrastructure changes are even feasible! The Applicant needs to come back from fantasy-land and give us concrete date. We need a supplemental traffic impact study that is the result of extensive consultation with all the appropriate traffic authorities. A project of this scale and impact can't be approved without a thorough analysis of the traffic infrastructure modifications and the cost of this infrastructure.

Response 4.8-79: *See Section 4.8 Introduction, Responses to comments 4.8-19 to 4.8-23, 4.8-38 to 4.8-43, and 4.8-27 to 4.8-30, FEIS Appendix K, which incorporates the NYSDOT comments of March 19, 2007 into the improvement program, and FEIS Appendices I, J, and L.*

Comment 4.8-80 (Letter C-5 Harold W. and Mary C. Barrett, September 22, 2006): Figure K11 in the Traffic Study of the Environmental Impact Statement Draft shows a right hand turn lane, 24 by 125 ft, at the end of Fair Street where it intersects Route 311. Our concern is how this right hand turn lane will affect our property which is located at the intersection of Fair Street, Route 311, and Deacon Smith Road.

> ***Response 4.8-80:*** *Traffic at the Fair Street and NYS Route 311 intersection was recounted (FEIS Appendix I) and reanalyzed (FEIS Appendix J). The right turn lane improvement has been replaced by a wider curb radius as schematically shown in FEIS Appendix K Figure K-1. The right turn lane in DEIS Figure K-11 of 12 feet wide, which created a two lane 24 feet wide approach, is no longer proposed.*

Comment 4.8-81 (Letter C-9 Joan Castiner, September 25, 2006): Tractor trailers will be delivering their goods and idling year round. Who will enforce any rules in place for hours of operation?

> ***Response 4.8-81:*** *Tenants are responsible for adhering to all local laws and the building inspector is responsible for enforcing town code requirements.*

Comment 4.8-82 (Letter C-9 Joan Castiner, September 25, 2006): Are traffic reports accurate? What about peak holiday times of the year where traffic is sure to double or triple?

> ***Response 4.8-82:*** *Traffic reports are often conservative and project volumes at a rate higher than what typically occurs. Recent reviews of traffic on US Route 6 at the 800,000 square feet Cortlandt Town Center revealed traffic volumes to be actually much lower than originally estimated in pre-development traffic studies. The same is true for traffic growth that was projected on NYS Route 52 in the original Kent Manor EIS. FEIS Appendix J delineates hundreds of trips from other projects that were included in the DEIS that are no longer pending. As indicated in Response 4.8-2, the background growth rate is conservatively high and historically higher than when combined with actually constructed projects.*
>
> *DEIS Table 4.8-24 indicates anticipated holiday peak hour traffic. This data has been updated for the FEIS (see Tables J-15 and J-26) to reflect the reduction in square footage on the site. Holiday p.m.. peak hour site generated traffic is relatively unchanged from the non-holiday site generated traffic. Holiday Saturday site generated traffic is projected to be approximately 15 percent higher than non-holiday site generated traffic.*

Comment 4.8-83 (Letter C-12 Edward Durkee, September 22, 2006): Perhaps the most telling paragraph that contradicts the rosy picture is just below.. "Queue management is as important as level of service when considering volume at an intersection. Priority needs to be given to the westbound off ramp traffic to avoid the potential of backing traffic up onto the Interstate 84 through lanes. This ramp would have green time priority of the NYS Route 311 southbound approach to the intersection. As the volume of traffic on the ramp is expected to increase faster than the NYS Route 311 traffic traveling from Patterson, capacity on NYS Route 311 Will need to be reduced to compensate for increased in ramp volumes. The purpose of adding traffic signals to the NYS Route 311 is to shift capacity from NYS Route

311 to the side streets. The increased capacity for the minor street, permits the minor street traffic to enter NYS Route 311 more easily.

Response 4.8-83: *Refer to the Response 4.8-78. The intent of the transportation improvements is foremost to increase safety. Traffic signals can shift capacity to minor streets, providing safer entry into the arterial. The purpose of traffic signals is to provide gaps in traffic for the minor street traffic. This shifts capacity from the major street to the minor street. It is anticipated that the No Build Projects and the Applicant's project would add more traffic to the ramps than would be added to NYS Route 311 further east of the interchange. Hence, transportation improvements should be centered on the site access and Interstate 84 and NYS Route 311 interchange. The existing level of service F on the westbound ramp is an indication that signalization needs to be added to the ramp to improve the efficiency of ramp movements.*

Response 4.8-29 addresses the use of detectors to further ensure ramp traffic would not back up on to Interstate 84.

Comment 4.8-84 (Letter C-12 Edward Durkee, September 22, 2006): Provide the estimated gross numbers of traffic volume, with the emphasis being that the bulk of traffic coming to the site will be off of Route 84.

Response 4.8-84: *The DEIS provided the subject information in Figures 4.8-8 and 4.8-9. FEIS Appendix J also examined Saturday holiday traffic and the p.m. peak hour traffic based on the 374,340 gross leasable square feet and increased traffic diverted from Interstate 84.*

Comment 4.8-85 (Letter C-12 Edward Durkee, September 22, 2006): Talk about how the general increase in traffic, due to increased development of other projects, and the general trend of the area will stress the roadway infrastructure making improvements to certain intersections and road conditions necessary at some time in the near future.

Response 4.8-85: *The DEIS Section 4.8.2 discusses the No Build Condition for 2010. FEIS Appendix J discusses the reduction in future area traffic as some No Build projects are not being progressed. Refer to Response 4.8-2.*

Comment 4.8-86 (Letter C-12 Edward Durkee, September 22, 2006): Relate accident types and statistics concerning the targeted intersections and roads being studied.

Response 4.8-86: *Refer to DEIS tables 4.8-2 through 4.8-5 and Responses 4.8-6, 4.8-8, 4.8-16, and 4.8-58.*

Comment 4.8-87 (Letter C-12 Edward Durkee, September 22, 2006): Describe the remediation techniques and proposed solutions that, should they be implemented, would provide some solutions to the traffic impacts.

Response 4.8-87: *The DEIS Build Condition provided insight into remediation techniques. These improvements have been modified in FEIS Appendix J and are summarized in FEIS Appendix K.*

Comment 4.8-88 (Letter C-12 Edward Durkee, September 22, 2006): Relate future tax revenues that in the "best of all possible worlds" could be used to help finance the necessary improvements to the Traffic Infrastructure.

Response 4.8-88: *Refer to Response 1.3-9 and 4.8-239.*

Comment 4.8-89 (Letter C-12 Edward Durkee, September 22, 2006): Emphasize that you will "work with the NYSDOT and others to fund and construct other improvements..." but not providing any specific costs or numbers.

Response 4.8-89: *Costs for the improvements documented work in the FEIS Appendix K including Applicant work on NYS Route 311 and Interstate 84 ramps have not been finalized but are expected to cost several million dollars.*

Comment 4.8-90 (Letter C-12 Edward Durkee, September 22, 2006): Summarize by implying that it is only with the building of Patterson Crossing that you (the towns and county) will be able to effect the improvements necessary to handle the increased needs.

Response 4.8-90: *Patterson Crossing Retail Center is anticipated to act as a catalyst to expedite improvements and fund other improvements that the Towns, County, and State may eventually require.*

Comment 4.8-91 (Letter C-12 Edward Durkee, September 22, 2006): This is a very optimistic narrative that when you dissect the information, assertions and comparisons does not accurately provide a realistic picture. For one example, the level of service for one of the most heavily traveled intersections 311 with Route 84 Westbound ramp will remain at the minimal service level, in spite of any modifications proposed. This means that we will still have a minimally operating intersection it will just have a substantially larger amount of traffic and a traffic light that creates longer delays to handle the traffic.

Response 4.8-91: *Under existing conditions the westbound ramp operates at level of service F. A traffic light will allow delay from the minor street to shift to the major street reducing the minor street delay. In the case of the aforementioned ramps it would be level of service D instead of F. Thus instead of side road traffic having lengthy delays, a signal will create safe, reliable gaps with reasonable, predictable delays.*

Comment 4.8-92 (Letter C-12 Edward Durkee, September 22, 2006): Project location has excellent connectivity via I84 to the regional highway system. As a consequence they assume most access to the site will be via this interstate. But if you begin to examine the market data analysis, this assumption is not one that holds up. As the data begins to indicate that the majority of the population comes from the neighboring population centers that do not have immediate access to the highway.

Response 4.8-92: *The data does indicate the majority of patrons will use Interstate 84. Interstate 84 bisects the County and traverses the 10 and 20 mile radii from the site. With 56,000 trips per day on Interstate 84, there is ample evidence that it is highly accessible to local neighborhoods. The Claritas area map in DEIS Appendix C shows the accesses to Interstate 84 at the 3 mile radius and NYS Route 52, US Route 9, and Interstate 684 to be the key corridors that feed into Interstate 84. The*

under-3-mile radius is lightly populated compared to the 10 and 20 mile radii. There are also accesses to Interstate 84 at NYS Route 312 and Ludingtonville Road that provide connection to the interstate from some neighborhoods.

Comment 4.8-93 (Letter C-12 Edward Durkee, September 22, 2006): What is never discussed is the effect of adding more than 15,000 daily auto trips to the area, or nearly 6 million trips a year producing more than 30 million additional vehicle miles of travel (all rough approximations but in the ballpark). Not only will this added travel generate another 200 auto accidents each year it will generate additional traffic congestion and environmental damages that will cost the community tens of millions of dollars in losses (each year). (Comment from Brian Ketcham) **[Similar comments were found in the following letter: Letter C-32 Anita Malpic, (9.23.06)]**

Response 4.8-93: *There is no technical support from the above assertion and no evaluation of daily trips, yearly trips or total vehicle miles traveled (VMT) in the network nor for the Patterson Crossing Retail Center. Less than 43 accidents per year occur in the existing network as indicated in DEIS Tables 4.8-1 and 4.8-3. There is no basis for projecting 200 more accidents per year. For example there will be a reduction of 28 vehicle miles for each vehicle that stops at the project site instead of continuing through to the Danbury Mall. Traffic mitigation improvements including the addition of signals and turn lanes would also reduce the potential for collisions.*

Comment 4.8-94 (Letter C-12 Edward Durkee, September 22, 2006): Summarizes new development anticipated for the study area that is likely to impact local traffic. No details are provided about the traffic impact of each project will generate. While there is some discussion of the background growth (1.5% per year over "five to six years"-- which is it?) The only way to divine no build impacts is to subtract traffic volumes for baseline conditions from no build conditions. A quick impression is that new development (some of which is approved) will increase local traffic impact from 13% to about 43%, depending on location. Another way to approximate these impacts is to compare total vehicle movements onto and off Interstate 84. For the PM peak hour, that total for new development comes to 303 vehicle trips (for 20 new projects listed). As you will see, this is about 45% of what the Patterson Crossing Retail Center will generate. (Comment from Brain Ketcham)

Response 4.8-94: *It is not the Applicant's responsibility to analyze individual traffic for other projects in the area. Six of the 29 projects are anticipated to have no impact as they are no longer planned. Additional information is available in the respective EIS's of larger projects. Some of these projects, including Kent Manor, Putnam Plaza Supermarket, Gateway Summit and Fairways, and Highlands Shopping Center, were previously analyzed and assigned mitigation measures to offset associated traffic related impacts.*

The number of years background growth was applied varies based on when the counts were taken as discussed on DEIS pages 4.8-10 and 4.8-11.

The relative traffic of a project with respect to a location in the network is partially due to its location in the network. Patterson Crossing Retail Center traffic will mostly use the NYS Route 311 interchange with Interstate 84. Projects along NYS Route 312 and NYS Route 22 would tend to use those interchanges more and not NYS Route 311.

Comment 4.8-95 (Letter C-12 Edward Durkee, September 22, 2006): Summaries of no build Level of Service showing far more severe conditions at many locations than is currently experienced without new development. (Comment from Brian Ketcham)

> ***Response 4.8-95:*** *The addition of background growth and traffic from 29 other projects without corresponding transportation improvements in the area is going to show added delays in the transportation network. While six projects are no longer being proposed other projects have provided mitigation by reducing the size such as Hillcrest Commons and Kent Manor. Other projects, including such as Kent Manor, Putnam Plaza, and Gateway Summit / Fairways have proposed mitigation in or around the study area.*

Comment 4.8-96 (Letter C-12 Edward Durkee, September 22, 2006): Note "The maximum grade of the site access drive is 7.96 percent." This is very steep and will slow entering traffic and, on wet or icy days, make exiting the site dangerous. Nothing is discussed. (Comment from Brian Ketcham)

> ***Response 4.8-96:*** *The access grade conforms to Town standards. The FEIS plan has a wider access that is simplified compared to the DEIS plan.*

Comment 4.8-97 (Letter C-12 Edward Durkee, September 22, 2006): "Construction Traffic/ Construction Delivery Traffic." Incomplete and in a location to break up focus on project traffic impacts. (Comment from Brian Ketcham)

> ***Response 4.8-97:*** *Impacts associated with Construction traffic are discussed in the DEIS Sections 2.4.1, 2.4.2, 4.8.3, 4.9.5, and 4.9.6 per the approved Scoping Document.*

Comment 4.8-98 (Letter C-12 Edward Durkee, September 22, 2006): Potential (project) Impacts. Table 4.8-20 presents ITE trip generation rates and Table 4.8-21 presents the resulting peak hour auto and truck trips. The DEIS is claiming a 25% pass by credit. Since I am not familiar with the area a 25% pass by credit should only be taken if there are a large number of existing retail stores in the corridor (along NYS 311 in close proximity). A 25% pass by credit reduces by 25% the project's impact on surrounding roads. (Comment from Brian Ketcham)

> ***Response 4.8-98:*** *The passby credit is related to vehicles already on the NYS Route 311 and applies to trip purposes other than local shopping. The site is located such that it will attract commuters returning home and attract trips destined for other shopping centers such as the regional Danbury mall. Refer to Responses 4.8-41 and 4.8-21.*
>
> *Comment 4.8-41 by the Town's Traffic consultant suggests, as is analyzed in FEIS Appendix J, a portion of the traffic should be from Interstate 84 where retail businesses have no direct access.*

Comment 4.8-99 (Letter C-12 Edward Durkee, September 22, 2006): An estimated 25 percent of site trips are already or will be on NYS Route 311. Of the remaining trips 57 percent are expected to travel directly to/from Interstate 84. Of these, 42% of the trips are

expected to travel from the south and the remaining 15% of trips are expected from the north." The DEIS provides no supporting documentation about origins and destinations (Comment from Brian Ketcham)

Response 4.8-99: *The distribution is explained on DEIS pages 4.8-36 through 4.8-38. See Comment 4.8-5 and FEIS Appendix J for sensitivity analysis on the trips already on NYS Route 311.*

Comment 4.8-100 (Letter C-12 Edward Durkee, September 22, 2006): It shows the project will add 675 trips to 1-84 (both directions), 2.3 times as many trips as for all 29 projects listed as new development in proximity to the project. While I have not checked every intersection, it is likely the overall area wide project impact will be double that for these 29 projects. (Comment from Brain Ketcham)

Response 4.8-100: *The site is not adding 675 trips to Interstate 84 as much of the site traffic is diverted from the 56,000 trips per day already on Interstate 84. Presenting this number as a multiplier of other projects in the region has little meaning in the context of environmental impact assessments. The project site is visible from and will draw the majority of site traffic from Interstate 84. Between the site and Interstate 84 there are no other projects.*

The traffic from any project declines as the traffic moves away from the project site and is presented with alternative routes. Thus, the traffic from Patterson Crossing Retail Center will decline as it moves away from the project site. The traffic from other sites will increase as their location is approached.

Many other projects would be closer to other Interstate 84 interchanges including NYS Route 312, NYS Route 22, or Interstate 684 interchanges. The majority of the traffic associated with these projects is not directed to the NYS Route 311 and Interstate 84 interchange. Their traffic would be higher at alternate locations.

Comment 4.8-101 (Letter C-12 Edward Durkee, September 22, 2006): Summarizes project impacts without mitigation. Congestion levels are reported to spread more widely with the project. Again, many of these impacts are at unsignalized intersections, locations where the DEIS reports warrant new signals to mitigate project impacts. (Comment from Brian Ketcham)

Response 4.8-101: *Impacts will be lower than shown in the DEIS based on fewer no build projects and a reduction in the size of Patterson Crossing Retail Center. (See FEIS Appendix J). The DEIS also discusses potential mitigation and the FEIS expands the analysis in (FEIS Appendix J) and updates the mitigation plan (See FEIS Appendix K).*

Comment 4.8-102 (Letter C-12 Edward Durkee, September 22, 2006): Internal Traffic Circulation. Table 4.8-28 reports acceptable traffic operations within the site. What is not reported is the effect on parking and whether or not sufficient parking is provided. What is missing is a **parking accumulation study** demonstrating that sufficient parking will be provided. This requires an estimate of vehicles entering and leaving the project by time of day for the entire day for weekdays, weekends and holiday shopping. (Comment from Brian Ketcham)

Response 4.8-102: *The parking provided for the Project is in excess of the bulk requirements as set forth in the Town Code. Parking at a rate of four to five spaces per 1000 square feet (See FEIS drawing SP-1) of gross leasable area has readily accommodated retail parking demand throughout the United States. There is need to conduct a parking accumulation study.*

Comment 4.8-103 (Letter C-12 Edward Durkee, September 22, 2006): Improvement Measures. Table 4.8-29 reports satisfactory operating conditions at all intersections analyzed assuming the extensive mitigation suggested throughout the DEIS. However, it is not clear any of this will actually occur. As stated on Page 4.8-54, 'The 'improvements outlined in Table 4.8-35 will improve current conditions and allow the studied intersections to operate at acceptable levels with the project. The project *will facilitate* roads and intersection improvements that will improve existing conditions as well as improvements necessary to mitigate project specific impacts, *helping to pay for both.* The Applicant will be responsible for mitigating the project specific impact to the greatest extent practicable *and will work with the NYSDOT* and others to fund and construct other improvements that would help alleviate traffic issues under the current conditions." "Specifically, *the Applicant is committed to participate and will share in the cost* of those improvements.

Response 4.8-103: *The FEIS Appendix J shows operations being further improved from the DEIS projections. FEIS Appendix K shows the Applicant's commitment to fund projects. Refer to Response 4.8-157.*

Comment 4.8-104 (Letter C-12 Edward Durkee, September 22, 2006): Again this is about COSTS to the town and taxpayers. We must know exactly what the costs will be.

Response 4.8-104: *FEIS Appendix K outlines the improvements anticipated to be conducted by the State, County and the Applicant. No transportation projects are proposed that will be funded by the Town. Refer to Response 4.8-157.*

Comment 4.8-105 (Letter C-12 Edward Durkee, September 22, 2006): Reinforces this observation by summarizing only those improvements reported in the DEIS to be "warranted" under NYSDOT criteria. (Comment from Brian Ketcham)

Response 4.8-105: *The NYSDOT would be responsible for issuing work permits for traffic signals on NYS Route 52 or NYS Route 311. The State warrant guidelines therefore are appropriate to ascertain if a signal should be installed. The DEIS indicates which intersections are unlikely to meet certain warrants. Certain intersections, such as Ludington Court, requires no mitigation based on level of service calculations.*

Comment 4.8-106 (Letter C-12 Edward Durkee, September 22, 2006): Nowhere in the DEIS is the project's impact on I-84 described, in spite of the claim that most shoppers will utilize this access route to the site. This seems to be standard practice for developers. However, the community should raise the issue right now with NYSDOT and force the developer to account for those impacts. This impact could be severe. (Comment from Brian Ketcham)

Response 4.8-106: *The potential for a significant impact to Interstate 84 operation resulting from the Proposed Action is most likely to occur where the interstate ramp intersects with NYS Route 311. Interstate 84 has an estimated 56,000 vehicles per day based on the NYS 2005 Highway Sufficiency Ratings, (NYSDOT). A large portion of the Site traffic would be traffic diverted from the 56,000 vehicles on Interstate 84. These diverted trips being already on Interstate 84 are new trips at the ramp intersections but not on the Interstate. The Thruway Authority has requested and the Applicant has agreed to provide queue detectors if the ramps are signalized to prevent the queues from impacting the flow of traffic on Interstate 84. The through traffic on Interstate 84 over NYS Route 311 is expected to decline as some through traffic is diverted down the ramps to the Patterson Crossing Retail Center.*

Comment 4.8-107 (Letter C-12 Edward Durkee, September 22, 2006): However dates were also listed for specific intersections. The dates that the observations were in theory conducted were certainly not typical of traffic volumes. July 29 (the last week before August vacations) is hardly a representative date of typical activity.

In addition the actual Traffic Study pages are all listed as being conducted on different dates. It is confusing to the average lay reader to understand what dates actually were used and whether we can be assured that the observations are accurate given that each observation was only for 15 minutes.

Response 4.8-107: *Traffic counts were done over a three to four hour periods to capture the peak hour volumes. Volumes were counted in standard 15 minute data increments. In general roads in the County do not experience wide fluctuations of peak traffic conditions. In fact, the volumes were recounted on November 28, 2006 and a week of NYS Route 311 traffic data was collected (See FEIS Appendix I). The revised analysis which indicates level of service would be better than indicated in the DEIS, can be found in FEIS Appendix J.*

Comment 4.8-108 (Letter C-12 Edward Durkee, September 22, 2006): While using data collected 2 years ago, I could not find a section that indicated that the analysis scenarios calculated the baseline data for the NO build charts based on current estimates of traffic. It simply states in the 4th paragraph that the reviews of 2004/2005 were based on "recent traffic conditions".

Response 4.8-108: *DEIS pages 4.8-10 and page 4.8-11 identifies when individual counts were taken. Those counts were used to establish existing conditions illustrated in DEIS Figures 4.8-2 and 4.8-3. DEIS Page 4.8-25 specifies the No Build Condition which is based on the existing condition, plus background growth plus growth from other area projects.*

Comment 4.8-109 (Letter C-12 Edward Durkee, September 22, 2006): In addition what is not discussed is the effect of adding (conservatively) more than 10,000 - 13,000 daily auto trips to this road infrastructure. That is over 3 million more trips per year and at only a 10 mile estimate of miles per trip, 30 million extra trip miles not taken into consideration with the provided collision data. This MUST be examined in closer detail with more accurate information concerning the rise in estimated accidents. Any substantial rise will cost the taxpayer. We must know the Costs for such a situation.

Response 4.8-109: *Without improvements, traffic collisions may increase in proportion to the rise in traffic volumes, however road improvements are intended to reduce collisions by improving traffic flow and increasing safety. For example, a new traffic signal can reduce right angle collisions by 43 percent and rear end and overtaking collisions by 20 percent, left turn lanes can reduce right angle collisions by 63 percent, rear end and overtaking accidents by 39 percent and left turn collisions by 35 percent (Source: NYSDOT Accident Reduction Factors Revision May 2000).*

Comment 4.8-110 (Letter C-12 Edward Durkee, September 22, 2006): Estimates: It is clear that the Highway Capacity Software model provides estimated volumes and averages of impacts. However, I would caution the board to examine the figures closely. The statement, "the traffic model does not always account for the ability of the traffic signal to compensate for shifting traffic volumes and thus may overestimate delay." I expect it could also just as easily underestimate delays.

Response 4.8-110: *The model does not estimate volumes. Existing volumes are counted and future volumes are projected using standardized methodology. These values are input into the model.*

The model used is conservative in calculating delays. For example, the peak 15 minute flow rates for each approach generally do not occur simultaneously in the same 15 minutes. While calculating based on simultaneous peak flow rates correctly illustrates the peak approach delay for a fixed time signal in the worst case 15 minutes on each approach, an actuated or semi-actuated signal can shift green time based on vehicles arriving during individual cycles. This reduces delays by shifting green times from less than peak flows to peak flows. Such elements of the model make the calculated values conservative estimates of delay.

Delay values calculated are average vehicle delays for the peak 15 minute flow rates, so individual drivers can experience higher or lower delays. The DEIS on page 4.8-13 states "During peak periods the experience of individual drivers can vary, because the model calculates average delay." The measure of effectiveness is not what the worst driver's delay is, rather the concept of level of service covers a broad range of average vehicle delay. The concept of level of service is to categorize the overall driver experience.

Comment 4.8-111 (Letter C-12 Edward Durkee, September 22, 2006): Queue Storage- This issue is a crucial one that is inadequately mitigated. As stated here" Queue storage is more important where traffic can spill back into a adjacent intersection reducing capacity of the second intersection or into a weaving section at the interstate. Compare this statement with the one previously referenced, found on 4.8.47 "Queue management is as important as level of service when considering volume at an intersection. Priority needs to be given to the westbound off ramp traffic to avoid the potential of backing traffic up onto the Interstate 84 through lanes. This ramp would have green time priority of the NO'S Route 311 southbound approach to the intersection. As the volume of traffic on the ramp is expected to increase faster than the Route 311 traffic traveling from Patterson, capacity NYS Route 311 will need to be reduced to compensate for increases in ramp volumes. The purpose of adding traffic signals to the NYS Route 311 is to shift capacity from Route 311 to the side streets. The increased capacity for the minor street, permits the minor street traffic to enter NYS Route 311 more easily" I would surmise that this mitigation effort which simply provides a minimal

level of service (D) for part of this crucial intersection is a woefully inadequate solution, and specifically in terms of traffic safety.

> ***Response 4.8-111:*** *If the ramps are signalized, detectors would be placed to ensure queues do not back up onto the Interstate.*
>
> *FEIS Appendix J includes an analysis of the Saturday holiday Build Condition. It indicates that all interchange movements will operate at level of service D or better and through movements under Interstate 84 will operate at level of service A or B. Overall ramp intersection level of service is projected to be C or better.*
>
> *Level of service D provides acceptable delays and would not impact safety. Although a level of service F can result in driver frustration it does not always translate into a traffic safety issue as such delays may occur over a very short period of the day. The traffic analysis is examining 15 minute peak flow rates experienced by less than five percent of the daily traffic.*

Comment 4.8-112 (Letter C-12 Edward Durkee, September 22, 2006): The proposed mitigations are often inadequate for the challenges produced by this project. At best they are a minimal attempt to "get by".

> ***Response 4.8-112:*** *This statement of opinion is inaccurate. Typically minor street approaches have lower priority than the major approach in order to minimize the overall average delay of vehicles entering the intersection. Thus what appears to be "a minimal attempt to get by" is, by design, adequate for a minor street approaches and more than adequate for the major street approaches. See also Response 4.8-116.*

Comment 4.8-113 (Letter C-12 Edward Durkee, September 22, 2006): "Daily shopping center trip generation is expected to be higher during the holiday shopping season... Shoppers make more use of off-peak shopping hours, choosing to shop early or late to avoid the crowds and thereby spread traffic volumes out... "

From Brian Ketcham (Traffic Consultant). This is wishful thinking. ITE, the same organization the DEIS sites for project trip generation rates, reports December producing 50% more traffic than the average for the rest of the year. I have secured two years of Target Store data that shows their December traffic is double annual average conditions. A trip to any large shopping mall in the New York metro area during holiday peak hours suggests the DEIS is understating the issue. Nevertheless, Table 4.8-24 reports PM peak hour traffic during holidays identical to average weekdays. This is done with clever redistribution of the number of trips entering and leaving the site. Saturday shows 16% higher holiday traffic.

> ***Response 4.8-113:*** *ITE's Trip Generation notes that the December monthly variation is based on only two pre-1991 sample surveys with average leasible area of 938,000 square feet, which is more than double the size of the Proposed Action, A 41.8 percent higher (not 50 percent) daily traffic. Traffic analysis is unconcerned about monthly variation which includes off-peak traffic. In the case of most shopping center, daily traffic volumes are recorded during expanded hours of operation in December.*

ITE's Trip Generation provides seasonal peak hour data based on average gross leasible square feet of 459,000 square feet and 526,000 gross leasible square feet which is closer to the project site's 374,340 gross leasable foot area (405,850 proposed in the DEIS). These are based on a total of 33 surveys. The distribution of traffic entering and leaving the site as reported by Trip Generation reflecting actual driving patterns with no increase in p.m. peak hour traffic and 16 percent increase in Saturday peak hour traffic.

Traffic data from Target was not provided for review. It is not known whether the referenced Target Stores were Free-standing Discount Superstores, or a Free-standing Discount Stores, or whether they were applicable to the project's shopping center.

Comment 4.8-114 (Letter C-12 Edward Durkee, September 22, 2006): With the statement that most of the expected traffic is to come from the interstate there is the statement that increases would be relatively" modest during peak hours. Is a conservative estimate of 4,000 more vehicle trips a day on Route 311 through the heart of Patterson a "modest" amount? Couple this with the intent to push as much traffic onto the side streets in order to have the Interstate Ramp intersection viable, then you are dramatically changing the impact of traffic on the residential areas of Patterson, not to mention Kent, whose volume of traffic is substantially more.

Response 4.8-114: *With a p.m. peak hour trip generation on NYS Route 311 north of NYS Route 164 at 113 vehicles, it is unclear where the 4000 vehicles per day was arrived at. At about 9 percent of the daily traffic, based on ITE Trip Generation, NYS Route 311 volumes would be less than 1300 trips.*

The DEIS traffic analysis showed more than 70 percent of the new site traffic going toward the interchange. The remainder was assigned to NYS Route 311 toward NYS Route 52. Longfellow Drive and Ludington Court were assigned no site traffic. Ludingtonville Road and Horse Pond Road were also assigned no traffic indicating traffic was not pushed onto the side streets to make the interchange work. Also the comment in 4.8-61 suggests the opposite, that traffic from the ramps is too high and should be redistributed. See Comment 4.8-41 from the lead agency's traffic consultant who requested that an increase in traffic to the ramps be examined. Also refer to FEIS Appendix J and Response 4.8-5.

Comment 4.8-115 (Letter C-12 Edward Durkee, September 22, 2006): The figures of the LOS changes need to be closely examined. While the applicant prominently points out that with the suggested improvements most LOS ratings for intersections will be upgraded, upon closer examination you will find in Table 4.8.33 that the 1-84 EB ramp has 2 D ratings in its LOS analysis. There are 8 "Decline in Service" ratings from "No Build to Build with Improvements" at the major intersections that were examined.

Response 4.8-115: *See FEIS Appendix K. The impact of the development is the difference between the No Build condition without improvement and the Build Condition with improvement. Of the eight intersections referenced, the Applicant is providing all the mitigation in four cases and partially in two cases, if needed.*

In order to maintain overall operation of the interchange, priority is given to the movements on the interior links between the ramps. This tends to reduce delay for vehicles passing through both ramp intersections but increase delay for movements passing only one ramp intersection. (See FEIS Appendix J Table J-28).

Comment 4.8-116 (Letter C-12 Edward Durkee, September 22, 2006,): The improvements still lead many of the intersections at a low rating, but now handling a much larger volume of traffic. The conclusions given are "..with noted improvements, all studied signalized intersections would perform at or better than level of service D." D is the "minimum" level of service that NYSDOT seeks for both unsignalized or signalized intersections. **[Similar comments were found in the following letters: Letter C-41 David G. Reeves, (9.22.06) and Letter C-50 Ronald and Sonya Taylor, (9.24.06)]**

Response 4.8-116: *Level of service D is the minimum level of service for signalized intersection lane groups. It is not unusual to have a minor approach operating at level of service D and the major approach operating at a better level of service to minimize overall intersection delay.*

Unsignalized intersections can operate at levels of service E and F and still not necessitate improvement as there is no minimum level of service for unsignalized intersections.

Comment 4.8-117 (Letter C-12 Edward Durkee, September 22, 2006): The failure to include detailed financial data analysis of all risk factors for the proposed project for the myriad of improvements necessary for a minimal level of traffic LOS rating is unacceptable. The Board must demand a thorough and detailed examination of possible cost scenarios covering: Impact to Town of Kent and Patterson and areas or responsibility for any an all suggested improvements. Worse case scenario Financial Risk Analysis, taking into account: failure on State's part to provide funding, the consequences of applicant declaring bankruptcy during build. Inability of either town to meet mitigation cost efforts. Reasonable DOT expectations concerning State readiness to cover build costs, time frame etc. County responsibilities for any improvements, and guarantee of money for improvements. Needs for Financial Bond Guarantees by the applicant. Financial Preparedness statement for if the current Applicant upon receiving approval for the project, 'flips" the project and property to another developer for a substantial profit. What obligations will be held by whom and most importantly who within the myriad of Town and County Officials would be responsible for enforcing any obligations.

Response 4.8-117: *As noted in Response 4.8-104, none of the transportation improvement projects are the responsibility of the Towns. Thus, there is not an immediate financial impact to local residents. However, public improvements are never free and their maintenance and future replacement have a cost associated with them. Ultimately, all improvements are paid for by the consumer, as the costs of initial road improvements and bonded improvement are passed on to the tenant in the form of land sale or lease rates which becomes part of the overhead expense of store operation. Overhead and materials expenses are recouped through sales and services sold to the public. The costs of road maintenance and future infrastructure improvements are borne by the Town, County, and State. Town and County revenues are derived from the future enhanced property taxes generated by the retail facility. County and State revenues are derived from sales tax. All these funds*

ultimately come from the future consumer. As the site would generate more tax revenue than it consumes, Town, County, and State tax payers would benefit.

The Applicant is bonding some improvements to ensure they are implemented if needed. If the developer goes bankrupt before the site is open and traffic put on the network, the financial risk is unchanged from current conditions as there is no impact from site traffic. The bonding agencies are accepting responsibility to ensure work can be paid for and the NYSDOT would ensure the work is done properly.

Comment 4.8-118 (Letter C-14 Sybyll Gilbert, September 24, 2006): Traffic on Rt. 311 is currently difficult due to the steep grade, which cannot be alleviated by engineering. Straightening the curves will destroy the landscapes we love, destroy property values, all at public cost.

Response 4.8-118: *The Applicant has not proposed straightening of vertical or horizontal curves on NYS Route 311.*

Comment 4.8-119 (Letter C-14 Sybyll Gilbert, September 24, 2006): The fact is that the "Highlands Development" is not yet complete and Putnam County has no need for this increase in commercial development. The two anchor stores in Putnam Plaza are still unoccupied after years of abandonment.

Response 4.8-119: *A supermarket was recently opened as the larger of the two anchor stores in Putnam Plaza. The shopping center portion of the Highlands development is complete (See FEIS Appendix J Table J-11).*

Comment 4.8-120 (Letter C-14 Sybyll Gilbert, September 24, 2006): On a strictly personnel level, I am a senior with driving limitations, who drives from Pawling to Patterson on Fair Street to visit my 94 year mother who requires my assistance, at least 3 times per week. I am her only caregiver. I cannot contend with heavy construction traffic. Patterson Crossing will cause great personal hardship for this old lady and many others, and place lives at risk.

Response 4.8-120: *It is anticipated that most heavy construction vehicles would use NYS Route 311 between the site and Interstate 84, remaining on site for much of the duration of construction.*

The size of any heavy trucks from Patterson would be limited by bridge constraints. NYS Route 311 north of NYS Route 164 has a posted bridge clearance of 10 feet 9 inches. NYS Route 164 has three bridges restricting the physical height of vehicles, a posted height of 11 feet. NYS Route 164 also has a one lane underpass. (source http://www.travelinfony.com June 2007).

Comment 4.8-121 (Letter C-14 Sybyll Gilbert, September 24, 2006): This proposal is of benefit to the developers, their consultants, and to the big contractors who will build it. Approve it and the public and small business in this entire region will be losers.

Response 4.8-121: *The public will benefit from an estimated 13 million in taxes per year, reduced travel time and distance to shopping, and additional job opportunities. The home improvement store would be an additional source of supplies to small*

contractors. Other small businesses would benefit from additional available services and goods.

Comment 4.8-122 (Letter C-20 Harry Hitner, September 24, 2006): Conspicuous by its absence except for two very passing references is the status for Echo Road and the emergency access road connecting to it. The only public access and exit to this development is a single, steep-sided winding two lane roadway approximately 30 ft wide and connecting to Route 311. This roadway will also be shared by delivery trucks and other service vehicles. Given the sheer size and projected traffic volume of this development it appears that this access road is inadequate at best and deathtrap bottleneck at worst. I cannot think of a single development even the quarter the size of Patterson Crossing that doesn't have a minimum of two separate entrances and exits. With parking provided for an expected 1900 vehicles this a a disaster waiting to happen. The access road allows for only two lanes of traffic, one in each direction, for more than 1200 feet. 750 ft of which has 30 foot high walls on either side. Even the smallest fender bender let alone a serious accident is likely to cause a major backup into the facility and well out on Route 311. For the people stuck inside Patterson Crossing, there will no way for them to get out and emergency responders will likely not be able to get in from 311. Even using the emergency assess on Echo Road any bottleneck in the mall's only access road will prevent a possible life saving swift response. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Harry Hitner (9.13.06)]**

Response 4.8-122: *The site access road, now proposed at a width of nearly 39 feet, is sufficient to allow two-way traffic past a stopped or disabled vehicle. A turn lane is provided for trucks at the first intersection. The emergency access has been moved and is shorter than initially proposed.*

The Highland Shopping Center on NYS Route 312 is served by a single access road. Independent Way, which also serves over 1000 parking spaces at the Metro North Station. The intersection with NYS Route 312 is larger and wider than the connection of Patterson Crossing Retail Center to NYS Route 311 but nonetheless, the single access has been handling the Highlands Center which is similar in size to Patterson Crossing Retail Center. See also Responses 4.8-47 and 4.8-123.

Comment 4.8-123 (Letter C-20 Harry Hitner, September 24, 2006): As for the emergency access road; the developer calls for a 12 ft wide gravel road- gated and locked on both ends, to prevent unauthorized access- to run steeply uphill from the property and connect to Echo Road. At its widest point Echo Road is approximately 20 ft wide. At its narrowest, Echo is less than 10 ft wide. In addition, there are usually cars or trucks parked at various locations up and down the hill, further restricting the width of the road. In a serious emergency like a fire or other situation that might require evacuating the mall or injured people, given the likely constrictions on the access road to 311, and the fact that Echo can only handle one-way emergency vehicle traffic at best, we again see the likelihood of disaster. People can't get out- first responders can't get in.

Response 4.8-123: *The emergency access road has been relocated from Echo Road to Concord Road near its intersection with Woodstock Road and is approximately 500 feet shorter than that proposed in the DEIS. There are several local roads beyond Concord Road that can be utilized by emergency service vehicles traveling to or from the site depending on the local road conditions and the nature of*

the emergency. Any problems emergency services vehicle encounter on local roads should be resolved regardless of this project, for the safety of local residents.

The gates for the new emergency road would be locked and access would be reserved for arriving emergency services vehicles only. Once on-site, emergency service personnel can determine if anyone should or need to be evacuated though the emergency road. Emergency service personnel can control traffic flow to permit incoming emergency vehicles.

Comment 4.8-124 (Letter C-20 Harry Hitner, September 24, 2006): The applicant should show and the Board needs to confirm that in a worst-case scenario the emergency plans for this development are sound and not likely to cost taxpayers in terms of added emergency support or risk of lawsuits to the town in the event of preventable injuries or fatalities. Additionally, secondary means of access to the development should be determined.

Response 4.8-124: *Existing Mutual Aid agreements enable cross-district coverage for additional personnel and apparatus as needed in an emergency. As indicated in the DEIS, the emergency service providers were contacted to determine the impact of the Project on their agency. Both the Patterson Fire Department and the Putnam County Sheriff's Department indicated the Project would not result in significant impacts to their departments. Additionally, the Project would generate tax revenues to the community service providers, which can be used for increasing staff size or purchasing equipment in the future, as necessary. Determining the need and hiring of new staff personnel is determined by the respective Department. Refer to Response 4.8-47.*

Comment 4.8-125 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-1: The description of the regional network leaves out Rt. 312. The DEIS should include a more complete description of the regional network.

Response 4.8-125: *NYS Route 312 connects US Route 6 and NYS Route 22. Interstate 84 exit 19 is located slightly a mile from US Route 6 along NYS Route 312 and over 3 miles from NYS Route 22. NYS Route 312 is a two lane road widening at the Interstate 84 interchange. The average annual daily traffic on NYS Route 312 between US Route 6 and Interstate 84 is approximately 18,400 vehicles over double NYS Route 312 between NYS Route 52 and Terry Hill Road at 8,510 vehicles (source: New York State's 2005 Highway Sufficiency Ratings, New York State Department of Transportation). Assessment of NYS Route 312 was not required in the scope adopted for the environmental review of this project.*

Comment 4.8-126 (Letter C-23 Daniel Kuchta, September 25, 2006): Figure 4.8-1, The Towns of Kent and Patterson are listed on the wrong side of the town line. This needs to be corrected.

Response 4.8-126: *Refer to FEIS Figure 4.8-1.*

Comment 4.8-127 (Letter C-23 Daniel Kuchta, September 25, 2006): The scoping document section H.l.a.5 calls for a description of Rt. 311 between Ludingtonville Rd and Cushman Rd. The DEIS contains no mention of Cushman Rd.

Response 4.8-127: *Cushman Road intersects NYS Route 311 north of NYS Route 164/NYS Route 311. NYS Route 311 intersections at NYS Route 164, Fair Street, and Ludingtonville Road in this area are shown in aerial photographs in Appendix K of the DEIS. NYS Route 311 is described as a two lane road with vertical and horizontal curves through this area and recommended speed limit of 25 miles per hour. Cushman Road is identified on Figure 4.8-1 revised for the FEIS. See also Response 4.8-132.*

Comment 4.8-128 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-2 description of Fair St: The description mentions 'educational' use of this road which is a serious understatement considering that the two largest schools in the district, the middle school and the high school are both on this road and the middle school is one of the largest in the state.

Response 4.8-128: *Comment noted.*

Comment 4.8-129 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-2 description of Fair St : The DEIS should have included Bear Hill Rd as part of the Fair Street intersection. Bear Hill Rd is about 100 feet from Fair St., east on Rt. 311. It can be partially seen at the top of the pictures provided in appendix K-3 and K-11. The impact of the proposed signal on Bear Hill Rd residents should be discussed in the DEIS. How will Bear Hill Rd residents make a left turn off of Rt. 311 on to Bear Hill Rd without holding back the traffic which was already queued by the signalized intersection? If a left turn lane is added to Westbound Rt. 311 will Bear Hill Rd residents have an additional burden of crossing over this turn lane to get on to Bear Hill Rd?

Response 4.8-129: *Generally, intersecting roads 50 feet from the intersection would not be considered part of the intersection. The revised mitigation (FEIS Appendix K) at Fair Street and NYS Route 311 no longer includes a traffic signal and is limited to a widened curb radius as discussed in FEIS Appendix J. No turn lane is proposed on NYS Route 311 in the area of Bear Hill Road.*

Comment 4.8-130 (Letter C-23 Daniel Kuchta, September 25, 2006): A left turn lane on westbound Rt. 311 at Fair St. appears to be needed. Is the Rt. 311 wide enough at Fair St. to accommodate this lane? How long will this turning lane be and will it impact Bear Hill Rd which is only 100 ft from Fair St.?

Response 4.8-130: *No left turn lane is proposed on NYS Route 311 at Fair Street (See FEIS Appendix K). The NYS Route 311 intersection would operate at an acceptable level of service without the westbound left turn lane. Refer to Response 4.8-129.*

Comment 4.8-131 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-3 description of NYS Route 52: The description fails to mention that Rt. 52 serves the Kent Primary and Kent Elementary schools.

Response 4.8-131: *The Kent schools are located on NYS Route 52 between NYS Route 311 and Ludingtonville Road as indicated on FEIS Figure 4.8-1.*

Comment 4.8-132 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-4 description of NYS Route 311: The DEIS provides a 3 sentence description of Rt. 311. This is inadequate. For example, the description fails to point out that Rt. 311 is a State Designated Bicycle Route which implies that the State has plans to provide a 4 to 8 wide bicycle lane. There is no mention of any of the grades on Rt. 311 particularly the steep hill between Fair St. and Rt. 164. The description of the truck traffic seems incredibly low. The Patterson Materials quarry located in the center of Patterson, provides a lot of truck traffic on Rt. 311 in the direction of the project, so much so that morning commute traffic is often held back by these vehicles as they climb the steep hill on Rt. 311 at 20-25mph. The DEIS needs a proper description of Rt. 311 and needs to address the issues associated with the bicycle route and truck traffic.

Response 4.8-132: *NYS Route 52 and NYS Route 311 are identified on the "Hudson Valley Bikeways & Trailways" map (source: New York State Department of Transportation and MetroPool, 2nd edition, Poughkeepsie, NY) as future bike routes.*

NYS Route 311 is generally flat following the shore of Lake Carmel. There is a hill on NYS Route 311 between NYS 164 and Fair Street. NYS Route 311 also curves upward toward Cushman Road from NYS Route 164.

The morning period is not studied as the retail stores typically generate their peak traffic on weekday afternoons and Saturday midday. During these periods the quarry and school bus traffic is reduced (Refer to Response 4.8-25). Commuter car traffic increases during the p.m. peak hour thereby reducing the percentage of trucks on the road during the p.m. peak hour. Refer to Response 4.8-36.

Comment 4.8-133 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-5 Table 4.8-1. The accident data comes from the NYSDOT which is not the primary source for this data. NYSDOT gets it's accident data from the NYS Department of Motor vehicles which in turn gets most of the data from local police departments. The low accident figure of 7 accidents over a 3 year period for Rt. 164 and Rt. 311 in particular stands out as an obvious anomaly of the reporting system. A discussion with a former member of the Patterson volunteer EMS service reveals that accident calls at this intersection occur at a rate of at least once per month if not more. Use of the DOT data in the DEIS underestimates the existing conditions. The developer should obtain the accident records from local law enforcement and EMS service providers and update this table with more accurate figures and discuss the impact.

Response 4.8-133: *The Department of Motor Vehicles gets its data from drivers, and police agencies including local police, County sheriffs, and State police departments (See Response 4.8-24). The NYSDOT uses this database for its statistical analysis and studies. Local accident records are generally filed chronologically requiring police departments to use personnel hours searching through their entire town records by hand. The EMS service provider would not provide necessary data on non-injury collisions nor are the police required to obtain such information.*

The new computerized TRaCS system is allowing police to directly upload accident records from the scene making them more accurate and more readily available (See FEIS Appendix J Attachment A).

Comment 4.8-134 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-9 description of public transportation: The DEIS description of public transportation leaves out any mention of school buses which are a type of public transportation. All school bus routes that service the elementary school in Patterson use Rt. 311. Many of the middle school and high school bus routes also use Rt. 311. The Kent elementary and primary school buses use both Rt. 311 and Rt. 52. The DEIS should include school buses and discuss any impacts and mitigations to school bus schedules and routes as a result of this project. **[Similar comments were found in the following letter: Letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien (9.25.06)]**

Response 4.8-134: *The addition of traffic signals on NYS Route 311 and NYS Route 52 would make it easier and safer for school buses to enter these arterials. School buses are not permitted to make right turns on red, a movement similar to turns at a stop sign. In general, delay at entering the arterials may be reduced. Average delays are noted in the level of service tables in the DEIS and revised for the FEIS. Routes may be altered to have buses entering the arterial at traffic signals rather than other non-signalized locations where such alternative routing is available. Refer to Response 4.8-25.*

Comment 4.8-135 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-10 description of existing traffic: The DEIS makes no mention of the weather conditions during the collection periods. The DEIS should make note of the weather conditions particularly any inclement weather occurring that may have affected the traffic counts.

Response 4.8-135: *Vehicular traffic is least effected by weather during p.m. peak hours when commuters are committed to returning home from work. Days in which weather events close roads, government offices, or schools, traffic is not normally counted. No unusual inclement weather was noted at the time of any of the counts used for the Draft and Final Environmental Impact Statement.*

Comment 4.8-136 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-10 description of existing traffic: One of the weekday collection dates, July 29, 2004 is not a school day. A significant amount of traffic on the roads immediately surrounding the project is generated from the 3 nearby schools. At the middle school so much traffic is generated that a Sheriff's deputy is assigned to the school to direct afternoon traffic leaving the school. The DEIS should document that the traffic counts collected during the weekday p.m. peak hour are actually higher than the peak during peak school hour or redo the traffic counts to account to peak school traffic. Additionally, the count data for April 15th 2004 and July 29th 2004 should be provided and compared to see the effect of school versus non school day counts.

Response 4.8-136: Additional traffic *counts were conducted on November 28, 2006 as described in Response 4.8-107.*

Comment 4.8-137 (Letter C-23 Daniel Kuchta, September 25, 2006): The scoping document section H.1.b states that a 'discussion of the methodology used should be included' in the traffic study. The existing DEIS does not appear to contain such a discussion. This needs to be provided. Page 4.8-11 mentions the use of the Highway Capacity Manual and the Highway Capacity Software but does not mention which version of

the HCS software was used and whether the latest patches were installed at the time of analysis. It also does not mention whether HCS was the only software used. The NYSDOT Engineering Bulletin 06-003 lists approved software for traffic analysis. The DEIS should indicate which if any of these programs were used in the traffic analysis and where they were used. Any other methods of traffic analysis that contributed to this study should also have been included.

Response 4.8-137: *The Highway Capacity Methodology (Highway Capacity Manual, National Academy of Sciences, Transportation Research Board, National Research Council, Washington, DC, 2000) combines information on traffic, geometrics, and traffic control as shown in level of service worksheets to produce estimated average vehicle delays. Vehicle delays are categorized into levels of service as provided in level of service criteria Tables 4.8-7 and 4.8-8 in the DEIS. The software version is noted on most level of the service sheets as 4.1d. Traffic analyses are not typically updated each time the HCS is revised. For example the recently available Synchro 7 software used in the FEIS uses the Highway Capacity Software (HCS) 4.1c file format (Trafficware, Synchro Studio 7 Traffic Signal Software User Guide, June 2006, page 14-8).*

As noted in the DEIS the Highway Capacity Software was used in the traffic analysis. Any traffic analysis revisions done for the FEIS used the most recent available version at that time (version 5.21). The HCS and Synchro are based on the Highway Capacity Methodology.

Comment 4.8-138 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-10: The DEIS needs to document that the traffic at the peak p.m. Hours studied for Fair St. and Rt. 311 are actually higher than the traffic during peak p.m. school hours. If not, then the there should be an evaluation of the project's impact during peak school hours. The same applies to the intersection of Rt. 311 and Terry Hill Rd. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Dan Kuchta, (9.14.06)]**

Response 4.8-138: *The peak hours of the school traffic will not coincide with the project generated peak hour traffic as discussed in Response 4.8-25. The Fair Street and NYS Route 311 intersection was recounted (FEIS Appendix J). FEIS Appendix I presents information showing that the peak hour volumes for school traffic are less than the p.m. peak hour used in the analyses.*

Comment 4.8-139 (Letter C-23 Daniel Kuchta, September 25, 2006): Appendix M Table M-2: The trip generations rates for the Chestnut Petroleum project on Rt. 311 almost opposite the Patterson Crossing project entrance, of 0.021 for ITE code 945 and 2.811 for ITE code 814 are a major underestimation of the trips generated right opposite the site and the DEIS needs to correct these figures and rerun the analysis or explain that they did the analysis correctly. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Dan Kuchta, (9.14.06)]**

Response 4.8-139: *Approvals expired for the subject project as noted in FEIS Appendix J, therefore this comment is not applicable.*

Comment 4.8-140 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-19 3rd paragraph: "NYSDOT machine count traffic data collected on state roads... were reviewed..." The DEIS should provide the dates for this data and the specific roads it was collected on. It should also provide the actual data in an appendix for review.

Response 4.8-140: *The NYSDOT counts all state roads, generally, on a three year cycle in conformance with the Federal Traffic Monitoring Guide. The subject data with dates for NYS Route 52, NYS Route 164, and NYS Route 311 has been added to FEIS Appendix I.*

Comment 4.8-141 (Letter C-23 Daniel Kuchta, September 25, 2006): Figure K-11. The proposed right turn lane from Fair St. on to Rt. 311 appears to cut into the front yard of the property owner on that comer. This property was recently landscaped with a new rock wall and planted evergreens along the space where the proposed right turn lane appears in figure K-11. The DEIS should discuss the impact to this property owner and the need for any eminent domain proceedings.

Response 4.8-141: *The schematic shown in DEIS Figure K-11 has been revised (FEIS Appendix K Figure K-1) to show a wide turning radius and not an additional lane. Detailed designs of the proposed improvement would be advanced before the NYSDOT would act on a work permit.*

Comment 4.8-142 (Letter C-23 Daniel Kuchta, September 25, 2006): Figure K-11: The scale of the proposed right turn lane appears to be wrong. The distance between Rt. 311 and Deacon Hill Rd is 216'. A 125' turn lane would extend to more than half this distance but the drawing shows a lane that is only about a quarter of the distance. This should be corrected.

Response 4.8-142: *The figure is a schematic and is not to scale. A revised Figure K-1 is provided in FEIS Appendix K that shows the right turn lane eliminated. See Response 4.8-141.*

Comment 4.8-143 (Letter C-23 Daniel Kuchta, September 25, 2006): Figure 4.8-4: The 30% discrepancy in vehicle flow on Rt. 311 between Ludingtonville Rd and Fair St. found on figure 4.8-2 has been propagated to figure 4.8-4 where it is a 31% discrepancy corresponding to 177 vehicles per hour that are unaccounted for on this stretch of road. The traffic study must be redone to correct this error. There may be other flow discrepancies in figure 4.8-4. This figure should be scrutinized carefully. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Dan Kuchta, (9.14.06)]**

Response 4.8-143: *The park-n-ride lot and differences in time frames could account for some difference in volumes. The Fair Street intersection with NYS Route 311 and link to the south were recounted as indicated in FEIS Appendix J. Corresponding analysis and improvements to this intersection were re-evaluated. A signal and right turn lane would not be necessary. See FEIS Appendix K for proposed improvements.*

Comment 4.8-144 (Letter C-23 Daniel Kuchta, September 25, 2006): Figure 4.8-4: The DEIS states on (page 4.8-25) that the values in this figure were arrived at using 1.5% background growth over 5 to 6 years plus other projects. Since the traffic data was collected

in 2004 and assuming that the values in figure 4.8-2 have not been adjusted to 2005 or 2006 then a 6 year growth at 1.5% results in accumulative growth of 9.3% $(1\ 015)^6$=1.0934 Much of the data in figure 4.8-4 has increased by much more that 9.3% over the data in figure 4.8-2 particularly in Patterson where Table 4.8-13 lists only one actual pending project. The DEIS should clearly explain how it arrived at the extra traffic from pending projects. Further the DEIS should demonstrate that 1.5% is the correct figure to use.

Response 4.8-144: *In Comment 4.8-20 the NYSDOT affirmed that a background growth rate 1.5 percent was acceptable. Response 4.8-2 indicates the growth rate used is conservatively high. The extra traffic from pending projects is not based on just one project; there are four projects listed in Table 4.8-13 of the DEIS for Patterson. Traffic associated with non-Patterson projects will travel on NYS Route 311 east of Interstate 84.*

Comment 4.8-145 (Letter C-23 Daniel Kuchta, September 25, 2006): Figure 4.8-4: The future no build traffic at Rt. 164 and Rt. 311 appears to go far above the 9.3% background growth and the traffic from the one pending project near that intersection. The one pending project is listed as #21 in table 4.8-13, Burdick Farms 37 single family homes. The increase in the number of cars above the 9.3% background growth corresponds to 34 new vhe/h going onto Rt. 164 from Rt. 311 and 33 new veh/l leaving Rt. 164 for Rt. 311. If this represents the new traffic from the Burdick Farm project then it appears to defy common sense for several reasons. It would imply that nearly all of the cars from the new project based on the data in Table M -3, come home from the same direction on Rt. 164. It also implies that almost none of the new residents will travel in the other direction on Rt. 164 to access Rt. 22. The DEIS should explain in detail how the increase in traffic flows above the background growth were arrived at and correlate them to the appropriate ITE code for the projects that affect each intersection.

Response 4.8-145: *One observed trend in housing in the metro area is for people to live north of their work location where the housing is less expensive. Salaries trend higher as you move closer to New York City. The comment assumes that no traffic from other uses would use NYS Route 164 (see also Response 4.8-144) which is an incorrect assumption. Background growth is not correlated to the Institute of Transportation Engineers' (ITE) Trip Generation codes, rather a 1.5 percent growth factor is used (see also the NYSDOT comment 4.8-20 and Response 4.8-2). The ITE codes are linked to individual projects as noted in DEIS Appendix M Table M-3.*

Comment 4.8-146 (Letter C-23 Daniel Kuchta, September 25, 2006): Figure 4.8-2: Does this figure contain peak flows from the actual 2004 collected counts or has this data been projected forward to 2006 using growth percentages? The DEIS should state this clearly.

Response 4.8-146: *As indicated on DEIS page 4-8-10, the study provides 2004/2005 existing conditions.*

Comment 4.8-147 (Letter C-23 Daniel Kuchta, September 25, 2006): Table M-3 includes trip rate data for two projects in Patterson that have been withdrawn or are inactive. Was this data used in the PM no build analysis and why?

Response 4.8-147: *The status of projects were updated during the completeness review. Including the traffic from these projects in the analysis provides a*

conservative projection of traffic volumes. These projects and other withdrawn projects were removed in the sensitivity analysis in the FEIS. (FEIS Appendix J).

Comment 4.8-148 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-22 second to last paragraph: "Project e) should improve vehicle occupancy.... these improvements were not taken into account...". Is it reasonable to not count the trips from a 100 car parking lot when the peak pm traffic for the access road is only 6 veh/hr? It would appear that the park-n-ride lot would greatly affect trips on CR 43. The DEIS should include this in the traffic analysis.

Response 4.8-148: *The existing park and ride lot has direct access to NYS Route 311 (DEIS Appendix K Figure K-7). The traffic count of six vehicles per hour indicates that the CR 43 approach to NYS Route 311 is not used heavily by the existing park and ride traffic.*

Comment 4.8-149 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.9-25, Table 4.8-13: The approved or pending projects in Southeast should include the developer's own Stateline Retail Center project.

Response 4.8-149: *The Stateline project was not pending at the time of the DEIS analysis. Traffic from the proposed Stateline Retail Center is picked up in the background growth traffic volumes.*

Comment 4.8-150 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-35 paragraph on Construction traffic: "Construction truck traffic would access NYS Rt. 311 from Interstate 84... it is expected that heavy construction truck traffic would not travel local roads to reach the site." This implies that none of the construction trucks will use the nearby Patterson Materials quarry on Rt. 311 for any of the gravel that is needed for this project. The DEIS should state clearly that the project will not patronize this local business and explain where all the gravel for the project will come from.

Response 4.8-150: *Much of quarry materials needed for this Project would be generated on-site, reducing the need for material hauling through the transportation network. The DEIS did not exclude the potential to use Patterson Quarry or other local businesses. Should the Patterson Quarry on NYS Route 311 be patronized to develop the project site, its trucks would not need to travel on local roads to reach the site. See Response 4.8-120 concerning truck limitations on NYS Route 311 and NYS Route 164.*

Comment 4.8-151 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-37, 3rd paragraph from the bottom: "The remaining 14% of the trips would be from the Town of Patterson..." This figure seems too low. Does this figure include anticipated trips from the Towns of Pawling, Wingdale and Dover? If not, the DEIS should explain why trips from Towns northeast of the project site were not accounted for.

Response 4.8-151: *Trips from the Town of Pawling and Town of Dover including Wingdale would travel through Patterson and were included in the 14 percent. This figure is not considered low because NYS Route 22 is attracting commercial trips and serves as a connection to the Interstate 84 and Interstate 684 commercial corridors that provide shoppers access to other shopping opportunities.*

Comment 4.8-152 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-38 Season traffic: "Shoppers make more use of off-peak shopping hours, choosing to shop early or late to avoid crowds..." This statement goes counter to the experience at nearby malls during holiday seasons. Both the Danbury Fair Mall and the Jefferson Valley Mall have serious parking shortages during the holiday seasons and not just during peak pm or Saturday hours. During the holiday seasons, it is not uncommon to find the parking lots full and cars parked out on the frontage roads. It would appear that the seasonal traffic may not have been properly accounted for. The DEIS should explain why this project is different from the other nearby malls and further explain why its parking lots will not be filled to overflowing during seasonal periods.

Response 4.8-152: *Shoppers do make more use of off-peak hours (DEIS page 4.8-38) as "during this season many stores expand their hours." Furthermore the comment suggests shortages of parking spaces exist during off-peak hours which is an indication shoppers are shopping during off-peak hours more. An alternative shopping venue such as Patterson Crossing Retail Center in the area should relieve parking shortages at existing facilities.*

The high holiday parking demand supports the notion that the region is under-served by retail. The parking ratio used in the Patterson code is long established in the U.S., and has been found to accommodate holiday and non-holiday parking demand.

The Danbury Fair Mall and the Jefferson Valley Mall are different from the proposed 382,560 square foot (plus 28,000 square foot garden center) Patterson Crossing Retail Center. The Danbury Fair Mall has 180 stores and 1.5 million gross square feet and the Jefferson Valley Mall has over 100 stores and 600,000 square feet. Both of these malls have additional shopping opportunities in the vicinity. The City of Danbury, has a much larger population than the Town of Patterson allowing the Danbury Fair Mall, a regional mall, the ability to draw from a much larger population. In addition, unlike the Proposed Project, The Danbury Fair and the Jefferson Valley Malls are indoor malls that provide an additional attraction during the holiday season.

FEIS Appendix J examines, in more detail, the peak Saturday holiday traffic both on site and at NYS Route 311 intersections with the site access and Interstate 84 ramps.

Comment 4.8-153 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-43 bottom of page: "Level of service D or better are anticipated at all major internal site intersections." Building a project with an expected level of service that is at the lowest acceptable seems like a plan for trouble. Was seasonal holiday traffic included in this analysis? What will be the levels of service during seasonal holiday traffic peak periods? If they are lower than service level D, then the internal traffic routing should be redesigned.

Response 4.8-153: *Level of service D is the criteria for signalized intersection design (DEIS page 4.8-12) and not unsignalized design during typical or seasonal operation. The internal intersections are all unsignalized.*

The internal access design did provide level of service D or better even before a five percent reduction in site traffic. In the DEIS the eight intersections studied all were

level of service C or better in the p.m. peak hour. On Saturday three intersections had level of service of D, three were C and one each operate at level of service A and B. The revised and simplified internal access design eliminated one of the level of service D intersections and created a new internal access.

FEIS Appendix L examines the Saturday holiday peak hour on the internal road. Levels of service ranged from B to E. The longest delay occurs at the service road, hence discouraging its use as a short cut to exit the site. The low volume left turning movements have longer delays than the higher volume right turning movements encouraging use of the internal road in front of the buildings for southerly movement.

Comment 4.8-154 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-45 middle of page: "Development of the site will generate... sales tax revenue... this will more than offset the costs for completing the highway infrastructure improvements." There are several problems with this statement. First, the DEIS did not provide any estimate of the road improvement costs. The DEIS should provide a detailed estimate of the cost of each road improvement individually. Second, there is no commitment from either the County or the State that any tax revenue will be used for road improvements. Third, the notion that the tax revenues will be used to pay for the roads is in stark contradiction with the statement on page 3-8 (3rd paragraph) which states that the revenues will be used for 'enhanced quality of life' programs such as parks, open space preservation and social service programs. The County is currently running a deficit and has been using surplus funds to fill the gap. This means that any new revenues will likely not be available for road improvements and quality of life programs. The DEIS needs to correct these contradicting statements and secure a commitment from the County and State that they will set aside monies specifically for these road improvements.

Response 4.8-154: *The annual sales tax revenues are projected at $13.9 million to $16.8 million according to the DEIS. These funds would be sufficient to cover the costs of road improvements under practically any scenario of improvement. However, the majority of improvements will be funded by the Applicant, so the matter is moot. The Applicant's expenses are not a matter of EIS investigation. Any improvements done by the County and State will come from tax revenues. This course of funding is how State and County government operate. See FEIS Appendix K for commitments on projects from the Applicant, County, and State.*

Comment 4.8-155 (Letter C-23 Daniel Kuchta, September 25, 2006): Section H.3.f of the scoping document calls for a discussion of "the potential increase in traffic from vehicles using North Terry Hill/Putnam Drive as a short cut." The current DEIS does not contain this discussion and it should be added.

Response 4.8-155: *Diversion of traffic was discussed on DEIS page 4.8-45 and such diversion would likely occur when the Terry Hill Road/NYS Route 311 Intersection is signalized. The potential of this diversion has been reduced as the project site traffic has been reduced and traffic from other area projects has been reduced, especially the elimination of the Hillcrest Commons Office Space.*

Comment 4.8-156 (Letter C-23 Daniel Kuchta, September 25, 2006): Table 4.8-30 on page 4.8-49: The proposed project leaves the Town of Patterson with 5 intersections at service level D after all of the improvements. Several of these intersections will be degraded

by 2 service levels. The DEIS should analyze the time it takes the level D intersections to drop to levels E and F and thus requirement the Town to make further road improvements or suffer with bad traffic.

Response 4.8-156: *The time at which additional transportation improvements would be needed would depends on the type of location of future projects. Further analysis is not the responsibility of the Applicant and not required by the adopted scope.*

Comment 4.8-157 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-54 second paragraph: "The project will facilitate road and intersection improvements that will improve existing conditions as well as improvements necessary to mitigate project specific impacts, helping to pay for both." This statement restates the remark on page 4.8-45 regarding the use of sales tax collected by the project to pay for the road improvements. Sales tax revenue is not an acceptable form of payment since it goes into State and County general funds and is not necessarily allocated to road improvements. We could have bad traffic for years if we wait for the State and County to act.

Response 4.8-157: *The NYSDOT has issued a letter indicating its concurrence with the Applicant's proposed traffic mitigation program (Appendix A, Correspondence). The Applicant will continue to work with the NYSDOT to complete all of the identified and agreed to improvements on State roads. To that end, traffic improvements beyond those required to offset impacts related to the project would be funded and implemented, in whole or in part, by the Applicant. Presently several intersections have been identified as having failing levels of service under Existing or future No-Build Conditions including the Interstate 84 westbound ramp at NYS Route 311 and the Interstate 84 ramp eastbound at NYS Route 311. In the Applicant's opinion, it is reasonable to expect that NYSDOT would be a contributing partner in improving these intersection. Tax revenues, whether from income tax or sales tax, are a reasonable source of revenue to finance road improvements.*

The Applicant has also met with the Putnam County Department of Highways and Facilities to discuss potential improvements at the NYS Route 311/Terry Hill Road and NYS 311 and Fair Street intersections. The County issued a letter agreeing with the improvements proposed to the County roads in the vicinity of the project site. As with the State road improvements, Improvements for County roads will remedy existing substandard conditions and as such it is the Applicant's opinion that the County will participate in the proposed mitigation effort. Available tax revenues could be used by the County to offset these costs.

The Applicant has agreed to place $100,000 in escrow with the Town of Patterson and monitor the NYS Route 311/NYS Route 164 intersection annually for a period of three years after Patterson Crossing Retail Center is open. The $100,000 per signal is an estimate based on current costs. The Applicant will agree to an escalator provision in the escrow agreement that would require the Applicant to cover the actual costs associated with the signal installation(s) above the estimated $100,000 placed in escrow. If the NYSDOT permits installation of a traffic signal at this intersection, those funds in escrow may be used for these improvements. If after three years, the NYSDOT denies the signal, the escrow would be returned to the Applicant.

The Applicant has addressed the timing of improvements by agreeing to implement most of the improvements prior the completion and occupancy of the retail center.

NYSDOT determines whether a signal is needed at an intersection on a State road. The signal retiming at NYS Route 311 and NYS Route 52 would occur as needed. The State would expedite NYS Route 311 and NYS Route 164 improvement for the site opening. The Applicant has included a $100,000 bond for a signal improvement in case a left turn lane is not constructed at Barrett Hill Road and the NYSDOT determines a signal is warranted after three years of operation. As with at the potential signal at NYS Route 311 and NYS Route 164, the Applicant will agree to an escalator provision in the escrow agreement that would require the applicant to cover the actual costs associated with the signal installation(s) above the estimated $100,000 placed in escrow.

If the timing of improvements needs to be substantially altered, the Applicant would be responsible for working with the agencies to establish a new schedule.

Additional information on the proposed improvements can be found in FEIS Appendix K.

Comment 4.8-158 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-54, third paragraph: "The applicant also commits to working aggressively with the Town, the County and the DOT towards funding an improvement program for road and infrastructure updates in the project vicinity..." This sounds like an effort to secure funding from places other than the developer's own pocket. Is it?

Response 4.8-158: *The State has already committed some funds to improve local infrastructure. These improvement projects were progressing before the Project was proposed and in response to improve poor existing conditions. Other infrastructure deficiencies were identified that would benefit from improvements regardless of this application. In view of these circumstances, any individual pursuing funding of these deficiencies would potentially produce a benefit to everyone traveling within the local road network.*

Comment 4.8-159 (Letter C-23 Daniel Kuchta, September 25, 2006): With regards to the proposed improvement program, do similar programs exist in other parts of the County and State end have they been shown to work?

Response 4.8-159: *The traffic methodologies such as the Highway Capacity Manual methodologies are used throughout most of the United States. The Manual is a standard for capacity and level of service methodologies throughout much of the world. Improvement programs for mitigating transportation impacts are used for larger projects throughout the State of New York as a result of SEQRA identified impacts. These improvement programs rely on the same general concepts of public/private partnerships used worldwide. These are public and/or private resources (money, land, work force, etc.) being devoted to public/private improvements using a wide spectrum of mechanisms. These mechanisms can include public or private grants (money, land etc.), tax incentives, in-kind work, bonding and others. The partnership of private and public interests working together to solve transportation issues is fundamental. The private and public interest of*

moving people safety and efficiently in the transportation network is critical to both. It is as important to the private owner of a development as Patterson Crossing Retail Center to ensure the public has access to the site through an adequate transportation network as it is to the public to use the transportation network.

The Applicant has proposed a revised transportation improvement program (FEIS Appendix K) that relies primarily on private resources and includes provision of additional private improvements at some locations where such might be needed.

Comment 4.8-160 (Letter C-23 Daniel Kuchta, September 25, 2006): The scoping document section K.3.a.1 calls for the emergency response times of each of the existing services. The DEIS response of one sentence (page 4.8-11) stating "under five minutes" is grossly insufficient. Each service response time should be listed individually with a minimum, maximum and average. Additionally the response times should be listed separately for the main access road and for the narrow unpaved emergency access road. Do the response times take into account the 6 new signalized intersections which tend to slow down emergency vehicles? The DEIS should also indicate where on the project site the response time was determined since the main access road is more than 0.6 miles long. The DEIS should also include an analysis of the response time if the emergency access road has to be used.

Response 4.8-160: *The scope does not specify the detail to be provided in the existing emergency response times. The site is vacant therefore the site plan roadway and emergency access roads have not been constructed. Existing emergency response times on unconstructed roads are not relevant. It is evident that given the length of the future internal road, any emergency vehicle could reach any location on the subject site in well under 60 seconds.*

Section K of the scope does not ask for future response times for emergency services. Emergency services coming from The Kent government Center or nearby firehouse may have two additional traffic signals to pass through, which would add 10 or 15 seconds potentially to their response. Emergency services from Carmel would likely have at least two and potentially a third signal with a similar potential increase in response time. From Patterson one of the signals is being bonded for potential construction, the interchange would have either two traffic roundabouts or two traffic signals and a final signal would be constructed at the site entrance, thus one to four additional signals.

Comment 4.8-161 (Letter C-23 Daniel Kuchta, September 25, 2006): The Thunder Ridge Ski Area on Route 311 and Route 22 in Patterson generates a significant amount of Saturday and Sunday traffic. None of the traffic count figures were collected during ski season. How would the Thunder Ridge Ski Area traffic impact the traffic analysis?

Response 4.8-161: *Thunder Ridge provides a variety of events year round including weddings, conferences, and paintball outings, besides skiing. Most of the traffic to Thunder Ridge comes north or south on NYS Route 22. Ski traffic would tend to arrive before and leave after the Saturday peak hour. The size of the facility is small and is not expected to influence, in a significant way, the results of the Patterson Crossing Retail Center traffic analysis. See also Response 4.8-89 for NYSDOT programmed improvement on NYS Route 22.*

Comment 4.8-162 (Letter C-23 Daniel Kuchta, September 25, 2006): The warrant data used to justify the need for a signal at the intersection of Route 311 and Fair Street passes warrant 2 by only 4 cars per hour. An independent study should commissioned to verify indeed that a signal at this intersection is needed under existing conditions.

Response 4.8-162: *The July 29th traffic volumes were rechecked manually and using machines counters from November 28th through December 5th 2006. The revised volumes correspond to the rest of the network volumes. The mitigation currently identified is a widened turning radius on Fair Street to NYS Route 311. No signal is proposed. (FEIS Appendix J).*

Comment 4.8-163 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.8-36, Table 4.8-20: The trip rate for ITE code 820 is an average value. What justifies the use of an average value in this case? What would the traffic service levels be using a value that is 20% higher and what would be the worst case? Note that the worst case used in the ITE's study of over 400 shopping centers is almost double the value used in the DEIS for a 400,000 square foot retail center.

Response 4.8-163: *Trip rates used for the shopping centers are not average rates. They are equation derived rates as required by the NYSDOT.*

The Applicant believes the trip generation for the proposed project using ITE equation rates is reasonable and requires no further adjustment. Traffic generation of urban shopping centers in cities such as Orlando Florida; Portland Oregon; Albany NY; Worcester Massachusetts; Washington D.C.; and Philadelphia Pennsylvania, may be higher than the project site due in part to the potential customer base. Also the New York City greater metropolitan area has one of the longest average commute times which help to spread the peak traffic out over a longer period. This would mean the customer base would be commuting past the site at a wider range of hours further depressing the peak hour trips generated by the site. Thus, although it might be appropriate to reduce the site trip generation a more conservative approach was undertaken.

Comment 4.8-164 (Letter C-24 Robert Ladau, September 12, 2006): How much more time will it take for your child to get to school?

Response 4.8-164: *School buses travel during off peak periods. School bus commuters are not likely to be significantly affected by the project. Many stores are likely to be opening after children are in school. Refer to Response 4.8-25.*

Comment 4.8-165 (Letter C-24 Robert Ladau, September 12, 2006): 1000 Parking spaces and just one public entrance/exit? How far will the estimated 1200 cars per hour during peak hours be backed up to enter Patterson Crossing?

Response 4.8-165: *The 95th percentile peak hour queue is anticipated to be 19 to 20 cars in the westbound left turn lane or about 500 feet. Queue lengths are provide in DEIS Table 4.8-25.*

Comment 4.8-166 (Letter C-24 Robert Ladau, September 12, 2006): Patterson Crossing will increase traffic by 1200 cars per hour at peak hours at the junction of Rt. 311 and 164.

Response 4.8-166: *Patterson Crossing Retail Center site traffic should increase p.m. peak hour traffic at the intersection of NYS Route 311 and NYS 164 by 146 vehicles not 1200 vehicles, see FEIS Appendix J Figure J-8.*

The DEIS indicated traffic increases at the intersection of NYS Route 311 and NYS Route 164 would be 154 vehicles in the p.m. peak hour and 209 in the Saturday peak hour as shown in Figures 4.8-8 and 4.8-9.

Comment 4.8-167 (Letter C-24 Robert Ladau, September 12, 2006): Routes 311 and 164 do not meet DOT standards for the anticipated traffic flow.

Response 4.8-167: *The NYSDOT has indicated they intend to alter the geometrics of the intersection and would expedite the process of design and construction (NYSDOT letter dated March 5, 2007). The Applicant has committed to bonding a signal which would be installed if warranted and approved by the NYSDOT.*

Comment 4.8-168 (Letter C-24 Robert Ladau, September 12, 2006): The DOT plans 6 new traffic lights with 1/2 mile of the entrance to Patterson Crossing.

Response 4.8-168: *The NYSDOT has no plans to install any traffic lights within a half mile of the site. The Applicant has proposed to install a traffic signal at the site entrance and either two signals or two roundabouts at the NYS Route 311 and Interstate 84 interchange. The County has agreed to install one traffic signal at Terry Hill Road and NYS Route 311. The Applicant would bond further signals that would be installed if needed at the intersections of NYS Route 311 and NYS Route 164 and NYS Route 52 and Barrett Hill Road.*

Comment 4.8-169 (Letter C-24 Robert Ladau, September 12, 2006): How about 6-7 years of construction vehicles using Route 311 to build Patterson Crossing.

Response 4.8-169: *The construction period is anticipated to be 24-36 months. Truck traffic would vary over this time depending on the type of work being conducted on site.*

Comment 4.8-170 (letter C-28 Ray Mainiero, Submitted September 13, 2006): page 41 shows that the only emergency exit road is off Echo Road. What improvements will be necessary to this road and how will it affect the residents on Echo Road?

Response 4.8-170: *The emergency access road has been relocated to a point on Concord Road near its intersection with Woodstock Road. The width of Echo Road and Concord Road is about 17 to 20 feet which is sufficient to accommodate emergency vehicles. Echo Road is not planned for any improvements.*

Comment 4.8-171 (letter C-28 Ray Mainiero, Submitted September 13, 2006): Will any of residences' existing property be lost, and if so, how much?

Response 4.8-171: *The development is wholly contained in the project site. No right-of-way acquisition is proposed that would affect existing residential properties.*

Comment 4.8-172 (letter C-28 Ray Mainiero, Submitted September 13, 2006): What will happen to the residents on Echo Road and Concord Road if there is an emergency on the single existing exit onto Route 311, when inevitably, there is a traffic jam or vehicle breakdown blocking traffic out onto 311. There could possibly be hundreds of cars and trucks diverted to these roads. There is no other provision.

Response 4.8-172: *Refer to Response 4.8-47, 4.8-122, and 4.8-123. The 39 foot wide access road is wide enough for vehicles to pass a disabled vehicle. If the access road were totally blocked, emergency vehicles could enter the site through the gated emergency access road at Concord Road and then vehicles may be permitted to leave the site at that access point should the need arise.*

Comment 4.8-173 (letter C-28 Ray Mainiero, Submitted September 13, 2006): Page 68 states that Longfellow Drive will be performing a service level of E, which will mean longer waiting periods for traffic coming down Longfellow Drive hill. This is already a very dangerous intersection, especially during winter months with icy roads. It is an extremely steep hill, and even now, there is a long waiting period to get out onto 311. Who will guarantee that the people on Longfellow Drive will not face greater danger with increased traffic and more cars and trucks flying down through 311?

Response 4.8-173: *With the suggested improvements vehicles leaving Longfellow Drive would have the option of rerouting their trip to the signalized intersection of North Terry Hill Road, Terry Hill Road, and NYS Route 311. Breaks in traffic flow introduced by the additional signals on NYS Route 311 would afford drivers leaving Long Fellow Drive additional opportunities to enter NYS Route 311 safely.*

Comment 4.8-174 (letter C-28 Ray Mainiero, Submitted September 13, 2006): Between 4 pm and 7 pm every evening, there are traffic jams created by commuters coming from Interstate 84 exit 18 going West onto Route 311. The traffic backs up onto Interstate 84 every night!

Response 4.8-174: *The traffic study in the DEIS indicated that the westbound ramp from Interstate 84 to NYS Route 311 is operating at level of service F in the existing condition. Delays, even without the Patterson Crossing Retail Center project, are anticipated to increase. The proposed project would include mitigation to either make a traffic roundabout or signalize the intersections adding a second ramp lane and detector to keep the lane queue from backing into Interstate 84 through traffic. See FEIS Appendix K for improvement and FEIS Appendix J for level of service under Saturday holiday traffic.*

Comment 4.8-175 (letter C-28 Ray Mainiero, Submitted September 13, 2006): Two weeks ago two individuals were killed coming west off of I84 onto Route 311. How many more accidents will be generated at this very dangerous intersection by all the increased traffic before both towns realize that we are now at a peak level on this narrow two-lane road?

Response 4.8-175: *The answer to this question is not known. The DEIS notes the existing poor level of service at this location and the Applicant has made improvements in this area a priority. See response 4.8-174. A signal improvement will likely prove effective in reducing turning collisions.*

Comment 4.8-176 (letter C-28 Ray Mainiero, Submitted September 13, 2006): How far will this traffic be backed up onto I84 westbound exit 18 if the Patterson Crossing is approved? It will inevitably be extended out I84 creating even greater hazardous conditions.

Response 4.8-176: *The NYS Thruway Authority has requested detectors to ensure that traffic on the ramps would not back up onto Interstate 84 (Response 4.8-29). With improvements, the 95th percentile peak hour queue on Saturday is anticipated to be 25 vehicles or approximately 625 feet (DEIS Table 4.8-30). The revised analysis indicates the queue length under 21 vehicles (525 feet) for the Saturday holiday period (FEIS Appendix J Table J-29). Both east and westbound off ramps are in excess of 1000 feet in length.*

Comment 4.8-177 (letter C-28 Ray Mainiero, Submitted September 13, 2006): The intersection of Route 22 South and 311 is already a high traffic area. With the inevitable increase in the volume of traffic coming down 22 to go onto 311 and to the Patterson Crossing, how will the town of Patterson rectify this condition?

Response 4.8-177: *The NYS Route 22 reconstruction from Interstate 84 to CR 65 which includes the widening of the road from two to four lanes plus the additional median turn lanes is budgeted in the NYS TIP for $25,000,000 in 2010 (PIN 813064). This improvement may draw more traffic south away from NYS Route 311 by eliminating congestion on NYS Route 22 which leads to Interstate 684 and Interstate 84.*

Comment 4.8-178 (letter C-28 Ray Mainiero, Submitted September 13, 2006): Page 5 of the traffic report in the DEIS, states, that, "the percentage of trucks in the traffic in one direction on weekday PM and Saturday peak hours ranges from zero to 5%". This is an outrageous observation and obviously taken by someone who has a bias towards the Patterson Crossing. Anyone who travels on 311 daily as I do, knows that truck traffic is much higher than that on a daily basis.

Response 4.8-178: *On a daily basis truck traffic is indeed greater, however during the p.m. peak hour the roads have more cars from commuters returning home, which affects the calculations. During the Saturday peak many trucks are off the road for the weekend or traveling off peak when there is less traffic. The study uses peak hour traffic not daily traffic to review intersection capacity.*

Comment 4.8-179 (letter C-28 Ray Mainiero, Submitted September 13, 2006): The intersection of Terry Hill and Route 311 receive an "F" rating for safety, its lowest rating. The builder suggests a traffic light to alleviate the anticipated increase in traffic. What will happen to traffic from arterial roads coming into 311 that have no traffic lights, such as Longfellow Drive and Putnam Drive? They will have to anticipate even greater delays.

Response 4.8-179: *At unsignalized intersections, entering the arterial depends on the number of useable gaps in the arterial traffic flow. Traffic signals group traffic into*

platoons creating longer gaps in traffic that makes entering arterial roads easier. In addition, Longfellow Drive and Putnam Drive traffic could reroute to use the North Terry Hill Road, Terry Hill Road, and NYS Route 311 signal to more easily enter NYS Route 311 during peak periods.

Comment 4.8-180 (letter C-28 Ray Mainiero, Submitted September 13, 2006): Many more projects are still pending. How much additional traffic will all this future development bring in to this shopping center? The way it looks, Route 311 will make Route 22 look like a side street!

Response 4.8-180: *DEIS Tables 4.8-12 and 4.8-13 identify approved or pending projects in the surrounding Towns. These Tables are updated in FEIS Appendix J Tables J-10 and J-11. The traffic analysis accounts for the approved and pending projects.*

Given the area, trip generation into the site is overly conservative and projected future projects are not anticipated to increase the site trips.

NYS Route 22 carries 20,730 vehicles per day (average annual daily traffic) north of NYS Route 311 on two lanes. This is more than twice the 10,060 vehicles per day on the two lanes of NYS Route 311 (New York State's 2005 Highway Sufficiency Ratings, NYSDOT). The portion of NYS Route 311 carrying the most site traffic would be expanded to three lanes under the proposed mitigation if the ramps intersections with NYS Route 311 are signalized.

Comment 4.8-181 (Letter C-28 Ray Mainiero, Submitted September 13, 2006): On page 60, it says that people traveling on Longfellow Drive can reduce their delay on going 311 by going over to Terry Hill Road. This makes no sense what so ever for in order to get to Terry Hill you have to go over Route 311. Why should we have to make this their version anyway? Just to satisfy the builder's needs to get approval?

Response 4.8-181: *Terry Hill Road intersects NYS Route 311 at North Terry Hill Road. A traffic signal and left turning lanes on NYS Route 311 and a right turn lane on Terry Hill Road is planned by the County at that intersection (FEIS Appendix K). The intersection of North Terry Hill Road, Terry Hill Road, and NYS Route 311 already meets signal warrants (FEIS Appendix I) so installation of a signal and geometric improvements should be progressed regardless of whether Patterson Crossing Retail Center is approved.*

Comment 4.8-182 (Letter C-31, Kathleen McManus, September 25, 2006): "Most of the traffic is expected to travel to and from the interstate, increases in volume beyond Interstate 84 to the west of Patterson, and to the west in Kent, are relatively modest during peak hours..." I believe this is a generalized assumption on the part of the developer, made to trump the location of the site adjacent to Interstate 84. The developer seems to completely ignore that residents from Dutchess County, neighboring Connecticut, Patterson, Putnam Lake, Brewster and Southeast would most likely travel? Route 22 to Route 311, or Route 22 to Route 164 to Route 311. These are all one lane roads and, with the exception of Route 22, are primarily residential areas. Additionally, residents from Mahopac, North Salem, Croton Falls, Somers may travel Route 22 north or may choose Stoneleigh Avenue to Fair

Street to Route 311 (possibly cutting across Terry Hill Road), or alternatively travel Route 6 to Route 52 to Route 311.

> ***Response 4.8-182:*** *Residents in Southeast, and North Salem, are expected to take Interstate 84 and not NYS Route 22. Croton Falls would use Interstate 684 to Interstate 84. Brewster traffic would also use Interstate 84 most likely US Route 6 to NYS Route 312 to Interstate 84. Much of Dutchess County and Connecticut can use Interstate 84 as well. The Taconic State Parkway, NYS Route 52, and US Route 9 in Dutchess County focus traffic to the Interstate 84 corridor. It is expected to be harder to draw Connecticut traffic away from the Danbury Mall shopping area than to intercept traffic from New York headed there. The distribution takes into account the areas described in terms of potential customer base, the transportation network, and competing opportunities.*

Comment 4.8-183 (Letter C-31, Kathleen McManus, September 25, 2006): I do believe that there will be a small percentage of local residents who will seek relief from traffic congestion in the immediate Lake Carmel area by traveling side roadways more often (i.e. Cottage Road, Montrose Drive) to get around possible congestion on Terry Hill Road. I myself already circumvent the construction now going on at the intersection of Simpson Road and Fair Street by taking an alternate route. It's not uncommon for people to want to seek out the less congested route, even if that means traveling through a residential neighborhood.

> ***Response 4.8-183:*** *The congestion on Terry Hill Road at NYS Route 311 and the associated delays would be reduced with the signalized improvement. Thus, the proposed signal at Terry Hill Road and NYS Route 311 should reduce traffic through residential neighborhoods.*

Comment 4.8-184 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): While the DEIS focuses on the fact that the largest increases in traffic will be during peak weekday rush hour and Saturday afternoons, it fails to note traffic will increase during all hours of the day, every day as a result of Patterson Crossing.

> ***Response 4.8-184:*** *The peak hours are the focus of the DEIS as intersection design is based on having road capacity handle the peak traffic volumes. Traffic would increase at locations outside the Interstate 84 / Route 311 corridor during the hours the facility is open.*

Comment 4.8-185 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): The Developer should be required to provide more data on the true effects that this project will have on the traffic on Route 311 as well as the surrounding area.

> ***Response 4.8-185:*** *The developer provided a sensitivity analysis and more in-depth review of transportation in the interchange area in FEIS Appendix J. FEIS Appendix I provides additional background information.*

Comment 4.8-186 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): Traffic has increased in the few years since we moved here and has brought with it more garbage on the road and on our lawn, increased vehicle noise, increased road dirt and pollutants, increased travel times and the potential for more

accidents. Just a few weeks ago there was a tragic fatal accident at the intersection of 84 and 311 - the very site at which the Developer intends to so greatly increase traffic.

Response 4.8-186: *Comment noted. As the local Town's comprehensive plan's are implemented, the population will grow and traffic will inevitably increase.*

The Applicant is proposing improvements to the Interstate 84 ramp intersections with NYS Route 311 to offset current traffic issues as well as impacts associated with the Proposed Action. Additional network improvements to be completed by the Applicant will make the local road network safer. Few improvements will progress in the foreseeable future if public moneys are the only source of funding.

Comment 4.8-187 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): Use of our front porch and yard are restricted due to the fact that the noise from passing vehicles prohibits sustained normal conversation, depending on the time of day. While all of these problems will continue to increase under the "No Build" scenario, that scenario is preferable to increasing these traffic related problems by introducing Patterson Crossing to the area.

Response 4.8-187: *Comment noted. The majority of the traffic added to the transportation network with this Project is anticipated to utilize Interstate 84 and the segment of NYS Route 311 between the site and the Interstate 84 ramps. This section of NYS Route 311 has no residential housing.*

Comment 4.8-188 (Letter C-41 David G. Reeves, September 22, 2006): 4.8.1 Existing Conditions: Measures of Effectiveness- Volume to Capacity Ratio: The following statement in the DEIS should remain (is currently shown in our review copy as "Crossed Out", indicating that the text is to be deleted) as it provides clarity. "The NYSDOT goal for volume to capacity (V/C) ratio at signalized intersection for lane groups is generally below 0.95."
Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.8-188: *This goal was deleted from the revised NYSDOT Highway Design Manual, and hence was deleted from the document as agreed to by the Planning Board and the Planning Board's traffic consultant. Volume to capacity ratios were retained in the document and included in summary tables, although it is a common practice in the Hudson Valley not to include volume to capacity ratios in summary tables. Discussion of volume to capacity ratios was not required by the adopted scope.*

Comment 4.8-189 (Letter C-41 David G. Reeves, September 22, 2006): 4.8.4 Improvement Measures :
1. Potential Area Improvements- NYS Route 311 and Interstate 84 Eastbound and Westbound Ramps: The following statement in the DEIS regarding constraints should be reflected in the analysis. "The limited queue storage on NYS Route 311 between the Interstate 84 ramp must be considered when phasing the signals at these intersections:
2. The analysis should recognize the significance of queuing that exceeds the storage length of an adjacent lane at all signalized intersections and in particular the Site Drive and Interstate 84 intersections with Route 311. This condition is undetected by the analysis software. Specifically, the analysis should account for vehicles blocked from the adjacent lane therefore adding to the length of the significant queue; the analysis should also account

for reduced capacity due to the blocked lane when approach flow is actually from the queue in a single lane, and not two lanes. Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.8-189: *The 95th percentile queue lengths and queue storage were added to the DEIS level of service summary tables. The distance between the site and Interstate 84 is approximately 800 feet, which is longer than the queues anticipated in the DEIS between these locations. A more detailed analysis using a different model (Synchro) as suggested in comments can be found in FEIS Appendix J.*

Comment 4.8-190 (Letter C-41 David G. Reeves, September 22, 2006): 4.8.4 Improvement Measures ;
1. Trip Generation
2. The trip Generation/Trip Distribution approach lacks conservatism. This results in a low estimate of trips using the Interstate 84 ramps, which might be diverted trips but does not consider them as part of the 25 percent pass by trips. The site abuts Interstate 84 and trips, passing on Interstate 84 are likely to see and travel to the site in impulse, as is the functional definition of the pass by trips. The DEIS states that the trips are diverted from Interstate 84 and are simply inclined in the non passby (also referred to as new and primary) trips. By accounting for all of the trips from Route 311, the traffic volume increases on the Interstate 84 ramps are minimized. A more conservative analysis should be applied considering the critical nature of the Interstate 84 ramps.
3. The DEIS should include the traffic volume data to calculate diverted trips from Interstate 84.
4. Consistent with the scope (Section IV.H.c.1) regarding the occurrence of peak hour traffic patterns for retail activities, the DEIS should recognize that according to ITE Trip Generation, Christmas season traffic volumes generated by shopping centers are typically 42% greater that the average month. Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.8-190: *2. The Institute of Transportation Engineers defines pass-by trips as those entering the site from an adjacent street or road with access to the site. Interstate 84 is adjacent to the site but has no direct access to it. Since interstate highways are prohibited from providing direct access to private sites, ITE pass-by trips should not include interstate traffic.*

A sensitivity analysis is provided in the FEIS to more carefully examine the section from Interstate 84 to the site; this analysis also shifts 10 percent of site traffic from NYS Route 311 passby trips to diverted Interstate 84 trips.

3. The latest published data on Interstate 84 from Ludingtonville Road to NYS Route 311 is from 2001. Counts on Interstate 84 between NYS Route 311 to NYS Route 312 are from 1996. Estimated 2004 average annual daily traffic is 59,850 and 56,030 for these segments of Interstate 84 respectively (Source: New York State's 2005 Highway Sufficiency Ratings, New York State Department of Transportation). The latest data (2004) available for Interstate 84 at a point nearest the site are for the sections at the Connecticut state line and Taconic State Parkway. Because of the age of the relevant data and the distance from the site of the most recent data, it was

not included in the DEIS. Since the DEIS was published, additional data has become available and is provided in FEIS Appendix I.

4. A section was added to the DEIS regarding holiday traffic. See Response 4.8-192, The 42 percent daily traffic increase was based on two pre-1991 surveys of centers more than twice the project size and does not reflect peak hour conditions nor reduction in network traffic that occurs at the same time. ITEs Trip Generation indicates holiday peak hour volume changes of 0 percent in the p.m. peak hour and 16 percent on Saturday peak hour.

Comment 4.8-191 (Letter C-41 David G. Reeves, September 22, 2006): B. Trip Distribution
1. Data should be provided to support the generally stated basis for the site trip distribution.
2. Here again, the data should be provided to support the generally stated basis for the site trip distribution. Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.8-191: *1. and 2. Details regarding the basis for trip distribution were provided in the DEIS. See pages 4.8-36 through 4.8-38.*

Comment 4.8-192 (Letter C-41 David G. Reeves, September 22, 2006):
C. Capacity Analysis- Build Condition
6. The presented concept plans should illustrate dimensions in order to demonstrate the feasibility of the suggested improvements.
9. The data and analysis supporting the warrants statements should be provided.

Response 4.8-192: *6. Sixteen pages of aerial photographs were added to DEIS Appendix K to illustrate the improvements. Dimensions were added to aerial photos. The improvement concepts have been reviewed at a series of meetings with NYSDOT staff and are viewed as feasible.*

9. Forty-eight pages of background traffic data was provided to the traffic consultants. For the warrant analysis, 30 pages of analysis was included in the DEIS Appendix K. Traffic signal warrants are addressed starting on page 4.8-18 and starting again on 4.8-29. Additional warrant analysis data is provided in FEIS Appendix I. SEQRA (617.9 (b) 1) requires "EIS's must be analytical and not encyclopedic".

Comment 4.8-193 (Letter C-41 David G. Reeves, September 22, 2006): 12.a. Intersection analysis should reflect the constraints and requirements of traffic signal coordination.
12.b. The DEIS should explicitly state that increased left turn volume served by a single lane on Interstate 84 off ramp will severely restrict the through traffic flow in Route 311
12.c. The DEIS should document the relationship of the existing volumes based on a April 4th traffic count to average month and peak month conditions.
12.d. The DEIS should document that trips generated by shopping centers are typically 42% greater than average during peak month.
Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.8-193: *Applicable constraints are included in the analysis, and include lower cycle length, consideration of queue lengths, and green times. A discussion requiring signal coordination was on page 4.8-47 of the DEIS.*

12b. The DEIS recommends the left and right turn movements on the ramps be separated rather than in a shared lane. The DEIS on page 4.8-47 further notes "This ramp would have green time priority over the NYS Route 311 southbound approach to the intersection. As the volume of traffic on the ramp is expected to increase faster than the NYS Route 311 traffic traveling from Patterson, capacity on NYS Route 311 would need to be reduced to compensate for increases in ramp volumes. The purpose of adding traffic signals to NYS Route 311 is to shift capacity from NYS Route 311 to the side streets." The degree of through traffic delayed on NYS Route 311 is explicitly noted in the DEIS level of service tables.

12c. Adjustment of peak hourly traffic is not typically done in NYS, as there are no factors for changing peak hourly volumes only daily volumes. April is nearly an average month 0.3 percent above the average day, however December weekend traffic is 19 percent <u>below</u> the average daily traffic when shopping traffic peak hour is 16 percent above normal.

12d. The 42 percent increase in shopping center traffic for the holiday season is based on a limited sample size (two) and is not relevant to the peak hours. A subsection was added to discuss holiday traffic starting on DEIS page 4.8-38. Since the peak hours are of primary concern in examination of traffic capacity, a trip generation table was added for the peak hours.

Although shopping center traffic does increase during the holiday month, the p.m. peak hour traffic is about the same and the Saturday traffic peak traffic increases by about 16 percent. Stores often expand hours of operation increasing off-peak travel for shopping. More importantly, seasonal traffic on the network is lower based on NYSDOT traffic data as noted in 12c above. Also, see Response 4.8-192.

<u>Comment 4.8-194 (Letter C-41 David G. Reeves, September 22, 2006)</u>: 4.8.4 Improvement Measures
C. Capacity Analysis- Build Condition
16. NYS Route 52 at Barrett Hill Road
Given the risky maneuver across a center turn lane as suggested, a two step gap acceptance analysis should be applied.
Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.8-194: *This question was discussed with the Town's consultants, who after re-reviewing the "Build with improvements" material presented in the DEIS, agreed that the analysis presented was indeed a two step gap acceptance analysis. No corrections were made as the material was correctly presented.*

<u>Comment 4.8-195 (Letter C-41 David G. Reeves, September 22, 2006)</u>:
4.8.4 Improvement Measures
C. Capacity Analysis- Build Condition
17. NYS Route 52 at Horse Pond Road
Here again, given the risky maneuver across a center turn lane as suggested, a two step gap acceptance analysis should be applied.
Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.8-195: *This question was discussed with the Town's consultants, who after re-reviewing the "Build with improvements" material presented in the DEIS agreed that the analysis presented was indeed a two step gap acceptance analysis. No corrections were made as the material was correctly presented.*

Comment 4.8-196 (Letter C-41 David G. Reeves, September 22, 2006):
4.8.4 Improvements Measures
D. Required Mitigation
1. The DEIS should clearly identify the NYSDOT standard being referenced.
Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.8-196: *The DEIS presents level of service criteria for signalized intersections on pages 4.8-12 and 4.8-13 in which the specific page reference was added. Signal warrant criteria was added starting on page 4.8-18. The warrant criteria are further detailed in the warrant analysis sheets.*

Comment 4.8-197 (Letter C-41 David G. Reeves, September 22, 2006):
4.8.4 Improvements Measures
D. Required Mitigation
2. The DEIS should identify the resultant traffic conditions with project committed mitigation and absent all other improvements that are not planned.
Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.8-197: *The DEIS shows the Build Condition without improvements and the Build condition with improvements. The Build Condition without improvements was with project committed mitigation improvements at that time and absent of all other improvements. The Build Condition with improvements included some improvements programmed by the New York State Department of Transportation and other improvements.*

Comment 4.8-198 (Letter C-41 David G. Reeves, September 22, 2006): I bring to your attention only a few of the many critical issues raised by Stantec Consulting, the firm selected by the town of Patterson Planning Board and paid for by the taxpayers of Patterson to review this draft. I find it alarming and question the board as to why hire an expect at taxpayer's expense and do absolutely nothing with their advice.

Response 4.8-198: *The developer paid a review fee to the Town that was used to pay consultants and staff for project review. Taxpayer funds were not used to pay for Stantec to review the material.*

The review by Stantec resulted with many revisions to the DEIS including approximately 100 pages of additional documentation, 30 pages of warrant sheets, and 16 pages of aerial photography. Some of these changes are discussed above in responses to other comments (See 4.8-189 - 4.8-195). In addition the Applicant provides additional analysis herein (FEIS Appendix J holiday traffic).

Comment 4.8-199 (Letter C-44 Peter Riebold, September 22, 2006): No roads east of Route 164 were Studied.

Response 4.8-199: *Comment noted. The adopted scope did not require analysis of intersections east of Route 164. Also, see response 4.8-200.*

Comment 4.8-200 (Letter C-44 Peter Riebold, September 22, 2006): Since Patterson Crossing will draw from a 20 plus mile market area it is critical that other intersections be studied. Routes 311 292 and 22 in Patterson already experience high volumes of traffic.

Response 4.8-200: *As traffic moves away from the site the project generated impact of site traffic is diminished. These intersections were not included in the scope as the relative influence of project generated traffic declines to a level where no significant impacts would result. See Response 4.8-125 regarding NYS Route 22 improvements.*

Comment 4.8-201 (Letter C-44 Peter Riebold, September 22, 2006): As shown the Average Annual Daily Traffic ADT is already very high for Routes 22 and 311 including intersections that were not reported in the DEIS. At the very least updated traffic accounts should be taken at these intersections.

- Route 311/22
- Route 311/292.

Response 4.8-201: *The subject intersections were not included in the DEIS Scope. The NYSDOT has programmed lower NYS Route 22 for improvements, see Response 4.8-125. These improvements should draw traffic south that may previously have been diverting to NYS Route 311 due to a lack of capacity.*

The average annual daily traffic (AADT) for NYS Route 311 are (New York State's 2005 Highway Sufficiency Ratings, NYSDOT): NYS Route 311 from End to NYS Route 292 is 9,550 vehicles, NYS Route 311 from NYS Route 292 to NYS Route 164 is 6,590 vehicles, NYS Route 311 from NYS Route 164 to Interstate 84 is 9,190 vehicles.

Comment 4.8-202 (Letter C-44 Peter Riebold, September 22, 2006): The paragraph states The percentage of trucks in the traffic in one direction on weekday p. m. and Saturday peak hours ranges from zero to five percent. While the truck traffic may have appeared low during the hours the survey was taken weekday truck traffic is moderately heavy due to an active gravel quarry that operates in the hamlet of Patterson north of Route 311. Heavy construction vehicles travel to and from the quarry to transport loads of gravel. It should also be noted that Route 311 has one low clearance railroad overpass and multiple sharp curves that prevent tall trucks and many long trucks from traveling freely on the road. These hazards require the vigilance of all drivers.

Response 4.8-202: *Comment noted. NYS Route 164 also has low clearances as noted on DEIS page 4.8-3. These low clearances are posted.*

Comment 4.8-203 (Letter C-44 Peter Riebold, September 22, 2006): "Bullet Road" should read "Bullet Hole Road".

Response 4.8-203: *Comment noted.*

Comment 4.8-204 (Letter C-44 Peter Riebold, September 22, 2006): "Amtrak provides long distance transportation service with the nearest stops at Rhinecliff and Poughkeepsie. These include the Adirondack Empire State Ethan Allen Express and Maple Leaf trains. Amtrak connects passengers with national rail service through New York City Albany and points north and west."

This paragraph should be corrected to state that the nearest Amtrak stop is Croton Harmon in Westchester County.

> ***Response 4.8-204:*** *The AMTRAK Poughkeepsie Station is the closest at 28 miles away, Croton-Harmon is 33 miles away and Rhinebeck is 46 miles away.*

Comment 4.8-205 (Letter C-44 Peter Riebold, September 22, 2006): An estimated 25 percent of site trips are already or will be on NYS Route 311 Of the remaining trips 57 percent are expected to travel directly to from Interstate 84 Of these 42 of the trips are expected to travel from the south and the remaining 15 of trips are expected from the north.
This paragraph states that 57 of the shoppers will travel via Interstate 84 This is unsubstantiated and arbitrary The paragraph also states that 25 of the shoppers will travel on Route 311 In 2001 the New York State Department of Transportation computed an Average Annual Daily Traffic MDT count of 9 638 at the corner of Route 311 and Terry Hill Road in Kent In 2002 the MDT for the other end of Route 311 at Route 22 was 9 279 The sizable additional traffic on Route 311 generated by Patterson Crossing will be too much for the residents of the community to bear.

> ***Response 4.8-205:*** *The traffic distribution from Interstate 84 is not arbitrary. Its basis is described on DEIS pages 4.8-36 to 4.8-38. FEIS Appendix J examines additional traffic from Interstate 84 based on comments from Town's consultant (see Response 4.8-41).*

Comment 4.8-206 (Letter C-44 Peter Riebold, September 22, 2006): Twenty nine percent of trips for the project site are expected to come from the Towns of Kent and Carmel from the west. This traffic will predominately use NYS Route 52 and NYS Route 311. The remaining 14 of trips would be from the Town of Patterson from the east. The trips traveling west would come from NYS Route 164 NYS Route 311 and US Route 22 areas. The trip distribution from the site is shown in Figures 4.8-6 and 4.8-7 for the weekday p. m. and Saturday peak hour. This summary ignores traffic from Dutchess County to the north and nearby Connecticut to the east.

> ***Response 4.8-206:*** *For traffic traveling to the site, most Dutchess County traffic would use the Taconic State Parkway and US Route 9 to reach Interstate 84. Most of the Connecticut traffic would use Interstate 84. A portion of Connecticut and Dutchess County are anticipated to use NYS Route 311 and NYS Route 164. Refer to Response 4.8-182*.

Comment 4.8-207 (Letter C-44 Peter Riebold, September 22, 2006): The paragraph also notes that the cost of road improvements will be offset by the sales taxes generated by the shopping center. It can also be said that the sales taxes generated by the project will pay for the road improvements that would not have been needed if the project were not built. The sales tax revenues will simply be consumed by road construction made necessary by Patterson Crossing. The developer should pay for the road improvements not the taxpayers.

Response 4.8-207: *Most road improvements are needed whether Patterson Crossing Retail Center is built or not. The developer is proposing to pay for most of the improvements; see FEIS Appendix K and the introduction of this Chapter. Refer to Response 4.8-239.*

Comment 4.8-208 (Letter C-44 Peter Riebold, September 22, 2006): These geometric improvements will have little effect on traffic. Striping a formal left turn lane or right turn lane from the exit ramps of Interstate 84 will do no good. At peak travel time drivers currently create informal turn lanes. The presence of the stripe will have no effect on traffic movement.

Response 4.8-208: *The use of shoulders as a lane is an indication that a lane is needed. Proper striping with sufficient allocated lane width improves capacity and safety. It establishes additional signal phasing opportunities, improves signal head visibility, and better manages queues.*

Comment 4.8-209 (Letter C-44 Peter Riebold, September 22, 2006): An extra westbound through lane as suggested in item a would create a bottleneck at some point west of the Patterson Crossing site when Route 311 becomes a one lane road again.

Response 4.8-209: *A single westbound through lane is proposed. The text is in error and should be consistent with to the DEIS Appendix K figures, DEIS level of service calculations, DEIS level of service tables and the DEIS Table 4.8-35 summary of intersection improvements which are summarized below;*

- *Provide extra right and left turn lane storage on northbound NYS Route 311 at the eastbound ramps.*
- *Provide a second lane for left turns onto the westbound Interstate 84 ramp.*
- *Provide a separate left turn lane for southbound NYS Route 311 at the eastbound ramp.*

Comment 4.8-210 (Letter C-44 Peter Riebold, September 22, 2006): Providing an additional left turn lane from the westbound exit ramp of Interstate 84 as suggested in item "c" will require an additional westbound through lane on Route 311. This is not obvious in the DEIS. Without an additional westbound lane on Route 311 between the eastbound and westbound ramps (under the overpasses), the two left bound exit lanes would bottleneck immediately as they try to merge onto the single lane Route 311. This would cause spillback into the intersection and prevent traffic from clearing the westbound off ramp.

Response 4.8-210: *The current single lane ramp would be expanded to two lanes separating left and right turning vehicles. Left turns from the ramp would be on a single lane requiring only the existing receiving lane on westbound NYS Route 311. Refer to Response 4.8-208. An alternative to the signalization, a traffic circle could be constructed using the existing single lane ramps.*

Comment 4.8-211 (Letter C-44 Peter Riebold, September 22, 2006): The queue between the eastbound ramps of Interstate 84 and the Patterson Crossing entrance must also be kept short to avoid a spillback on the portion of Route 311 under Interstate 84. There is only a short distance between the eastbound and westbound ramps and it would only take a few

consecutive tractor trailer trucks to create a backup. Since the DEIS claims that all deliveries will be made via Interstate 84 and that most shoppers will arrive via Interstate 84, this problem must be studied closely and the comments of the New York State Dept. of Transportation must be included in the DEIS. Providing traffic signals however cannot clear the single westbound lane of traffic quickly.

> ***Response 4.8-211:*** *Refer to Responses 4.8-19 through 4.8-23 and 4.8-27 through 4.8-30. The NYSDOT and the New York State Thruway Authority have provided comments on the DEIS. A sensitivity analysis is provided in FEIS Appendix J to more closely study the interchange. A traffic signal would clear the westbound off ramp faster than the current stop control as the traffic signal's entire purpose is to shift capacity to the off-ramp. Coordination of the ramp signals is important to maintaining flow on NYS Route 311 between ramps.*

Comment 4.8-212 (Letter C-44 Peter Riebold, September 22, 2006): Although an additional westbound through lane appears needed between the eastbound and westbound ramps construction of this extra through lane may not even be physically possible because of the way the Interstate 84 overpass over Route 311 is constructed. The bridge is a set of steel girders supported at both ends by concrete abutments. The abutments end at the edge of the paved shoulders. To create an extra lane the shoulders would have to be substantially narrowed. There would then be one single eastbound lane and one westbound lane the rightmost lane that would be dangerously close to the abutments. The new shoulder would also be too narrow to permit a disabled vehicle to be moved off the traffic lanes. Tractor trailer trucks may also have insufficient clearance on the outer lanes. These abutments are critical to the support of the bridge and cannot be modified unless the bridge is redesigned and rebuilt It is doubtful that the NYS Dept. of Transportation would be willing to approve this scheme and even more doubtful that it would spend millions of dollars to reconstruct the roadway and the bridges or undertake any construction project that might slow traffic on the interstate highway. Such construction would be a long term project causing much inconvenience to drivers on both 1 84 and Route 311 It is highly doubtful that the developer of Patterson Crossing would pay for this work. Since the addition of an extra through lane may involve more than restriping the existing lanes the NYSDOT must be consulted for recommendations and the comments of the NYSDOT must be included in the DEIS. It is inappropriate for the developer to include any traffic remediation suggestions without including the comments from the NYSDOT or local highway departments.

> ***Response 4.8-212:*** *The analysis in DEIS Appendix K examined a single additional lane under the bridge. The NYSDOT would review and permit improvements to NYS Route 311 and that review would consider construction safety, and the efficacy of improvement. NYSDOT comments are addressed in Responses 4.8-19 through 4.8-23. The NYSDOT March 19, 2007 letter addresses the interchange concept (see FEIS Figure K-3)*

Comment 4.8-213 (Letter C-44 Peter Riebold, September 22, 2006): Adding a traffic signal to the intersection of Fair Street and Route 311 will allow traffic to flow from Fair Street onto 311 more easily. However, the backup will simply be shifted to Route 311 the more heavily traveled road as Route 311 traffic must now stop to allow the Fair Street traffic to move onto 311. The stretch of Route 311 east of Fair Street is also notoriously dangerous with a steep hill and several sharp curves.

Response 4.8-213: *See the revised analysis in FEIS Appendix J. A signal at NYS Route 311 and Fair Street is not needed.*

Comment 4.8-214 (Letter C-44 Peter Riebold, September 22, 2006): Long portions of Route 311 both in the Patterson hamlet and in Lake Carmel already have posted 30 mph speed limits which are largely ignored by drivers. Reducing the speed limit will have no effect on traffic safety.

Response 4.8-214: *The presence of traffic signals should result in more consistent operating speeds along the through roadways. The presence of the signals will help reduce left turning accidents. In areas where there are no traffic signals, the vehicles are not subject to speed changes and hence can maintain higher speeds, even if not legal.*

Lower speeds can reduce the severity of damage in accidents. In addition the reduction in speed also decreases the braking distances hence allowing some collisions to be avoided.

Comment 4.8-215 (Letter C-44 Peter Riebold, September 22, 2006): Table 4.8-31 displays the changes in traffic volumes occurring under various conditions on NYS Route 311 during the weekday p. m. and Saturday peak hour periods. The “Site Generated Volume” shows the additional number of vehicle peak hour trips that are projected to occur when Patterson Crossing Retail Center is complete. Since most of the traffic is destined to and from the interstate, increases beyond Interstate 84 to the East in Patterson, and to the West in Kent, are relatively modest during peak hours. Outside the peak hours volumes East of Interstate 84 and West of the site would be lower than projected peak hour conditions and lower still than the peak fifteen minute rates used in the traffic analysis. This paragraph restates the claim that most shoppers will access Patterson Crossing via Interstate 84. There is no evidence to support this claim in the DEIS. There is no evidence to support the claim that increases beyond Interstate 84 to the East in Patterson and to the West in Kent are relatively modest during peak hours.

Response 4.8-215: *DEIS page 4.8-50 refers to Table 4.8-31 which summarizes information contained in the traffic volume figures. The explanation for these volumes is discussed in detail in the Existing, No Build, and Build Condition scenarios. Interstate 84 as a 55 to 65 mile per hour interstate provides east-west access across Putnam and Dutchess Counties. There are numerous exits from which north-south access can be achieved including US Route 9, the Taconic State Parkway, NYS Route 22, and Interstate 684.*

Comment 4.8-216 (Letter C-44 Peter Riebold, September 22, 2006): The "Future Growth" numbers are arbitrary and require explanation and evidence to support the estimates. Several large parcels of land in the area are zoned either "C-1" or "1" and are eligible for development into large scale projects. These parcels are on Route 311 east of Fair Street, Ludingntonville Road north of Route 311, and the area straddling Interstate 84 from Fair Street west to the Kent town line. "Future Growth" must reflect the potential for those sites to be developed into large scale projects, and the effects of Patterson Crossing on local traffic volumes must be considered along with the future traffic to be generated by the development of those other sites.

Response 4.8-216: *Future growth numbers are based on anticipated background growth and growth from other known proposed area projects using ITE Trip Generation. Undeveloped parcels in the area that are not before the boards are not included in future growth. Should projects be proposed on these parcels, the town planning boards will be responsible for reviewing the propose.*

Background growth is addressed in Responses 4.8-2 and 4.8-20, where NYSDOT agrees with the 1.5 percent background growth used in the analysis.

Comment 4.8-217 (Letter C-44 Peter Riebold, September 22, 2006): DEIS page 5.8-54 Specifically the Applicant is committed to participate in a significant way in the funding of intersection improvements in the area. In addition to the widening and signalization of Route 311 in front of the Applicant's property. the Applicant will work with the appropriate authorities to identify intersections where improvements are warranted as a result of the proposed action and will share in the cost of those improvements. The applicant also commits to working aggressively with the Town, the County and the DOT towards funding an improvement program for road and infrastructure updates in the project vicinity to ensure that the intersections in the study area operate at levels acceptable to the NYSDOT into the future. This paragraph needs to be expanded with details of what, if any, financial contribution the developer is planning to make towards road reconstruction. The intersections and road improvements that the developer intends to fund must also be specifically listed. The DEIS must also detail the legal obligation and guarantees the developer will be under to force the developer to act on his promises.

Response 4.8-217: *Details regarding the Applicant's contribution to roadway improvements is addressed in the Introduction, Response 4.8-4, and FEIS Appendix K. The Findings Statement following the FEIS typically details the obligations and commitments being made by the Applicant.*

Comment 4.8-218 (Letter C-49 Paul Spiegel, September 13, 2006): *"*A project to widen Route 6 between Route 312 and John Simpson Road in Carmel is to resume this spring. The road over the reservoir bridge will be 12 feet wider, turning lanes will be added, and the bridge is being replaced. The $4.2 million job is expected to be finished at the end of this year." (THE JOURNAL NEWS by Caren Halbfinger April 28, 2005) Part of the reason for this very expensive contract was the additional volume of traffic coming to and from the Brewster Highlands shopping Center from Carmel. Even though this was a New York State DOT project, all area taxpayers were responsible for the costs of the project because we all pay state taxes. Patterson Crossing will be the cause of similar expensive projects throughout the area.

Response 4.8-218: *The John Simpson Road/US Route 6 intersection had poor levels of service in the 1990's prior to the development of the Highlands Shopping Center. The US Route 6 bridge widening provided an additional lane into this intersection. The Highland Shopping Center has generated more than enough sales taxes to the State of New York to pay for the already needed road improvements in the area.*

Comment 4.8-219 (Letter C-49 Paul Spiegel, September 13, 2006): What studies have been done on the non-vehicular traffic on this project as it borders a park district? How will

access to the lake be maintained by residents living across 311 or on Terry Hill Road. What precautions are planned for the families and children trying to access their lake?

Response 4.8-219: *Access to the Park District facilities for residents living across NYS Route 311 may improve as traffic signals provide crossing locations introduce breaks in the flow of traffic and reduce average vehicle speeds. The Applicant would bond a signal at Barrett Hill Road and it would be installed if approved by the NYSDOT and a signal is proposed at Terry Hill Road and NYS Route 311. Both improvements would assist pedestrians in crossing these roads.*

Comment 4.8-220 (Letter C-50 Ronald and Sonya Taylor, September 24, 2006): The Applicant should give a cost-benefit analysis of the specific improvements recommended. On page 4.8-22 the Applicant lists a number of area projects listed in the NYSDOT Transportation Improvement Program, but does not identify the budgeted projected costs of the projects. That could be a starting point. A phone conversation with the NYSDOT revealed that the potential cost for the improvement of the intersection of Route 311 and Route 164 would be more than $12 million. What then would the cost of the I84 improvements be? The sale tax revenue generated by the project will not be sufficient to offset the cost of improvements even if wholly devoted to them (very unlikely), one can see. Applicant should be required to provide figures not guesses and wishful thinking.

Response 4.8-220: *The NYSDOT does not know the construction costs of the intersection of NYS Route 311 and NYS Route 164 as the design has yet to be determined. Discussions as recently as July 2007 with the NYSDOT indicated this project is with a group of other small projects funded under biannual improvements. The $12 million dollar cost cited is unreasonably high. Sales tax revenue associated with this project for one year is anticipated, according to the DEIS, to be $13.9 million to $16.8 million, many times higher than the cost of all transportation improvements currently proposed under the improvement plan.*

Comment 4.8-221 (Letter C-60, September 13, 2006, Joe Ruocco): We will need traffic lights and wider roads to avoid the tragic accident which occurred on Thursday September 7th which hurt 4 people and killed 2. These improvements should be paid for by the developer. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Joe Ruocco (9.13.06)]**

Response 4.8-221: *Refer to Response 4.8-186.*

Comment 4.8-222 (Letter C-60, September 13, 2006, Joe Ruocco): If it isn't in place before the project is built then it will be the tax payers of this county who will have to foot the bill..... Route 311 cannot support the amount of traffic being talked about. 1,500 cars per peak hour. The causeway over Lake Carmel, the intersection at 311 and 164, the one-lane railroad bridges on 164 as well as the intersections of Interstate 84 and 311 must be improved before this project goes forward. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Joe Ruocco (9.13.06)]**

Response 4.8-222: *No improvements will be implemented by the Applicant before the project is approved, finalized, and construction initiated.*

DEIS Figures 4.8-8 and 4.8-9 indicated the site generated traffic at different locations. The Table 4.8-2 below illustrates the change for some locations based on reductions in traffic with the reduction of the square footage of the proposed retail center. FEIS Appendix K expands on the potential improvements discussed in the DEIS. The majority of traffic is anticipated to be from Interstate 84 ramps to the site. The interchange area capacity would be expanded by adding turn lanes at the cost of the Applicant. No changes are proposed for the Causeway or the one lane NYS Route 164 bridges. The NYSDOT is redesigning the NYS Route 311 and NYS Route 164 intersection.

FEIS Table 4.8-3
Increase In Traffic From The Site

	P.M. Peak Hour	
Locations	***Toward the Site***	***Away from the Site***
DEIS		
NYS Route 311 Causeway	*140*	*156*
NYS Route 164	*17*	*19*
NYS Route 311 north of NYS Route 164	*56*	*62*
FEIS		
NYS Route 311 Causeway	*134*	*147*
NYS Route 164	*16*	*17*
NYS Route 311 north of NYS Route 164	*54*	*59*

See FEIS Appendix J Figure J-8.

Comment 4.8-223 (Letter C-60, September 13, 2006, Joe Ruocco): Echo Drive being used as a emergency exit makes no sense it is a narrow road on a steep grade which has parked cars and many families living on it, it leads to Terry Hill Road which is no better off... I do not understand how the head of Putnam County Emergency Management and The Putnam County Sheriff can approve this as safe. A viable egress for so many vehicles in an emergency. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Joe Ruocco (9.13.06)]**

Response 4.8-223: *Refer to Response 4.8-123. Echo and Concord Roads are Town roads, owned and maintained by the local municipality. If they are not safe under existing conditions (and it is the Town's position that they are), such a matter should be immediately remediated.*

Comment 4.8-224 (Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, September 13, 2006): a) There is no commitment to fund the necessary off-site highway improvements to support the development; and
b) The development's onsite transportation infrastructure is significantly undersized for the proposed 434,050 square feet retail space; and

c) Nearby residents will suffer negative consequences and congestion, which will eventually lead to local town and state DOT action to fund and repair these narrow roads. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Oreon Sandler (9.13.06)]**

> ***Response 4.8-224:*** *A) The Applicant will fund improvements at four intersections and bond improvements at two intersections. The State is already funding three improvements. The County and Kent Manor are each funding one intersection. FEIS Appendix K discusses the funding of transportation improvements.*
>
> *B) The development proposed at 405,850 gross leasable square feet in the DEIS has been reduced to 374,340 gross leasable square feet. The onsite road network has been studied (FEIS Appendix L) and is sufficient to accommodate traffic even for the Saturday holiday peak hour.*
>
> *C) Any action that leads to the funding and repair of substandard (narrow) roads, may be a long term benefit to local residents. Patterson Crossing Retail Center traffic is very unlikely to use the narrow local roads.*

Comment 4.8-225 (Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, September 13, 2006): In lieu of outright denial, a supplemental Environmental Impact Statement should be required. Because the traffic study for Patterson Crossing underestimated the volume of traffic that will be added to the surrounding roadway network, it is recommended that the entire traffic analysis be revised and resubmitted as part of an SEIS, along with other information that might have been misrepresented in the DEIS. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Oreon Sandler (9.13.06)]**

> ***Response 4.8-225:*** *The DEIS traffic section provided a reasonable projection of traffic using ITE trip generation. It was prepared by professional traffic consultants and reviewed by professional traffic engineers on behalf of the Town of Patterson and by the NYSDOT. There is no basis under the law to prepare a SEIS.*

Comment 4.8-226 (Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, September 13, 2006): The SEIS should either propose a second driveway to access the project site or dramatically reduce the size of the project to a level which can be sustained by a single driveway and which is consistent with current engineering and planning standards and philosophies. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Oreon Sandler (9.13.06)]**

> ***Response 4.8-226:*** *Consideration was given to providing a secondary access. Access to the east is blocked by Interstate 84. Access to Fair Street to the south has very steep grades. Access to the west is blocked by residential development. The proposed access provided at NYS Route 311 to the north already has been widened to provide an additional lane. For unrelated reasons the size of the project has also been reduced as described in the Chapter introduction. Refer to Response 2.2-1 for additional information on alternate access road locations investigated by the Applicant. Refer to Response 2.2-1.*

Comment 4.8-227 (Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, September 13, 2006): The SEIS recommended should contain a commitment from the applicant to fund completion of the necessary mitigating measures. Alternatively, the resolution of approval for the subject property should require that Certificates of Occupancy for the development would be conditioned upon the completion of these improvements by others. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Oreon Sandler (9.13.06)]**

Response 4.8-227: *Refer to Response 4.8-4. FEIS Appendix K lists the improvements and the party responsible for their implementation Signal improvements would be bonded by the Applicant as NYSDOT may require traffic volumes to be met before permitting the installation of a signal, thus Certificates of Occupancy may be required before obtaining NYSDOT approval to construct some improvements. The Applicant would work with the Lead Agency and NYSDOT regarding the timing of the improvements.*

Comment 4.8-228 (Letter C-63 Marian H. Rose, Ph.D., President, CWCWC, September 13, 2006): This development can cause these local country roads to become dangerously congested. This will happen unless the developer pays in a timely fashion and in full for the needed improvements at the various traffic intersections and elsewhere along the roads, as described in the DEIS. Simply because he owns the property, the developer has not right to cause road congestion that will most likely only be mitigated at some later date, when the developer is gone, leaving the cost and the tax burden to the local residents.

Response 4.8-228: *Refer to Response 4.8-4 for a summary of the proposed mitigation FEIS Appendix K for additional information on these improvements and 4.8-227 for information on funding and timing.*

Comment 4.8-229 (Letter C-61 Oreon Sandler, P.E., Acting Executive Director, Croton Watershed Clean Water Coalition, September 13, 2006): Include a revised analysis to determine whether the internal intersection will have sufficient capacity to accommodate the additional incoming traffic and holiday season traffic including left turns on the electronics and sporting goods stores approaches to the main access road, to ensure that the site's main access road will not fail and prevent motorists from using this to enter and exit the facility. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, Oreon Sandler (9.13.06)]**

Response 4.8-229: *See Response 4.8-55.*

Comment 4.8-230 (Public Hearing, September 13, 2006, Joan Castiner): What are the plans to Echo Road? Will it have to be widened, thereby taking portions of residents; front yards to accommodate emergency vehicles?

Response 4.8-230: *The emergency access has been moved to connect to Concord Road near its intersection with Woodstock Road. This emergency road can be accessed over five local roads. There are no plans to alter Echo Road or any local roads in the vicinity.*

Comment 4.8-231 (Public Hearing, September 13, 2006, Joan Castiner): I've never seen the school buses that routinely pick up our children access streets above Montrose Drive. Could this be because it's hard to negotiate some of the turns on our roads, many of which are narrow and have deep ditches and make it difficult to pass oncoming vehicles? In addition, we know that Echo Road is hard to travel in inclement weather such as snow and ice storms. I ask you to consider what would happen if there were an emergency requiring mass evacuation? Not far-fetched given the times we live in.

Response 4.8-231: *Refer to Response 4.8-123. The circumstances of the hypothetical mass evacuation and the potential risk it presents to local residents is overly speculative and falls outside the Scope adopted by the Lead Agency for this DEIS. That said, should an emergency mass evacuation be required, the primary route would be the main access drive. During a mass evacuation, the ingress side of the main access may also be used as a travel lane to allow vehicles to exit the site. The emergency access would be used if the main access drive was totally blocked. Traffic exiting the site through the emergency access road would be subject to the same conditions as residents residing on Concord Road and the connecting road network.*

Comment 4.8-232 (Public Hearing, September 13, 2006, Joe Ruocco): I'm also concerned that this influx of people from outside our community will be driving through our neighborhood streets creating a danger to our children playing in these street.

Response 4.8-232: *Proposed related traffic would not likely travel on the local residential roads. Traffic traveling on the local street is anticipated to be local residents.*

Comment 4.8-233 (Public Hearing, September 13, 2006, Antoinette O'Connor): The builder does not state that the total cost of the six traffic lights and a series of turn lanes along a two-mile span of 311 and 164 and Cherry Hill Road, but he does state that this area of road is in such disrepair that it would need this work anyway, but the truth is that span is new, so I don't see why we need to make these improvements. I don't think it's fair that we taxpayers have to absorb the cost that is only being raised for this project.

Response 4.8-233: *NYS Route 311 was recently repaved and is not in a state of disrepair. There are some existing and future (without Patterson Crossing Retail Center) capacity and safety needs that should be addressed as identified in the DEIS The NYSDOT has NYS Route 52 and NYS Route 311 programmed in the Transportation Improvement Program (TIP) for improvements. The intersection of NYS Route 311 and NYS Route 164 was on the TIP prior to the application and the NYSDOT has agreed to expedite these improvements (see the March 19, 2007 letter from Glenn T. Boucher, Regional Highway Work Permit Coordinator of the NYSDOT, Region 8 in Appendix A). Thus some improvements reflect long standing issues that the NYSDOT recognizes and is in the process of addressing.*

The Applicant is providing improvements as noted in FEIS Appendix K to address issues specific to the project site and to address certain issues that are anticipated to arise without the site development. No improvements are proposed for Cherry Hill Road. None of the site specific improvements proposed in FEIS involves local tax payer funding.

Comment 4.8-234 (Public Hearing, September 14, 2006, Katherine O'Conner): The developer has indicated what intersections must be change for the benefit of the project, but has he approached the D.O.T., that is the State Department of Transportation? When the D.O.T. Was contacted, they have received no plans from him, who is going to pay for the changes?

Response 4.8-234: *The NYSDOT was supplied with copies of the approved DEIS and the Applicant has met with agency staff on multiple occasions. FEIS Appendix K lists responsibility for various transportation improvements. The March 2007 letter from NYSDOT in FEIS Appendix A provides the NYSDOT follow-up response and concurrence with the proposed conceptual improvements.*

Comment 4.8-235 (Public Hearing, September 14, 2006, Karen Correll): Page 3-6, second paragraph, a portion of the tax revenues collected by Patterson and Kent should be used by the local highway department and maintenance of local roads. According to table 3-3, towns will get 110k and 7k respectfully. If these amounts are correct and devoted solely to road improvements, they will not amount to much.

Response 4.8-235: *Most roads that will be used are State and County roads. NYS Route 52, NYS Route 164, and NYS Route 311 are state roads. Fair Street, Terry Hill Road, Ludingtonville Road, and part of Horse Pound Road, are County roads.*

Local roads such as Ludington Court and Longfellow Drive should see no additional traffic from Patterson Crossing Retail Center other than trips from the residents along those roads. Barrett Hill Drive is anticipated to have six (6) p.m. peak hour and eight (8) Saturday peak hour trips related to the Proposed Action. The likelihood that Patterson Crossing Retail Center traffic will significantly increase municipal road maintenance costs appears very low.

Comment 4.8-236 (Public Hearing, September 14, 2006, Betty Hammond): What side street is it going to divert traffic to? Where are they going to go? Up the back road. I don't know where he wants these guys to go. Where are they going to go in your town? Where are they going to go? Nowhere. Straight down 311.

Response 4.8-236: *It is expected that if a signal is constructed at North Terry Hill Road, Terry Hill Road, and NYS Route 311, then some traffic may take the shorter route from NYS Route 52 to NYS Route 311 using North Terry Hill Road during peak hours. These drivers would likely be choosing this as a shorter path based on familiarity with local area. The reduction in site traffic in combination with elimination of Hillcrest office space and other projects that are no longer expected to be built would reduce the potential for diverted traffic.*

Comment 4.8-237 (Public Hearing, September 14, 2006, Devin Brown): As the volume of traffic on the ramp was expected to increase faster than the New York State Route 311 traffic traveling from Patterson, capacity on New York State Route 311 will need to be reduced to compensate for increase of ramp volumes. The proposal of adding a traffic signal on Route 311 to the side streets, the increased capacity for the minor street, permits the minor street traffic to enter New York State Route 311 more easily.

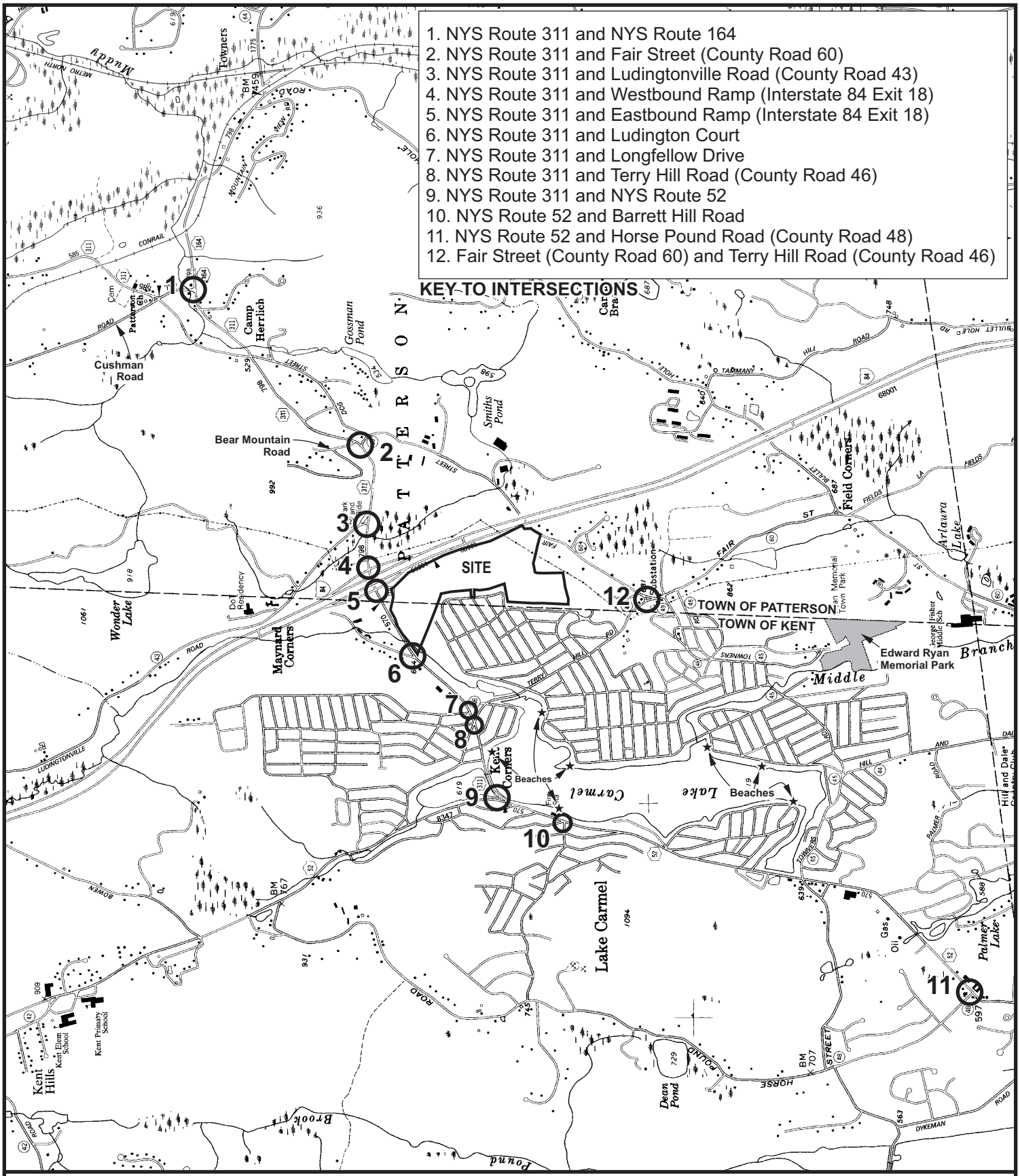
Response 4.8-237: *Refer to Responses 4.8-83 and 4.8-111.*

Comment 4.8-238 (Public Hearing, September 14, 2006, Devin Brown): I would like to personally acknowledge that the claims of the Draft Environmental Impact statement are that there are no pedestrian traffic and there are no pedestrian designations in there surrounding the proposed site. Perhaps in the commercial designations there are few in the area, but the proposed commercial center is within a quarter mile of Lake Carmel, and I'm not sure what has been done, but there are hundreds of children walking to this lake everyday. In the winter for ice skating and in the summer obviously for the lake itself, but also the Carmel High School track team runs throughout Carmel's streets throughout the spring and fall, I believe, so that is quite a large percentage of student body in Carmel High School, so I'm a little less than convinced that pedestrian traffic is so nonexistent in the area. But after this project, pedestrian traffic will be completely impossible.

Response 4.8-238: *Interstate 84 has no pedestrian activity and NYS Route 52 and NYS Route 311 have little pedestrian traffic. Nearly all of the pedestrian traffic in the vicinity occurs on local streets or County roads where traffic generated by the site would be minimal, in particular south of NYS Route 311. Although most site traffic would be concentrated along state roads, the provision of a traffic signal at NYS Route 311 and Terry Hill Road could improve pedestrian access to the lake. Refer to Response 4.8-77*.

Comment 4.8-239: (Letter C-24 Robert Ladau, September 12, 2006): $20 Million of County money for one intersection? That's the estimate for improving the intersection of Route 311 and 164 for Patterson Crossing. How long will it take the tax revenues from this project to repay this debt?

Response 4.8-239: *There is no proposal to spend $20 million dollars nor $12 million (See comment 4.8-221). FEIS Appendix K contains information concerning the transportation improvements proposed. The NYSDOT is reviewing options to improve the NYS Route 311 and NYS Route 164 intersection and no estimated cost is available. Based on the expected committed improvements from all sources according to the DEIS, the annual sales tax revenue at $13.9 million to $16.8 million should cover the one time transportation improvements without considering property tax revenues anticipated at $840,000 (DEIS). The cost of a signal would depend on the final geometric design. The Applicant will bond $100,000 to implement the improvement at this intersection. Refer to Response 4.8-157 for additional information on the proposed escrow agreement.*



E
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LEGEND

- Site Property Boundary
- Intersections Studied

Figure 4.8-1: Local Road Network

Patterson Crossing Retail Center FEIS
Town of Patterson, Putnam County, New York
Base Map: USDOT Planimetric Map, Lake Carmel Quad
Approx. Scale: 1" = 2,700'

File 04031 7/19/07
JS/04031

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4.9 NOISE COMMENTS AND RESPONSES

Comment 4.9-1 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): The applicant needs to state why the HUD standards apply to this project. The HUD standards are for Federally funded projects. Unless this project is Federally funded the NYSDEC Noise Policy should govern as modified by any local ordinances. The NYSDEC Policy is consistent with SEQR process.

> ***Response 4.9-1:*** *The DEIS acknowledges on page 4.9-4 that this Project is not subject to HUD guidelines. Rather they offer valid goals as the design noise thresholds are more stringent than the FHWA and NYSDOT thresholds and directly relate to noise impacts with residential concerns. The DEIS acknowledges that the Towns of Patterson and Kent Noise Standards apply to the project. The NYSDEC Noise Regulations (Part 450) Noise From Heavy Motor Vehicles apply to vehicles with a Maximum gross weight of 10,000 pounds or a combination of vehicles weighing 10,000 pounds. For those heavy vehicles making deliveries onto the Patterson Crossing Retail Center site, the NYSDEC Noise regulations would apply. For general project operations, the NYSDEC regulations do not apply.*

Comment 4.9-2 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): The noise study references the HUD Standards and that exterior noise levels do not exceed an L_{dn} of 65 decibels. The L_{dn} is a 24-hour based noise level and takes into account the changes in noise levels during the daytime and nighttime. However, the study uses the L_{eq} descriptor for quantifying noise levels measured in 15 minute intervals and then compares that to the L_{dn} (based on 24 hours). This type of comparison is incorrect as these representative sound levels are not comparable.

> ***Response 4.9-2:*** *The L_{eq} is used as the foundation of the noise descriptor L_{dn} and is known to show a good correlation with community response to noise. As stated above L_{dn} is based on a 24-hour average level, with a +10 decibel weighing applied to noise occurring at night (10:00 PM to 7:00 am). This +10 decibel weight is applied because people react to noise differently at night than during the day.*
>
> *The DEIS lists the conservative HUD site acceptability standards as a reference and a valid goal for the project site. The noise study also identifies the NYSDOT noise standards, where thresholds of 66 dBA (L_{eq}) or an increase of 6 dBA over ambient levels requires mitigation. The maximum increase in operational noise would be an increase of 4.6 dBA to a level of 52.5, which is less than the standard thresholds.*

Comment 4.9-3 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): Sound level measurements were performed at the edge of the wooded area adjacent to existing residential development. The applicant states that the existing trees and brush do not "substantially influence" measurements of the noise levels from Interstate 84. The implication here is that the noise levels from I-84 will be the same whether the trees and brush are there or not. In order to determine if a wooded area provides attenuation, measurements must be taken at a few distance doubled intervals (such as 100', 200', 400', 800', 1600', etc.) from the noise source. From these measurements, an actual noise attenuation rate and/or shielding effect can be determined. Based on the traffic volumes and speeds along I-84, L_{eq} noise levels 50 feet from the center of the nearest travel lane can be 80 dBA or more over a 15 minute period. If you reduce the noise levels from I-84 to the nearest receptor (receptor 1,

800' from I84) by 5 dBA for every doubled distance, noise levels at Receptor 1 would be approximately 60 dBA. Since the measured level reported by the applicant is 52 dBA, it appears the existing trees, underbrush or terrain could be providing 8 dBA of shielding. By using the applicant's reduction factor of 4.5 dBA per doubled distance the trees or terrain may be providing 10 dBA or attenuation.

Response 4.9-3: *The DEIS indicates that the "seasonal difference is not expected to substantially influence noise measurements at the Patterson Crossing Site. The site contains mature trees with a relatively open understory that does not provide effective noise reduction for traffic noise from Interstate 84 and Route 311". The DEIS states that in the summer months, with full vegetation, the line of site is as great as 300 feet. According to Highway Noise Fundamentals (USDOT/FHWA, September 1980), "While heavy dense growth of woods and other vegetation can provide a small though useful amount of noise reduction, this is better termed "attenuation" than shielding". According to the document, up to 5 dBA attenuation can be expected if the woods are so dense that there is no clear line of sight, if the tree height extends at least 5 meters above the line of sight, and the woods are at least 30 meters deep. Such vegetation is not present at the Patterson Crossing Retail Center site and therefore, the assertion is that the leaves on a mature forest stand with an open understory would not have a significant influence on noise from Interstate 84.*

Presently, approximately 57,000 cars a day travel past the property on Interstate 84 (NYS DOT "2006 Traffic Volume Report", July 16, 2007) and this number is expected to increase under the No Build Condition. The regrading of the site (increasing the site elevation near Interstate 84) along with the placement of the buildings on the eastern edge of the property, the installation of the proposed noise barrier between Buildings A and B, the six foot high noise fence and two to three rows of evergreen plantings within 25 to 50 feet of the western property line will reduce any potential increase in ambient noise resulting from project related traffic on Interstate 84 to an insignificant level.

The Applicant proposes to install noise walls between Buildings A and B and along the western property line, to mitigate noise from Interstate 84. Also, the proposed buildings themselves will act as a noise barrier for certain locations falling within their noise "shadow".

It is noted that the previous application for development of the project site, the Patterson Pavilion, which is similar to the plan set forth in Building Orientation Alternative in the DEIS, had the rear of the buildings along with all the loading docks and truck route facing the residential development to the west of the subject property. The Proposed Action has many benefits, including the siting of the buildings along Interstate 84 which will act as highway noise barriers. This plan also locates all loading docks and related truck lanes behind the buildings on the opposite side of the project site from the residential development.

Comment 4.9-4 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): The latest studies and the Federal Highway Administration Traffic Noise Prediction Model and the NYSDEC Noise Policy use a reduction factor of approximately 6 dBA per doubled distance over soft ground beginning at approximately 50 to 100 feet from the noise source. When there is a mix of hard and soft ground, the attenuation rate will vary between 3 to 6 dBA proportionately.

Response 4.9-4: *The reduction factors used in the DEIS study are more conservative than the factors identified above. Using the factors above, the future noise levels at the project site would be even less than what is discussed in the DEIS. In the example provided on page 4.9-9 of the DEIS, the 61 dBA operational noise level was projected to be 56.5 dBA at 100 feet from the access road and 46 dBA at Vernon Drive. Using the factors noted above the noise level would be 55.0 dBA 100 feet from the access road and 41 dBA on Vernon Road.*

Comment 4.9-5 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): The terms "substantially" and "effective" will need to be defined as they are interpretive and appear throughout the study.

Response 4.9-5: *Substantially: being largely but not wholly that which is specified. Effective: producing a decided, decisive, or desired effect. Merriam-Webster's Collegiate Dictionary, 10th ed. 1993.*

Comment 4.9-6 (Comment number not used):

Comment 4.9-7 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): The applicant will need to quantify the increased noise levels due to the loss of existing soft ground and trees and underbrush (if any) between receptors and I-84.

Response 4.9-7: *The comparison of sound attenuation over soft ground compared to pavement is provided in Section 4.9.5 - Future Conditions. According to the Noise Guidebook, US Department of Housing and Urban Development, March 1985, there is a 4.5 dBA reduction in noise for each doubling of distance over soft ground and 3.0 dBA reduction for each doubling of distance over pavement. The analysis provided in the DEIS accounts for the noise reduction over distance using the pavement factor and also discusses the noise reduction attributed to noise mitigation measures.*

Comment 4.9-8 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): Please provide a basis for the predicted reduction of 20 dBA from the rock crusher over 500 feet.

Response 4.9-8: *A berm can provide noise attenuation of up to 15 dBA if it is several feet higher than the "line of sight" between the noise source and the receiver The Audible Landscape: A Manual for Highway Noise and Land Use (FHWA, 1974) and according to the NYSDEC publication, Assessing and Mitigating Noise Impacts (2000), rock crushers have noise levels of 89 dB(A) at 100 feet and 69 dB(A) at 1,000 feet. Therefore, the combination of the proposed berm and the reduction due to distance results in a conservative overall reduction of 20 dBA for the rock crusher at a distance or 500 feet (a 10 dBA reduction allotted to the use of the berm and a 10 dBA reduction allotted to the distance).*

Comment 4.9-9 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): The predicted noise levels at each sensitive receptor needs to be quantified. This does not mean just the measurement locations, but also includes the residents that may be impacted by site driveways and other operations of the site.

Response 4.9-9: *The project Scoping Document identifies three specific receptor locations to be studied. The DEIS noise study additionally measured at two other*

locations and repeated a study at one of the original locations. These locations, as accepted and approved by the Town in their adoption of the Scoping Document, provide a reasonable cross-section of receptors with regard to this Project.

Comment 4.9-10 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): The applicant states that an "effective noise barrier" will be constructed around the rock processing equipment. There is no mention of how many decibels of reduction the barrier will provide or how it will be accomplished. The berm mentioned would need to be quite high in elevation above the rock processing equipment to be effective. In order to review the rock processing equipment noise, further detail is required on both the berm and the processing equipment to be used.

Response 4.9-10: *Refer to response 4.9-8. The berm would need to be constructed high enough to block the line of sight from local receptors. Given the size of a rock crusher, a berm approximately 10 to 15 feet high would be required.*

Comment 4.9-11 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): The study states that "specific noise reductions have not been calculated". However, the study makes a claim that a 4 to 10 dBA reduction of I-84 noise would be obtained by the proposed noise wall and building combination. This claim attenuation needs to be substantiated quantitatively and included as part of the report. The FHWA Traffic Noise Prediction Model (TNM) is a software program that can analyze a barrier or a row of buildings that act as a barrier designed to shield noise. A barrier analysis must be completed and submitted as part of the technical review and part of the project's approval documents.

Response 4.9-11: *Comment noted. The 4 to 10 dBA noise wall attenuation on page 4.9-11 of the DEIS is cited from The Noise Guidebook, US Dept. Of Housing and Urban Development, 1985 an accepted and trusted source for this type of information. The level of analysis noted in the comment is not necessary to allow for the assessment of impacts and to allow the Lead Agency to determine if potential impacts are significant. It is recognized that a detailed barrier plan is required as part of the site plan review and approval and related approval documents.*

Comment 4.9-12 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): Technical Note: For a barrier to provide any shielding or barrier attenuation from linear noise source such as I-84 at receptors 800'+ away, it would need to be much higher than 10 feet and very long. The functionality of a noise barrier is directly dependent on the distance the receptor and noise source is from the barrier and how long the barrier is.

Response 4.9-12: *It should be noted that the proposed noise barrier is to be used in conjunction with the buildings acting as barriers between Interstate 84 and the existing residences. The effective length of the combined noise barrier includes the frontage length of the buildings and the length of the noise wall. Refer to Response 4.9-11.*

Comment 4.9-13 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): Cross sectional views showing the relationship of the existing terrain and proposed terrain will need to be included in the subsequent review to properly assess the elevation differences that may contribute to the difficulty or aid in mitigating noise levels. The cross sections should extend from I-84 to the first row of residential homes west of the site and be in a scale that is reasonable to work with.

Response 4.9-13: *Cross sections for visual analysis are provided in Section 4.13 Cultural Resources. Figure 4.13-4 - Line of Sight Profile from Route 311 Westbound - View 3 shows a section from NYS Route 311, through Interstate 84 to residences along Concord Road, west of the site. The section shows the proposed ground elevations including the locations of buildings and retaining walls.*

Comment 4.9-14 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): A barrier analysis is required to determine what noise reduction (if any) will be provided by the proposed 8' high fence along the western property boundary. The applicant mentions that the physical properties of a proposed fence can determine it's effectiveness, while this is true, the report will need to specifically state that the fence will be constructed of a material or combination of materials with a density of 4 pounds per square foot (psf). A typical wooded stockade fence has a density of approximately 2 psf and will not provide the attenuation claimed. Please provide a cross section that shows the fence, sensitive receptor and noise source it is intended to shield.

Response 4.9-14: *The Applicant will provide a detailed barrier plan as a part of site plan approval, and the fence will be specified at a density of 4 psf or greater.*

Comment 4.9-15 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.9-6, the discussion of rock processing and the proposed location of rock crushing equipment needs to be expanded to consider alternative locations that would place the equipment further from existing homes, and the installation of temporary sound barriers to mitigate construction noise impacts. As noted in the table, rock processing equipment generated sound levels of 73-75 dBA at 500 feet, and 65-67 dBA at 1000 feet. As shown on Figure 4.9-2, however, the rock crushing equipment would be located less that 800 feet from the nearest residence. Given that the DEIS describes a construction period of 2 to 2½ years, dismissing the impact of construction noise as "short term and temporary" mischaracterizes the potential severity noise would have on the occupants of nearby residences.

Response 4.9-15: *The rock processing equipment was located to optimize distance from sensitive receptors while maintaining its proximity to the rock removal operations. Refer to Responses 4.9-8 and 4.9-10.*

It is estimated that the rough grading for the site will be completed within six to nine months and the rock processing equipment would operate during that period. After the finished grades are substantially reached for the site development, no rock crushing would be needed and the use of that equipment and the resultant noise would cease.

Comment 4.9-16 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): In addition, the discussion of noise should analyze construction and site operation noise generation with respect to the impact on human response to various decibel levels. The following table is derived from New York State Department of Environmental Conservation publication "*Assessing and Mitigating Noise Impacts*" (October 2000) and should be used to assess the human response to construction noise.

dBA	Human Response
0-10	Threshold of hearing
20-30	Very Quiet
50	Quiet
60	Noticeable
70	Telephone use difficult
80	Annoying
90	Very Annoying (hearing damage @ 8 hours continuous exposure)
100	Discomfort
120	Maximum vocal effort required to communicate
140	Painful

Response 4.9-16: *The DEIS discusses increase in noise levels over ambient levels with 2-3 dBA being barely perceptible and 10 dBA or more being an annoyance depending on the frequency and duration. Noise associated with the construction phase will vary based on the particular operation, location on site as well as duration. DEIS Table 4.9-5 exhibits typical noise level ranges for various construction equipment without any barrier attenuation. In general if a construction activity is over 200 feet away with a direct line of sight it could be considered an annoyance, however at 500 feet away most activities would not be much more noticeable than the ambient noise level.*

Operational noise levels, as stated in the DEIS, are not projected to be more than 4.6 dBA higher than the existing ambient level. The operational noise level would fall between 50 (quiet) and 60 dBA (noticeable) on the chart above and be below any standard threshold for mitigation.

Comment 4.9-17 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.9-6, the hours during which the on-site processing of rock will occur should be stated here. In addition, due to the nature of noise generated by rock crushing activity it is expected that rock crushing would be cut back from the proposed Monday-Saturday 7:00 am to 6:00 PM construction hours. It would be appropriate to place substantial limits on the hours of rock processing operations in order to mitigate adverse impacts on nearby residence.

Response 4.9-17: *By properly siting the rock processing equipment, reducing the hours of operation, and constructing a berm, the temporary impact of the equipment operation would be mitigated. Rock processing would be limited to the hours between 8:00 a.m. and 5:00 p.m. Monday through Friday, excluding the following holidays:*

- *New Year's Day*
- *Dr. Martin Luther King Jr. Birthday*
- *President's Day*
- *Easter Day*
- *Memorial Day*
- *Independence Day*
- *Labor Day*
- *Yom Kippur*
- *Columbus Day*

- *Election Day*
- *Veteran's Day*
- *Thanksgiving Day*
- *Christmas Day*

Comment 4.9-18 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.9-7, see our prior comments regarding the likelihood that subsurface bedrock conditions will require more extensive blasting across the site than described in this section.

Response 4.9-18: *The preliminary estimate of the required areas of blasting was based upon the engineered grading plan and soil borings presented in the DEIS. Since the submission of that document, the building pad elevations have been raised to better balance the earthwork. As a result, the amount of rock removal has been reduced by approximately 50 percent from that presented in the DEIS. Refer to Responses 1.3-23 and 4.2-3 for additional information on rock removal.*

Blasting, if required, no matter the duration, will be subject to the mitigation program set forth in the SEQRA process and with applicable laws.

To further offset potnetial impacts related to site preparation work, a berm will be constructed surrounding the area(s) where mechanical rock removal and/or processing is required.

Comment 4.9-19 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The Final EIS should explain why there is no information reported for future noise levels. Moreover, the applicant should explain the rationale for not performing the PCE's screening analysis for mobile sources.

Response 4.9-19: *Future noise levels are described on pages 4.9-8 and 4.9-9 Potential Impacts - Site Generated Project Noise, of the DEIS. A noise screening using passenger car equivalents (PCE's) was not specified in the approved Scoping Document and was not deemed necessary by the Lead Agency.*

Comment 4.9-20 (Letter C-9 Joan Castiner, September 25, 2006): With the constant cars and trucks coming and going, what noise levels and air pollution will the adjacent residents be subjected to?

Response 4.9-20: *The DEIS identifies a noise level increase in a range from 2.3 dBA to 4.6 dBA depending on the source and receptor locations. An increase of 2-3 dBA is considered to be barely perceptible while 5 dBA would be readily noticeable. It is noted that the increase in the ambient noise level falls below State and Federal thresholds for mitigation and therefore is not anticipated to significantly impact the adjacent residents.*

Potential air quality impacts are addressed in Chapter 4.15 herein. See Response 4.15-11.

Comment 4.9-21 (Letter C-9 Joan Castiner, September 25, 2006): Just what town or agency will set the standards for noise and quality of air standards? How will these standards be enforced and monitored? Will monitoring, if any, be done on a monthly or yearly basis,

and who will be apprised of any results? If there is a problem with noise and air pollution, what steps can then be taken to remedy this?

> ***Response 4.9-21:*** *The Town, State and Federal agencies have established noise guidelines and standards which apply to this Project; these are identified on page 4.9-2 of the DEIS. Specific noise complaints are handled by the Town Codes Officer as is current practice.*
>
> *The Towns of Patterson and Kent noise regulations do not specifically require routine noise monitoring for construction projects or for commercial developments. If the Town(s) Code Enforcement Officer receives complaints, those complaints, can be addressed by the Town(s) in the form of noise monitoring.*
>
> *Air quality standards are addressed in Chapter 4.15 herein. See Response 4.15-12.*

Comment 4.9-22 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.9-6, 4.9-7 and figure 4.9-2: The proposed location for the rock crushing equipment is located on a 10% grade. This does not seem like a reasonable or practical location for this equipment. The developer should explain why this is the best location for the equipment and how it will operate on this slope or find another location for it and redo the noise analysis.

> ***Response 4.9-22:*** *The area for the rock processing equipment would be graded to provide a level pad for the machinery.*

Comment 4.9-23 (Letter C-31, Kathleen McManus, September 25, 2006): In the DEIS, the developer states that noise impacts as a result of construction activities are an intermittent short-term, temporary impact, however, the developer also expects construction to last 24-36 months. The definition of "short-term" can be debated; obviously to my family who is directly adjacent to the site , a 2 or 3 year period is NOT short-term.

> ***Response 4.9-23:*** *Comment noted. The use of the phrase short-term is relative to the potential operational life-span of the completed Project. The use of the terms intermittent and temporary are relative to the variable use of construction equipment throughout the work day, and the shut down of construction activities on a daily basis as well as during holidays (refer to Response 4.9-17) and weekends.*
>
> *Noise attributed to the construction is functionally intermittent and would vary greatly over the construction period and with the construction activity (e.g. land clearing, building interior construction, or paving) and the distance to a receptor. For example, rough grading and rock processing is expected to be completed within six to nine months (see Response 4.9-15).*
>
> *Construction noise levels would be within the thresholds established in the Town of Patterson and Town of Kent noise regulations.*

Comment 4.9-24 (Letter C-31, Kathleen McManus, September 25, 2006): These facts about the affects noise has on one's health is of immediate serious concern to me since my husband has just returned from a long hospital stay recovering from congestive heart failure, as the result of an accelerated heart beat, and four of five members of my family (including children) suffer from documented gastric-intestinal problems. Since the access road for this project is within approximately 65 feet from my children's bedroom windows, I don't believe

the suggested 8 foot wooden fence and two lines of tress adjoining our property line is a sufficient mitigation measure to reduce noise impacts and, furthermore, I believe it will have a tremendous long-term affect on our personal health and well-being. Thus, the DEIS conclusion that "no significant, long-term noise impacts will result from the project" is grossly misrepresented.

> ***Response 4.9-24:*** *The DEIS analysis of future noise indicates an expected noise level at the western property line following project construction of 50.5 to 52.5 are well below the HUD standard of 65 dBA for acceptable outdoor noise levels. The operational noise level would fall between 50 (quiet) and 60 dBA (noticeable) on the Table referenced in Response 4.9-16. Based upon the above, the DEIS concluded that no significant long term noise impacts would result from the project.*

Comment 4.9-25 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): The DEIS provides a simple table (see Table 4.9-5) which lists Construction Noise Levels and notes that the "level of impact from these construction noise sources depends upon the type and number of pieces of construction equipment being operated, the duration of the construction activities, as well as the receptor [sic] distance from the construction area." Page 4.9-6. Therefore, it is impossible to estimate the decibel level to which residents, both near and not so near, will be subjected and for how long. Given the estimated two to three years of construction, (p. 2-19) and the potential for construction operations to proceed for up to 66 hours per week residents' exposure to sustained and repeated "unacceptable" noise levels will be enormous. While residents further away will not experience the noise at as great a decibel level, they will still be exposed to increases in background noise that will surely impact their lives.

> ***Response 4.9-25:*** *Comment noted. See Response 4.9-23. Construction activities are a basic and functional part of everyone's lives, and affect people at varying levels on a regular basis. While often inconvenient, new land uses, infrastructure, repairs and replacement all require such short term affects. The Applicant has proposed mitigation measures for construction noise including limiting the hours of construction and locating the rock crusher as far from noise receptors as possible and constructing a berm around the rock crusher (see Responses 4.9-15 and 4.9-17).*

Comment 4.9-26 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): The Developer also attempts to minimize the noise impacts that residents near the site will experience after construction and during operation of the project. Given that the current levels at the site are 50-55 decibels (Table 4.9-4, page 4.9-5), it is difficult to follow the DEIS' argument that *after* construction, but *before* mitigation the noise levels will only be 46 decibels on Vernon Dr. (Section 4.9-5, p. 4.9-9.)

> ***Response 4.9-26:*** *The DEIS (page 4.9-9) discusses the reduction of noise due to the loss of sound over distance, from a particular noise source. Ambient noise levels would not be reduced to less than existing levels, however reductions due to distance is one factor that would lessen combined noise levels from different sources. The Project includes mitigation measures as practical to mitigate these aggregate noise levels.*

Comment 4.9-27 (Letter C-44 Peter Riebold, September 22, 2006): In October 1999, the Town of Patterson Code Compliance officer measured traffic noise levels outside my house, which is situated on Route 311 just outside the hamlet area. Noise levels peaked at 95 dBA,

which is a level above "Noisy urban street - 90 dBA, very loud" as indicated in the DEIS on Table 4.9-1. Any additional traffic generated by Patterson Crossing will only make matters worse. It should be noted that prolonged traffic noise of this level does meet the state standard for noise barriers.

Response 4.9-27: *Comment noted. The Applicant was not provided with the noise study described in the comment and therefore cannot substantiate or comment on the results. The noise level described (95 dBA) is a peak measurement and may be the result of a single loud vehicle, such as a car without a muffler or a large truck under load, passing by the measurement point. Generally, noise studies are based upon averaged noise measurements taken over a period of time.*

It is acknowledged that traffic on NYS Route 311 will increase under both the future No-build Condition (without the project) and Build Condition (with the project). NYS Route 311 is a major traffic arterial and elevated noise levels would be expected in close proximity to a major thoroughfare. It should be noted that, the majority of traffic generated by the Project is anticipated to utilize NYS Route 311 between the site and Interstate 84 thereby limiting impacts to areas adjacent to the remainder of this roadway.

The Applicant is not aware of any State standards for noise barriers. According to the Federal Highway Administration; Noise barriers are not always required at locations where an absolute threshold is met. There is no "number standard" which requires the construction of a noise barrier. Federal requirements for noise barriers may be found in Title 23 of the U.S. Code of Federal Regulations, Part 772, "Procedures for Abatement of Highway Traffic Noise and construction Noise."

Comment 4.9-28 (Letter C-47 Charles M. and Grace E. Sisto, September 22, 2006): Background- 4.9.1- DEIS data from March 1985. Please see attached highlighted data from: NYSDEC Revised February 2001/Assessing and Mitigating Noise Impacts-Pages 2, 3, 5, 8, 10, 11, 12, 13, 15, 18 &19. These pages reflect how surrounding terrain, time of day, wind direction, temperature and relative humidity can affect how sound travels.

Response 4.9-28: *It is acknowledged that there are many environmental factors that can influence the relative noise level. It is rare that aside from terrain, such conditions affect noise at noticeable levels for extended periods of time.*

Comment 4.9-29 (Letter C-47 Charles M. and Grace E. Sisto, September 22, 2006): If you refer to page 8-A.1 of the DEC report it states: At a distance greater than 50 feet from a sound source, every doubling of the distance produces a 6dB reduction in the sound. For this reason we feel the area has an amphitheater effect which enhances the sound. When looking at Patterson Crossing, it has the potential to create the same effect. This should be explored because on page 10-A.6 of the DEC report, sound levels can be accentuated by certain features to cause adverse noise impacts at specified locations.

Response 4.9-29: *There are no physical conditions at the Patterson Crossing Retail Center site that would cause noise to be amplified. The analysis of future noise provided in the DEIS is based upon standard methods for assessing noise, and included noise measurements at an existing shopping center with a similar design and layout as the proposed Patterson Crossing Retail Center. The Proposed Action implements several operational and physical noise mitigation measures, including the*

construction of a noise barrier between Interstate 84 and the existing residences (between the Buildings A and B) and the use of a berm during construction.

Comment 4.9-30 (Letter C-57, September 25, 2006, Glenna Wright): According to the Highway Traffic Noise Analysis and Abatement Policy of Guidance by the U.S. Department of Transportation (1995) (the "DOT Guidance"), "A barrier placed close to low-scale single detached residential area has a severe adverse visual effect. A barrier close to a residence create detrimental shadows, loss of sunlight and air circulation... Vegetation, which is so high, wide and dense that it cannot be seen over or through, can decrease highway traffic noise." Pp. 25-28. A 200-foot width of such vegetation would effectively reduce noise by 10 decibels, which cuts in half the loudness of traffic noise.

Response 4.9-30: *As part of the modified plan, the Applicant proposes a six-foot high noise fence along the western boundary of the project site as part of noise mitigation for residents along Concord Road. A fence of this height meet zoning code requirements and be similar to decorative fences currently used in the residential neighborhood. A fence of this scale and height would not result in the negative impacts listed in the comment. The comment suggests that a vegetation barrier would be superior to a structural barrier. In addition to the proposed noise barrier fence, two to three rows of evergreens will be planted on the residential side of the fence. It should be noted that the existing vegetation on the property is not sufficient to provide any effective noise mitigation.*

The Applicant can, as per the DEIS, build a 15,700 square foot retail building on the site; currently a 2,000 square foot building is proposed. If the building size is increased from 2,000 square feet to a maximum of 15,700 square feet, the Applicant will install three rows of evergreens plus the noise barrier fence to mitigate any noise or visual concerns.

Comment 4.9-31 (Letter C-63 Marian H. Rose, Ph.D., President, CWCWC, September 13, 2006): Over 60 acres of a thickly forested area will be eliminated. Among other superb benefits, forests absorb sound. This forest will be replaced by a huge shopping mall that will generate noise from tens of thousands of cars and trucks. Simply because he owns the property, the developer has no right to significantly increase noise levels in the neighboring quiet, semi-rural community.

Response 4.9-31: *The proposed shopping center (not a mall) is moderate in size and does not even fall within the top 100 centers in New York. The Project is in conformance with Town Zoning and Comprehensive Plans with the exception of signage. The location of a retail center adjacent to an Interstate and arterial are not only ideal but encouraged in land use planning. The DEIS analyzes noise generated by the Project and identifies measures to mitigate potential impacts.*

Comment 4.9-32 (Public Hearing, September 13, 2006, Ray Mainiero): What does the applicant mean when he says intermittent and short-term temporary impact? Exactly how long will the rock crunching and grinding go on? What decibel levels will the residents expect of this project?

Response 4.9-32: *The comment refers to the description of construction noise. Construction noise is intermittent because it will vary depending upon the construction activity occurring on the property, at any given time. The DEIS indicated*

that maximum noise levels at the property line during construction may range from 65 to 90 dBA. The highest noise values will only occur when construction equipment is used near the property line and that will be limited to tree removal, grading and paving.

Comment 4.9-33 (Public Hearing, September 13, 2006, Charles Sisto): It states that there was a Greenwood Court and it didn't exist and that said it's Greenridge Road. It is Greenridge Court, it is not Greenridge Road.

Response 4.9-33: *Comment noted.*

Comment 4.9-34(Public Hearing, September 14, 2006,Susan Russo): I am also asking for during construction the law that the trucks cannot idle for more than five minutes at a time. That's before construction and after delivery times. Who is going to monitor this? It's a law, but there is no one that monitors this.

Response 4.9-34: *Town codes are enforced by the Town Code Officer.*

4.10 UTILITIES COMMENTS AND RESPONSES

4.10.1 Introduction

Based upon several comments from Town consultants, agencies and the public, the Water System Report and the Wastewater Report were revised to provide technical background regarding the basis for estimates of project water demand (daily design flows) and wastewater flow. The revised Water System Report and the Wastewater Report are provided in Appendix G and H respectively. The reports provide water usage data from retail stores and uses similar to those proposed for the Patterson Crossing Retail Center.

The reports provide water design flows and wastewater design flows for both the southern water system and southern SSTS area, and the northern water system and northern SSTS. The southern water system consists of the two wells described in the DEIS and the water system for the proposed retail development. Total water demand for the southern water system is estimated at 15,000 gallons per day based upon water use data from local retailers and a safety factor of 1.5 (see Water Usage Report, Appendix G).

The northern water system would consist of a single well used to support a 2,000 square foot building proposed for the northern portion of the site, located in the Town of Kent. The building would be supported by its own well and SSTS system. The specific use of this building is currently unknown, but a water use design flow of 400 gpd has been estimated. This is a conservative, or high, water design flow for the type of retail use, such as a bank, expected to tenant this space. Estimated water design flow of 400 gpd is less than the water design flow of typical three-bedroom residence which is estimated at 600 gallons per day. The system could be increased to 2,000 to 3,000 gpd to accommodate a building up to approximately 15,000 square feet if the Applicant chose to increase the building size.

The northern parcel in the Town of Kent is 16.4 acres in size and is therefore more than adequate in size to support a single well and small SSTS area. Based upon the relatively low water demand, and comparatively large parcel, a future well in the northern parcel is not anticipated to result in any impacts to the local aquifer or off-site wells.

It should be noted that the northern SSTS and well system are optional, since the well and septic could be connected to the southern water and wastewater system. This would be decided as the final site plan goes through the review process and as the final site layout is determined.

Comments received on the DEIS included concerns regarding the proximity of the southern SSTS to off-site private wells (both in Patterson and in Kent) and the potential for the SSTS to impact off-site wells. The design of the southern SSTS has been modified from that described in the DEIS, by moving the absorption trenches further away from the westerly property line. These changes were based upon modifications to the Site Plan, additional analysis, and comments from agencies and the public. These modifications are described in the revised Wastewater Report (Appendix H).

The proposed southern SSTS absorption trenches have been sited to maximize the separation distance to adjoining wells. Putnam County Department of Health (PCDOH) and New York State Department of Environmental Conservation (NYSDEC) regulations require a minimum 100 foot separation distance between wells and an SSTS. A 200 foot separation distance is required if the well is downgradient in the direct line of drainage (downhill) from

the SSTS. Private wells adjacent to the Patterson Crossing Retail Center site, in the vicinity of the SSTS system, are not downgradient in the direct line of drainage of the southern SSTS system, and therefore a 100 foot separation distance should apply.

The southern SSTS area is generally flat at its high point and slopes gently to the west and gradually steeper to the east. The western property boundary in this area borders the relatively densely developed area of Lake Carmel. The SSTS was reconfigured to provide a buffer of at least 200' feet between the SSTS and the closest property line. The SSTS is proposed to be located primarily on the eastern slope, which pitches away from the developed area of Lake Carmel and towards Interstate 84. The existing ground slope in the proposed SSTS area ranges from generally flat to 15 percent with an average slope less than 10 percent.

The closest private well to the southern SSTS system is located in the Town of Patterson, and will be at least 205 feet from the closest absorption trench. The design of the SSTS will provide a minimum 275 foot separation distance between the SSTS absorption trenches and the western property line in the Town of Kent. This will provide a separation distance of greater than 200 feet between the SSTS and any private wells in the Town of Kent, which is well in excess of regulatory standards.

Soil testing was performed and witnessed by representatives of the Putnam County Health Department (PCHD) and New York City Department of Environmental Protection (NYCDEP) (See Appendix H of this FEIS for the results of field testing). The geotechnical engineer has conducted detailed hydrogeological evaluations of the two proposed SSTS areas. Additional information related to the on-site soils analyses is presented in the Hydrogeology Investigation (DEIS Appendix E).

It should be noted that the PCDOH and the New York City Department of Environmental Protection (NYCDEP) are responsible for the approval of the Patterson Crossing Retail Center SSTSs, and therefore, they are also reviewing the SSTSs to ensure the public health and safety are protected. Refer to Appendix R for a copy of the submission to the PCDOH. These agencies have been identified as Involved Agencies in the SEQRA review of the Patterson Crossing project and have been provided pertinent plans, studies, and environmental documentation to assist the Lead Agency in their review of the Proposed Action.

4.10.2 Comments and Responses

Comment 4.10-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.9-7, see our prior comments regarding verification of the daily water usage figures related to the on-site processing and preparation of food at the wholesale warehouse.

> ***Response 4.10-1:*** *Refer to Response 2.0-10. The Water System Report has been revised to include actual water usage data from retail stores similar to those proposed for the Patterson Crossing Retail Center development (see Appendix G). The local water usage data was used to develop the daily design flows for the project.*

Comment 4.10-2 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): Included in the DEIS is a hydrogeologic investigation/mounding analysis that was performed to assess the soils and groundwater in relation to the discharge of the proposed SSTS. Based on the review of figure 6-2 (Post-Development Groundwater Elevations at South Area) in Appendix E, it appears that there is a breakout of leachate at the

roadway cut between elevations 840 and 850. In addition, the localized areas within the proposed disposal area and on the west side beyond the proposed disposal area are predicted to have groundwater rise to potentially leach out to the surface. DEP recommends that the locations of the observation wells for the mounding analysis be added to a full scale plan to more accurately asses if the proposal to add 2 feet of fill is sufficient to prevent breakout.

Response 4.10-2: *We are aware that predicted mounding levels along portions of the initially proposed roadway cut alignment indicate possible breakout. The project engineer has shown all related grading on the updated plans included with this FEIS. The cut in the vicinity of the SSTS required for the emergency access drive construction as proposed under the plan presented in the DEIS, has been eliminated by relocating the emergency access drive to a point away from the septic area (refer to attached plans).*

Comment 4.10-3 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006. Also at Public Hearing September 13, 2006): The Town code prohibits using a residential district for purely commercial purpose. In this use consider sewage- requires 8.7 acre sewage field, no where in permitted, especially in a residential zone.

Response 4.10-3: *The Town Zoning Code does not prohibit the use of subsurface SSTS facilities in any of the Town's zoning districts.*

SSTS facilities are not addressed at all in the sections which regulate the uses in either a residential zone or in an industrial zone. Sections 154-26 (Uses in Residential Districts - Permitted Principal Uses); 154-27 (Uses in Residential Districts - Permitted Accessory Uses); 154-38 (Uses in Industrial I District – Permitted Principal Uses); 154-39 (Uses in Industrial I District – Permitted Accessory Uses). In fact, the use of SSTS facilities is not addressed in any of the zoning districts in the Town Zoning Code.

SSTS facilities are permitted in every district. This is obvious because such facilities need to be utilized in all zoning districts, including residential zoning districts. If the zoning code were interpreted as the commentor suggests and the proposed septic field is prohibited because such use is not specifically permitted under the cited provisions, then all homeowners seeking to install septic systems would be threatening to illegally use their property. This is clearly not the legislative intent of the Town Zoning Code and such an interpretation has never been previously utilized or implemented in the Town.

Nor would the use of an SSTS system in that portion of the site located in the R-4 district upset the "quiet, aesthetic residential character" of that portion of the property or the surrounding neighborhood. The SSTS facilities are underground and therefore not visible. There is nothing to see and there will be no odors associated with the septic field and no noise generated during its operation. Furthermore, the system will be inspected regularly to ensure it continues to operate properly. In addition, the surface of the land will, as a condition of approval, remain undeveloped. As a result, there is no impact on the neighboring residential neighborhood. In fact, the SSTS facilities on the property will do more to maintain the aesthetics environment than if it were utilized for residential development because such development would involve

the construction of new homes and ancillary facilities in addition to the installation of a septic system(s). As currently proposed, the property will be retained as a vacant meadow.

The property will act as a natural buffer between the nearby residential uses and the Project. The SSTS will not alter the character or contour of the land, and its existence will be virtually undetectable by surface observation. There will be no adverse visual impact on the neighboring property owners resulting from the usage of the lot for an SSTS and the parcel will be re-vegetated and retained as a vacant 8.7 acre meadow that would be appropriate for walking paths or passive recreation. The quiet, aesthetic character will not be altered and the parcel will be entirely compatible with the residential nature of the R-4 district.

Comment 4.10-4 (Letter B-5 David B. Clouser, PE, LS, David Clouser and Associates, September 21, 2006): The Applicant has utilized "custom" values for calculating design flow based upon the historical usage of each proposed tenant. However, the calculation should be based upon NYSDEC's Design Standards publication that would be accepted by the permitting agency.

Response 4.10-4*: Refer to Responses 2.0-10, 4.4-1 and 4.4-4.*

Comment 4.10-5 (Letter B-5 David B. Clouser, PE, LS, David Clouser and Associates, September 21, 2006): Additionally, based on the information provided in the DEIS, no design has been completed for the SSTS. The design of the system is an integral part of the environmental review of this project and should be completed at this time. As the Board is aware, the system must also incorporate pretreatment (for phosphorus removal) prior to disposal in a subsurface system. There is no design information for this required component of the wastewater disposal system that is being proposed for the development. The plans portray a conceptual "black box" approach to the planning of this component- little more than an arrow pointing to where the system would be generally located is provided for review, without any of the necessary detail that could confirm or deny its feasibility. The DEIS wastewater report narrative refers to groundwater modeling uncertainties and concern for lateral leaching of untreated sewage, without providing tentative feasible solutions to these concerns that their consultants have raised. Significantly more detail for this critical development component is needed before impacts can be considered.

The preliminary design of the system and a detailed description of its necessary components would allow the Board to more properly determine whether the system complies with agency minimum standards, fits on the site area indicated on the plans (i.e., would a system that is required to be 3.3 times the system described in the DEIS- with its required reserve area- fit in the area planned for this use?), what the extent of disturbance is, and what impacts it may have on nearby groundwater and surface water resources.

Response 4.10-5: *Refer to Response 4.10-2, Appendix E-18 and E-19 regarding leachate breakout. Also, see introduction above, regarding modifications to the SSTS plan.*

The detailed design of the SSTS is not necessary to evaluate impacts and is not typically performed at this stage of the project. As documented in the DEIS, the designated SSTS area was tested and "sized" based on the anticipated loading and in consideration of the soil characteristics and groundwater in relation to the proposed

field location. This, along with the additional pertinent information provided in this and previous environmental documents is sufficient for the Lead and Interested Agencies to assess the potential for significant adverse impacts that might result from the proposed SSTS on all aspects of the environment including groundwater and surface water resources. The extent of the disturbance is well documented in the DEIS and this FEIS. It should be noted that the Patterson Planning Board is not the agency that would "...determine whether the system complies with agency minimum standards..." That responsibility lies with the Putnam County Health Department and the New York City Department of Environmental Protection both of which regulate the design and development of SSTSs. In addition, both of these agencies have been identified as Involved Agencies and have been/will be provided a copy of all pertinent environmental documentation to assist the Lead Agency in their review of the Proposed Action. The project Wastewater System Report (FEIS) Appendix H includes a detailed description of the proposed wastewater systems.

Comment 4.10-6 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Depth to High Water: Table 1 shows that the depth of soils to groundwater is shallow (less than 2.5 feet) in more than ~95% of the area proposed for construction disturbance. The top soils at the proposed subsurface wastewater treatment area are PnC and WdB soils. High ground water presents two fundamental problems for the proper operation of septic systems. First, shallow groundwater can be contaminated with human wastes. Second, saturated soil can limit the effectiveness of a septic system in treating and decomposing contaminants.

Response 4.10-6: *It appears that the author of this review comment may have misinterpreted the data in Table 1. The shallowest depths to groundwater, during the monitoring period which included the typically wettest season, ranges from 2 to 24 feet. Excluding a limited area in the northwest corner of the South Area, where Wells S-9, S-12, S-13 and S-13A are located, the groundwater depths range from 9 to 24 feet. The relatively limited and localized northwest area, where groundwater is shallow, has been purposely excluded from use as septic effluent leaching areas .*

Comment 4.10-7 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): The discussion of the proposed wastewater disposal method is grossly deficient. The applicant proposes the subsurface discharge of 10,740 gallons per day (gpd) of wastewater into an 8.7-acre disposal field.' Although no soil samples were taken within the proposed disposal field area,[2] the applicant's Soils Map indicates that the disposal field soils are predominantly Woodbridge loam,[3] which is limited for construction due to its characteristics of wetness and frost action.[4] The applicant claims that "[Woodbridge] soils are found throughout Putnam County and erosion potential has been addressed successfully through the use of standard engineering design practices and the use of Best Management Practices..."[5] However, the applicant fails to point out that subsurface sewage treatment systems (SSTSs) the size of 10 football fields are *not* found throughout Putnam County. The applicant further claims that in compliance with requirements of New York State law[6] no more than five acres of the site will be disturbed at one time during construction,[7] but the applicant fails to explain how "standard engineering design practices" will address erosion and sedimentation during the construction of a disposal field that will require two separate construction phases.

Response 4.10-7: *Contrary to the statement made in this comment, fifteen test borings and numerous soil and rock samples were drilled/obtained on and surrounding the proposed disposal field area. These, together with groundwater data, were used to develop the groundwater model which is included in Appendix E. A summary of the on-site soils analyses is depicted in a graphic contained in an appendix to the Stormwater and Pollution Prevention Plan (SWPPP) which is attached to this FEIS (FEIS Appendix F).*

As noted in the phasing plan submitted as a part of the DEIS, the construction of the subsurface sanitary system will occur in two phases so as to not exceed the five acre disturbance threshold. There is no reason to assume that the construction of this facility would present any unique erosion and sediment control challenges greater than those for other proposed construction operations. Septic systems are constructed on relatively level ground and therefore, this segment of the overall site construction has low erosion potential.

Comment 4.10-8 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): In addition, the applicant's fracture trace analysis identified a major fracture trace along border of the disposal field and a minor fracture trace that transects the proposed disposal field area.[8] These subsurface bedrock fractures were identified "to assist in the location and development of water supply wells for the project."[9] Accordingly, it is bewildering that the applicant chose to site a sewage disposal field directly over one of these fractures, especially when that fracture is directly connected to a major fracture and one of the identified potential well locations.[10]

Response 4.10-8: *The vertical separation distance between the bottom of the septic leaching trenches and the top surface of the bedrock; fractures, fissures, or other water bearing zones within the bedrock provides adequate infiltration treatment of the septic effluent in the subsurface treatment and disposal system.*

Comment 4.10-9 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): The applicant also predicted the minimum depth to groundwater mound of 2-3 feet within the proposed disposal field area.[11] The applicant's consultant, Connecticut Test Borings, LLC, conducted 32 soil borings on the project site in March 2004 and claimed that groundwater levels in 16 of the sites ranged from 6-26 feet with no groundwater encountered in the remaining 9 borings.[12] However, not one of these borings was conducted on the proposed disposal field area.

Response 4.10-9: *Refer to Response 4.10-6.*

Comment 4.10-10 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): The Exploration Location Plan prepared by a second consultant, GeoDesign, appears to identify 10 borings around the perimeter of the proposed disposal field area, but only 4 borings within the limits of the disposal field. [13] One of the borings within the disposal field area (Boring S-9) recorded a depth to groundwater of only 2.2 feet, which may be due to the fracture trace that transects the proposed disposal field in the area of the boring. [14] In any event, constructing an 8.7-acre sewage disposal field over a fracture trace with a 2.2 foot depth to groundwater is extremely ill conceived. Although the remaining 3 borings recorded greater depths to groundwater, all of the boring logs contain a disclaimer stating that "fluctuations of

groundwater may occur due to other factors than those present at the time measurements were made."[15] In fact, the consultant's exploration and analyses are fraught with additional limitations and disclaimers that suggest potentially insufficient investigation and cast doubt on the validity of the consultant's conclusions.

> ***Response 4.10-10:*** *Refer to Response 4.10-6 for a discussion of the applicable groundwater level data, including the implications of groundwater fluctuations. As fluctuations are expected, long-term monitoring was conducted in the observation wells including during the wettest season. The northwest corner where Boring S-9 is located has been purposely excluded from the proposed absorption field.*
>
> *For purposes of a mounding analysis, an area much larger than the footprint of the proposed leaching fields needed to be tested and evaluated. Accordingly, of the fifteen test borings drilled and fifteen wells installed, thirteen are outside the proposed septic field area.*

Comment 4.10-10A (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): [D]uring a discussion of groundwater mounding model calibration, the applicant' consultant concedes that "the groundwater elevations for the pre-construction condition include a peak between observation wells S-12 and S-9A that does not reflect actual conditions." This suggests that the model could not be calibrated properly in addition to its myriad other limitations.

> ***Response 4.10-10A:*** *Any groundwater model is subject to limitations inherent in the assumption, including the limits imposed by the available data and other factors discussed in detail in Appendix E. Nonetheless, this does not invalidate the model or its conclusions. The peak between observation wells S-12 and S-9A, while potentially not a true representation of the groundwater elevations, provides for a more conservative model.*

Comment 4.10-11 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): The applicant's consultant provided rainfall data provided by the National Weather Service Poughkeepsie Station. These data show that precipitation during the two boring sample periods was 1.87 inches in March 2004 and 3.78 inches in April 2005.[18] If these borings had been conducted during wetter months, the increases in rainfall may have raised the minimum depth of groundwater to grade level, under which conditions the proposed disposal field would fail to treat the waste stream.

> ***Response 4.10-11:*** *The average annual rainfall for Carmel is approximately 44.1 inches per year, according to the Soil Survey of Putnam and Westchester Counties (USDA SCS, 1994). This results in an average monthly rainfall of 3.67 inches per month. The March, 2004 rainfall is below typical monthly averages while the April 2005 rainfall is above average. While precipitation does affect shallow groundwater levels somewhat, groundwater levels generally do not fluctuate more than several feet (less than 3) due to changes in precipitation. Soil borings completed by GeoDesign in the proposed septic field found that shallow groundwater was at an average depth of approximately 24 feet (see Appendix E - Hydrogeology Investigation (Mounding Analysis), GeoDesign, August 2005). Static water level measurements were taken from a well placed in the septic field in November, 2004 and in May, 2005. These measurements differed by 0.4 feet. Seasonal changes in rainfall will not result*

in a 24 foot rise in groundwater levels. Testing was done by GeoDesign to ensure that the soils and depth to groundwater were suitable for the project's septic system .

The historical rainfall data is presented and used in Appendix E as a basis to estimate base flow applicable to model calibration. However, as provided in Table 1, the groundwater levels used in calibrating the model include data obtained during the "wetter months".

Comment 4.10-12 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): Finally, the DEIS proposes construction of an 8.7-acre primary SSTS,[19] but the Wastewater Report claims that only 6.5 acres will be required for primary and expansion disposal fields of 3.25 acres each.[20] In addition to this discrepancy, it is unclear how the "expansion" field will function as intended if the absorption trenches are to be "distributed over the entire SSTS area (6.5 acres) to evenly disburse the wastewater."[21] This suggests that the primary and expansion fields will be in operation simultaneously as a single system, in which case failure of either field to function properly will compromise the entire system.

Response 4.10-12: *The groundwater model assumes that the entire design flow will be applied to entire footprint of the proposed septic leaching area. This is commonly achieved by double-spacing the trenches and only applying septic effluent flow to every other trench (in effect creating a checkerboard effect). The set of trenches that is not initially used constitutes the reserve area. This approach allows spreading of the effluent over a wider area, thereby reducing the magnitude of the mounding.*

Comment 4.10-13 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): If the proposed wastewater disposal system fails for any reason, the applicant proposes a treatment plant area "behind the wholesale warehouse store for installation of such a facility should it be necessary.[22]" The proposed treatment plant area has precipitously steep slopes, with a change in elevation of 90 feet over 300 linear feet (30% slope).[23] The soils in this area are of the Chatfield series, which have severe limitations for roads, parking lots, buildings without basements, and shallow excavations due to steep slopes.[24] The DEIS provides no discussion of construction constraints or erosion control on such steep slopes, no design plans for the treatment plant, and therefore there can be no possible informed review of this alternative wastewater treatment method. If the proposed disposal system fails, the treatment plant design, site preparation, construction, remediation of the failed disposal field, and rerouting of effluent conveyances from multiple septic tanks to the plant and from the plant to the disposal field will require many months, if not years, to complete. If breakout of leachate occurs during failure of the disposal field, 10,740 gpd of untreated wastewater effluent will be discharged overland until the treatment plant is designed, built and put into operation, unless all of the connected commercial facilities are forced to remain closed during remediation. In any case, the adverse environmental and economic impacts would be catastrophic, and the DEIS fails to address the issue of wastewater management and mitigation during the months of plant design and construction should the proposed disposal system fail.

Response 4.10-13: *The proposed wastewater treatment plant (WWTP) was included in the DEIS plan set to potentially take advantage of the NYCDEP Pilot Phosphorous Offset Program. The program is no longer available and the WWTP is no longer proposed. The project will utilize a conventional subsurface sewage treatment system (SSTS) that will consist of septic tanks and conventional two foot wide absorption*

trenches. The SSTS will be designed to provide a 100 percent expansion area. The expansion area is provided in the event the primary SSTS area ever fails and needs replacement. Therefore, appropriate area will be set aside to allow for a full replacement of the SSTS if the primary SSTS ever fails.

The Applicant notes that the USDA Soil Survey of Putnam County indicates that the groundwater elevation in Chatfield soils is located some six feet below the ground surface, and that extensive on-site soil investigations did not reveal the presence of any significant limitations to the proper functioning of an SSTS in its proposed location. As such, the likelihood of SSTS failure is considered to be remote.

The writer also states that if "breakout of leachate occurs during the failure of the disposal field, 11,400 gpd of untreated wastewater effluent will be discharged over land until the treatment plant is designed, built and put into operation". The writer is apparently not familiar with the function and failure of an SSTS. A SSTS does not function like a pump station, where either the pump station is working normally, or if a pump fails there is an immediate and complete loss of function. Should a SSTS fail it does so slowly and effluent in the tanks would be pumped and transported off-site for treatment to prevent a surface discharge. This characteristic of a SSTS is very beneficial when it comes to performing a repair or expansion of the system. Since there would be 100 percent expansion area set aside for a potential failure, the selected area of failure could be replaced with an equal area of expansion trenches. If over time, the expansion area were to be utilized close to its full capacity, then plans for other SSTS repairs or a potential WWTP design could then be implemented.

Comment 4.10-14 (Letter C-8 Harry Bourletos, September 18, 2006): Then there's the matter of a septic field the size of 5-8 football fields to be installed some 185 feet in back of my house on Vernon Drive...If that thing one day springs a leak and my water begins to taste or smell funny, who's fixing that?

Response 4.10-14: *The proposed subsurface sanitary treatment system (SSTS) was designed to professional engineering standards and following extensive testing of soils and the modeling of wastewater flow and treatment. Such systems are the standard method for the disposal of sanitary waste for both residential and commercial properties, in those areas not served by sanitary treatment plants. A detailed study of site hydrogeology was done to assess the potential impact of the SSTS on neighboring properties (see DEIS Appendix E, Hydrogeology Investigation (Mounding Analysis). Based upon on-site soil and groundwater testing and measurements, the study concluded that the minimum travel time for leachate to reach the nearest property line was three years. According to the study "This travel time is sufficient to provide adequate treatment of the septic effluent".*

Partly in response to comments from agencies and the public, the design of the SSTS has been modified to increase separation distance between the absorption trenches and adjacent private wells (see introduction discussion, above).

In addition, the design of the system must be reviewed and approved by the Putnam County Department of Health (PCDOH) and the NYCDEP. Properly engineered and installed septic systems rarely affect drinking water wells. If the Town Engineer and/or the PCDOH determines that a neighboring well is affected by the project's septic

system, then the Applicant would be responsible for implementing the appropriate mitigation.

Comment 4.10-15 (Letter C-9 Joan Castiner, September 25, 2006): The way I understand it, the ejection pump is responsible for pumping sewage back up to the septic fields, which by the way are at the highest point not to mention close to neighboring wells. I have always understood that what goes up must come down. There seems to be no backup pump or emergency generator. What happens in a power outage or just a breakdown? Will Croton River (nearby stream) be compromised thereby polluting our lake all the down to New York City drinking water? How will this pump be monitored and maintained? Who will be responsible for this, Kent or Patterson or what agency? In a worse case scenario who will be accountable?

Response 4.10-15: *The proposed pump station includes an emergency generator to power the pump should a power outage occur. A typical pump station actually contains two pumps enabling alternating operation or stand alone operation should one of the pumps be in need of maintenance or repair. The property management company operating the site would be responsible for the maintenance and upkeep of the subsurface sanitary system.*

The Putnam County Department of Health (PCDOH) is the approving agency for the proposed project wells and septic system and they are responsible for ensuring that all of the proposed septic systems are designed to function properly and protect the public health. Furthermore, the PCDOH approves the design and construction of individual septic systems. The Health Department regulations establish a minimum separation distance of 100 feet between septic fields and water supply wells for health and safety reasons. The proposed plans comply with this regulation; the nearest private off-site well is greater than 200 feet away from the proposed septic system and the project wells are at least 1,000 feet from the system.

It is also noteworthy that private wells in the vicinity of the project are drilled into bedrock and are drawing water from fractures greater than 100 feet below the surface. The existing project wells are drilled to 705 feet and 805 feet. The leaching fields for septic systems are typically 18 to 30 inches below finished grade. According to studies cited in the Septic Systems Handbook (Kaplan, 1987), "1 to 3 feet of unsaturated soil below a leachlines clogging mat was adequate for complete bacteria removal". Given that shallow groundwater was determined to be approximately 24 feet below the ground surface in the proposed septic field, site conditions allow for the complete treatment of effluent prior to its reaching shallow groundwater.

It should be noted that with respect to pollution of the Middle Branch Croton River, the Applicant notes that much of the elevated phosphorous in Lake Carmel is generated internally from anoxic sediments and inflows from the many nearby septic systems. A study conducted of Lake Carmel in 1987 (Diagnostic Feasibility Study for Lake Carmel, April 23, 1987) concluded that the greatest pollutant sources in that lake are internal and septic system effluent.

Comment 4.10-16 (Letter C-9 Joan Castiner, September 25, 2006): As for septic fields, we know our septic system has infiltrators rather than fields as there is such a high clay content in this area. Can the ground absorb water and waste usage that is predicted? Is the

water usage predicted accurate? Have perk tests been done? Is the septic system to close to neighboring wells thereby compromising the quality of their drinking water?

Response 4.10-16: *Deep test holes and percolation test holes have been performed and witnessed by the Putnam County Department of Health and NYCDEP. Refer to Response 4.10-15.*

Comment 4.10-17 (Letter C-15 Suzannah C. Glidden, Chair Hands across the Border, September 12, 2006): And the sewage from this project that is to be treated underground: is that also a desirable addition to well water supply? We should be considering a Croton Watershed ban on phosphates, fertilizers and pesticides, not an increase in pollution to our drinking water.

Response 4.10-17: *Comment noted. See Responses 4.10-13 and 4.10-14 regarding the proposed wastewater disposal system and local wells. Extensive testing of the soils performed on the project site in the vicinity of the proposed SSTSs and witnessed by the NYSDEC and NYCDEP and a mounding analysis performed on the areas both indicate that all requirements for subsurface treatment of the watewater generated by the Proposed Action can be met and that no significant adverse impacts would result.*

The New York City Department of Environmental Protection (NYCDEP), which oversees the quality of drinking water resources in the New York City Watershed, requires the installation of subsurface sanitary systems as a means to adequately treat sewage effluent. Surface discharging wastewater treatment plants are not permitted to be constructed in the NYCDEP watershed.

It should also be noted that this project requires approval of the stormwater pollution prevention plan (SWPPP) by the NYCDEP, the Towns of Patterson and Kent, and the NYSDEC, and that these entities enforce standards that are designed to protect water quality. The project engineer has developed a project specific SWPPP that is included in Appendix F and shows that it reduces post development pollutant loads to pre-development levels. For additional information on the Stormwater Pollution Prevention Plan refer to Chapter 4.5 and Appendix F.

Comment 4.10-18 (Letter C-23 Daniel Kuchta, September 25, 2006): Table 4.10-1: The source for the solid waste generation calculations is more than 10 years old. Is this data still applicable? Is there a more recent source of data that can be used? Coffee shops today are much different than from the mid 1990's. In particular coffee shops are much more popular now and likely to generate more solid waste.

Response 4.10-18: *The Urban Land Institutes' Development Impact Handbook is an accepted, reliable and accurate source of data on impacts related to development that was last published in 1995. Since that time, the number of coffee shop employees has likely not changed significantly. However, if the number of employees at the coffee shop increased by 50 percent, that would result in an increase of 1.5 percent in the total amount of waste generated at the project site. As all waste would be managed per Health Department standards, transported from the site by a private contractor and disposed of at an off-site waste management facility. The only impact would be to the tenants in the form of increased cost.*

Comment 4.10-19 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.10-3 states that the project will consume about 1.5-3.OM Watts (13,000A @ 120v or 240v) and that "All utility lines on the site will be situated underground. But what about the transmission lines outside the project? Are these currently sufficient to supply this extra power or will additional power lines be brought in? If these additional power lines are above ground, what will be the impact to the environment?

Response 4.10-19: *As noted in the DEIS, New York State Electric and Gas has indicated that the current transmission network is sufficient to support the anticipated loads.*

Comment 4.10-20 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.10-3 states "Correspondence with NYSEG indicates that facilities are in place to provide electrical service to the project without any capacity problems." Where is a copy of this correspondence? It is not part of Appendix B.

Response 4.10-20: *Refer to Response 9.0-1.*

Comment 4.10-21 (Letter C-32 Anita Malpic, August 23, 2006): Where on Earth is the sewage going to go? In the lake?

Response 4.10-21: *Refer to Responses 4.10-13, 4.10-14 and 4.10-17. The wastewater from the project site will not reach Lake Carmel.*

Comment 4.10-22 (Letter C-33 Audrey Napierkowski, September 25, 2006): There is no discussion in this DEIS regarding any potential long term affects associated with depositing such large amounts of waste matter into the ground, depositing such amounts adjacent to drinking water supplies of residents, cumulative effects on adjacent properties, downhill properties and Lake Carmel over 5yrs./10yrs. or longer.

Response 4.10-22: *Aside from the potential for excessive clogging of the trenches (which is addressed by proper trench dosing and design with an additional safety provided by the reserve area), there is no detrimental cumulative effect due to long term use of subsurface treatment and disposal systems since the effluent is treated and does not accumulate and the additional water flow become part of the hydrologic cycle. See Response 4.10-21.*

Comment 4.10-23 (Letter C-33 Audrey Napierkowski, September 25, 2006): No studies were included in the DEIS, either supporting or negating the long term use of a subsurface sewage treatment system on such a large scale, and specifically for this site.

Response 4.10-23: *The impacts of the proposed "large scale" subsurface treatment and disposal system were evaluated by the hydrogeological study presented in Appendix E. See Responses 4.10-13 and 4.10-14.*

Comment 4.10-24 (Letter C-33 Audrey Napierkowski, September 25, 2006): Not addressed - what happens when the waste water treatment system has reached the end of its life and all of these buildings are in place to dispose of their waste? Septic systems, even very large ones, have finite existence!

Response 4.10-24: *Refer to Responses 4.10-13, 4.10-14 and 4.10-22.*

Comment 4.10-25 (Letter C-33 Audrey Napierkowski, September 25, 2006): No mention of the type of remediation that would be required should adjacent lands become contaminated and deemed unsuitable for habitation. Does the town have to pay to purchase the contaminated land from the owners or does the developer have to compensate the owners? The same question goes for downhill lands and Lake Carmel. Who pays for remediation of Lake Carmel should the need arise years from now - the towns or developer?

Response 4.10-25: *Refer to Responses 4.10-14 and 4.10-24 regarding septic issues.*

The NYSDEC and NYCDEP stormwater regulations require treatment of waters prior being discharged off-site. The development of the property would actually enhance the quality of Lake Carmel by reducing sedimentation (i.e. the highly eroded drainage channel on site) and nutrient loading (i.e. phosphorus reductions). Refer to Responses 4.5-2 and 4.5-3 and 4.5-4 for additional information on the off-site water quality improvements developed to address existing sediment and pollutant loading to Lake Carmel that would be incorporated into this project and funded, in part or in full, by the Applicant.

Comment 4.10-26 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): The septic system for the project will have to process up to 11,000 gallons of water per day. As Lake Carmel residents are acutely aware, the failure of a septic system can have terrible implications for the Lake as well as for the resident's wells. A septic system failure is not a necessarily a catastrophic event which leads to immediate repair. Rather, leakage can occur slowly over along period of time before a problem is identified and controlled or repaired. The potential for environmental damage from a septic system of this size is enormous and no mitigation plan for the for future failures is contained in the DEIS.

Response 4.10-26: *There is no concern for leakage as the subsurface treatment and disposal system is not a closed system. Rather it is designed to add treated effluent to the groundwater and designed to do so without causing breakout and to provide adequate travel time to allow treatment to occur naturally. Refer to Responses 4.10-14 and 4.10-24.*

Comment 4.10-27 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): According to the DEIS, Patterson Crossing will result in the creation of an additional 189 tons of waste per year of which 1/3 is expected to be recyclables. Page 4.10-3. It states that this waste will be shipped to Danbury, CT for disposal. However, on page 4.10-4 the DEIS states that solid waste will be shipped to Peekskill's RESCO. There seems to be some confusion as to how waste will actually be disposed. In either case, the production of this huge additional amount of waste in Putnam County is unnecessary.

Response 4.10-27: *Reference to transport of solid waste to Danbury CT was in error. Refuse would be transported to the Charles Point Resource Recovery (RESCO) facility in Peekskill. According to information provided by the Westchester County Department of Environmental Facilities, the RESCO facility has a permitted throughput capacity of 710,000 tons per year. In 2002, municipally generated solid waste delivered to the facility totaled 666,025 tons, with private carters and direct haul waste comprising the balance.*

Based on the modified plan with reduced square footage the volume of solid waste that would be generated at the retails center is approximately 180 tons per year.

Comment 4.10-28 (Letter C-42 Virginia Reeves , September 22, 2006):
Proposed Sewer pump on Kent Property?
Why is the sump pump located on Kent property?
When the pump fails will it become Kent's problem and expense to repair/ replace?
Why is there no back up pump if this fails in time or needs to be serviced?
Why is there no emergency generator in place to keep the pump operational?
What happens if there's a power outage?
Why would the DEP, DEC allow the pump station within 150 of our protected water shed area storm water basin #3.2?
If the pump station ever fails we can expect our drinking water to be compromised?

Response 4.10-28: *The system is proposed to be on private land and will be operated and maintained by the property management company for the site. Refer to Responses 4.10-14, 4.10-15 and 4.10-17.*

The Applicant notes that the proposed sewer pumps are located in the Town of Patterson, not the Town of Kent.

Comment 4.10-29 (Letter C-42 Virginia Reeves, September 22, 2006) and Comment 4.10-31 (): Lastly, you hired Stantec Consulting Services Inc., to review the DEIS. In their memo to the Patterson Planning Board dated June 29, 2006 they state: "4.0 Environmental Setting Potential Impacts and Mitigation 4.4 Groundwater Page 4.4-6 and 4.4-7: We have previously raised the issue of the design flow of 10,740 gpd in Table 4.4-3 bring substantially lower than the anticipated daily usage of 35,000 gpd based on NYSDEC standards and the potential maximum square footage. We continue to suggest that the documents be revised to discuss the following scenarios: A. Because there is always the chance for a change in tenant(s), in our view the estimated design hydraulic loading rates should be based on NYSDEC standards and the potential maximum sq. ft of retail floor area and the number of seats in the food service facility" **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing, September 13, 2006, David Reese]**.

Response 4.10-29: *Refer to Response 4.4-4.*

Comment 4.10-30 (Letter C-63 Marian H. Rose, Ph.D., President, CWCWC, September 13, 2006): The developer is proposing a highly questionable underground system for treating 11,000 gpd of raw sewage that could eventually, by the admission of his own consultant, reach the groundwater and affect the neighbors' properties. Simply because he owns the property, the developer has no right to put the neighbors' wells at risk.

Response 4.10-30: *All subsurface sanitary septic systems discharge wastewater to the surrounding soils. The wastewater is treated as it infiltrates through the soil before reaching the groundwater; this is the purpose for having separation distances regulated by the County and State. The subsurface treatment and disposal system designed to treat the effluent before it reaches open water courses, wetlands or neighboring wells (refer to our response to review comment No. 4.10-22 for more information on this). Thus, a properly design, constructed and operated system does not increase risk to "neighbor's wells". See Responses 4.10-14 and 4.10-17.*

Comment 4.10-31 (Comment number not used):

Comment 4.10-32 (Comment number not used):

Comment 4.10-33 (Public Hearing, September 13, 2006, David Clouser): We found that we disagreed with the flow rate that is being proposed in the Draft Environmental Impact Statement. I think that was mentioned earlier. We find this is about three times what is being portrayed as the flow from the retail center.

Response 4.10-33: *Refer to Responses 2.0-10, 4.4-1 and 4.4-4.*

Comment 4.10-34 (Public Hearing, September 13, 2006, David Clouser): We also find that the SDS is located on land where there is very high groundwater table to the point that the Draft Environmental Impact Statement proposes to bring in fill to keep the leachate from leaking out of the ground.

Response 4.10-34: *Please refer to the Response 4.10-6 for a discussion of shallow groundwater levels. The proposed filling is relatively limited both in thickness (about two feet) and in area (less than three acres). This filling is not due to a "very high groundwater table" but rather due to limited areas where it is prudent to increase the vertical separation between the groundwater and the bottom of the leaching trenches based on the proposed flow rates*.

Comment 4.10-35 (Public Hearing, September 13, 2006, David Clouser): The other is there's a lot of uncertainties that are omitted in the modeling and he asked whether the model was accurate enough to be able to determine what is going to happen in the leach field. His other item was there's a comment made in the Section 8 of the Draft Environmental Impact Statement that there is sufficient time for the leachate to be adequately treated, but there's more supporting information of what sufficient is.

Response 4.10-35: *The groundwater model, despite its limitations, is appropriate to predict mounding levels under proposed effluent flow rate conditions. A discussion relative to travel times is included in Section 7.70 of Appendix E.*

Comment 4.10-36 (Public Hearing, September 13, 2006, Audrey Napierkowski): In the draft it states that there's going to be approximately 11,000 gallons of wastewater that will be treated before released back into the environment through subsurface discharge. That comes out to a 3 and a half million gallons yearly of wastewater being put into the ground and then the statement ends there. What happens to that water years from now, decades from now? Once it's in the ground, where is it going.

Response 4.10-36: *Wastewater is generally treated within one to three feet of septic systems leaching lines, according to studies cited in the Septic Systems Handbook (Kaplan, 1987). This treated water slowly percolates through the soil, through the unconsolidated glacial till material (consisting of silt and sand at the Patterson Crossing site), into shallow groundwater aquifers and eventually portions of the discharge reach bedrock aquifers. The proposed septic system for the Patterson Crossing development is similar in design and function as all other residential and commercial septic systems in the County. The system will be designed and installed according to the requirements of the PCDOH.*

Please refer to our response to review comments No. 4.10-22 and 4.10-26.

Comment 4.10-37 Hearing, September 14, 2006,Christina Fatum): I'd like to know what the Department of Health says about this project and the size of the septic fields as I am looking at it here? Is there a contingency for the septic field? Does this also fall into twice the size planning that the Department of Health states is necessary?

Response 4.10-37: *The Putnam County Department of Health and NYCDEP will review and approve all of the components of the SSTS. A contingency plan is automatically in place for the septic fields as a PCDOH requirement, namely setting aside adequate area to install a 100% expansion ("replacement") SSTS area if the primary SSTS fails. The writer of the comment is under the impression that the SSTS is twice the size that the PCDOH requires. Setting aside sufficient area for the 100% expansion area does effectively double the area required for the SSTS.*

4.11 COMMUNITY SERVICES AND FACILITIES COMMENTS AND RESPONSES

Comment 4.11-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.11-2, the discussion of police protection in this section implies a much higher level of responsibility for the Town of Kent Police Department than the discussion on page 3-7. The discussion should quantify the expected types and numbers of police emergency responses at the retail center from the three police agencies. This is important because the DEIS provides no analysis of the actual costs to the Town of Kent to respond to emergencies at the site in relation to the small amount of real estate taxes that would be realized by the Town. Such an analysis should be based on empirical study of similarly situated retail centers in the same manner as the noise study considered noise generated at the retail development. **[Similar comments were found in the following letters: Letter C-4, Elena Bao (9.25.06); Letter C-49 Paul Spiegel (9.13.06); Letter C-23 Daniel Kutcha (9.25.06)]**

Response 4.11-1: *Due to the size and type of retail stores, the Highlands Shopping Center in Brewster, in the Town of Southeast, was used for comparison purposes. Police Protection in Town of Southeast is provided by both the Putnam County Sheriff's Department (PCSD) and the NYS Police Department. The Highlands Shopping Center contains several anchor businesses including a Kohl's department store, Linens-n-Things home goods store, Home Depot home improvement store, Michael's craft store, and Marshall's department store, as well as numerous secondary retail stores and restaurants. The Highlands Shopping Center is located on Independent Way.*

Information regarding calls to the Putnam County Emergency Operations Center (PCEOC) for police service for all locations along Independent Way is provided below. However, it should be noted that the Metro-North Railroad Southeast train station, located at the end of Independent Way (southeast of the shopping center), generates a high volume of traffic to the area and would likely also generate an associated volume of emergency calls to the PCEOC. As noted, the Highlands Shopping Center was used to analyze the potential impacts of the proposed development. However, due to the location of the Southeast Train Station in such close proximity of the Highlands Shopping Center, the demonstration of potential impacts of the Proposed Action would be that of a worst case scenario.

Table 4.11-1 911 Emergency Calls for Police Services Independent Way, 2006	
Type of Call for Service	***Number of Calls***
Assistance to other police or ambulance units or related	*37*
Non-Emergency	*30*
Auto Accident with Property Damage	*9*
Auto Accident with Injury	*4*
Harassment	*3*
Suspicious Activity/Persons	*3*
Public Assistance	*2*
Dispute/Disturbance	*2*
Disorderly/Intoxicated Persons	*2*
Response to Alarm	*2*
Motor Vehicle Lockout	*1*
Disabled Vehicle	*1*
Possession of Stolen Property	*1*
Theft of Services	*1*
Traffic Violations	*1*
Fire Alarm	*1*
TOTAL	***100***
Source: Putnam County Emergency Operations (911) Center.	

Emergency calls to the PCEOC for Independent Way, which would include calls originating from other locations along Independent Way including the Metro-North train station, totaled 100 calls during 2006. Nearly one third of these calls were identified as non-emergency. It can be conservatively assumed that less than 70 calls for service per year requiring emergency response would be generated by the Patterson Crossing Retail Center, of which only those originating from the development in the Town of Kent would be responded to by the Town of Kent Police Department. This number would likely be limited further by the fact that a Putnam County Sheriff's substation is proposed in the 2,000 square foot building to be built in the Town of Kent. Alternately, this use could be sited in the building that would contain the management, office and meeting space in the Town of Patterson. Based on input from the Putnam County Sheriff at a meeting with the Applicant, the substation floor plan has been developed and provided to the Sheriff for review (see the Applicant's letter to the Putnam County Office of the Sheriff dated February 4, 2008 in Appendix A of this FEIS). The Sheriff also noted that he will man the substation as appropriate (refer to the letter from the Putnam County Office of the Sheriff dated February 14, 2008 in Appendix A of this FEIS).

The potential additional demand for police services would be distributed between responders including the County Sheriff's Department, the New York State Police,

and the Town of Kent Police (only in the Town of Kent). Actual demand for police protections services would likely be lower than the conservative estimate of additional demand described above for most periods during the year. Only during peak shopping times would all of the proposed parking spaces be expected to be occupied, which the above analysis assumes. Based on the conservative estimate, demand for police services equating to an additional officer and no additional police vehicles would be expected. Since there are three departments that would absorb this additional demand, no one Department would be expected to experience an increase in calls or demand for services requiring new staff or facilities. Based on salary information available for MTA Police, which is a state police department the starting salary of a police officer is approximately $33,000 (see http://www.mta.info/mta/employment/mtapd-info.htm). The proposed project is expected to provide between $7 and $8.4 million in future New York State sales taxes, $6.2 to $7.4 million in County sales taxes, $7,403 in Town of Kent property taxes, and $56,318 in County property taxes, all of which would be available to fund additional police services as a result of the project.

The distribution of police costs between the various departments involved in responding to the project site to some degree cannot be determined at this time. Costs associated with Patterson Crossing Retail Center are not expected to impact the State or County Police Departments. It is acknowledged that the Town of Kent Police Department would incur costs from the Patterson Crossing Retail Center, however, in that their jurisdiction would be limited to calls originating from the development in the Town of Kent, these impacts would not be significant.

The Applicant has incorporated a Putnam County Sheriff's Department Police Substation in the modified plan. This substation would be located on site in the 2,000 square foot Building H proposed on the north end of the development in the Town of Kent or, alternately, within the building that would contain the management, office and meeting space. It is the Applicant's opinion that with the limited development (1,700 square feet of retail and a 300 square foot County Police Substation within same building) proposed in the Town of Kent, it is reasonable to expect that the Proposed Action will not adversely impact the Kent Police Department.

Comment 4.11-2 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.11-4, the agreement between the applicant and the Patterson Fire Department whereby the Fire Department would assume responsibility for responding to all emergency calls for the entire retail center should be incorporated into the conditions of final site plan approval. **[Similar comments were found in the following letter: Letter C-4, Peter Riebold (9.22.06)]**

Response 4.11-2: *Comment noted. Appendix B of the DEIS includes a letter from the Patterson Fire Department documenting and advising the Applicant of the Department's intent to be the responding agency for emergencies on the project site.*

Additionally, there is a county-wide Mutual Aid agreement in place in Putnam County[1], which is a plan to allow assistance between all County Fire Departments. The Officer-in-Charge of the fire has the capability to request assistance whenever it is deemed necessary.

[1] Phone call with Adam Stiebeling, Deputy Commissioner of Putnam County Bureau of Emergency Services, on February 22, 2005.

Comment 4.11-3 (Letter C-1 Carol F. Arnold, September 21, 2006): The use of Echo Road as an emergency road is outrageous! This is a narrow, country road and is unsuitable and inadequate. **[Similar comments were found in the following letter: Letter C-42 Virginia M. Reeves (9.22.06)]**

Response 4.11-3: *The modified site plan incorporates an emergency access drive located at a point more central to the site and west of Building B. The new location, off of Concord Road near its intersection with Woodstock Road, is closer to NYS Route 311 thereby reducing potential response times. It also reduces concerns with the grading that would have been required with the emergency access in the original location. The relocated emergency access road would allow for enhanced emergency traffic circulation through the local road network should an emergency arise.*

Any problems or obstructions emergency service vehicles might encounter, including parked vehicles on local roads, should be resolved regardless of this Project for the safety of local residents. The current width of the local roads should accommodate emergency vehicles traveling to residences or to the project site. There is no reason to believe these roads would be overwhelmed by emergency vehicles traveling to the project site any more than vehicles responding to an emergency at a local residence.

Emergency access from Fair Street into the project site was investigated. Although frontage on this road exists, the change in elevation from the road to the developable portion of the site exceeds 40 percent in areas. These grades severely limit the construction of a viable access drive into the site. Steep slopes in this area also prohibit the siting of the stormwater features required to treat the runoff from the access on the project site. Off-site installation of stormwater management facilities is not possible due to the location of prior development in the area and the limited distance to a viable point of discharge for the treated stormwater. Finally, the New York State Electric and Gas right of way, which runs across the project site in this area, can not be disturbed. This right of way separates the proposed development from the roadway.

Comment 4.11-4 (Letter C-9 Joan Castiner, September 25, 2006): The one entrance and exit for the public will be on Kent lands. The one emergency exit will be on a residential road in the Town of Kent. If there is an accident of some kind, could the Town of Kent be held responsible for law suits or expensive repairs to correct any situation that might arise? Without the use of Kent lands, this project could not be built. As our emergency services will be first responder, have our police and fire departments been asked to review these plans to see if it is easy for them to access and leave the mall in the event there is an emergency? What about mass evacuation? Could our police and fire departments handle the local citizens of the Lake Carmel Park District as well? Or will our local citizens be at risk? Is the necessary fire fighting apparatus in place? Is there enough fire hydrants? **[Similar comments expressed by the following members of the public during DEIS public hearings: Public Hearing Comments: Harry Hitner (comment pertaining to liability, 9.13.06);**

Response 4.11-4: *Municipalities are not liable for vehicular accidents unless an employee of the municipality is involved in the accident during the course of their working shift. As noted and documented in the DEIS, the emergency responders for this Project have been contacted, and note the ability to handle emergency situations*

that may arise with the operation of this Project (refer to Appendix B of the DEIS). In addition the Town of Kent Planning Board is an Involved Agency as part of the SEQRA review process and has the opportunity to review and comment on the Proposed Action.

The circumstances of the hypothetical mass evacuation and the potential risk it presents to local residents is overly speculative and falls outside the Scope adopted by the Lead Agency for this DEIS. That said, should an emergency mass evacuation be required, the primary route would be the main access drive. During a mass evacuation, the ingress side of the main access may also be used as a travel lane to allow vehicles to exit the site. The emergency access would be used if the main access drive were blocked. Traffic exiting the site through the emergency access road would be subject to the same conditions as residents residing on Concord Road and the connecting road network.

As noted on page 4.11-6 of the DEIS, fire hydrants will be installed according to Town standards.

Comment 4.11-5 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.11-1, second paragraph under police protection: "A minimum of one patrol is assigned to the Patterson area 24 hours per day by the Sheriff's department." This is a misleading statement and should be clarified. Although there may be at least one deputy actually in Patterson at any given time and given the sheriff's commitment to the Town of Southeast, it is most likely that there is not a deputy in Patterson most of the time. **[Similar comments were found in the following letter: Letter C-44, Peter Riebold (9.22.06)**]

Response 4.11-5: *According to Captain Lindert of the Putnam County Sheriff's Department (PCSD), the Department has at least one car assigned to the Town of Patterson area and any response to the project site would be from within the Town of Patterson. During overnight hours, when PCSD coverage is reduced, the retail center would not be open for business, generally reducing the need for emergency responses.*

Comment 4.11-6 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.11-1: There is a very detailed description of the Kent Police department but is the Kent Police department permitted to respond to incidents in Patterson? Will Patterson have to set up a contract with the Kent Police department to pay for this coverage? **[Similar comments were found in the following letter: Letter C-4, Peter Riebold (9.22.06)**]

Response 4.11-6: *As documented in the DEIS, within the Town of Patterson, the "closest car" concept is utilized in response to 911 emergency calls; either the Putnam County Sheriff's patrol unit, the New York State Police patrol unit or the Kent Patrol Unit would be dispatched (Also refer to the letter from Putnam County Sheriff's Office located in Appendix B of the DEIS). This approach will apply to all police calls originating at the Patterson Crossing Retail Center. The Kent Police Department would respond to emergency 911 calls placed from the project site should they have a patrol car closer than the Putnam County Sheriffs Department or the State Police. Refer to Response 4.11-1 for text on offsetting costs to the Kent Police Department.*

The Kent Police Department does not have authority to respond to traffic infractions and other types of violations outside of their jurisdiction; primary police response will

be from the Putnam County Sheriff or State Police unless the Town of Kent adopts a policy which allows the Kent Police Department to respond to calls from the Patterson Crossing Retail Center, or is requested to respond as a matter of mutual aid.

Comment 4.11-7 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.11-2 mentions that they do not anticipate a significant impact to services from crime at the project. This is incredulous! A simple internet search for +costco +crime returns numerous incidents of crime. Below are 7 of these crime incidents with links to their source. The local Sheriff and Kent police chief may have underestimated the crime that mall projects bring to an area. It is rare to visit the Jefferson Valley Mall without seeing a Yorktown police vehicle parked outside. The Woodbury Commons Outlet mall in nearby Orange County recently opened a police substation at the mall to handle all the crime incidents. The impact from crime needs a closer review. **[Similar comments were found in the following letter: Letter C-49 Paul Spiegel (9.13.06)]**

Response 4.11-7: *As shown above in Table 4.11-1, there were only four responses by the Sheriffs Department to the Highlands Shopping Center in 2006 for crime-related incidents (larceny, theft, disturbance or suspicious activity). The majority of the responses were related to automatic alarm systems and police assistance.*

Comment 4.11-8 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.11-2, sixth paragraph discusses the need for an 8-foot high fence which will require a variance. Recently a business in Patterson, Dunkin Donuts, applied 3 times for a variance for an 8 foot fence. The last time was case #01-05. All 3 times, this variance was denied. Will the Town of Patterson face a lawsuit from Dunkin Donuts if it grants a fence height variance to Patterson Crossing? The DEIS should include a discussion of the utility of a 6 foot high fence that conforms to code.

Response 4.11-8: *In response to comments regarding the fence along the western property line of the project site, the Applicant has reduced its height to six feet. The fence to be installed would be manufactured to reduce the propagation of noise into the residential neighborhood to the west of the Proposed Action.*

Comment 4.11-9 (Letter C-23 Daniel Kuchta, September 25, 2006): Section 4.11-2 on Fire protection. The bulk of the information provided in this section comes from a private phone call with the Patterson Fire Chief. It is not possible to know what was said during that phone and to be able to verify the accuracy of the information provided. The developer should obtain a written document from the Patterson Fire Chief. **[Similar comments were found in the following letter: Letter C-4, Peter Riebold (9.22.06)]**

Response 4.11-9: *Appendix B of the DEIS includes a letter from the Patterson Fire Department documenting and advising the Applicant of the Department's intent to be the responding agency for emergencies on the project site. The letter provides a synopsis of previous discussions with the Applicant and asserts the requirement for the Project to be in compliance with NYS Building and Fire Codes. Additionally, the fire department asserts their ability and willingness to provide the needed fire protection in their correspondence.*

Comment 4.11-10 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.11-2, 5th paragraph: The proposed 12 foot wide emergency access road seems too narrow. It would

not permit two opposing vehicles to pass. i.e., an ambulance that it leaving and additional equipment that are arriving would be in each other's way. Although the emergency access road is mentioned in a few places in the DEIS there are no details provided in the text. It is not revealed that this will be a gravel, not a paved road, except in fine print on a few of the figures. What is the length of this road? It appears to be about 1,000; long. Were the Fire Chiefs and local law enforcement made aware that the emergency access road is only 12 feet wide, unpaved and 1,000 feet long? **[Similar comments were found in the following letter: Letter C-42 Virginia M. Reeves (9.22.06)]**

Response 4.11-10: *The primary purpose of the emergency access is to provide for an alternative entrance for emergency vehicles. Should this access be needed for ingress and egress for emergency vehicles, traffic flow would be coordinated and handled by the agency in charge of the emergency scene. As noted and documented in the DEIS the emergency responders for this Project have been contacted, have been able to, and will continue to participate in the review and approval process of the Proposed Action.*

The approximately 225 foot emergency access road is proposed to connect the site access road of the Patterson Crossing Retail Center, which runs north to south along the western portion of the property, to Concord Road. The emergency access road is located west of proposed Building B and associated parking lot. The access road would be gravel, gated at both ends, and measure 12 feet wide.

Refer to Response 4.11-3 for additional details on the relocated emergency access road.

Comment 4.11-11 (Letter C-23 Daniel Kuchta, September 25, 2006): Does there need to be a lighting plan for the emergency access road and what is it?

Response 4.11-11: *As the use for the emergency access road is anticipated to be minimal, with no normal use by the public, lighting would not be required.*

A low level lighting system or one activated by a sensor along the emergency access road was considered by the Applicant. However it is not planned as use of such access will be rare. All vehicles using the road will have appropriate lighting. Responders will likely have access to temporary lighting. Lighting the emergency access could negatively impact the nearby residents.

Comment 4.11-12 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.11-5, 6th paragraph: "no new equipment would be required." How can this be substantiated? The Environmental Protection Agency sued Costco in 2003 on behalf of a fire department after Costco failed to disclose the substantial quantities of hazardous chemicals such as anhydrous ammonia, sulfuric acid and lead that it stored in its warehouse. The fire department was awarded $42,000 and Costco was fined $10,000. Were the fire chiefs aware of all the chemicals that may be in use or stored at the Patterson Crossing project? The DEIS seems to address issues specifically related to fire but not to hazardous material incidents. Do the local fire departments have the necessary hazardous materials equipment? The details of the settlement can be found at the EPA website. (see letter C-23) **[Similar comments were found in the following letter: Letter C-4, Peter Riebold (9.22.06);]**

Response 4.11-12: *Spill response plans are developed by emergency service agencies such as the Local Fire Department and the County Bureau of Emergency Services. The local department under the Mutual Aid agreement with the County Bureau of Emergency Services and the NYSDEC Spills Response Unit are capable of handling spill incidents associated with the type of retail uses anticipated with this Project.*

Comment 4.11-13 (Letter C-23 Daniel Kuchta, September 25, 2006): The scoping document section K.3.c.2 calls for the provisions for air lifting trauma patients from the site. The DEIS response is "Should the air lifting of trauma patients be required at the Patterson Crossing Retail Center, space in one of the parking areas could be utilized." Appendix L-1 shows that all the parking areas are sprinkled with 18' high lighting poles. How can an air lifting vehicle land in a parking lot with all these lighting poles? Which area(s) in particular are actually suitable for air lifting?

Response 4.11-13: *The DEIS notes that a parking area could be utilized. Landing zones within a Fire District are established by the emergency services agencies and involve a number of requirements to be met. Should there be no established landing zone on the Property, any emergency requiring an air-lift would involve the determination of a suitable location on- or off-site by the incident commander. Please note that airlift helicopters are capable of landing in areas with limited space. The layout of the parking lots should permit a helicopter to land in multiple locations depending on the location of the emergency and the use of the parking lot.*

Comment 4.11-14 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.11-5, 6th paragraph: An estimate of 60,000 gallons of water are needed for fire protection. What plans are in place to guarantee that the proposed 270,000 gallon tank will always have a minimum of 60,000 gallons of water in it? Will this 270,000 gallon water tank be used for any non-fire purposes?

Response 4.11-14: *NYS Building and Fire Codes would pertain to the water storage tank requirements for fire protection and would be enforceable by the Town Building Inspector. The water supply system would include redundant pumps with level alarms to ensure that the water levels in the storage tanks remain within an acceptable range. These storage tanks would be dedicated to service all fire-fighting functions on the project site.*

Refer to Response 2.3-7 for additional information pertaining to the water storage tanks.

Comment 4.11-15 (Letter C-42 Virginia M. Reeves, September 22, 2006): Grading and Utilities Plan: On this plan to the northwest corner of Building #1 Coffee Shop, I noticed there's a Fire Hydrant. I question why it starts on the Kent property side? However, through the entire site I could not find another single Fire Hydrant? How is this possible? What does this say about the applicant's response to health and safety of the community? **[Similar comments were found in the following letter: Letter C-42 Virginia M. Reeves (9.22.06)]**

Response 4.11-15: *Fire hydrants are located and would be installed in accordance with Town code requirements. Refer to the Plan Set attached to this FEIS for a depiction of the proposed fire hydrants on the project site.*

Comment 4.11-16 (Letter C-42 Virginia M. Reeves, September 22, 2006): We live in a different world? How could the omission of an emergency exit been such an oversight? Once the developer comes up with some emergency scheme, I would suggest it be reviewed and approved by the Kent Volunteer Fire Department as first responders.

Response 4.11-16: *An emergency access road between Echo Road and the internal roadway at the southwest corner of the proposed Wholesale Warehouse was included in the project plan submitted as part of the DEIS.*

This emergency access road has been relocated to access Concord Road near its intersection with Woodstock Road. Refer to Responses 4.11-3 and 4.11-11 above and the attached Plan Set for details on the relocated emergency access road.

Comment 4.11-17 (Letter C-44 Peter Riebold, September 22, 2006): The term "County Police" is incorrect. This should state "Putnam County Sheriff.

Response 4.11-17: *Comment noted.*

Comment 4.11-18 (Letter C-44 Peter Riebold, September 22, 2006): The paragraph also notes that police services provided by Putnam County or New York State would have "no direct cost on the Town of Patterson". Taxpayers pay taxes to the county as well as the state. These police services are not free.

Response 4.11-18: *The Proposed Action presented in the DEIS and as modified in this FEIS would not result in significant adverse impacts to State and County police services and police protection in the area according to Chief Smith of the Putnam County Sheriff Department.*

State and County tax revenues generated by the retail center would be available to offset any costs related to responding to calls at the project site.

Refer to Responses 4.11-1 and 4.11-6 regarding the jurisdiction of the Town Kent Police Department at the Patterson Crossing Retail Center and offsetting potential costs to the Department.

Comment 4.11-19 (Letter C-44 Peter Riebold, September 22, 2006): It must be noted that the Kent Police will not respond to calls coming from the shopping center. The stores and most of the access roads will be located in the Town of Patterson. Typical response time will never be 5 minutes! I have personally waited hours for a Sheriff's Deputy to respond to a call I've made. 911 emergency calls are answered by the "closest car" method, but never in 5 minutes unless a car just happens to be located nearby and is available to handle the call. Police coverage in Patterson, especially during evenings and overnight hours, is spotty. Appendix B of the DEIS includes correspondence from Putnam Sheriff Donald B. Smith, which does not state any response time statistic. There is no correspondence from the New York State Police. **[Similar comments were found in the following letter: Letter C-4, Peter Riebold (9.22.06)]**

Response 4.11-19: *Emergency 911 calls would receive a response from the nearest available State Police or Putnam County Sheriff's Department unit whatever the origin (Town of Patterson or Town of Kent) of the call. The Kent Police Department's*

jurisdiction and therefore need to respond to calls would be limited to the area of the proposed development that falls within the Town of Kent.

As stated by the Town of Kent Police Department, typical response times would be under five minutes. Non-emergency calls are responded to in order of priority of current call-load by the appropriate agency and would result in varying response times.

Although correspondence was sent to the NY State Police Department requesting information, no response was received.

Refer to Response 4.11-5 for additional information on the Putnam County Police Department.

Comment 4.11-20 (Letter C-44 Peter Riebold, September 22, 2006): "A minimum of *one* patrol is assigned to the Patterson *area*". Coverage during evening and overnight hours is spotty. Coverage is actually zero if the lone car is busy with a call. The Sheriff assigns cars to an *area*, not a town. Any patrol can be assigned to another area if there is a need, which means that there may be no units within Patterson at certain times. Shopping centers breed nuisance complaints, such as shoplifting, parking lot vehicular accidents, unruly teenagers, and thefts by employees. Problems of this type are regularly reported in the *Journal News* and are regular occurrences in other regional shopping centers, such as the Cortlandt Town Center in Mohegan Lake and the Jefferson Valley Mall in Yorktown.

Response 4.11-20: *Refer to Responses 4.11-1, 4.11-5, and 4.11-19. It is anticipated that the property management company would contract for private security service should the need arise.*

Comment 4.11-21 (Letter C-44 Peter Riebold, September 22, 2006): "The current staffing of the Sheriff's Department falls below this standard" [of 2 police officers per population of 1000]. The Sheriff's Department is already shorthanded and staffs overnight hours using officers working overtime. Putnam County is facing budgetary problems and will not add officers to the Department.

Response 4.11-21: *The Proposed Action generates tax revenues which would be available to expand the Police protection on a State, County and Town level should decision-makers deem such expansion as necessary. Refer to Responses 4.11-1 and 4.11-18 for additional information on offsetting potential costs.*

Comment 4.11-22 (Letter C-44 Peter Riebold, September 22, 2006): Patterson has barely enough patrols currently. It is absurd to think that Patterson Crossing will not overburden the existing patrol system. In fact, Sheriff Donald B. Smith makes this point in a letter to Ms. Janell Herring of Tim Miller Associates, engineers for the developer.

Response 4.11-22: *Sheriff Donald B. Smith notes in the referred to letter that this project would not result in significant impacts, however he notes the collective impact of many new developments would create a need for more law enforcement resources in future years. Refer to Responses 4.11-1 and 4.11-19 for additional information on police services.*

Comment 4.11-23 (Letter C-49, Paul Spiegel, September 13, 2006): How do developments such as these affect crime rates when they are built so close to residential communities? How do they affect our insurance rates? What other costs will be needed to adequately protect our homes from outsiders who wish us harm?

Response 4.11-23: *The Project is not anticipated to have any impacts on insurance rates of nearby residential homes, since these rates are typically determined by factors such as type of construction and condition of the home, safety factors (alarm systems and fire sprinklers, nearest fire hydrant), flood or earthquake zones, type of coverage and deductible.*

Refer to Response 4.11-1 for information on the police calls of a similar retail development.

Comment 4.11-24 (Letter C-49, Paul Spiegel, September 13, 2006): Patterson does not even have a police department. The DEIS states that increased sales will "help" pay for needed services without considering the potential for increased needs. Where is the cost analysis for extra protection? How many additional police will be required and at who's cost. How much of our resources will need to be spent on controlling crime which would otherwise not exist? Can the supposed revenues from sales tax cover the added cost of police AND all other needs that arise like emergency costs, capital improvements and maintenance?

Response 4.11-24: *A cost analysis for projected increase in police protection is beyond the Scope of the adopted DEIS. Information regarding the potential impacts of the Proposed Action on associated Police Departments as well as information on the level of crime anticipated to result from the retail center are included in Response 4.11-1 and 4.11-6. Refer also to Responses 4.11-18 and 4.11-21 for additional information on the options for offsetting potential costs.*

As indicated in the DEIS, the community service providers were contacted to determine potential impacts of the proposed project on their agency.

The retail center will be served by on-site wells and septic therefore no capital improvements to the local water supply, water delivery or wastewater systems would result from its development. In addition, as part of the Proposed Action, traffic and stormwater management improvements beyond those required to offset impacts related to the project would be funded and implemented, in whole or in part, by the Applicant. As a result of the Applicant's investments, the design of the project and the tax revenues to be generated, it is expected that all capital improvement costs to the State, County and Towns that might result from the Proposed Action would be fully offset.

Comment 4.11-25 (Letter C-60, Joe Ruocco, Undated): I would like to start with crime and safety. Long Island had over 60 home invasion robberies last year, all near exit and entrance ramps, and more than half near shopping complexes like this one. It's only a matter of time before people looking for short-cuts to avoid traffic find your block. Who is going to pay for first responders to the location of to the traffic accidents on Route 311? If Kent is the first responder, is the Town of Patterson willing to reimburse the Town of Kent? After all, the residents of Kent pay taxes for a police department which Patterson does not have.

Response 4.11-25: *As stated in the DEIS, no repayment of funds for those services provided in other Towns is typically forthcoming unless a prior agreement is reached. The Project will generate tax revenues to the emergency service providers. Refer to Response 4.11-1 for information on offsetting costs associated with the Proposed Action.*

Comment 4.11-26 (Public Hearing, September 13, 2006, Erica Kelly): I'd like to ask what plan is also in place for the additional police and fire protection as well as ambulance services that will be needed when the project is completed? Which town will absorb the costs?

Response 4.11-26: *As indicated in the DEIS, the emergency service providers were contacted to determine the impact of the Project on their agency. Both the Patterson Fire Department and the Putnam County Sheriff's Department indicated the Project will not result in significant impacts to the department. Additionally, the Project will generate tax revenues to the emergency service providers, which can be used for increasing staff size or purchasing equipment in the future, as necessary. Determining the need and hiring of new staff personnel is a task for the respective Departments. Refer to Response 4.11-1 for information on anticipated emergency service call volumes. As well as Responses Refer to Responses 4.11-1 and 4.11-18 for additional information on offsetting potential costs. Neither Town will need to "absorb the costs".*

Comment 4.11-27 (Public Hearing, September 13, 2006, Charles Sisto): No crime studies have been included in the Draft Environmental Impact Statement. How does development such as this affect crime rates that are built so close to residential communities and how do they affect our insurance rates? What other cost will be added to protect our homes from outsiders that mean us harm?

Response 4.11-27: *Please refer to Response 4.11-1 for information pertaining to the Putnam County Sheriff's Department responses for a comparable retail development, by response type. The Applicant has found no correlation between residential insurance rates and proximity to shopping centers. Given the 40,000 shopping centers in the United States, if such a trend existed, it would be identifiable.*

The Applicant is proposing fencing along the residential border which should provide security between the two uses. Also, there is no direct access between these uses further minimizing potential interactions.

Comment 4.11-28 (Elena Bao, Letter #C-4, September 25, 2006): The "closest car" concept of response will apply to all police calls generated by Patterson Crossing. The Town of Kent Police Department is located 1.5 miles from the project site, making it several times closer to the project site than either the state and county police facilities. As such, common sense tells us that the Kent Police Department will bear the greatest response burden for handling police calls generated by the Patterson Crossing project. The Applicant grossly understates the impact this project will have on the Kent Police Department from a resource and cost standpoint in this DEIS. This is unacceptable and must be corrected in the DEIS. Further, a thorough cost analysis must be performed by the Applicant to detail the project's impact on the Kent Police Department to enable an accurate assessment of police impacts

from a resource and cost perspective. **[Similar comments were found in the following letter: Letter C-4, Elena Bao (9.25.06)]**

Response 4.11-28: *The proximity of the Kent Police Department to the site of the proposed Patterson Crossing Retail Center does not necessarily mean that the Kent Police patrol cars will be the "closest car", since the Department patrols the entire Town of Kent which extends nearly ten miles east of the project site. Furthermore, the Town of Kent Police Department's jurisdiction would extend only to the areas that fall within the Town's borders; calls for police service from the Town of Patterson side of the development would not require response by Kent police.*

Refer to Response 4.11-1 and 4.11-6 for additional information on anticipated calls and potential impacts to the responsible police departments.

4.12 SOCIOECONOMIC COMMENTS AND RESPONSES

Comment 4.12-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.12-4, the assessment of impacts is unsupported by actual quantitative analysis of the impact of development on the community character of such places as Lake Carmel. The discussion acknowledges the potential for displacement of businesses in Lake Carmel as a result of the construction of a regional shopping mall, but provides no meaningful analysis of this effect. As noted by the New York State Court of Appeals, "*the impact that a project may have on population patterns or existing community character, with or without a separate impact on the physical environment, is a relevant concern in an environmental analysis since the statute includes theses concerns as elements of the environment."*[1] The potential displacement of local residents and businesses resulting from significant changes to existing land use patterns as a result of the project must be examined in a way that quantifies the potential severity of such impacts. **[Similar comments were found in the following letters: Letter C-14 - Sybill Gilbert (9.24.06); Letter C-44 - Peter Riebold (9.22.06); Letter C-51 Judith Terlizzi (9.14.06), Letter C-35, Rich Osmers (Owner of Oscom Communications (9.10.06)]**

Response 4.12-1: *The DEIS examines the effects of the proposed project on existing area businesses, and the population and character of the surrounding community. No significant potential for displacement of residents was identified in the DEIS. Page 4.12-6 of the DEIS states the following with respect to the potential for secondary impacts on existing businesses and the potential for effects on community character:*

> *". . . .the introduction of over 400,000 square feet of retail space may draw some shopping dollars away from the surrounding downtown areas for some existing retailers that have a high degree of overlap with the goods and services to be provided at Patterson Crosssing Retail Center. The increase in competition for a store like Dill's Best Home Center, which is located in Lake Carmel, Pawling and Brewster, could potentially lead to secondary displacement should these establishments no longer remain viable from a competitive standpoint. Although unlikely, should secondary displacement occur, the vacated site would most likely be reused by another commercial establishment allowed pursuant to zoning. This transition of businesses would not result in significant long term economic impacts to either the Lake Carmel or Route 22 commercial centers or in blighting of the immediate neighborhood, as land values remain high. Should these establishments be displaced, it is unlikely that their sites would remain vacant in the long term, given their size and prominent locations along main roadways.*"

The Applicant notes that there are recent examples of vacancies in the existing commercial areas studied for the DEIS that suggest there are factors other than competition from the proposed project that affect business owner decisions related to store closures. Store turnover is not uncommon in commercial districts. Dill's Best hardware store, located on NYS Route 52, closed in the Fall of 2006, unrelated to competition from the proposed project. The Lake Carmel Hardware Store, also on NYS Route 52 in the Lake Carmel Hamlet, has been closed for a longer period of time. NYS Route 52 has a number of other commercial sites and stores that have been vacant for extended periods, including a former gas station, and a former commercial baseball batting cage operator. Long periods of vacancy of some of the

corridor's stores could be indication of constraints related to this corridor, such as its older storefront conditions and expansion limitations due to surrounding wetlands. Other downtown areas studied have also seen commercial vacancies in the last year, some of which have been reoccupied, such as a storefront used by a sporting goods store on Route 22 in Patterson near Thunder Ridge that closed and has been reoccupied by another business. Examples of this type indicate that business turnover is an ongoing process along nearby commercial corridors and downtown areas, whether through competition from other stores, national retail trends, tenant circumstances, or site-specific issues. While overall local commercial real estate market conditions have remained stable despite some business turnover that has occurred irrespective of competition from the proposed project, some storefronts and sites along the NYS Route 52 corridor have experienced longer vacancies.

While store turnover and vacancies have occurred in the Hudson Valley as a result of the aforementioned factors, there is little documented evidence that "blighting" has occurred.

Local examples of recent store closures unrelated to the Patterson Crossing Retail Center project provide some indication of the reasons, and magnitude of economic impact, associated with local business closures, according to the Applicant. With the example of the now-vacant Lake Carmel Hardware Store, which is in a high visibility location on NYS Route 52, the length of vacancy may be related to the condition or age of the property (built in 1945 according to profile of site found at Loopnet.com[1]), factors related to the small size of the site (0.60 acres), or availability of parking. This storefront was vacated well before the appearance of potential competition from the Patterson Crossing Retail Center. While the DEIS did not indicate that the proposed project would be likely to result in the closure of this or any other specific business, using this store as a general example of the economic impact of the unrelated closure of a local business indicates the loss of local purchases totaling over $500,000 a year (4,981 square feet of retail space[2], with estimated $111.39 in sales per square foot, based on national median sales data for Neighborhood Shopping Center Hardware Stores[3]). Any changes in local property tax assessments related to the vacant status of this store would be determined by the Town's Tax Assessor. Other economic effects of this business closure are the loss of local employment, potentially entailing five or more full time employees, and the loss of local spin-off retail and service establishment sales associated with those employees, such as food and gas purchases. In the case of the Lake Carmel Hardware Store combined with the closure of Dill's Best, conditions along this stretch of NYS Route 52 have not changed significantly other than specifically related to these individual vacancies. If the Lake Carmel Hardware Store closure were used as an example for evaluating effects of potential minor secondary displacement associated with the Patterson Crossing Retail Center project, it does not appear that such changes would have a significant overall effect on the character of the Town's commercial areas. Rather, the effects are mainly limited to the appearance of the vacant storefront, minor loss of

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[1] See *http://www.loopnet.com/xNet/MainSite/Listing/Profile/ProfileSE.aspx?LID=14759309&linkcode=10850&sourcecode=1lww2t006a00001)*

[2] ibid.

[3] Newspaper Association of America website, 2007 (see http://www.naa.org/Advertising-and-Marketing/Trends-and-Numbers/Report-Sales-Per-Square-Foot-(2001).aspx#neighbor).

employment, loss of State, County and MTA sales tax totaling less than $50,000, and a decrease in local economic activity amounting to a very small fraction of this commercial district and the Town.

In terms of changes in community character as a result of the Lake Carmel Hardware Store vacancy example, FEIS Figure 4.12-1 shows the condition of NYS Route 52 in the vicinity of this vacant storefront. The adjacent businesses have remained viable and the vacant hardware store has not had a blighting effect on the adjacent and nearby commercial uses. The Dill's Best store that was vacated in 2006 also does not appear to have had a blighting effect on the NYS Route 52 corridor. A new salon (Hair Palace 2) opened across from the former Dill's Best Store in 2007, and the vacant former Dill's Best building has not presented a blighting image for its surrounding uses.

While the Patterson Crossing Retail Center project is not expected to result in similar closures due to secondary economic effects, these examples of vacancies that have occurred without the proposed project demonstrate that effects from limited store closures on community character and the viability of these commercial areas would not be significant, should limited displacement occur as a result of the project. Such anecdotal evidence of local real estate trends, and fiscal and employment impacts described above, support the findings of the DEIS described above and in Chapter 4.12 of the DEIS.

Comment 4.12-2 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.12-8, as previously noted the Town of Kent Master Plan calls for creation of commercial development at a scale designed to serve area residents rather than creation of commercial development designed to serve the region. The discussion should include an analysis of consistency of the proposed development in light of the Master Plan policies regarding the appropriate scale of commercial development, and the standards of the Town Zoning Law as amended in July 2005.

Response 4.12-2: *The Applicant does not propose retail space in Kent to serve the region. In fact, the development proposed for the Town of Kent is 2000 s.f., a very modest commercial project on 16 acres located in the Town of Kent.*

The Town of Kent's Master Plan is applicable to lands within its jurisdiction - not the lands in neighboring communities. The new retail stores at the Patterson Crossing Retail Center are proposed with deep building setbacks and open space buffers. As such, the layout protects the character of surrounding areas to the extent feasible while providing a program of commercial development consistent with existing zoning. Other Town of Kent Master Plan goals and objectives such as providing for a variety of land uses in order to provide a balanced array of services in the Town (see page 38, 1990 - Town of Kent Master Plan) are actually satisfied by development in both Kent and Patterson. The Kent Master Plan also calls for development of a more diversified economic base and tax base (page 84), to which the Patterson Crossing Retail Center project would contribute.

With regard to regional shopping needs, the Kent Master Plan calls for relying on surrounding areas for regional shopping needs (see page 84), which the Patterson Crossing Retail Center project directly facilitates with the proposed store sites being

located within the adjacent Town of Patterson. With regard to other more general plan policies, the project is proposed in a location at the crossroads of Interstate 84 and NYS Route 311 where development of regional retail uses would support the Master Plan's overall goal for Transportation of developing an efficient and well maintained road network serving both local and through traffic (see page 60). The Master Plan also makes a general recommendation to discourage expansion of the existing pattern of strip commercial development. As stated in the DEIS, the proposed project would focus future commercial growth in an appropriate location, near major transportation infrastructure, while not creating strip commercial development.

With regard to the scale of the proposed project, visual effects have been addressed through the inclusion of large areas of preserved open space buffer and the proposed layout that locates proposed buildings on the eastern portion of the project site, away from adjacent residences. While a portion of the site frontage borders NYS Route 311 west of Interstate 84, existing topography limits views into the project site to the northernmost end of the property where only the entrance road will be visible. Chapter 4.13 of the DEIS describes potential visual effects of the project from this and all other public locations where the project may be visible. From the neighborhood to the west, Concord Road generally follows a small ridgeline so that the road itself is at a higher elevation than the land on either side of it, thereby limiting potential views onto the project site from public roads to the immediate area. Mitigation measures addressing the appearance of the project are expected to minimize impacts related to its scale. As described on page 4.13-8 of the DEIS,

> *"The project plans call for preservation of a 25' wide (minimum) "Reservation Area", in its present condition, along the common property line with the adjacent Concord Road properties from Brentwood Road on the north end to the existing telecommunications facility drive to the south. A double row of evergreen trees is proposed 25 feet inside the property line along this side of the site to further buffer views into the project from adjoining properties, in addition to plantings of street trees (deciduous shade trees) along the proposed perimeter road. An eight foot high solid wood fence will be constructed along the residential edge of the preservation area to further limit views of the proposed retail center from the identified town roads.*"

In response to comments regarding the visual and noise impacts presented by the Proposed Action as well as to comply with local zoning, the fence height has been reduced from eight feet to six feet. The modified plan also calls for the fence to be an actual noise barrier not just a solid wood fence. To further limit visual impacts, additional evergreens are proposed in the Reservation Area where a direct line of site into the project existed (see Drawings SP-2.1, SP-2.2 and SP-2.3).

Please note that based on comments received on the DEIS the fence now proposed is six feet high and would be a specially constructed noise barrier.

Refer to Chapter 2.0, Project Description (Response 2.0-2 and 2.0-5) for a discussion of the conformance of the Proposed Action to the Town of Kent 2005 Zoning Amendments.

Comment 4.12-3 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.12-7, the statements regarding sharing of sales tax revenue to the towns should be deleted from this section since it appears that the discussion is assuming credit to off-set the cost of the project to the towns by suggesting the sharing of sales tax revenue as mitigation. Absent a commitment by the County to share sales tax such suggestions should be deleted.

Response 4.12-3: *The statements in the DEIS referred to above relate to a variety of tax revenues that can support services, whether they be local, County or State services, and do not imply a sharing of tax revenues as mitigation. Page 4.12-7 states the following:*

> *"In addition, a portion of the property tax and sales tax revenues generated by the project to the Town of Kent, Putnam County and the State of New York could be made available to augment the budgets of the Kent Police Department, the Putnam County Sheriff's Department, and the New York State Police Department respectively."*

While the specific allocation of State and County sales tax revenues derived from the Patterson Crossing Retail Center is unknown, such revenues could be made available to augment the budgets of the County and State police, as indicated in the statement on page 4.12-7. State, County and MTA Police services are provided to the Town of Southeast on a regular basis.

Comment 4.12-4 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): The DEIS must examine the effect of the project on the existing character of the Town of Kent and the Town of Patterson with respect to the impact on employment and wages at existing businesses, and potential impacts to real estate tax revenue within the identified commercial centers related to a downturn in business. The issue here is not one of economic competition between existing local businesses and the proposed project, but the effect on the community and character of the towns by placement of a large regional retail mall outside of a the traditional "downtown" commercial areas. The DEIS should be amended to include a complete discussion, including empirical data from other communities, of the potential adverse effect on the community character associated with locating a regional shopping mall at the periphery of small town commercial hubs. The discussion provided here does not address these issues.

Response 4.12-4: *As stated in Response 4.12-1, the DEIS examines the potential effects on existing businesses and downtown areas in the Towns of Patterson and Kent. Page 4.12-6 of the DEIS indicates that "the proposed project is not expected to significantly alter the character or local economies of its surrounding downtown areas, or significantly alter the character of the Towns of Kent and Patterson." An empirical evaluation of such potential effects is beyond the scope of the DEIS as adopted by the Lead Agency.*

In the Applicant's opinion, the location of the proposed project -- being removed for the most part from other commercial sites and residential areas, and being located at the crossroads of a major interstate highway, will serve to minimize its effects, and may result in attracting additional shoppers to nearby areas as a spin-off benefit to existing businesses.

Comment 4.12-5 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Pages 4.12-9 and 4.12-11, the suggestion that the proposed regional shopping mall would result in lower vehicular air emissions for local residents not having to travel out of the area to shop should be deleted. The regional mall will, in fact, increase the overall number of vehicles traveling to the area resulting in increased air emissions.

> ***Response 4.12-5:*** *The statement regarding reduced travel times relates to "local households in the Towns of Kent and Patterson that might shop at the future Patterson Crossing Retail Center on a weekly basis instead of traveling to major retail stores". It is acknowledged that added traffic will increase emissions, though the statement in question is specific to a certain segment of local patrons of the proposed stores that would benefit from reduced travel times for some of their shopping needs. Patterson Crossing Retail Center will provide local shoppers with a much closer shopping opportunity those that currently exist in White Plains, Jefferson Valley or Danbury, Connecticut.*

Comment 4.12-6 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): Despite being unknown, the DEIS states up to 16 million dollars in sales tax is "projected". How can it be projected when it is entirely unknown? The answer is that it cannot. There is no basis for the DEIS's reckless claim which should be stricken from the record. The DEIS admits it has no basis for such a claim.

> ***Response 4.12-6:*** *Page 3-4 of the DEIS indicates the following regarding the basis for projecting sales taxes:*
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> > *"To project future sales at the proposed development, average sales per square foot for various shopping centers around the country were reviewed based on data compiled by the International Council of Shopping Centers. Given the likely tenants for this project, the range of sales per square foot of retail space is projected to fall between $500 and $600. Annual sales at the proposed development based on these rates would thus range between $200 to $240 million.*"
>
> *While the specific amount of sales taxes resulting from occupancy of the proposed stores can not be known in advance, the methodology employed in the DEIS evaluation of potential fiscal impacts supports the conclusions of the DEIS with regard to sales tax revenues, and provides an order of magnitude estimate for projected revenues that is appropriate for SEQRA evaluation, according to the Applicant.*

Comment 4.12-7 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): Also the DEIS examined a trade area radius of only 3 miles, conveniently avoiding analysis of Brewster Highlands which is 3.5 miles away. How much of the income derived from the project will simply displace dollars? What will it do to existing businesses? How can DEIS possibly indicate that if the project creates 516 jobs, no additional people will wind up living in Kent of Patterson and not a single additional schoolchild will result. If that is not ludicrous, provide the data. **[Similar comments were found in the following letters: Letter B-6, Letter B-6, Ann Fanizzi (9.25.06); Letter B-7, Cathleen Breen (9.25.06)]**

Response 4.12-7: *The Highlands Shopping Center is discussed on page 4.12-4 of the DEIS, noting that there would be little overlap of retailers.*

The DEIS discusses the potential for induced growth as a result of the new worker population and demand for additional services generated by the proposed development. DEIS Chapter 8.0 addresses the potential for induced residential growth. Contrary to the statement above, the DEIS does not indicate that no additional people will reside in the Towns of Kent or Patterson as a result of the proposed project. The DEIS clarifies that the majority of the future workers at Patterson Crossing are expected to commute from their existing residences in Putnam County and surrounding counties, and that those who might choose to move to Kent or Patterson would be likely to occupy existing housing stock, rather than induce significant growth of new residential development. Refer to Response 4.12-8, below. Page 8-1 of the DEIS states the following with respect to this issue:

> *"These [Patterson Crossing Retail Center] jobs would most likely be filled by residents of Putnam and the adjacent counties where the unemployment rate in 2005 was just over four percent. Since it is expected that the majority of these workers would live within commuting distance of the proposed project, no significant population increases would be expected. The number of future workers that would potentially relocate their households to the Town of Patterson or the Town of Kent to reside closer to their place of employment can not be determined at this time, however, any increase in local resident population due to the proposed project would be expected to be relatively small, and would not be expected to induce further growth. Existing and proposed housing resources within Patterson and Kent would be expected to accommodate any workers that could potentially relocate from outside the region."*

Comment 4.12-8 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): Where are the people going to come from seeking these $15,000-$20,000 dollar jobs? The DEIS does not say. How is that going to impact traffic patterns? Again the DEIS is silent. They are not likely to come from Kent or Patterson where unemployment is very low and the median household income is between $66,000 and $72,000 dollars. **[Similar comments were found in the following letter: Letter B-7, Cathleen Breen (9.25.06)]**

Response 4.12-8: *With regard to the place of residence of lower income wage earners at the Patterson Crossing Retail Center stores, the DEIS indicates that lower income jobs at the proposed businesses are expected to be filled by workers currently residing in Putnam County and surrounding counties. Areas within easy commuting distance where lower income wage earners would be likely to reside, and where there is a relatively greater amount of existing affordable housing stock include the Village of Brewster in Putnam County, East Fishkill and Fishkill in Dutchess County and Danbury, Connecticut in Fairfield County. Other areas where direct surface transit connections could potentially be made available to the site and which contain a much broader range of housing than is available in Putnam County in general, including apartments and rental housing, include the City of White Plains, which also is connected to Putnam County by a PART bus line.*

In order to evaluate the Proposed Action's demand on affordable housing, TMA staff identified residential areas within a reasonable commuting distance (forty five minutes or less) of the project site that contain existing affordable housing units. Refer to Figure 6.0-1, Local Affordable Housing Locations. This methodology was used with the assumption that employees do not generally relocate for jobs in the unskilled or less skilled labor categories. This is an important distinction that points to low growth inducing effects, in the opinion of the Applicant (i.e. low increased demand for low-income housing options).

Affordable housing is generally defined as the housing cost burden or the 30 percent rule, which states that not more than 30 percent of a family's monthly income should be devoted to housing costs[4]. For analysis purposes, the median annual salary for a retail sales staff employee (full time)[5] was used to calculate the amount of monthly income a single person could devote to housing costs if employed at Patterson Crossing Retail Center. The median salary for an employee of retail sales staff working in the Town of Patterson, as of June 2007, is $27,764. Thirty percent of this salary would be $8,329.20, allotting approximately $694.10 per month to be devoted to housing costs by this one individual (i.e. rent, mortgage). To reiterate, this monthly calculation is for a single person not a household. It is anticipated that the positions in question would be filled by a households secondary wage earner.

As illustrated in Figure 6.0-1, there are residential areas that contain existing affordable housing within the aforementioned commuting distance. The identified housing units, located in both single and multifamily housing developments include studio and one bedroom apartments, two to three bedroom apartment shares, and individual room rentals. For example, in the Towns of East Fishkill (15 minutes) and Poughkeepsie (36 minutes) and the City of Poughkeepsie (36 minutes), the average rent for a studio apartment in 2006 was $600, $616 and $644, respectively[6]. All three options would be considered affordable by the above mentioned retail sales staff employee.

Other areas identified within a reasonable commuting distance that include affordable housing stock, such as the Village of Brewster in Putnam County (10 minutes), the City of White Plains (40 minutes) and Danbury, Connecticut (20 minutes are also accessible to/from the project site by public transit. Additionally communities with extensive rental and multi-family housing units that are within commuting distance of the project site are the Cities of Newburgh (31 minutes), Poughkeepsie, and Peekskill (43 minutes), among others. Westchester Urban County Consortium's 2000 Consolidated Plan indicates that the northern Westchester City of Peekskill and Town

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[4] Addressing Affordable Housing - Cases and Practical Solutions. Jacobowitz and Gubits, LLP, Counselors at Law, " 18 June 2007, <www.jacobowitz.com>

[5] Salary.com's Salary Wizard - Do you know what you are worth?. Salary.com. June 2007. 20 June 2007. <http://swz.salary.com> Note: analysis conducted for a Retail Sales Staff (see below definition) employed in Patterson, NY 12563. Retail Sales Staff - Full Time: Duties include selling goods and attending to customers on the selling floor. May require a high school diploma or its equivalent. No experience necessary. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Primary job functions do not typically require exercising independent judgment. Typically reports to a supervisor or manager. Hourly salary annualized based on a 2,080 hour work year.

[6] Rental Housing Survey, 2006. Dutchess County Planning and Development. 2006. 15 June 2007. <http://www.co.dutchess.ny.us/CountyGov/Departments/Planning/PLpublications.htm>

of Cortlandt (39 minutes) each contain a substantial number of smaller multi-family housing units, and that the City of Peekskill contains more than 3,000 rental units[7].

The data above supports the information presented in the DEIS, that there are areas within commuting distance, either by automobile or public transit, that contain affordable housing resources to support the future labor force at the Patterson Crossing Retail Center. While the information above does not indicate an increase in the availability of affordable housing in the areas where Patterson Crossing Retail Center workers would be likely to reside, it does indicate that there are affordable housing options for workers within reasonable commuting distance of the project site. Therefore, the new workers would not be expected to induce significant changes in housing market conditions that would lead to significant secondary impacts.

Sections 4.8 Transportation of the DEIS and this FEIS examined the current and future transportation operations in the vicinity of the Patterson Crossing Retail Center. Please refer to the above mentioned Sections.

Comment 4.12-9 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): As this is a coordinated review, the lead agency must consider and discuss the standards for granting use variances. Where is the economic hardship in dollars and cents? What are the real property value impacts to adjoining and nearby neighbors. Studies indicate that the creation of the currently proposed project will have devastating impacts to the Town's infrastructure and community character. (See attached Riverkeeper Report).

Response 4.12-9: *The big box retail format is a very well established way to shop in North America. This is not a new idea. For example, the Home Depot, a traditional big box retailer has more than 2,150 stores in North America alone. All of these stores have been integrated into local economies without their collapse and the public continues to support this form of retailing.*

The advantage of the discount retailers is clear: lower prices, aggressive pricing practices, large advertising budgets, expanded lines of products to choose from, constant renovation and remodeling, free parking, hours of operation (many are open twenty-four hours), one-stop shopping (including groceries, dining, apparel, filling prescriptions and much more) and lack of back ordering.

The Applicant believes that existing studies regarding the effects in general of large scale retail developments on existing communities have been mixed, and that evidence linking other large scale retail developments in the surrounding region with decreases in property values and devastation of infrastructure and community character is not apparent. Studies of the proposed Patterson Crossing Retail Center project prepared by the Applicant's consultants and included in the DEIS have not indicated that the project will have the impact referenced in this comment (see Response 4.12-1 regarding effects on downtown areas.) As described in Response 4.12-2 above, the project layout and design incorporate features to limit the effects of the scale of the project on the surrounding community.

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[7] *Westchester Urban County Consortium 2000 Consolidated Plan, page 37.*

Significant infrastructure impacts are not anticipated, and costs to the involved municipalities are expected to be offset by substantial projected tax revenues and proposed mitigation measures. In the Applicant's opinion, the location of the proposed project at the crossroads of an interstate highway make it ideally situated for the type of regional facility proposed from an infrastructure perspective.

Refer to Response 2.2-3 in Section 2.0, Project Description, for a response pertaining to use variances and the proposed SSTS for Patterson Crossing Retail Center as well as the potential impacts of the STSS on the land uses surrounding the project site.

The referenced report by Riverkeeper, entitled Sprawl and Big Box Stores begins with characterizations of big box retail related to their size and operations that can also be used to explain their popularity and attractiveness to a large segment of shoppers, their efficiencies through economies of scale, and their higher degree of economic activity in relation to smaller retailers. The Applicant acknowledges the physical form of such development and need for parking given that the project is considered to be an auto-oriented, highway commercial use, and has modified the original development plan presented in the DEIS with mitigation measures to further address physical impacts to the site and the environment, and indirect and visual effects.

Traffic issues cited in the noted report are largely avoided with the proposed project, and mitigation measures are proposed to address identified traffic impacts (see Chapter 4.8 herein). Significant widening of existing streets cited by the author from a study of Walmart stores entitled "Slam Dunking Walmart" is not proposed.

The Riverkeeper Report then cites further data regarding crime from the article "Slam Dunking Walmart," with an example from Florida, which is addressed in Response 4.12-4A. With regard to effects of vacant big box stores, examples of long vacant big box stores in the surrounding region are not common. A mall in Fishkill in Dutchess County is one example, and its reuse is underway at this time. The author states that big box stores constantly relocate to more effective locations. The Applicant believes that the subject site is a highly effective location for large scale retail given its location adjacent to an Interstate highway and interest expressed in the proposed project by potential tenants and that timely reuse of the stores would be likely should they be vacated. The likelihood of the stores being supplanted by larger facilities, as the author suggests, is low given the zoning and environmental constraints that have limited their development in Putnam County. The author refers solely to examples of Walmart stores in describing unfair labor practices and impacts on community centers of big box stores. It should be noted that no Walmart Store is being proposed at the Patterson Crossing Retail Center.

Comment 4.12-10 (Letter B-6 Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space, September 25, 2006): The applicant asserts that 576 full-time jobs, paying an average of $12.26 an hour, will be created. Averages notoriously distort statistics since they include high and low figures and this one is no different. In arriving at the $12.26 figure, neither job classification salaries nor numbers employed in each category are given. We are left to speculate.

Response 4.12-10: *The salary data provided is for the applicable category of workers as defined by the U.S. Department of Labor. More recent average salary data for nonsupervisory retail sector workers available from the Department of Labor's website indicate that average salaries rose to $12.69 in January 2007. The Applicant believes that this is an appropriate general estimate for future workers at the project site, given that they will occupy positions ranging from sales clerks and shipping clerks to managerial positions. According to data obtained from the website of salary.hotjobs.com (www.salary.hotjobs.com/salarywizard), the median salary of a shipping clerk in the nearby Lake Mahopac Zip Code where large scale retail facilities currently exist is $30,880. This equates to $15.29 in hourly salary. Average salaries of big box retailer employees have more recently been indicated in media reports as ranging from $10 per hour at Walmart Stores to $17 per hour at Costco stores.*[8]

Comment 4.12-11 (Letter B-6 Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space, September 25, 2006): Is it the obligation of government solely to create jobs for "young people" and "seniors" or is it to create diverse employment opportunities benefiting the entire population, especially those comprising working class families? **[Similar comments were found in the following letter: Letter B-7, Cathleen Breen (9.25.06)]**

Response 4.12-11: *A review of 2000 census data indicates that the work force of Putnam County has people in all age groups. Thus, job creation for all age groups and housing for all age groups should be (and generally is) addressed in the comprehensive plans of Putnam County communities. The government generally establishes the goals and policies, and the private sector follows through with implementation.*

The additional jobs that are expected from the Patterson Crossing Retail Center project are anticipated to attract the entire working age population not solely young people and seniors. It should also be noted that it is not the government that is creating these jobs, but rather the private sector.

Diverse long- and short-term employment opportunities would be created as a result of the proposed project. Many of the long term opportunities would be for retail and service workers and would include sales positions, stock positions, managerial positions, maintenance workers and administrative positions. Salaries would range from moderate income sales positions and administrative positions to lower paying full time jobs, including clerks and stock personnel, janitorial staff, and service staff.

Part time jobs, including sales associate positions, would also be available as a result of the proposed development.

Comment 4.12-12 (Letter B-6 Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space, September 25, 2006): Will Patterson Crossing fulfill its claim of job creation for the "young people" and "seniors" of Putnam County? **[Similar comments were found in the following letter: Letter B-6, Ann Fanazzi (9.25.06)]**

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[8] PBS, Nightly Business Report, "Street Critique", February 14, 2007 (see http://www.pbs.org/nbr/site/onair/transcripts/070214d/.)

Response 4.12-12: *The proposed stores are expected to provide both part-time and full-time employment. Varied shift scheduling of major retailers tends to allow for flexibility. Since part-time work is often sought by teens and senior members of the labor force, it is likely that a portion of the retail jobs at the Patterson Crossing Retail Center that will be filled by youth and seniors. Also see Response 4.12-11.*

Comment 4.12-13 (Letter B-6 Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space, September 25, 2006): The DEIS cites the Claritas 2005 study (3-8) to support the applicant's various claims for the viability of several components of the retail center. While the applicant in various sections of the DEIS seeks to project the image of a retail center for Putnam County and its residents, the study demonstrates the opposite: at one point merging statistics from combining population, salaries and sales for Westchester, Rockland and Putnam and another citing "households within 10 miles of the project.

Response 4.12-13: *The retail center would allow local and Putnam County and residents from surrounding Counties to shop for a range of diverse products. The center is expected to draw shoppers from all of these areas that normally would spend their money outside the County, resulting in an added benefit in terms of sales taxes. For this reason a broad range of data from a variety of locations in the region were used in the analysis presented in the DEIS.*

Comment 4.12-14 (Letter B-6 Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space, September 25, 2006): While trumpeting the annual sales of $200 to $240 million as the source of county sales revenue and school tax relief, it is to be noted that the applicant inserts certain exemptions. Thirty-five (35%) of whole sale warehouse sales are exempt from sale tax i.e. Food products, beverages, health supplements, drugs and medical supplies, equating to roughly 12% of total sales of the shopping center. How does this translate in terms of sales revenue figures provided by the applicant for Putnam County?

And even more confusing is the following statement which occurs on 3-5. Citing the projected $6.2 to $7.4 million (a spread of over a million) revenue to be realized by the County, the DEIS states, "A certain amount of these taxes would not be net income to Putnam County or NYS as some of these sales are already taking place at existing establishments either in the County or the State.

Response 4.12-14: *The DEIS qualifies the amount of sales taxes that are projected with the statements above regarding non-taxable sales, and County sales tax receipts that could be from sales that would otherwise be occurring within Putnam County without the proposed project. While it is not known what percentage of sales will be new sales that would otherwise not have occurred in Putnam County, the amount of total sales taxes that would result if 12 percent of the sales fall in the categories of food products, beverages, health supplements, drugs and medical supplies would be between $12.2 million and $14.6 million. This estimate with the food and health-related sales factored out is of the same order of magnitude as the gross estimate provided in the DEIS (between $13.9 million and $16.6 million) and results in no change in the underlying conclusions of the DEIS related to sales taxes, according to the Applicant. This is also true for adjustments that might result from the inclusion of sales that would otherwise be occurring within Putnam County without the proposed project. The project would still result in substantial sales tax revenues to the State, County and MTA.*

Comment 4.12-15 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): The DEIS notes that there will be overlap between Patterson Crossing's retailer and some of those already existing in the area. It reasons that despite this, the overlap will create opportunities for comparison shopping. It appears that DEIS is actually listing improved comparison shopping as a "socioeconomic" benefit, even while it admits that this ability to comparison shop will result in the drawing off of business from existing retailers and does nothing to increase sales tax revenue, only shift it. **[Similar comments were found in the following letters: Letter B-6 Ann Fanazzi (9.25.06); Letter C-35, Rich Osmers (Owner of Oscom Communications (9.10.06)]**

Response 4.12-15: *The DEIS notes that there would be some overlap in services and product offerings with other retailers in the area. However, it is anticipated that the Project would draw additional consumers into the area, offsetting significant "drawing off" effect due to comparison shopping and competition. (See Response 4.12-1 for additional description of anticipated effects on local businesses).*

For example, retail and service establishments in the immediate vicinity of the project site, just west of the site entrance on NYS Route 52, include several restaurants and bars, a deli, and a real estate office. These businesses will likely benefit from some degree of additional shoppers traveling to the Patterson Crossing Retail Center that will pass these shops. Further to the south and west on NYS Route 52 are stores that have somewhat overlapping merchandise, but which have their own niche such that Patterson Crossing Retail Center shoppers might make purchases at these stores that might otherwise not occur without the Patterson Crossing Retail Center project. Businesses with some overlap that might benefit from the synergy of having the new stores located nearby include apparel related stores such as a Lingerie store and a Clothing Alterations business near Towner Road on NYS Route 52. Auto related businesses may similarly benefit, including the gas stations and automotive repair establishments that are clustered on NYS Route 52 close to the Lake Carmel Hamlet center.

Economically, the Patterson Crossing Retail Center will benefit Putnam County by recapturing and maintaining sales tax revenues in Putnam County; sales tax revenues that are currently exported out of the County. The proposed retail center would also be supportive of existing policies of Putnam County such as the "Shop Putnam" initiative, which supports smart commercial growth in Putnam County as well as working towards correcting the Putnam Paradox by offering new retail shopping opportunities within the County for its residents and beyond. Refer to Section 1.0, Executive Summary, Response 1.3-21.

Comment 4.12-16 (Letter B-6 Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space, September 25, 2006): The applicant promises $600,000 in one section of the DEIS and $500,000 in another as Patterson's Crossing's contribution to offset school taxes, the greatest portion of any resident's tax bill. He formerly promised $750,000.

Response 4.12-16: *Page 3-3 of the DEIS indicates that total anticipated Carmel Central School District taxes would be $579,137. The project would generate these revenues without generating significant costs to the School District.*

Comment 4.12-17 (Letter C-44 Peter Riebold, September 22, 2006): A project this size is certain to "significantly alter the character of local economics..." Its is absurd to say otherwise. It is also very unlikely that the present vacancies on Front Street in the Patterson hamlet will be filled when Patterson Crossing opens. Experience tells us the opposite is true. Front Street once had a video rental store and a small grocery store. Both closed due to competition from Blockbuster Video and the A&P stores at Routes 311 and 22. Box stores tend to have a detrimental effect on locally run stores.

Response 4.12-17: *See Response 4.12-19. Vacant storefronts on Front Street may be a result of retail competition, the specific retail mix of that business center, conditions of those vacant storefronts, the management of the particular business or any combination of these and other factors. Front Street vacancies are an indication that storefront turnover and vacancies are an existing condition as a result of ongoing pressures, retail trends, and trends in the local real estate market. Such business turnover would be expected to occur with or without the proposed project and are not unique to the area.*

Comment 4.12-18 (Letter C-44 Peter Riebold, September 22, 2006): The Town of Kent master plan provided for additional retail shopping within the Town of Kent, which would provide property taxes to the Town of Kent. The retail stores in Patterson Crossing would be located in the Town of Patterson, which would retain the bulk of the property taxes since most of the shopping center would be located there. Kent would only receive a small portion of the property taxes.

Response 4.12-18: *Comment noted. It should also be noted that the DEIS indicates that the Carmel Central School District, which also serves the Town of Kent, is expected to receive an additional $579,137 in annual tax revenues as a result of the Patterson Crossing Retail Center project.*

Comment 4.12-19 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Failure to Assess Secondary Growth Impacts on New Development and Associated Impacts on Water Quality. The proposed Project is estimated to employ some 516 retail workers. Nonetheless, the DEIS simply asserts, without support, that the Project will not increase the population of Putnam County. Therefore the DEIS completely fails to assess the impacts of "secondary growth" directly associated with this Project, as is required by SEQRA. In particular, the impacts of additional phosphorus loadings associated with secondary growth (new construction activity, new impervious surfaces, etc.) Need to be fully assessed and addressed. **[Similar comments were found in the following letter: Letter B-7, Cathleen Breen (9.25.06)]**

Response 4.12-19: *Secondary impacts associated with post-construction increases in phosphorous, and other pollutants, are those that could result, not directly from the proposed project, but from consequences of the project or from changes that occur because of the project.*

With respect to increases in phosphorous, and other pollutant loading, the secondary impacts could result from additional land development associated with off-site disturbance and changes in impervious cover that would increase pollutant loads in stormwater being discharged from the developed land. the Proposed Action has been enhanced to include off-site stormwater treatment facilities, as detailed in the

SWPPP included in this FEIS as Appendix F. Based upon the modified site development plan, revised SWPPP, and the on- and off-site stormwater treatment measures now proposed, post-construction phosphorous loads in both the East Branch and Middle Branch Reservoirs will be reduced following construction of the project.

DEIS Chapter 8.0 addresses the potential for induced residential growth for the proposed project. The modified Patterson Crossing Retail Center is expected to generate approximately 488 permanent jobs, which are expected to be filled by individuals within a reasonable commuting distance to the project site. The secondary growth related to the influx of people to fill jobs at the Patterson Crossing Retail Center is anticipated to be minor and the resultant need for new housing more limited. Refer to Response 4.12-8, above and Chapter 6.0, Response 6.0-1 and Figure 6.0-1 and Chapter 8.0, Response 8.0-2.

Based on the conclusions drawn from the analysis to determine the potential for secondary growth associated with the jobs to be generated by the Proposed Action, the impacts of additional phosphorus loadings associated with secondary growth (new construction activity, new impervious surfaces, etc.) would be insignificant.

Comment 4.12-19A (Letter B-8 James M. Tierney, Watershed Inspector General, September 26, 2006): 3. Pollutant loadings associated with secondary growth must be evaluated; traffic impacts should be re-assessed. The assessment of the secondary growth from the Project is a basic requirement of SEQRA. The DEIS estimates that the proposed Project will create 516 new jobs. DEIS at 2-25. Yet, the DEIS simply states, without support whatsoever, that there would be no increase in resident population. DEIS at 3.4; 4.14-1. The U.S. Census Bureau estimates that the total population of Putnam County was 100,507 in 2005. The Putnam County unemployment rate is only 3.7 percent, according to the U.S. Department of Labor, Bureau of Labor Statistics. The DEIS should conduct a detailed, quantitative, assessment of the secondary growth potential associated with the addition of any new employees of the proposed Project. The construction disturbances, impervious surfaces and pollutant loadings associated with this secondary growth should be assessed.

Response 4.12-19A: *See Responses 4.12-7, 4.12-8 and 4.12-19, above for responses pertaining to secondary population growth and pollutant loading associated with secondary growth resulting from the Proposed Action. Also refer to Section 6.0, Response 6.0-1 and Figure 6.0-1 and Section 8.0, Response 8.0-2 for responses pertaining to secondary population growth impacts resulting from the Proposed Action. The Applicant believes that the assessments included in these comments and in Chapter 8.0 of the DEIS accurately assess potential secondary growth and correctly concludes that this growth and the associated impacts would not result in result in additional pollutant loading of the NYC water supply.*

Traffic related impacts are addressed in Chapter 4.8 of this FEIS.

Comment 4.12-19B (Letter C-44 Peter Riebold, September 22, 2006): Putnam County shoppers will continue to shop outside Putnam County even if Patterson Crossing is built. There are many reasons for this:

- It is typical for an employee to do some shopping where they work because of the convenience.
- The lower sales tax rates in Danbury are significant. In September 2006, Putnam County Executive Robert Bondi announced his proposes County budget, and indicated he would ask the New York State Legislature for a sales tax increase of 8-1/2%, which is substantially larger than the 6% rate in Danbury. Danbury also exempts clothing purchase under $100 from sales taxes. While New York Sate dropped the sales tax on clothing purchases under $110 in April 2006, the Putnam County portion of the sales tax remains. The sales tax rate in the City of White Plains is 7.875%, and the general sales tax rate in Westchester County is 7.37%, except for cities such as Yonkers that have a local sales tax.

Response 4.12-19B: *Some people will do some of their shopping at retailers near their workplace. However, many major purchases are made on weekends and other off hours at retailers close to their residence.*

The competitive disadvantage of New York State stores with regard to sales taxes in comparison to Connecticut stores is acknowledged. However, other features of the Patterson Crossing Retail Center, including its location (nearly direct highway access) and the project's close proximity to many Putnam County residents (i.e. time and gas savings for local residents), must be factored in when considering its relative strengths as a retail destination. Refer to Response 1.3-21 for a information on additional benefits expected from the proposed retail center.

Comment 4.12-20 (Letter C-44 Peter Riebold, September 22, 2006): It should also be noted that there have been no studies to examine why Putnam residents shop outside of Putnam County. The DEIS states that lack of shopping within Putnam County is the primary cause, but it does not state any evidence that this has been studied.

Response 4.12-20: *The lack of shopping opportunities in Putnam County is well known to County residents, and has been widely reported, according to the Applicant. The U.S. Census Bureau reports that 2002 Retail Sales Per Capita for Putnam County totaled $6,994, compared to similar per capita sales for Dutchess County ($10,744), Orange County ($11,323), Westchester County ($12,589) and Fairfield County, Connecticut ($15,569), which includes the City of Danbury .*[9]

Comment 4.12-21 (Letter C-49 Paul Spiegel, September 13, 2006): NYS Comptroller Alan Hevesi has warned counties and cities not to rely on sales tax income. Consumers change their spending patterns without notice. Therefore commercial development is not THE answer; it is only part of a larger answer. In a volatile economy, can we be assured that added costs will be covered without raising already high taxes even higher?

DEIS 4,12-11 states: "Putnam County needs more retail shopping opportunities to generate sales tax revenue necessary to fund our increasing mandated services and costs without raising taxes." Study after study has proven that developments like Patterson Crossing is what creates the increased costs, often more that the sales tax revenue it generates. Again the NYS Controller has warned counties and towns against relying on such a volatile means of revenue, yet out of 57 counties in the state, Putnam County ranks THIRD behind Suffolk

[9] U.S. Census Bureau (http://quickfacts.census.gov/qfd/states/36/36079.html).

and Dutchess counties in reliance upon the sales tax as a source of revenue to balance the county budget; the report shows that Putnam has a 33.2% reliance on this income as opposed to a statewide average of 25%. Putnam County's reliance on this very volatile revenue is dangerous and misleading.

> ***Response 4.12-21:*** *Page 3.8 of the DEIS indicates that the County would be expected to receive between approximately $6.16 million and $7.38 million in annual sales taxes from the proposed project. These revenues, and the projected $56,318 in additional County property taxes that are expected, would potentially benefit the residents of Putnam County.*
>
> *Furthermore, funding for the majority of public infrastructure improvements (i.e. Stormwater and Traffic improvements) proposed on and in the vicinity of the project site are to be provided for by the Applicant; private funds would be used for public improvements. These improvements are expected to create an overall public benefit, especially for local and Putnam County residents. The proposed infrastructure improvements (i.e. Stormwater and Traffic improvements) are discussed in detail in Chapters 4.5, Surface Water and 4.8, Transportation of this FEIS.*
>
> There is no evidence that the significant County costs referenced in this comment would be created by the proposed project. On the contrary, the analysis in the DEIS and this FEIS shows that the project will provide significant economic benefits to the County.

Comment 4.12-22 (Letter C-49 Paul Spiegel, September 13, 2006): The DEIS fails to quantify any increased costs the project would cause, either directly or indirectly. It vaguely states "the project is not expected to generate 'significant' costs to either town." Significant to a guy who rolls property over for a cool $30 million and a guy like me who has a mortgage on a thousand square foot house are vastly different. The costs for added protection and emergency services, infrastructure and maintenance should be covered in a supplemental and comprehensive impact statement.

> ***Response 4.12-22:*** *Costs of community services related to the project are described in DEIS and FEIS Chapter 4.11. The project is expected to result in a net fiscal benefit, including substantial school tax revenues in excess of $579,000, without incurring significant costs to the School District.*

Comment 4.12-23 (Letter C-49 Paul Spiegel, September 13, 2006): The DEIS states that 4.12-6 states "the proposed project is expected to strengthen the county's economy.... Long vacant commercial sites in the hamlets might actually become occupied in the future with increased local activity." This wishful thinking is pretty ambiguous. It is clear that the effects of Brewster Highlands has forced businesses to close their doors. Franklin Gifts, Lake Carmel Hardware could not compete with the chain stores in Brewster. How many more grocers would be shut down with the advent of Costco? Kent and Lake Carmel are littered with vacant grocery stores. Those who could not afford the $45 membership would be forced to pay higher prices as surrounding businesses need to increase cost to make up for loss in sales volume. How long would those stores need to be vacant?

> ***Response 4.12-23:*** *See Response 4.12-1 regarding effects on existing businesses. The fact that there are existing vacant storefronts in Kent and Lake Carmel indicates*

that storefront turnover is an ongoing trend that is likely to occur irrespective of whether or not the Patterson Crossing Retail Center is built The Applicant would like to note that the introduction of additional shopping opportunities in proximity to the vacant storefronts might have the opposite effect by making these vacant storefronts more attractive to and viable for new local businesses.

Comment 4.12-24 (Letter C-49 Paul Spiegel, September 13, 2006): What studies have been done to analyze the effect of this type of development on Park districts or quality of life on a densely populated area that borders the project? How many projects like this border on such densely populated areas?

Response 4.12-24: *It is noted that the Lake Carmel Park district is a taxing district, not a "Park" in the traditional sense. The district's facilities include common properties such as a meeting facility and beaches on the lake. The Patterson Crossing Retail Center project is well removed from these facilities and will not interfere with their operations.*

It is also noted that there are some 40,000 shopping centers in the United States that are in an area of sufficient population density to support the center as far as sales are concerned.

Shopping centers are built when population density is sufficient to accommodate the investment in land, buildings and infrastructure, not the other way around. In this regard, retail centers are located whenever there are people from lower density rural areas, to the heart of urban areas. They are found in every city in the United States.

The DEIS provides extensive analysis of land use, community character and visual effects of the project, and effects on the adjacent residential area. R*efer to Response 4.12-2.*

Comment 4.12-25 (Letter C-49 Paul Spiegel, September 13, 2006): The DEIS 4-12.6 states, "The proposed project is expected to have an overall positive effect on nearby commercial centers in the Lake Carmel and Patterson Hamlets (Lake Carmel is not a hamlet). Highway oriented businesses such area expected to see an increase in business. Some patrons of the proposed retail center would be expected to make purchases at local shops and take advantage of area restaurants ad services."

This is a direct contraction to the traffic analysis that indicates that the majority of traffic would be coming from Route 84 and that increased traffic through Lake Carmel and Patterson would be minimal. The DEIS also contradicts itself by stating that the front view of the center will face Route 84, with minimum visibility from neighboring sites. Yet the purpose of the project is to encourage local shopping and keep tax dollars in the county.

Response 4.12-25: *With regard to traffic, as discussed in Chapter 4.8 of the DEIS most of the traffic destined for the Patterson Crossing Retail Center is expected to come from Interstate 84. A part of the site generated traffic would also be comprised of patrons from Kent, Carmel and Patterson that would otherwise have been relying on Interstate 84 to access stores in surrounding areas and counties. The additional traffic that may provide increased sales at local establishments that is referred to in the DEIS would consist of patrons accessing the site via NYS Route 52 and NYS*

Route 311, for the most part, that otherwise might not drive through those areas to access shopping elsewhere, if the project were not built. These shoppers will pass businesses on their way to the proposed retail center and may provide a positive economic impact. These new trips from Kent and Carmel, predominantly, represent a small portion of the overall traffic generated by the proposed project, but will likely provide some degree of additional sales at local establishments.

The layout and orientation of the proposed stores are intended to maximize visibility of the stores for motorists on Interstate 84 while minimizing views and visual effects on the adjacent residential areas. Visibility of the project from residential areas to the west has been minimized through mitigation measures and features of the project described in DEIS Chapter 4.13, rather than increased in an attempt to draw shoppers from these adjacent areas.

Comment 4.12-26 (Letter C-49 Paul Spiegel, September 13, 2006): The DEIS cavalierly states that established local businesses like Dills may be "displaced" due to inability to compete, but does not address the effect the loss of businesses like Dills will have on the community. How has the impact of out of town businesses been analyzed and how much money will actually be taken away from the community after sales tax is discounted?

Response 4.12-26: *Regarding Dill's Best, this store has been closed since the Fall of 2006 for reasons unrelated to the Proposed Action. See Response 4.12-1. As stated above, quantitative analysis of hypothetical business displacement that is not anticipated to occur to a significant degree as a result of the project is speculative. The DEIS concludes that business displacement, if any, would not be likely to affect the overall character of the Town's commercial areas due to the probable reuse of such vacated commercial space. The fact that smaller local businesses provide certain services and local knowledge that are not typically available at large scale retail establishments, and the additional sales to existing businesses that would be expected as a result of comparison shopping by future patrons of the Patterson Crossing Center are factors that have also been considered in the evaluation of effects on local businesses.*

Comment 4.12-27 (Letter C-49 Paul Spiegel, September 13, 2006): DEIS 4.12.2 The proposed project is not expected to significantly alter the character of the local economies of its surrounding downtown areas, or significantly alter the character of the Towns of Kent and Patterson. The location of the sight is at the crossroads of Interstate 84 and NYS Route 311, largely isolated visually from the surrounding hamlet areas, make it ideally suited for large scale retail development.

Mr. Camarda's recent glossy flyer says its time to urge our government to support commercial development, I agree. What I disagree with is the type of commercial development it should support. Local businesses that have been the backbone of our local economy should not be forced out of business by big box corporations that will take profits back to the coffers. That will rob our community of long standing respectable businesses such as Dills.

Stating that the character of Lake Carmel will not be significantly altered could not be further from the truth. The character will be completely altered and the rural habitat destroyed.

Response 4.12-27: *See Response 4.12-1 and 4.12-26 above regarding potential business displacement and the Dill's Best store. There is no data offered that supports the notion that local businesses have been the backbone of the local economy.*

Regarding community character, the Applicant believes that the location of the project site adjacent to Interstate 84, and the wooded and open space buffers that will serve to screen views of the project from other locations, will minimize community character effects. Locating intensive commercial development adjacent to major transportation corridors is considered by the Applicant to be a benefit in terms of future growth policies in that the more rural areas of the surrounding towns, and rural habitat that is not adjacent to major highways, will not be in close proximity to the project. Site features, topographic conditions of the surrounding area, and proposed visual mitigation measures that further serve to limit effects on community character for areas closest to the project site are addressed in the DEIS (see Response 4.12-2).

The character of the intersection of Interstate 84 and NYS Route 311 and the first several hundred feet of NYS Route 311 west of the interstate will be altered by the proposed development. In order to offset the proposed changes to this area, the modified plan presented in this FEIS includes gateway improvement features. A presentation assembled by the Applicant's architectural consultant, Street-Works LLC, which is reproduced in FEIS Appendix M, illustrates the improvements and features being considered in the Patterson Crossing Retail Center plan. Refer to Chapter 4.13, Cultural Resources, Response 4.13-5 for a detailed description of these improvements.

Comment 4.12-28 (Letter C-49 Paul Spiegel, September 13, 2006): The promise of bringing jobs to the area is a completely empty one. There are plenty of these kinds of jobs around. There are actually "Help Wanted" postings for Shop Rite in the public library. Was an employment survey completed as part of this DEIS? If so, what is the demand for the types of jobs this project will create? Does it consider how jobs will be filled at business from which the project may draw its employees? What would the effect on those business be? **[Similar comments were found in the following letters: Letter C-23, Daniel Kutcha (9.25.06);Letter C-28, Ray Mainiero (9.13.06)]**

Response 4.12-28: *See Responses 4.12-7, 4.12-8, 4.12-10, 4.12-11, and 4.12-19, above, regarding workforce impacts. An employment survey has not been done.*

The U.S. Census Bureau reports that the updated unemployment rate in Putnam County for the first quarter of 2007 dropped to 3.4 percent. This equates to approximately 2,000 people not currently working in the County alone. This rate of unemployment is consistent with other county unemployment rates in the northern parts of the New York metropolitan region and Connecticut, with some of the other surrounding counties where employees could potentially commute from having slightly higher rates of unemployment in the first quarter of 2007, such as Westchester County (3.8 percent), Ulster County (4.3 percent) and Fairfield County, CT (4.0 percent).[10]

[10]U.S. Census Bureau, New York State Unemployment Rate - http://www2.fdic.gov/recon.

Employees would be expected to come from this available pool of labor within Putnam County and surrounding counties, or from individuals and part time workers, including youth or seniors, who may not be actively searching for employment now and are not currently counted as unemployed. While the number of workers that might be switching jobs can not be determined at this time, it should also be noted that if there are workers that might leave existing retail jobs for employment at Patterson Crossing Retail Center, those workers would be doing so for improved job opportunities or circumstances, such as those related to salary, location of residence with respect to their jobs, or other factors, which would be a benefit to those workers.

Comment 4.12-29 (Letter C-51 Judith Terlizzi, September 14, 2006): Developer shows no data to support his contention that other local stores would benefit. **[Similar comments were found in the following letters: Letter C-14, Sybill Gilbert (9.24.06); Letter C-51, Judith Terlizzi (9.14-06)]**

Response 4.12-29: *Refer to Response 4.12-15. In the Applicant's opinion, some shoppers traveling to Patterson Crossing Retail Center may take advantage of comparison shopping at local stores to some degree, and sales at local service establishments such as restaurants and gas stations might also benefit from the additional visitors to the area. Whether they do or do not benefit however, the project is still a permitted use, consistent with the goals of the Towns of Patterson and Kent.*

Comment 4.12-30 (Letter C-58 Edie Keasbey, September 13, 2006): Mr. Tim Miller on page 4.12-7 states that the applicant "is not seeking any tax incentives which would be applied to this project." What about the stores, will they be seeking tax incentives that the taxpayers have to replace? If history has taught us anything we know they will grieve their assessments and probably win a decrease while we, the taxpayers have to make up the losses.

Response 4.12-30: *Refer to Chapter 3.0, Economic and Social Benefits, Response 3.1-5 of this FEIS. The answer to the above question is "No". Based on data compiled by the International Council of Shopping Centers on average sales per square foot, Chapter 3.0 on the DEIS projects that New York State will realize between $7.0 and $8.4 million in sales tax revenue. This revenue will become available to offset indirect costs to the State associated with the project.*

Chapter 3.0 of the DEIS indicates that Putnam County is expected to receive $56,318 in additional property taxes per year, and between approximately $6.16 million and $7.38 million in annual sales taxes as a result of the proposed project. These figures are based on data compiled by the International Council of Shopping Centers and the likely tenants of the retail center.

The Towns of Patterson and Kent will also receive tax revenue from the proposed project. Property taxes collected by Town taxing jurisdictions in Patterson and Kent combined, including library and fire departments, will increase by $169,987 annually. Even if abatement is granted, tax payers would not have to replace the tax dollars not collected.

Comment 4.12-31 (Public Hearing, September 13, 2006, Erica Kelly): Who will be responsible if or when the properties or the families in my neighborhood are affected by this

property? Will it be the Patterson Town Board? Will it be the Kent Town Board. Will it be Mr. Camarda or the stores that are going in? That's the biggest question. Who do we go to when we have no water? When we have no septic fields any longer? When my child gets hit by a car taking a shortcut to the mall?

Response 4.12-31: *If someone breaks the law, there are enforcement mechanisms at all levels of governmental to bring about enforcement, including civil actions in the New York court system.*

The DEIS evaluates the potential for impacts to the infrastructure of the Towns of Patterson and Kent as a result of the proposed project, including roadway capacity and safety, and water supply and utilities. Mitigation measures have been proposed to address potentially significant impacts. Requirements imposed by the NYSDEC, NYSDOT, Putnam County Department of Health and the Town's of Kent and Patterson to protect water supplies and infrastructure will be adhered to by the project sponsor. Future tenants at the Patterson Crossing Retail Center will be required to adhere to applicable regulations designed to protect public health and safety. The project will utilize a subsurface treatment system compliant with NYCDEP watershed area requirements and those of the County Health Department. The subsurface sewage treatment system will be located at least 200 feet from the nearest residential property well to the west.

Blasting will follow accepted protocol to prevent off site impacts. Wells will be monitored and the blasting contractor will be insured and responsible for impacts to wells and other real property off site.

The hypothetical case of a person being hit by a car taking a short cut to the mall offers insufficient data to assign responsibility. By state law, every owner of a motor vehicle operated in New York is liable and responsible for injuries to persons resulting from negligent operation of a that vehicle. A parent can also be held responsible for certain actions of a minor. Future liabilities or responsibilities cannot be projected.

The lead agency has responsibility in the SEQRA process to review potential significant impacts resultant from a proposed project. The Applicant has conducted a detailed traffic analysis and provided the lead agency with funds for them to hire a consultant to review all the materials related to that analysis. The State of New York Department of Transportation has responsibility for issuing the access permit. Through the public hearing and review process the Towns, County, State, environmental groups, and public all have an opportunity to be involved.

The improvements proposed in Chapter 4.8 and Appendix K are a result of the review process. Ultimately the State, County, Towns, and Applicant will be responsible to ensure the improvements are correctly constructed. The Applicant is responsible for paying taxes for government services, less the transportation infrastructure located on the property. The agencies with jurisdiction are in responsible for maintaining the public's infrastructure (roads, etc.).

As indicated in Response 4.8-57, most of the project generated traffic is anticipated to be from Interstate 84 traveling a quarter mile or less to the site access on NYS Route 311, hence the project site location is ideally suited to reduce traffic on

non-interstate roadways, such as neighborhood streets. The remaining outsider traffic is mostly traveling on NYS Route 311 and NYS Route 52. Responses 4.8-77 and 4.8-219 indicate that children who walk and bike throughout the Lake Carmel Park District would not be adversely affected by any increase in traffic volume associated with the Project. Additionally, pedestrian traffic on NYS Route 311 would benefit from the installation of signals, providing greater gaps in traffic and the potential for crossing at these signals.

Comment 4.12-32 (Public Hearing, September 13, 2006, Paul Speigel): The Draft Environmental Impact Statement fails to quantify any increased cost the project will have, either directly or indirectly. It vaguely states the project is not expected to generate significant costs to either town.

Response 4.12-32: *See Responses 4.12-9 and 4.12-22. Retail development typically does not generate the same level of demand for municipal services as residential development. Costs to and responsibilities of fire protection and police service providers are addressed in Chapters 3.0 and 4.11 of the DEIS and this FEIS. The evaluation of such potential cost impacts was done with the input of local service providers. No significant costs were identified that are not addressed either by measures that are part of the proposed project, or through projected increases in tax revenues.*

Refer to Response 4.12-21 for information pertaining to the funding of private improvements by the Applicant.

Comment 4.12-33 (Letter C-21 Janette James, July 4 , 2006): Mr. Camarda states that Patterson Crossing will lower our taxes but who will be burdened with the increase in road costs, garbage control and crime? I believe it is just a political ploy but even if it is not, who can put a price on quality of life? Is $50 a year going to make up for the fact my child is burden with asthma or, God forbid, cancer induced from the very pollution I moved away from? Or if you don't believe in environmental ailment, then at what price is it acceptable that my child or a friend is injured or killed from the 1200 new cars and trucks that will be speeding by our country roads per hour?

Response 4.12-33: *As indicated in Response 4.8-57, most of the project generated traffic is anticipated to be from Interstate 84 traveling a quarter mile or less to the site access on NYS Route 311. Hence, the project site location is ideally suited to reduce traffic on non-interstate roadways, such as neighborhood streets.*

The project is not expected to pose an air quality threat in terms of asthma or other public health issues, or generate significantly higher crime rates in surrounding areas. See Response 4.11-1 for information on emergency calls related to a similar retail development. Based on need, individual stores may choose to employ their own security services.

Solid waste generated by the project would be transported by private contractor to out-of-town disposal facilities. Measures to ensure adequate storage and disposal of solid waste are described in Chapter 4.10. These include covering and screening dumpsters and refuse storage areas to physically contain solid wastes within designated areas. Trash cans and recyclable only cans will be placed in convenient

locations, and the development would retain personnel to routinely patrol and remove litter from the project site as is the practice of most retailers. In addition, a street sweeping/vacuum vehicle would be used on a weekly basis (more often as needed) to maintain trash-free project site roads and parking areas.

Comment 4.12-34 (Letter C-20 Harry Hitner, September 24, 2006): The second item I'd like to touch on is the sales tax windfall the applicant outlines in the DEIS. We all know that not one dime of sales tax revenue goes to the Towns of Patterson or Kent. The bulk goes to the State of New York, a fraction goes to transportation and the remainder to the county. Since our schools are funded by our property taxes only the property taxes paid by the development will do anything to alleviate the school tax bill. The property taxes on the fully built-out Patterson Crossing will amount to less than 1% of the current annual school budget.

Also as the housing market cools and interest rates rise, (which is especially hard on adjustable rate mortgages and credit card holders), consumer spending spirals downward. Right now, Nationwide the Consumer Comfort Index[1] is at Minus 15 the worst it's been since Labor Day of 2002, which is far worse than the Positive 29 it was at in 1998. Here in New York State specifically, consumer confidence[2] is almost 8 points lower than the national average. All this translates into reduced consumer spending and much lower sales tax revenues. The county cannot rely on highly variable sales taxes for budgeting expenditures. Additionally the bulk of Costco's sales are food items which are tax exempt.

Response 4.12-34: *See Response 4.12-14 regarding sales taxes. School taxes generated by the project will help fund the District's budget without generating costs to the District. With regard to consumer confidence and spending in New York State, the Federal Reserve Board reported in January 2007 in its "Beige Book" report that regional consumer surveys for New York State showed confidence retreating slightly in December 2006, but remaining at fairly high levels.[11] Retail market data provided in DEIS Appendix C demonstrates that the population within the project's market area has the buying power to support the proposed uses.*

Additionally, the Journal News recently reported that retail sales have increased by 1.4 percent over April [2007], which is the largest increase in more than a year and is double of what analysts expected[12]. "The strong showing, which followed a 0.1 percent decline in April [2007], was widely based' and included general merchandise stores (up 1 percent), department stores (up 1.3 percent), specialty clothing stores (2.7 percent), and hardware stores (2.1 percent)[13].

Comment 4.12-35 (Letter C-24 Robert Ladau, September 12, 2006): Southeast taxes are up 40% since the Highlands (Home Depot) opened. How much will Patterson Crossing add to Patterson's taxes?

Response 4.12-35: *The DEIS includes a fiscal impact analysis and evaluation of anticipated costs of municipal services necessary to serve the proposed project.*

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[11] See United States Federal Reserve website at http://www.federalreserve.gov/FOMC/BeigeBook/2007/20070117/2.htm.

[12] Crutsinger, Martin. "Retail sales surge in May to twice what analysts expected." Journal News. 14 June 2007.

[13] Crutsinger, Martin. "Retail sales surge in May to twice what analysts expected." Journal News. 14 June 2007.

Additional demands on municipal services are expected to be offset by projected tax revenues. Increases in local tax rates would not result from the development of the Patterson Crossing Retail Center project.

Many factors individually or in combination, could increase property taxes within a Town. To date, no connection has been identified between the opening of the Highlands Shopping Center and the increase of property taxes within the Town of Southeast.

Comment 4.12-36 (Letter C-24 Robert Ladau, September 12, 2006): How much $ will Patterson Crossing put in Patterson's coffers? Patterson and Kent will have no say over the distribution of sales tax revenue. Only about 4-1/2% of the revenue generated will find its way to Patterson and Kent.

Response 4.12-36: *The DEIS indicates on page 3-3 that the Town of Patterson will receive approximately $117,000 in additional annual property taxes from the proposed project. This does not include taxes to local Library, Park, School and Fire Districts, which would receive additional tax revenues. Total combined property taxes generated by the project for the Towns of Kent and Patterson are estimated at $124,452, or 15.5 percent of the total property and school taxes expected to result from the project.*

Comment 4.12-37 (Letter C-24 Robert Ladau, September 12, 2006): $20 Million of County money for one intersection? That's the estimate for improving the intersection of Route 311 and 164 for Patterson Crossing. How long will it take the tax revenues from this project to repay this debt?

Response 4.12-37: *The State is intending to improve the intersection of NYS 311 and NYS Route 164 as noted in the March 2007 NYS DOT letter in FEIS Appendix A. As an intersection of two state routes it is not anticipated to be a county improved intersection. The cost has not been determined by the state based on a July 2007 call to the NYS DOT. The cost is more likely to be in the hundreds of thousands of dollars not tens of millions. Overall tax revenues would take a few weeks to repay the cost. See also Response 4.8-220. The Applicant has also agreed to provide a traffic signal if warranted at this intersection as noted in FEIS Appendix K.*

Comment 4.12-38 (Letter C-28 Ray Mainiero, Submitted September 13, 2006): On page 59, the projected tax revenue to the state of New York is approximately 7 or $8 million, and county revenue maybe $6 or $7 million. How much of the revenue will come from existing business establishments such as the Brewster Highlands, Dills Lumber, the Putnam Plaza, ShopRite, the A&P and many other establishments. These tax dollars will be a verdict to the Patterson Crossing and hence thereby lowering these expectations. The arguments that "all" of this revenue will come from residents who live outside of our area and do not shop here now, does just not hold water.

Response 4.12-38: *See Response 4.12-1. The DEIS acknowledges on page 3-5 that many of the potential patrons of the proposed stores are currently spending money at the limited number of establishments in Patterson and Kent that sell goods similar to those that would be offered at the proposed stores. The DEIS also clarifies that most of these patrons are probably spending much larger amounts on these goods in other*

counties including Westchester and Dutchess in New York, and Fairfield in Connecticut, and that some amount of the household income available for retail expenditures is either not spent at all, or is not currently spent in the tri-county area.

Comment 4.12-39 (Letter C-28 Ray Mainiero, Submitted September 13, 2006): School taxes are supposed to be $7.5 million to the Carmel school district. If you do the math on this, with a $93 million budget this represents less than 1% of our total school taxes. This would mean that the average resident of the towns of Carmel, Kent, and Patterson will receive approximately $10 for every $1000 of assessed school taxes. I'm not a tax expert, but if this is correct, it is a pittance in comparison to what we have to endure in other costs to our property values and quality of life. Those of us who live close to this project suffer most and endure the burden just so that others can enjoy a small tax refund, while the developer and other outsiders reap the major profits.

Response 4.12-39: *See Response 3.1-6 which addresses the school tax portion of the comment.*

The proposed layout, and proposed mitigation measures related to visual and other potential community impacts are expected to prevent significant quality of life impacts to the surrounding community. While significant impacts to property values in the surrounding community are not expected, the Applicant notes that the non-residential zoning of the vacant subject site has been long established, giving indication that some sort of commercial development on the site has been possible.

Comment 4.12-40 (Elena Bao, Letter #C-4, September 25, 2006): I object to the phase "tax benefits". The Applicant has not provided any data to show that this project will yield "tax penalties". We should not permit the Applicant to state this project will yield tax benefits when this DEIS provides no data to indicate this is the case.

Response* 4.12-40*: *Chapter 3.0 of the DEIS provides specific projections of future tax revenues based on the most recent tax rates and methods of projecting fiscal impacts. Costs to the involved municipalities and taxing jurisdictions are also projected. No significant fiscal impacts are anticipated by the project, which is expected to generate considerably more in tax revenues than the resultant costs to municipal services.*



Figure 4.12-1: Route 52 Visual Conditions With Existing Vacant Lake Carmel Hardware Store Building

Patterson Crossing Retail Center

Town of Patterson, Putnam County, New York

Source: TMA Photo, 3/08/07

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

4.13 CULTURAL RESOURCES COMMENTS AND RESPONSES

Comment 4.13-1 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): New York State Office of Parks, Recreation and Historic Preservation recently adopted new standards. The Applicant must examine whether additional studies are required in light of the new standards... It is presumptuous of the Applicant to make assumptions about the OPRHP's findings. The OPRHP's findings should have been included in this DEIS. The Applicant has had years, literally, to get this report. Its absence in this DEIS is unacceptable. **[Similar comments were found in the following letter: Letter #C4, Elena Bao, 09/25/06]**.

> ***Response 4.13-1:*** *A full archaeological report for the Patterson Crossing Retail Center was submitted to the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). OPRHP has reviewed the report and issued its determination on March 21, 2007 that the project will not impact upon cultural resources. A copy of that letter is contained in Appendix A herein.*

Comment 4.13-2 (Letter #C4, Elena Bao, 09/25/06): The Applicant doesn't address the existence of the Lake Carmel Park District in the DEIS, and hence has not even acknowledged there will be any impact resulting from building a massively-scaled regional retail center in such close proximity to our park district lake community. The character of the park district community is rural, quaint and geared toward "recreational" country living. The Lake Carmel Park District is a significant cultural resource and is one of Kent's most prized aesthetic resources. Lake Carmel is the focal point of most of our community's gatherings, festivals, and daily recreational activities and is a ¼-mile from the Patterson Crossing project's entrance... The Applicant uses the reference "Lake Carmel residential development". Why, when this is not its name? This area is called the Lake Carmel Park District. It is blatantly obvious that the Applicant has selectively chosen not to use the term "park district" in this entire DEIS in a effort to conceal the true character of the community the Patterson Crossing project will destroy. This is completely unacceptable and must be corrected in this DEIS. All references to the "Lake Carmel Hamlet" and "Lake Carmel residential development" need to be changed to the area's correct name, which is the Lake Carmel Park District. **[Similar comments were found in the following letter: Letter #C4, Elena Bao, 09/25/06]**.

> ***Response 4.13-2:*** *Lake Carmel Park District is a taxing district which includes many of the homes in the areas surrounding Lake Carmel. The District, which is established under Town Law as an "improvement district" (not a "park" per se), consists of privately-owned, residentially developed land, public streets, parkland along the shores of the lake, as well as the lake bed itself, and provides benefits to the local residents largely in the form of access to the lake and its shoreline. Section 190 of Town Law provides that the town board of any town may establish an improvement district for specified purposes, including for park land, and provide improvements or services in such district, wholly at the expense of the district. Lake Carmel Park District is such an improvement district established under Town Law for this purpose. Section 198 of Town Law provides that the town board has authority to establish and oversee improvement districts, and has authority to acquire, manage, and improve land in an approved park district. The town board may expend funds for the proper maintenance of such district for the use, convenience and enjoyment of the inhabitants of such district, and may grant licenses and privileges for any use of*

such property. The town board may adopt general rules and regulations for the government and protection of the improvement district. The Town of Kent manages Lake Carmel as a recreational resource through tax revenues obtained from Lake Carmel Park District property owners.

The Patterson Crossing Retail Center site is located next to Lake Carmel Park District. However, the proximity of the project site to the district has no effect on the purpose of the district. Further, as stated in DEIS section 4.13, given the orientation of the project site on the north and east sides of a ridge, potential visibility of the site from local vantage points is notably limited by the topography, and therefore, potential visibility of the site from points west is limited to the immediately adjacent properties and local roads.

It is acknowledged that Lake Carmel can be considered a recreational and community resource, although neither Lake Carmel Park District nor Lake Carmel itself is designated by the Town as a significant cultural or aesthetic resource in its recent "Update to Chapter 3, The Environment", of the Master Plan of 1990. The Patterson Crossing Retail Center site is not located within the Lake Carmel Park District and the development of the site is not projected to interfere or conflict with the activities that take place within the Park District.

The "Lake Carmel Hamlet" and "Lake Carmel residential development" referred to in the DEIS encompasses the area of the Town that generally comprises the unincorporated village of Lake Carmel, which is essentially the same as the Lake Carmel Park District.

Comment 4.13-3 (Letter #C4, Elena Bao, 09/25/06): A massive traffic volume increases from Patterson Crossing will impede residents' ability to access Lake Carmel in the ways they have always done and are accustomed to doing (on foot, on bikes). It is clear from this DEIS that project-generated traffic will create an unsafe pedestrian situation on Route 311 and it will no longer be safe (or possible) for residents and their children to traverse Route 311 to access the lake. Those living in a park district should have unhampered access to their lake, given they pay taxes to the park district to enjoy the lake's amenities. A project that will degrade the rural character of the park district, create traffic on local roads so severe that it will impede residents' access to their lake isn't a project that is appropriate to build on the border of a park district. The park district itself is a valuable quality of life resource to thousands of residents who live in the park district. Patterson Crossing as planned cannot co-exist with the Lake Carmel Park District without degrading the park district.

Response 4.13-3: *As noted in the Traffic chapter of the DEIS and this FEIS, over 70 percent of traffic generated by the Project and not already on NYS Route 311 would be traveling between the Interstate 84 interchange and the site entrance. At the present time, residents living south of the Patterson Crossing Retail Center site use the local roads to access shopping facilities elsewhere in the local area. That traffic is more likely to be redistributed rather than change significantly. Most roads in the Lake Carmel Park District that residents currently use for walking or biking are local roads that would not be adversely affected by the traffic associated with the Project. Pedestrian traffic at NYS Route 311 (primarily crossing that road) would benefit from the installation of traffic controls on the corridor that would provide greater gaps in*

traffic and the potential for providing formal cross walks at the signals. Traffic controls are planned by the applicant or others for NYS Route 311 that can be expected to have traffic calming effects on this corridor that passes Lake Carmel: included is a new signal at the project entrance, new signals or circles at the I-84 ramps, and new signal at NYS Route 311/Terry Hill Road.

Comment 4.13-4 (Letter #C4, Elena Bao, 09/25/06): The influx of thousands of patrons from various parts of the county has the potential to degrade quality of life for residents of the park district. Bringing "strangers" into this area will "expose" the beauty of our park district to those who may not realized the park or the lake existed. This will lead to non-residents encroaching on the park district. The Applicant has not addressed this issue in the DEIS from a quality of life standpoint or from a park district service cost standpoint. How will the park district monitor and address such problems? How much more is it going to cost the park district to monitor and enforce the local rules we have in place to deal with non-residents using our lake? To what extent will our community be degraded by the invasive nature of crowds passing through? The beauty of our community is in plain view from Route 311 and Route 52, where thousands more people per day will travel in order to get to Patterson Crossing. Without question, this beauty will draw thousands of strangers to our lakeside which is an enormous imposition on park district residents.

Response 4.13-4: *The increased use of Park District property by "strangers" is highly speculative and there are no studies to support such speculation. Resources within the Park District are well posted as to who has the right to use them and there is no reason to believe that the citizens of Putnam County will not continue to obey applicable rules and regulations. More than 70 percent of new trips are estimated to be coming from and returning to the north, thus not passing the lake at all. Some of those trips will come from the traffic already passing the site on Interstate 84 (56,000 vehicles per day according to NYS 2005 Highway Sufficiency Ratings, NYS DOT). The site development will be visible from Interstate 84, however the lake will not be visible from the site due to the topography.*

Comment 4.13-5 (Letter #C4, Elena Bao, 09/25/06): The applicant has designed Patterson Crossing to be as conspicuous as possible from I-84 with no regard that doing so will degrade and "cheapen" the landscape with big-box stores. I believe Richard Williams in one of his SEQR Completeness reviews made note that he had concerns that the applicant's building layout was insensitive to adverse visual impacts from I-84 yet the Applicant did nothing to address the planner's concerns on this. Brewster Highlands is an eye-sore at Exit 19. The Applicant's "marketing needs" for Patterson Crossing should not take precedence over Kent and Patterson's need to maintain the "rural character" of the Route 311 corridor and the surrounding Lake Carmel Park District and Patterson communities.

Response 4.13-5: *In view of the long-standing designation of this site for commercial use in both the Patterson and Kent comprehensive plans, and the bulk standards set forth in the zoning of both towns, the project as proposed clearly conforms to that which has long been envisioned by both towns as a goal for this site. The portion of the project site in the Town of Kent is zoned commercial and the portion of the site proposed for development in the Town of Patterson is zoned industrial.*

As a result of comments received on the plan presented in the DEIS, the project has been reduced in scale, buildings reconfigured and the site plan modified to

incorporate conceptual architectural details and gateway features that are designed to improve the visual character of the retail center in terms of its position in the Lake Carmel/Patterson community. DEIS Figure 4.13-1 and visual section Figures 4.13-2 through 4.13-5 have been revised for this FEIS to represent the plan revisions and are provided at the end of this section. A presentation assembled by the Applicant's architectural consultant, Street-Works LLC, which is reproduced in FEIS Appendix M, illustrates the improvements and features being considered in the Patterson Crossing Retail Center plan. The proposed plan enhancements incorporate a number of design concepts, generally encompassing the following key points: enhancement of the image of the gateway to Kent and Patterson; attractive entry to the project site, with a public outdoor plaza as a focal point; well designed pedestrian connections to all stores; sensitive lighting and signage designs; and a conceptual rural architectural style throughout the project. These aesthetic features of the proposed project are illustrated in Appendix M.[1]

Particular to the visibility of the project from the "gateway" to Kent and Patterson, the Applicant proposes a design style that will reflect the historically rural architecture and pastoral landscape that exists in Putnam County. This design concept includes use of stone walls, fences, and tree plantings along the local circulation paths: the frontage on NYS Route 311 and the project entry drive. Additionally, and integral to the project design concept, the proposed style of building architecture was selected to enhance the gateway when viewed from off-site. See FEIS Figures 4.13-6 and 4.13-7 that illustrate the design concept for portions of the architecture that will be visible from Interstate 84. [2]

As described in the DEIS, the elevation of the project site in relation to Interstate 84 and NYS Route 311 will limit the extent of visibility of the project as a whole, particularly the parking fields in the project. Since the project site is higher than these roads, portions of the buildings will be visible from the highway while ground level features such as vehicles and pavement areas will be hidden from these views. Additionally, tree cover that exists within the road rights-of-way will remain as a buffer to views from these roadways. Enhanced building architecture is proposed, in combination with the enhanced landscape plan, to provide an attractive development as viewed from the nearby roadways.

The Applicant's design team has developed a signage concept that would be appropriate given the location of the site and the requirements of the tenants. Details of the signage size, type and location will be addressed during the final site plan design. It is acknowledged that the project is expected to require variances for particular aspects of the proposed signage program since, like many communities, the Town of Patterson has a signage ordinance that is not sufficiently adaptable to address the needs of a gateway project like this one. The ordinance is more clearly focused on signage appropriate to small stores in a village setting rather than large format retailers looking for identity both from the interstate highway and from within a site. Figures 4.13-8 and 4.13-9 compare the signage limitations of the current zoning regulations versus the design concept that is being developed by the Applicant. The

[1] It is noted that the Patterson Crossing Plan Enhancements illustrated in Appendix M are conceptual designs and further project-specific architectural details will be developed as part of the final site plans for the project.

[2] DEIS Figures 4.13-1 through 4.13-5, Line of Sight Profiles, have been modified to reflect the current project plan and are included at the end of this section.

Applicant believes there is value and importance in providing appropriate, well-designed project signage and graphics that will support the project's viability.

Comment 4.13-6 (Letter #C4, Elena Bao, 09/25/06): "May" be visible from residential properties? Residents will see the parking lots, will see the access roads, and will see the buildings. There is no "may" in this situation.

Response 4.13-6: *The proposed plan includes a 6-foot tall privacy fence and landscaping to be installed at the property line nearest the residences that are located adjacent to the site to the west, which will soften the view of the development from these homes. As shown in the line of sight profiles (revised and presented in FEIS Figures 4.13-2 through 4.13-5), views of portions of the site development will be possible from Longfellow Drive, Concord Road, and Echo Road. Lighting has also been designed to minimize off-site effects to the greatest extent practicable. While portions of the project may be visible from residential properties to the west, it is noted that the project as proposed clearly conforms to the planning and zoning of both the Town of Kent and the Town of Patterson for this site. See Response 4.13-5.*

Drawing SP-2.2 shows evergreen planting proposed at the emergency access to avert view from Concord Road through the access road opening. The lines of sight from Concord Road at this location are illustrated in FEIS Figure 4.13-5B. The proposed plan specifies buffer planting to be two rows of evergreen trees, planted at 8' to 10' height and approximately 12 feet on center. The alignment of the emergency access is curved and additional trees are proposed at the access (shown in the key map in Figure 4.13-5B) to further obscure views from Concord Road at this location.

Elsewhere, a third row of evergreen trees is proposed on the west side of the proposed privacy fence where existing tree cover cannot be preserved in the buffer (see the Layout and Landscape Plans included with this document).

Comment 4.13-7 (Letter #C4, Elena Bao, 09/25/06): However "attractive" Exit 18 might be to developers for commerce, we cannot allow any party to exploit our community for financial gain while completely disregarding the community's character and values. We must not lose sight of the fact that Exit 18 is the "entrance" into the Kent/Lake Carmel Park District/Patterson communities and any project (if any) we allow on this site must embody the character of the surrounding communities. The Applicant shows no regard whatsoever to the sensitivity of this site in terms of the impacts it would have on the "look and feel" of entrance to our community. Patterson Crossing most certainly doesn't say "Where the country begins" to visitors at Exit 18 and neither do the big-box buildings the Applicant wants to display so prominently on I-84. Patterson Crossing is not in keeping with the surrounding character of our community nor is it consistent with how we have historically defined our community. This project will force our community to redefine itself as a "big-box" shopping destination.

Response 4.13-7: *Patterson Crossing Retail Center is designed to conform to the existing industrial and commercial zoning for the property, which clearly relates to its proximity to the Interstate 84/NYS Route 311 interchange. As a shopping destination, this location is well suited for such a development. As part of the project plan, the Applicant is developing plan enhancements in a style that will reflect the historically rural architecture and pastoral landscapes in Putnam County and address the*

visibility of the project from the "gateway" to Kent and Patterson. See Response 4.13-5.

Comment 4.13-8 (Comment number not used):

Comment 4.13-9 (Comment number not used):

Comment 4.13-10 (Letter #C4, Elena Bao, 09/25/06): Residents living in the Barrett Hill area enjoy a breathtaking view of Lake Carmel and the hills beyond it due to their high elevation on the hill. This DEIS does not include any viewshed analysis for the Barrett Hill area when it is glaringly obvious that residents living in this area will experience significant adverse visual impacts and light pollution impacts from the Patterson Crossing project. The Applicant must perform a thorough viewshed and light pollution analysis for the Barrett Hill area in both the winter and summer seasons to enable the visual impact from this vantage point to be assessed. This is an issue which cannot be ignored given these residents have Lake Carmel, a prominent aesthetic, in their viewshed. **[Similar comments were found in the following letter: Letter C-57, September 25, 2006, Glenna Wright].**

Response 4.13-10: *The visual assessment performed for the DEIS included a delineation of the potential viewshed of the project site, which is limited given the orientation of the project site on the east side of a ridge line. The review of the USGS topographic maps indicated that the Patterson Crossing Retail Center site is situated on the opposite side of the hill from Lake Carmel and the residences on Barrett Hill Road. See Revised Figure 4.13-1 at the end of this section showing the extent of the potential viewshed of the site based on topography. There is no direct line of sight from the residences in the vicinity of Barrett Hill Road to the project site, its proposed buildings, or the proposed lighting fixtures at any time of year. See Figure 4.13-5A at the end of this section. The project is proposed to comply with accepted industry guidance for parking lot lighting of the Illuminating Engineering Society of North America, and with all applicable requirements of Patterson Town Code §154-22.1F regarding lighting, including the requirement that all exterior lighting have full shielding, with recessed bulbs, and the light fixtures be installed in a horizontal position. The use of full cutoff lighting fixtures is advocated for the reduction of light pollution. It is also commonly recommended that lights be spaced appropriately for maximum efficiency, and that lamps within the fixtures not be overpowered. A full cutoff fixture, when correctly installed, reduces the chance for light to escape above the plane of the horizontal. The DEIS presents the proposed lighting at the site, including a photometric lighting plan demonstrating that there will be no measurable light (measured at the ground) emitted from this project onto any adjoining property 200 feet from the property line during operating hours, and with the exception at the site access, no measurable light levels emitted after operating hours at the property line. However, analysis of light pollution ("nighttime glow") is a very complicated procedure and beyond the scope of this EIS. After-hours site lighting will be equipped with light control devices (timers and/or dimmers) to automatically reduce site illumination after operating hours. The reduced late-night lighting is designed to provide safe lighting conditions for minor vehicle movement (such as for night deliveries, if any) and security. While, the DEIS represents that portions of the illuminated site will be visible from off-site, lamp characteristics and pole spacing in this project will be designed to avoid light emissions at the property line and therefore have minimal effect on neighboring residential uses at any time of year.*

Comment 4.13-11 (Letter #C4, Elena Bao, 09/25/06): The Applicant describes the residential area as being "modest density" and "moderate density". This is false. The area is a densely populated rural lake community that is a legally designated park district called the Lake Carmel Park District.

Response 4.13-11: *According to 2006 U.S. Census Bureau population estimates, the population density of the Lake Carmel census designated place is 409-822 persons per square mile. As part of the NY -- Newark, NY-NJ-CT urbanized area, the Lake Carmel area consists of contiguous, densely settled census block groups and census blocks. The terminology used in the DEIS refers to the general characteristic of development intensity in relation to all the land surrounding the project site, which includes undeveloped land. DEIS Figures 2-3 and 4.7-1 illustrate the general development pattern of the local area, clearly depicting a land use density of the Lake Carmel Park District that can be characterized as dense development, albeit in a larger rural setting. The homes in the area are generally on small lots served by septic systems.*

See Response 4.13-2 regarding the designation of the Lake Carmel Park District.

Comment 4.13-12 (Letter #C4, Elena Bao, 09/25/06): I am unsure how the Barrett Hill area would have been left out of this DEIS from a visual impact assessment as the software described here clearly would have identified the Barrett Hill area as having a view of the site based on its elevation (higher than the Patterson Crossing site in some areas). It is unacceptable that the Barrett Hill area has been left out of this DEIS.

Response 4.13-12: *See Response 4.13-10, and Figure 4.13-5A at the end of this section.*

Comment 4.13-13 (Letter #C4, Elena Bao, 09/25/06): The "field survey" referred to here is a farce. The Applicant states a field survey was performed yet Lake Carmel wasn't identified as an aesthetic resource in this DEIS, the Applicant fails to acknowledge that this project would abut a legally designated park district, and fails to identify the Lake Carmel Clubhouse on the corner of Clubhouse Drive and Vernon as a structure of significant architectural design.

Response 4.13-13: *The DEIS visual assessment was prepared in accordance with NYSDEC guidance for visual analysis and included analysis of available topographic mapping of the project area and in-field investigation to determine the potentially affected "viewshed" of the project site. Lake Carmel and its immediate surroundings are outside of the potential viewshed of the project due to the natural topographic ridge line along the west side of the project site, as shown in Figures 4.13-1 and 4.13-5A at the end of this section.*

It is acknowledged that Lake Carmel can be considered an aesthetic resource although it is not designated by the Town as such in its recent update to the Town Master Plan (see Response 4.13-2), and that the project site is next to the Lake Carmel Park District.

The building identified above as the Lake Carmel Clubhouse, which is located near the southwestern corner of the project site, was identified in the in-field portion of the DEIS visual assessment as a privately owned apartment building of varied architectural style (not architecturally significant) and thus, not of significance in relation to visual impacts. The clubhouse property is separated from the Patterson Crossing Retail Center site by woods and a residential property and is located, in fact, outside the viewshed of the development portion of the proposed project due to an intervening hill on the project site. The former clubhouse building has wood and fieldstone facades resembling rural construction of the 1930s, of similar architectural design to some of the larger farmstead residences in the Putnam County area, but is not considered to be of architectural significance. Refer to Response Appendix B-5.

Comment 4.13-14 (Comment number not used):

Comment 4.13-15 (Letter #C4, Elena Bao, 09/25/06): The description of the visual character of the immediate area provided by the Applicant here conceals the true character of the community and minimizes project-generated social and visual impacts in this DEIS. The Applicant failed to include any scenic photos of the Lake Carmel Park District to illustrate its current community character. There are no photos of the residential neighborhoods, the residential streets, its breathtaking shorelines, lush green foliage, and the picturesque scenery which define our lake community. So there are no misunderstandings of what lies to the immediate west of the project site, I compiled a photo album of the Lake Carmel Park District (located in Appendices of my written comments) to accurately represent the community's character for public record. The Applicant's omission of any reference to the park district community that will be most impacted by Patterson Crossing reflects poorly on the Applicant, who is required by SEQRA to provide an unbiased representation of project impacts. Treating the Lake Carmel Park District like it doesn't exist for the purposes of this DEIS is unacceptable & inconsistent with the spirit and intent of SEQRA.

Response 4.13-15: *Lake Carmel Park District is an "improvement district" established for purposes of creating tax revenue for maintenance of the Lake Carmel area and is comprised of developed lands as well as park features. (Refer to Response 4.13-2.) The park features are those illustrated in all but three of the photos attached to the commentor's letter. DEIS Chapter 4.13 describes that the character of the Lake community as a whole would be substantially unaffected by development on the project site since the area of potential visual influence from the project site is limited to the immediately adjacent properties, adjacent local roads, and a small portion of Longfellow Drive. While next to the Park District, the project is situated outside the area of significant visual influence from the District due to the natural topography. This is demonstrated in FEIS Figure 4.13-5A.*

Since SEQRA requires that a subject area be assessed at a level of detail commensurate with the likely impact, the bulk of the Lake Carmel Park District was not discussed as the vast majority of homes in the District will not see the Patterson Crossing Retail Center.

Comment 4.13-16 (Letter #C4, Elena Bao, 09/25/06): No mention of the Barrett Hill Area? No mention of Lake Carmel or its many beaches a ¼ mile from the project site? No mention of the Lake Carmel Clubhouse?

Response 4.13-16: *Refer to Responses 4.13-12 through 4.13-15.*

Comment 4.13-17 (Letter #C4, Elena Bao, 09/25/06): There are no 3-dimensional models of the project site which allow an adequate assessment of visual impacts "post build". During the scoping session, this model was requested by a resident of Lake Carmel but the Lead Agency did not incorporate this item in the Final Scope. The visual impact issue is a critical one, given that this project abuts Lake Carmel Park District. The Applicant most certainly has the resources to prepare a 3-dimensional model (be it physical or computer generated). The Applicant must be compelled to provide this. At the very least, there should be artist sketches/renderings of the visual impacts of the project from any location which will have a view of the project or the lights from this project - including, but not limited to:

- 84 East
- 84 West
- Route 311 on the "Kent" side
- Route 311 from Ludingtonville Road area
- Route 52
- Barrett Hill Road area
- Concord Road
- Longfellow Road
- Lake Carmel beach area

Response 4.13-17: *While SEQR requires that an area of concern be assessed in the SEQR documents made available for public review, it does not prescribe the method for such evaluation. The applicant has prepared a visual assessment in accordance with the final scoping document approved by the Lead Agency, as well as the NYSDEC guidance for determinations of visual impact that sufficiently and accurately considers the potential visual effects of the proposed action without need for presenting a model. The presentation in the DEIS identifies the potential area of study as the site viewshed, and states:*

> *"Potential views of the site from points west are limited to the immediately adjacent properties and local roads due to the topography.... The Lake Carmel residential development dominates land west of the project site, primarily on west-facing slopes outside of the potential viewshed. The project site... is located on northeast-facing slopes.... From the in-field reconnaissance, the actual project site viewshed was determined to encompass short portions of Interstate 84, Route 311, Fair Street, Concord Road, Echo Road, Vernon Drive and nearby locations, and a small portion of Longfellow Drive to the northwest. Existing views into the site are found to be limited by topography.... No site views were identified from other local roads in the site vicinity due to the natural conditions of the area."*

The graphic presentation in the DEIS assesses potential effects from the noted locations: [3]

[3] Note that DEIS Figures 4.13-1 through 4.13-5 have been modified and are included in this FEIS as Revised Figures 4.13-1 through 4.13-5.

- *Interstate 84 East (views for westbound traffic): Figures 4.13.1B, 4.13-2 and 4.13-4*
- *Interstate 84 West (views for eastbound traffic): Figures 4.13.1D, 4.13-3, 4.13-4 and 4.13-5*
- *Route 311 Kent side: Figures 4.13.2, 4.13-3 and 4.13-5*
- *Route 311 Ludington Road area: Figures 4.13.1E and 4.13-4*
- *Concord Road: Figures 4.13.1G and F, and 4.13-4*
- *Longfellow Drive: Figures 4.13.1H and 4.13-5*

Other locations noted in the comment (Route 52, Barrett Hill Road area and Lake Carmel beach area) are situated west of the natural topographic ridge that is the limit of the actual project site viewshed. See FEIS Figure 4.13-5A. Given this fact there would be no visual impact at these locations resulting from the project.

Comment 4.13-18 (Letter C-29 Thomas F. Maxson, September 16, 2006): The DEIS states; "No historic resources are located on this project site. Therefore, the proposed project would not result in any significant impact to historic resources" (pg. 1-21). The DEIS also notes that there was a review of the available historic literature, with no historical significance being found. (pg. 4-13). Curiously absent from the reference materials listed in Appendix N of DEIS is the most comprehensive work covering the history of this area, William S. Pelletreau's History of Putnam County, New York, originally published in 1886. Per Pelletreau's description as found on pages 704-706: David Kent, who for many years one of the most prominent citizens of Putnam County, was the son of Elihu Kent, who was born in 1749, and died September 17,1807...David Kent was born in the town of Kent September 3d, 1792, on the farm now owned by Samuel Terry, and where his father then lived. He remained at home till he reached the age of sixteen, when he began teaching school, a vocation which he followed till he was nineteen." **[Similar comments were expressed by the following member of the public during DEIS public hearings: Public Hearing, September 14, 2006, Tom Maxson].**

Response 4.13-18: *A full archaeological report for the Patterson Crossing Retail Center was submitted to the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). OPRHP has reviewed the report and issued a determination on March 21, 2007 that the project will not impact upon cultural resources. A copy of that letter is contained in Appendix A herein. Moreover, as indicated in the DEIS, a search of the site files maintained by the New York State OPRHP in Albany indicated no structures currently listed, nominated or determined eligible for listing on the State or National Register of Historic Places were found within one mile of the study area and that no buildings that meet the minimum age requirements for listing were identified adjacent to or with a view of the proposed development.*

Comment 4.13-19 (Letter C-29 Thomas F. Maxson, September 16, 2006): Appendix N also states that: "The study area is seen as unlikely to contain structural remains and cultural features related to the early European American era occupation of the area... No such structures were identified." Of course, it is impossible to properly evaluate the presence of structures and foundations when the developer has moved literally thousands of rocks and boulders across the property. No one can ever say for sure what was there before this massive effort took place. The Planning Board should reject the developer's claim, as it appears in Appendix N, that there were no structures on this property.

Response 4.13-19: *The archaeological investigation conducted at the project site by professional archaeologists included the systematic subsurface sampling of the site, as well as research using historic maps to identify any buildings that may have been present on the site, even if any such building had previously been removed. More than 800 shovel tests were excavated across the site. As previously stated, the investigation followed the strict standards accepted by OPRHP for such investigations as their approval of the archeological report confirms.*
See also Response 4.13-1.

Comment 4.13-20 (Letter C-29 Thomas F. Maxson, September 16, 2006): The DEIS is clearly incorrect when it dismisses the potential cultural and historical significance of this property. Further, the absence of any mention of Pelletreau's History of Putnam County, New York, the most significant historic work ever undertaken in this area raises serious questions as to the accuracy of the DEIS assessment of cultural and historical impacts, and the approach taken in arriving at its conclusions.

Response 4.13-20: *The potential for impacts of the proposed Patterson Crossing Retail Center development on historic or prehistoric cultural resources was only eliminated after systematic subsurface sampling indicated that no Native American or pre-WWII European American cultural items were found on the project site. See Response 4.13-1.*

Comment 4.13-21 (Letter C-57, September 25, 2006, Glenna Wright): This section misdescribes the general area as "rural development," emphasizing the development aspect as single-family homes, and individual commercial and retail establishments. In actuality, the area is *rural,* that is lacking in development. The proposed retail center would introduce urban sprawl in a decidedly rural setting.

Response 4.13-21: *DEIS Figures 2-3 and 4.7-1 illustrate the general development pattern of the local area, clearly depicting a land use density of the Lake Carmel Park District that can be characterized as dense development, albeit in a larger rural setting. See response to Comment 4.13-11. The US Census Bureau classifies areas as either "urban" or "rural". Lake Carmel is classified as an urbanized area by the US Census. The aerial photograph in Figure 4.7-1 clearly shows the density of development adjacent to the site to the west.*

Comment 4.13-22 (Letter C-57, September 25, 2006, Glenna Wright): The DEIS completely fails to acknowledge the existence of the Lake Carmel Park District, whose property line abuts that of the proposed site. There is no reference made to the Great Swamp that is contained within the proposed site and there is no mention of Lake Carmel that is less than 4/10ths of a mile from the site entrance. **[Similar comments were expressed by the following member of the public during DEIS public hearings: Public Hearing, September 13, 2006, Glenna Wright]**

Response 4.13-22: *Refer to Response 4.13-2 for information on the Lake Carmel Park District. The project site is located within the drainage area of the Great Swamp, however this large freshwater wetland is not located on or near the project site. Lake Carmel is located approximately one-quarter mile west of the project site, at the closest point.*

Comment 4.13-23 (Letter C-57, September 25, 2006, Glenna Wright): The Lake Carmel Park District, established circa 1939, borders the property line with proposed project. What provisions have been put in place by the applicant to preserve the Park District?

Response 4.13-23: *There are no protective rights associated with the Lake Carmel Park District for properties in or next to the District but rather, the District is an improvement district established to support the amenities and recreation facilities associated with Lake Carmel. (Refer to Response 4.13-2.) Notwithstanding this fact, the project Applicant proposes a significant landscaped buffer along the property line that faces the District. The proposed landscaping plan includes a privacy fence, a complement of trees and shrubs for screening and shade, reestablishment of vegetated buffers, and ornamental plantings for aesthetics.*

Preserving the Lake Carmel Park District relies, in part, on protecting and improving water quality in Lake Carmel. To that end, the Stormwater Pollution Prevention Plan (SWPPP) for the proposed project incorporates provisions to reduce existing pollutant loads in stormwater that are currently being conveyed to the lake by the Middle Branch of the Croton River.

Untreated stormwater runoff currently entering Lake Carmel includes runoff from the northern portion of the project site, from portions of New York State Route 311 and Interstate 84, and from the residential development north of Lake Carmel on Concord Road. As proposed, runoff from these three areas will be treated before it enters the lake.

Runoff from the first area originates in the northern portion of the site that includes the proposed access road and the northern parking area and side slopes. A proposed stormwater treatment train, consisting of two stormwater ponds in series, will treat runoff from a portion of the entrance road and from the lower parking areas for the main retail pad. Runoff from the second area includes that from the northern portion of the proposed access road and adjacent side slopes, and that generated off site along NYS Route 311 and portions of the Interstate 84 median and ramps. Although not required to meet any regulatory requirements, stormwater generated from these off-site areas will be treated with runoff generated on-site in a stormwater pond before being discharged to the river.

The third component of stormwater runoff discharging to the lake is the runoff from the existing residential development on Concord Road. This runoff discharges to a highly eroded ditch that conveys flows across the project site before reaching the Middle Branch Croton River and Lake Carmel. Although treatment of this runoff is not required either, a treatment pond is proposed to improve stormwater quality and rectify a chronic source of sediment entering Lake Carmel. The pond will improve stormwater quality, while continuing flow in the tributary to the Middle Branch of the Croton River.

The proposed treatment of runoff from Interstate 84 and the area adjacent to NYS Route 311, a reduction in the previously proposed area of impervious surface on the project site, and treatment of stormwater entering the site from Concord Road, will help preserve the Lake Carmel Park District by achieving significant reductions in

existing loads of Total Phosphorous, as well as, Total Nitrogen and Total Suspended Solids that would continue to enter Lake Carmel were the project not constructed.

The Applicant notes that with respect to phosphorous, the pollutant of greatest concern in freshwater water bodies such as Lake Carmel, implementing the proposed SWPPP for the project is expected to achieve better than the calculated mean removal efficiencies due to adjunct stormwater treatment practices that have been incorporated into the project design, but not considered in the calculation of post development pollutant loading. These adjuncts include catch basin/drain inlet sumps, turf filter strips, forested filter strips, and the addition of permanent pools in the stormwater basins. Even without these measures, implementing the project is expected to reduce existing phosphorous loads entering the lake by more than six pounds per year.

Comment 4.13-24 (Letter C-57, September 25, 2006, Glenna Wright): How may it be legally permissible to build a project of this type and scale adjacent to a New York State Park District?

Response 4.13-24: *Lake Carmel Park District is an improvement district established under § 198 of New York State Town Law. See Response 4.13-2. The type and scale of development that is permitted adjacent to the Park District is regulated primarily by the existing zoning. The proposed retail center conforms to the zoning and all land use requirements that are applicable to the project site.*

Comment 4.13-25 (Letter C-57, September 25, 2006, Glenna Wright): What has the Town of Patterson done to protect the inhabitants of the Park District of the entirely negative impact of this project? Has the Town of Patterson met its legal responsibilities in this regard?

Response 4.13-25: *The NY State environmental review process is intended to identify potential impacts of a project and find reasonable and feasible mitigation measures that will minimize or avoid such impacts to the greatest extent practicable. As the Lead Agency for this application, the Town of Patterson Planning Board will continue to review the various aspects of the proposed project in relation to its surrounding environment. The Board will consider each and every one of the public comments received on the DEIS and the responses to those comments as presented in this FEIS prior to making its decision to approve or disapprove the project, which it is obligated to do as part of the formal environmental review process.*

Comment 4.13-26 (Letter C-57, September 25, 2006, Glenna Wright): The DEIS report makes no reference to the impact the project will have upon Lake Carmel and its beach locations in terms of viewsheds, signage and lighting. Lighting and signage need to be addressed in both day and night time conditions. This omission should be rectified before a vote is permitted. **[Similar comments were expressed by the following member of the public during DEIS public hearings: Public Hearing, September 13, 2006, Glenna Wright]**.

Response 4.13-26: *The buildings proposed for the Patterson Crossing Retail Center will be 3/5 of a mile from the nearest beach at Lake Carmel. There will be no signs associated with the Retail Center visible from Lake Carmel. Since the site cannot be seen from any of the beaches on the lake, the beaches are not open to the public at*

night, and the lighting at the Patterson Crossing Retail Center will be shielded to prevent spillage onto neighboring properties, there will be no impact of views, signage or lighting from Lake Carmel and its beaches. Refer to Response 4.13-10 and FEIS Figure 4.13-5A.

Comment 4.13-27 (Letter C-57, September 25, 2006, Glenna Wright): There is no discussion of how project will impact Park District locations as seen from Barrett Hill on Route 52 and other elevated areas in terms viewshed, signage and lighting.

Response 4.13-27: *See Response to Comment 4.13-10.*

Comment 4.13-28 (Letter C-57, September 25, 2006, Glenna Wright): There is no artist rendering of the project or scale model of the project. The proponent's failure to utilize these common tools lead to the inescapable conclusion that had they been created, they would obviously illustrate the project's impact upon Lake Carmel and the surrounding Park District.

Response 4.13-28: *The DEIS establishes that the project site is located outside of the area of visibility from Lake Carmel itself and lands within the Lake Carmel Park District, with the exception of Concord Road, Echo Road, Vernon Drive and nearby locations, and a small portion of Longfellow Drive. The effects on these areas is discussed in the DEIS. As explained in Response 4.13-17, SEQR does not prescribe the method for evaluation of impacts, however, the DEIS visual assessment was prepared in accordance with NYSDEC guidance for visual impact analysis.*

Renderings of the Proposed Action and Gateway improvements generated by Street Works LLC are included in Appendix M.

Comment 4.13-29 (Letter C-57, September 25, 2006, Glenna Wright): The proposal to strip the entire site of forest is evidence that landscaping is to be inexpensive and expedient and is not sensitive to the Park District, Lake Carmel and the residences that are on the property line.

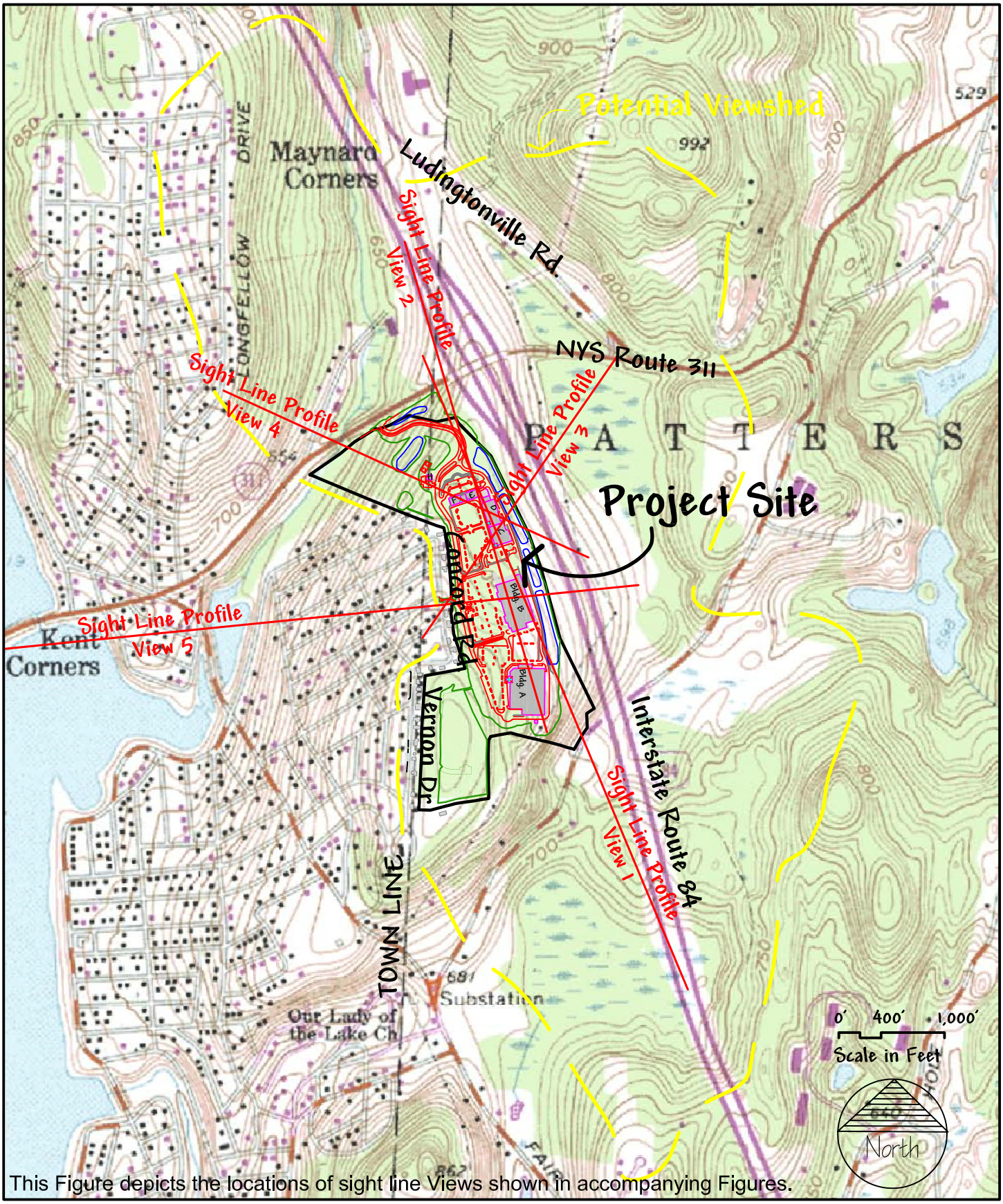
Response 4.13-29: *The applicant sees no correlation between the amount of tree removals necessary to develop the proposed project and the type of landscaping proposed. The proposed landscaping plan includes a privacy fence, a complement of trees and shrubs for screening and shade, reestablishment of vegetated buffers, and ornamental plantings for aesthetics. It is the intention of the Lead Agency to recognize the potential impacts of the project on the neighbors and to require that the Applicant implement appropriate landscaping as mitigation for the changes in views into the project site.*

Comment 4.13-30 (Letter C-57, September 25, 2006, Glenna Wright): The Patterson Crossing Site is over 600 feet wide at the narrowest point and is 1200 feet at its widest point. The site consists of dense vegetation and therefore, a 200 foot buffer of existing dense vegetation could easily be retained.

Response 4.13-30: *The Applicant's proposal conforms to the zoning requirements that are applicable to the project site and provides 25-foot wide and 50-foot wide vegetated buffers on the site's western border, with a privacy fence along the narrowest portions of the buffer.*

Comment 4.13-31 (Letter C-57, September 25, 2006, Glenna Wright): Segment 4.13.1 dealing with Historic and Archaeological Resources noted that the characteristic of the topography combined with the Native American history of this region, the site location is thought to have average to above-average potential for significant artifacts of both Native American and European American artifacts. What mechanism will be in place to monitor soil or site for any archaeological artifacts that may be discovered as more significant earth moving is involved? What does applicant propose to do if significant artifacts are discovered on site during the course of the construction?

Response 4.13-31: *After the extensive archeological analysis conducted on the project site and in conformance with State requirements, the OPRHP made its determination that the project will not adversely affect archaeological resources. No further measures are warranted.*



Revised Figure 4.13-1: Key Map to Visual Sections

Patterson Crossing Retail Center

Towns of Patterson & Kent, Putnam County, New York

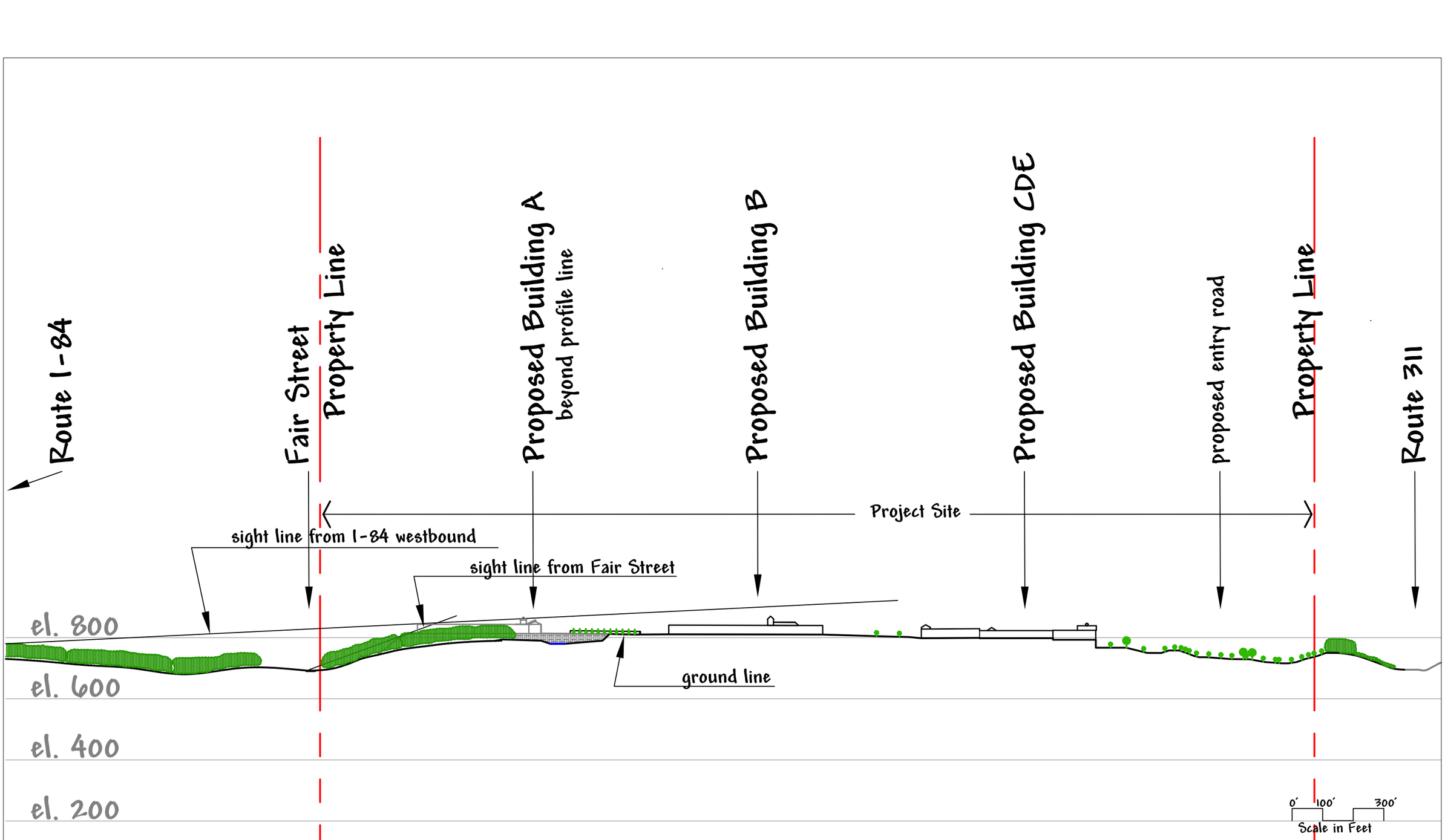
Base Map: USGS Topographic Quad: Lake Carmel

Rev. 07/18/07

Scale: 1" = 1,250'

W:\Patterson Crossing\CAD\pattxing visual assessmt.dwg: keymap

Tim Miller Associates, Inc., 10 North Street, Cold Spring, New York 10516

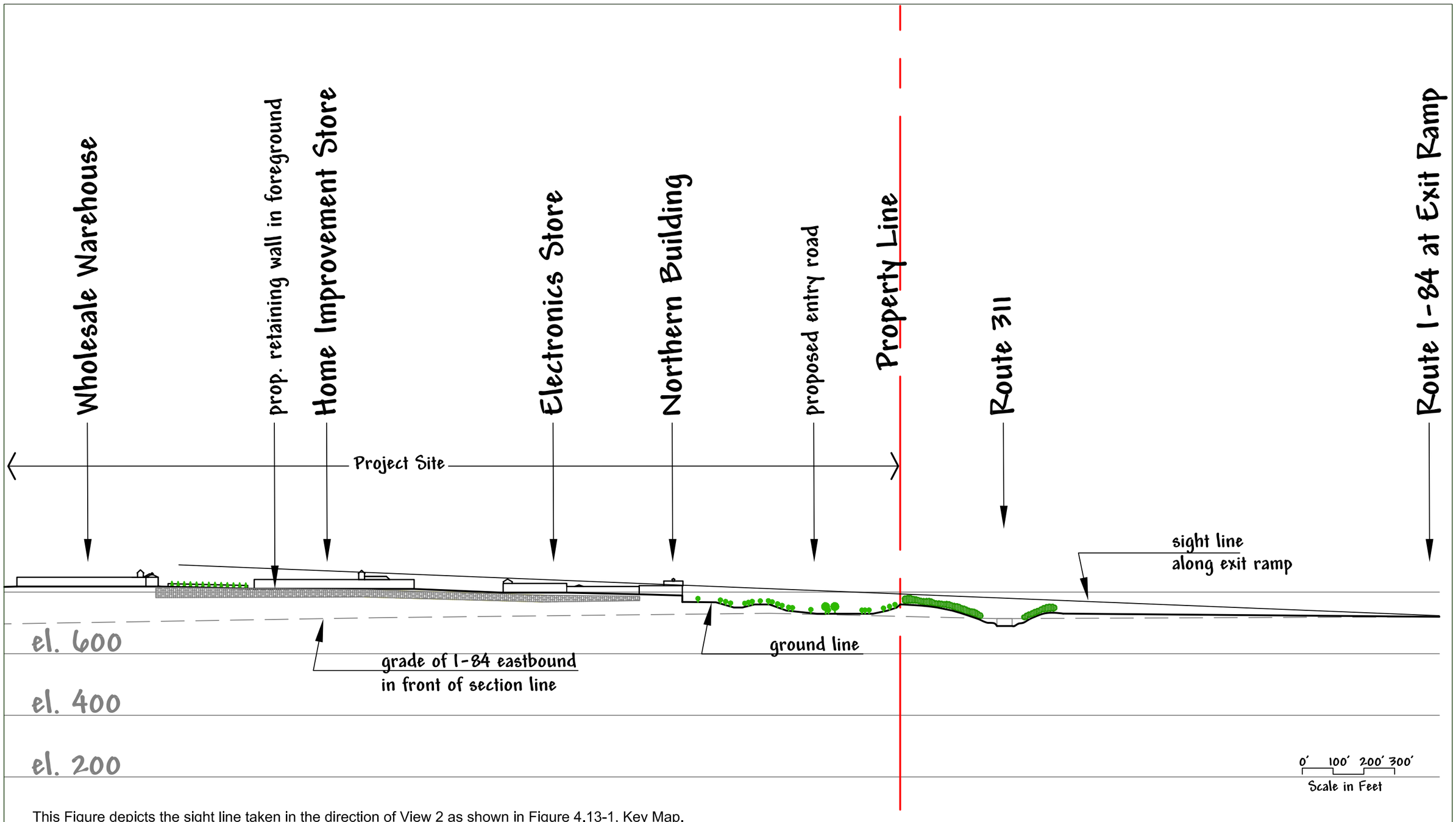


This Figure depicts the sight line taken in the direction of View 1 as shown in Figure 4.13-1, Key Map.

Rev. 07/18/07
Scale: 1" = 300'

W:\Patterson Crossing\CAD\pattxing visual assessmt.dwg: View1

Revised Figure 4.13-2: Line of Sight Profile from I-84 Westbound - View 1
Patterson Crossing Retail Center
Towns of Patterson & Kent, Putnam County, New York
Prepared by: Tim Miller Associates, Inc.

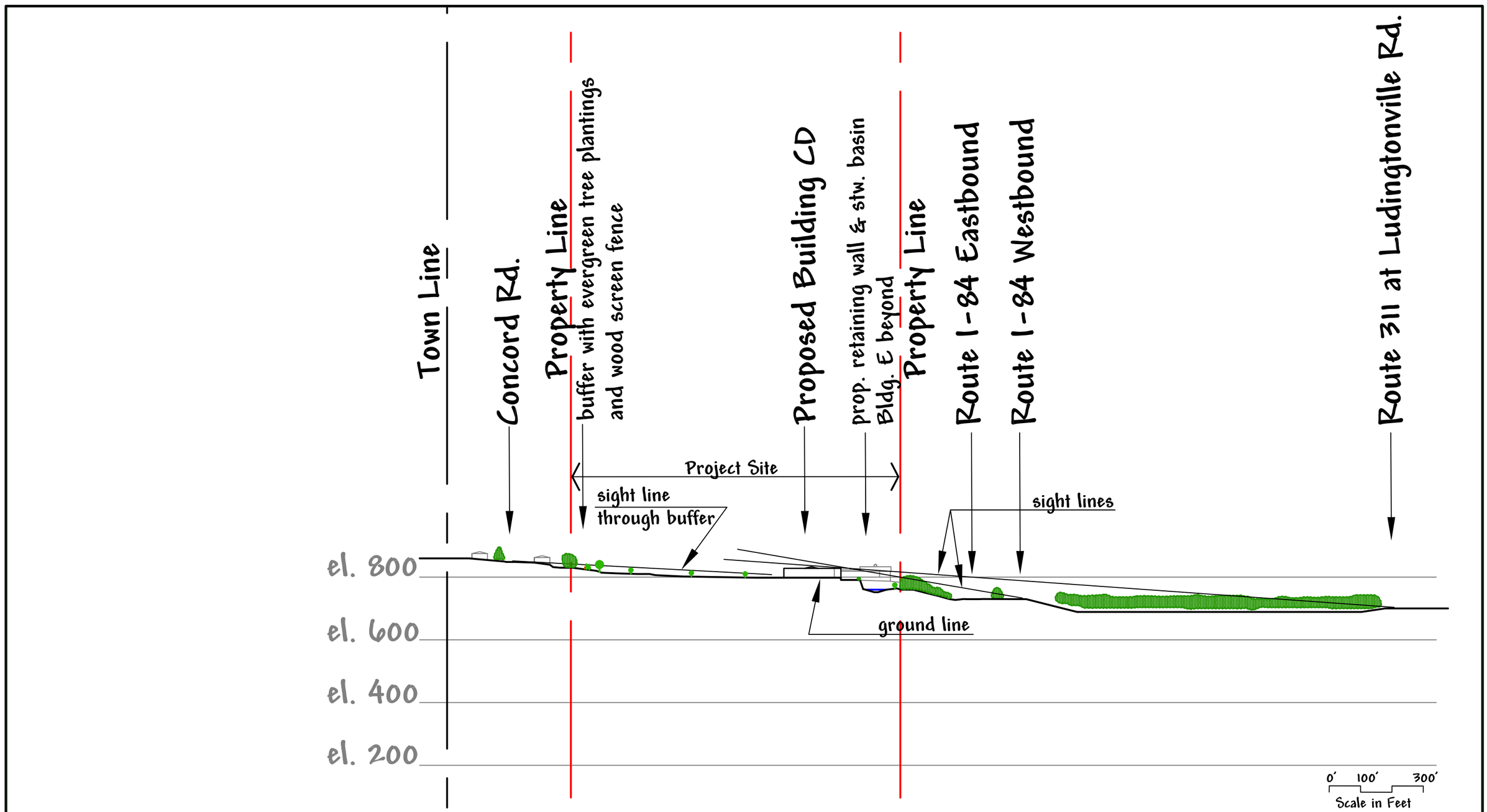


This Figure depicts the sight line taken in the direction of View 2 as shown in Figure 4.13-1, Key Map.

Rev. 07/18/07
Scale: 1" = 300'

W:\Patterson Crossing\CAD\pattxing visual assessmt.dwg: View2

Revised Figure 4.13-3: Line of Sight Profile from I-84 Eastbound - View 2
Patterson Crossing Retail Center
Towns of Patterson & Kent, Putnam County, New York
Prepared by: Tim Miller Associates, Inc.

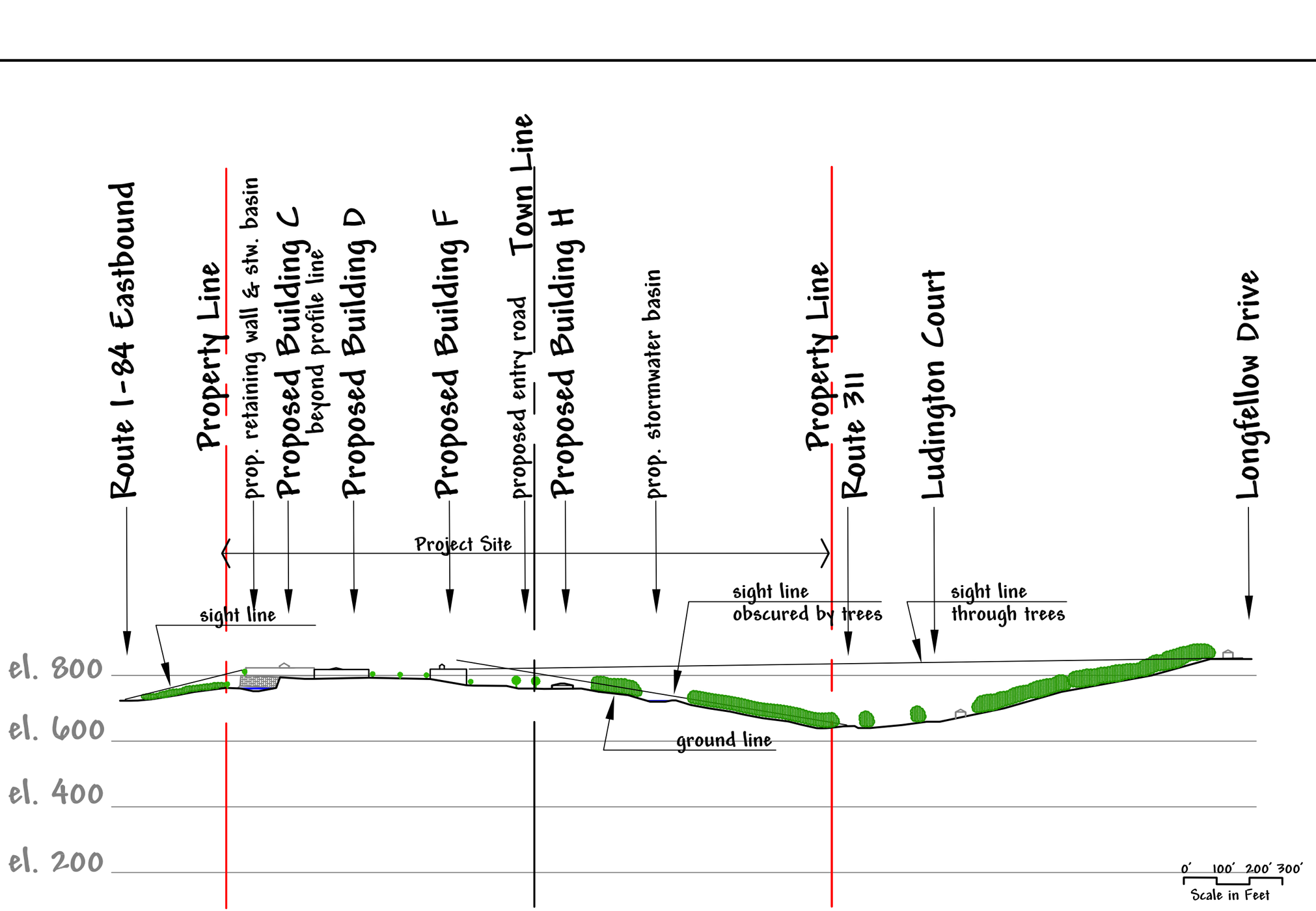


This Figure depicts the sight line taken in the direction of View 3 as shown in Figure 4.13-1, Key Map.

Rev. 07/18/07
Scale: 1" = 300'

W:\Patterson Crossing\CAD\pattxing visual assessmt.dwg: View3

Revised Figure 4.13-4: Line of Sight Profile from Route 311 Westbound - View 3
Patterson Crossing Retail Center
Towns of Patterson & Kent, Putnam County, New York
Prepared by: Tim Miller Associates, Inc.

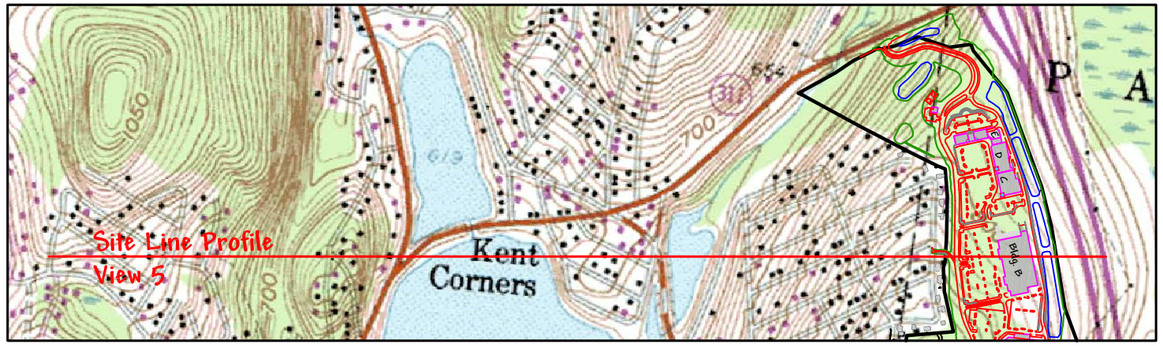


This Figure depicts the sight line taken in the direction of View 4 as shown in Figure 4.13-1, Key Map.

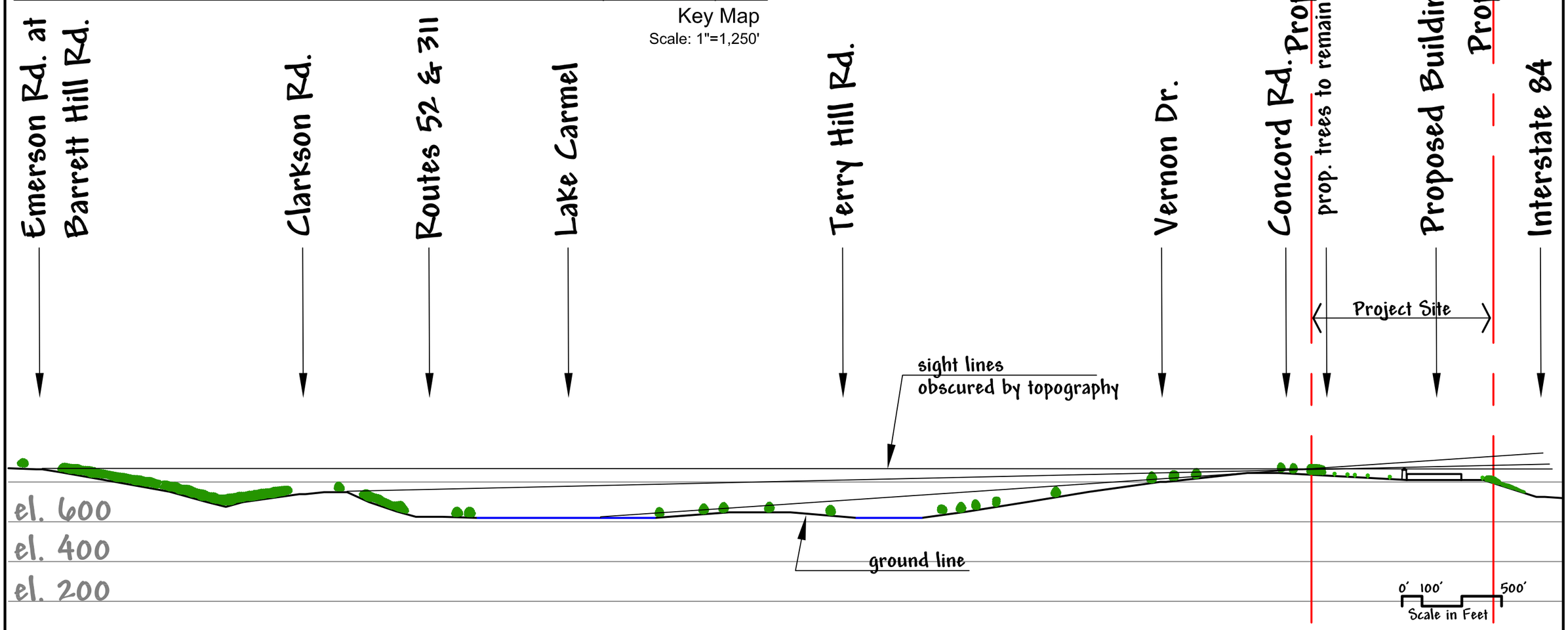
Rev. 07/18/07
Scale: 1" = 300'

W:\Patterson Crossing\CAD\pattxing visual assessmt.dwg: View4

Revised Figure 4.13-5: Line of Sight Profile from Route 311 & Longfellow Dr. - View 4
Patterson Crossing Retail Center
Towns of Patterson & Kent, Putnam County, New York
Prepared by: Tim Miller Associates, Inc.



Key Map
Scale: 1"=1,250'

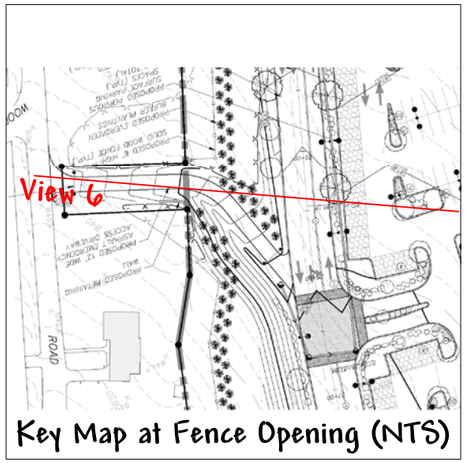


This Figure depicts the sight line taken in the direction of View 5 as shown in Key Map above.

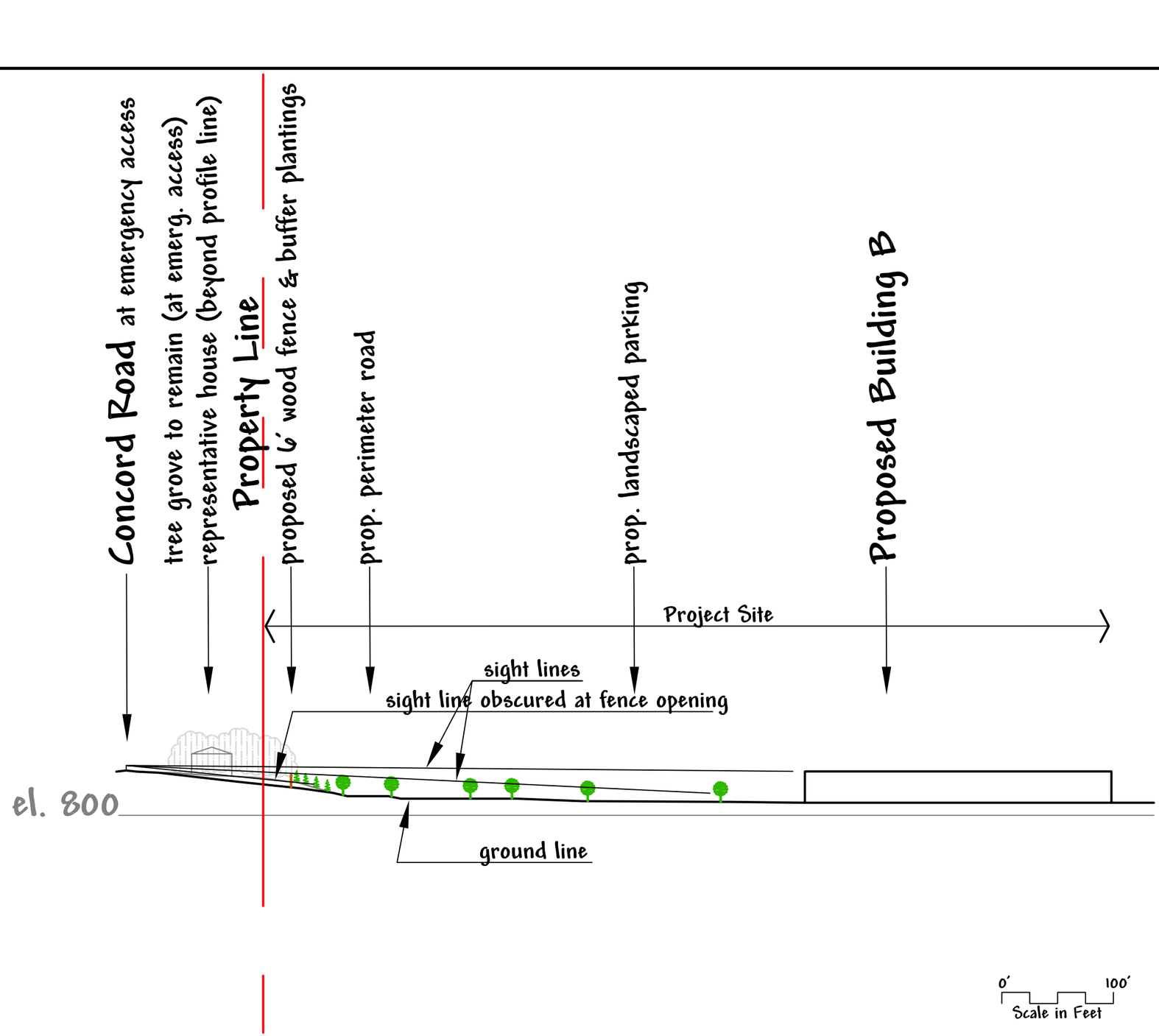
07/18/07
Scale: 1" = 500'

W:\Patterson Crossing\CAD\pattxing visual assessmt.dwg: View5

Figure 4.13-5A: Line of Sight Profile from Barrett Hill Rd. Area - View 5
Patterson Crossing Retail Center
Towns of Patterson & Kent, Putnam County, New York
Prepared by: Tim Miller Associates, Inc.



Key Map at Fence Opening (NTS)



This Figure depicts the sight line taken in the direction of View 6 as shown in Key Map above.

Figure 4.13-5B: Line of Sight Profile from Concord Road at Emergency Access - View 6

Patterson Crossing Retail Center

Towns of Patterson & Kent, Putnam County, New York

Prepared by: Tim Miller Associates, Inc.

Rev. 12/17/07
Scale: 1" = 100'

W:\Patterson Crossing\CAD\pattxing visual assessmt.dwg: View6

Elevations





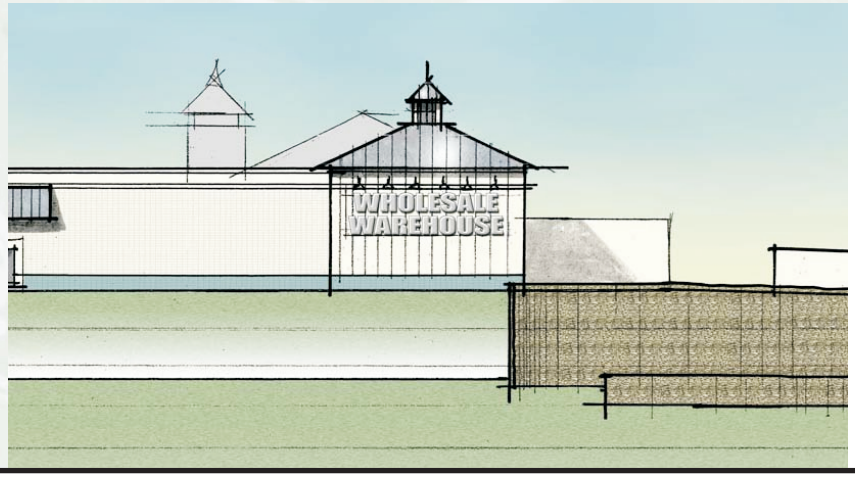
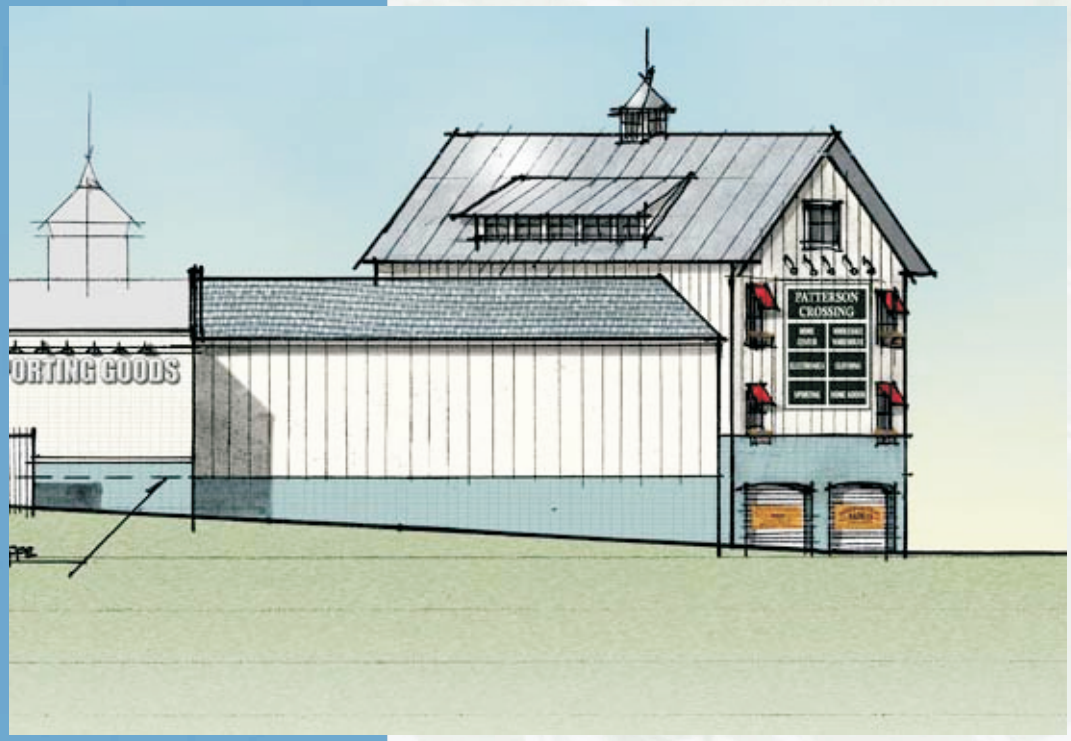


Figure 4.13-6: Design Concept Elevations 1
Patterson Crossing Retail Center
Town of Patterson, Putnam County, New York
Source: StreetWorks, LLC

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

Elevations



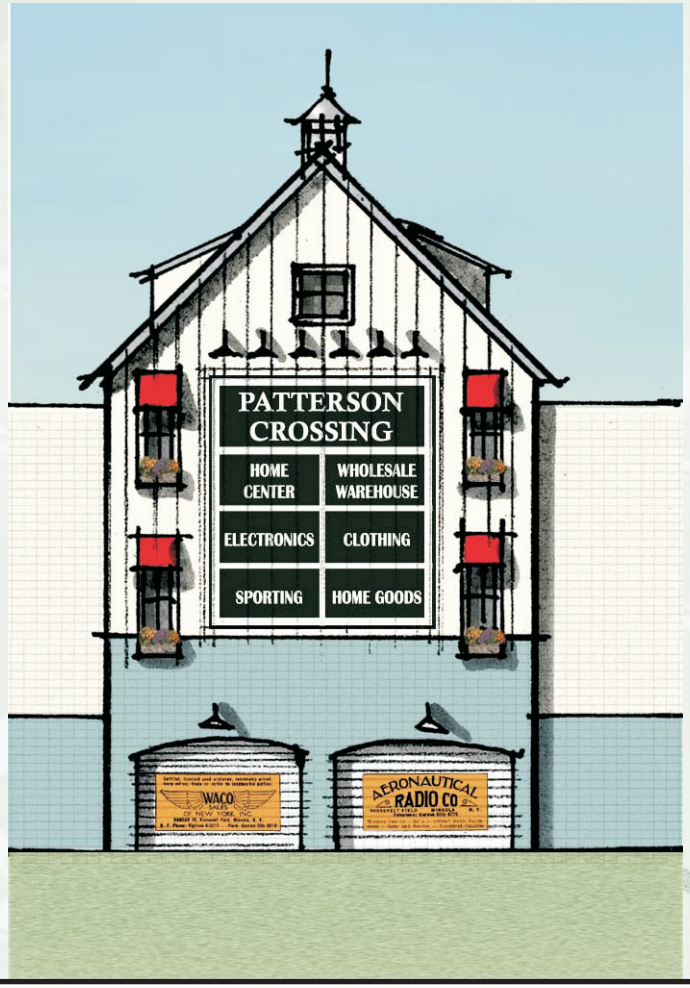
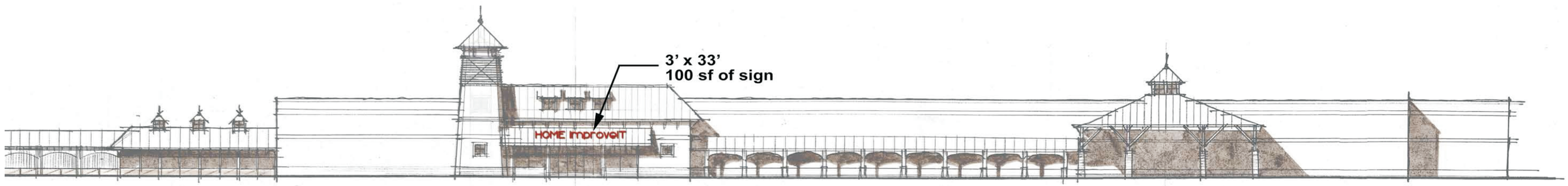


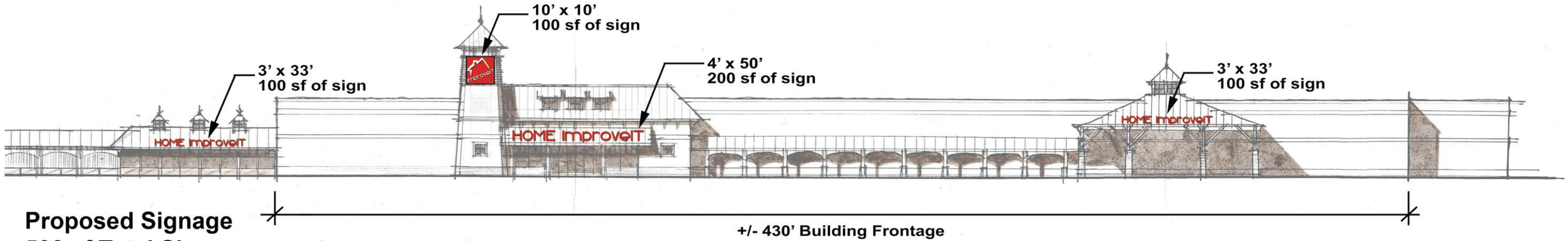
Figure 4.13-7: Design Concept Elevations 2
Patterson Crossing Retail Center
Town of Patterson, Putnam County, New York
Source: StreetWorks, LLC

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418



Signage per Zoning
100 sf Total Sign

+/- 430' Building Frontage



Proposed Signage
500 sf Total Sign
(maximum 1.5 sf of signage per 1' of linear length of wall)

+/- 430' Building Frontage

1" = 35'

Elevation Facing Parking Lot

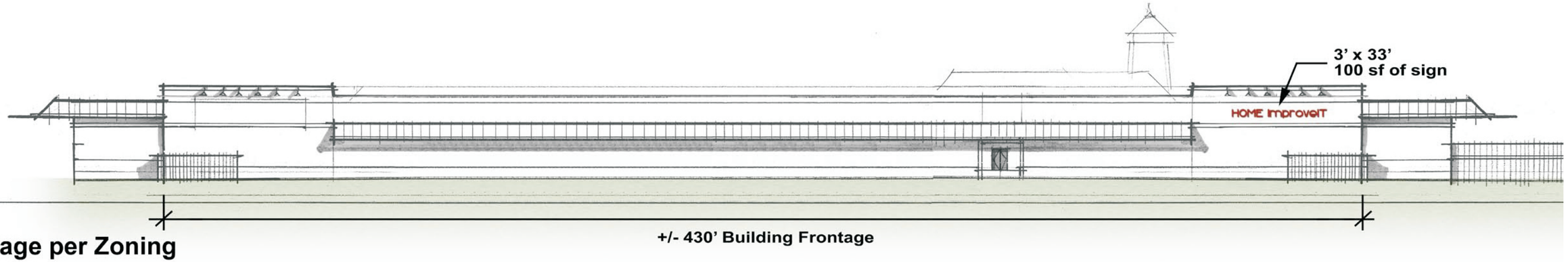
Patterson Crossing

July 10, 2007

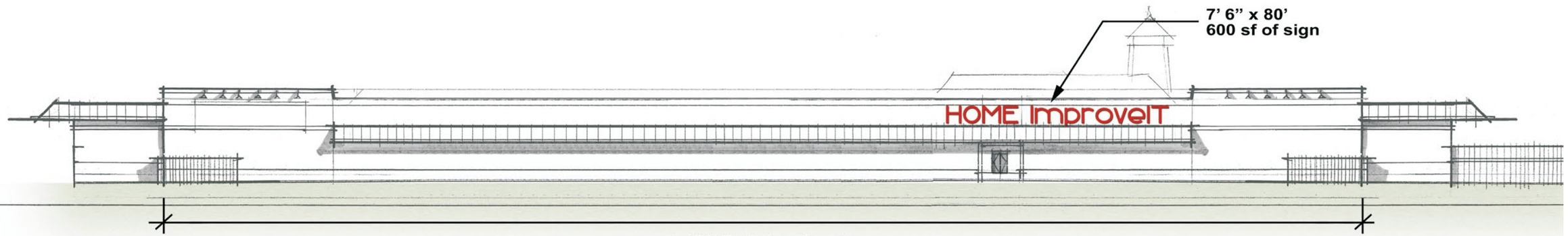
Figure 4.13-8: Signage Design Concept 1
Patterson Crossing Retail Center
Town of Patterson, Putnam County, New York
Source: StreetWorks, LLC
Scale: As Shown

File 04031 8/08/07
JS/04031/FEIS Graphics/

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418



Signage per Zoning
100 sf Total Sign



Proposed Signage
600 sf Total Sign
(maximum 1.5 sf of signage per 1' of linear length of wall)

1" = 40'

Elevation Facing Rt. 84

Patterson Crossing

August 8, 2007

Figure 4.13-9: Signage Design Concept 2
Patterson Crossing Retail Center
Town of Patterson, Putnam County, New York
Source: StreetWorks, LLC
Scale: As Shown

File 04031 8/08/07
JS/04031/FEIS Graphics/

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

4.14 CUMULATIVE IMPACTS COMMENTS AND RESPONSES

No comments were received on this chapter.

4.15 AIR QUALITY COMMENTS AND RESPONSES

Comment 4.15-1 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): We agree with the results of the air quality study indicates that the seven study area intersections located in the Town of Kent screen out from requiring a detailed air quality analysis. Therefore, we agree that the project will not result in violation of the ambient air quality standards at the intersections in the Town of Kent. However, the statement that no roadway modifications will be made in the Build conditions on page 17 may need to be revised based on revisions/comments on the traffic report.

Response 4.15-1: *Refer to the Introduction of Chapter 4.8 Traffic and Transportation herein for detailed information on the proposed roadway improvement plan related to the Patterson Crossing Retail Center project.*

Comment 4.15-2 (Letter A-1 Wendy C. Cimino, PE., PTOE, September 21, 2006): We agree that a mesoscale analysis is not required for this project. However, the reference that a mesoscale analysis measures PM10 on page 13 should be removed as a mesoscale analysis only measures VOC, No_x, and CO. We concur with the construction related air quality impacts discussion.

Response 4.15-2: *For NYSDOT projects, New York State Department of Transportation Project Level Particulate Matter Analysis, Final Policy, September 2004, requires not only PM_{10} to be measured but also $PM_{2.5}$, increasing the number of pollutants to be measured to five for mesoscale air quality analysis. Note: these requirements are set in place for NYSDOT transportation projects and do not apply to site developments.*

Comment 4.15-3 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.15-6, the discussion of control of dust emissions during construction must be amended to include a commitment to implement the required mitigation.

Response 4.15-3: *SPDES Permit GP-0-08-001 General Permit for Stormwater Discharges from Construction Activities requires the development and implementation of a Stormwater Management Pollution Prevention Plan (SWPPP). The content of the SWPPP includes erosion and sediment control plan details and notes pertaining not only to erosion through water transport, but wind erosion as well.*

Minimizing disturbances, stabilizing and seeding disturbed soils, sweeping roadways, and spraying water on dirt and gravel roads are all wind erosion controls incorporated into an erosion and sediment control plan and are enforceable through the SPDES permit. The SPDES permit has language in place should additional measures to maintain permit compliance be deemed necessary.

Comment 4.15-4 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The Final EIS should explain why no analysis have been performed for particulate matters (PM_{10} and PM_{25}).

Response 4.15-4: *Analyses conducted were in accordance with the approved scoping document, including first level screening for traffic impacts, and modeling using CAL3QHC and MOBILE6 analyses for CO in conformance with the NYSDOT*

Environmental Procedures Manual. Particulate matter analyses are normally conducted as a part of NYSDOT transportation projects, not site development.

Comment 4.15-5 (Letter C-31, Kathleen McManus, September 25, 2006): My home is located within approximately 65 feet of the access road, and directly behind the first left-turn lane into the parking lot of the proposed retail complex - the point where cars will slow down and stop as they approach the turning lane, thereby magnifying the amount of vehicle emissions and exhaust within close proximity to my residence. On the opposite end of this turning lane is the Truck Turn Around. As illustrated on DEIS Figure 4.8-12: Primary Truck Internal Circulation, it is a straight open roadway from the access road turning lane behind my home to the Truck Turn Around at the other end of the lane. This makes my home more susceptible to diesel fumes emitted by the trucks as well as noise created by vehicles traveling on the access road and in the turning lane, and by the trucks in their turn-around procedure (including that annoying backing-up beep) which I would assume would happen throughout the evening hours. The only thing that would separate me from all this "busyness" is a proposed 8 foot fence and two rows of trees.

Response 4.15-5: *There would be approximately 65 feet from the property line to the curb line of the proposed access drive. The subject residential dwelling is separated from the proposed access road left turn lane by at least 100 feet, and the distance between the subject residence and the turnaround is at least 600 feet.*

Operational noise levels as stated in the DEIS are not projected to be more than 4.6 dBA higher than the existing ambient level. The exterior operational noise level would fall between 50 (quiet) and 60 dBA (noticeable) and be below any land use thresholds for mitigation. Additionally, noise levels are reduced (or attenuated) as noise travels over the ground surface from source to receptor. Noise studies typically use the figure of 3.0 dBA reduction per doubling of distance over a hard surface and a 4.5 dBA reduction per doubling of distance over soft ground (The Noise Guidebook, US Department of Housing and Urban Development, March, 1985). For example, a noise level of 60 dBA, measured 50 feet from the source would be reduced to 54 dBA at 200 feet over a hard ground surface and to 51 dBA at 200 feet over a soft ground surface. Therefore, a sustained noise level of 65 dBA measured at the turn lane would be reduced to approximately 60.5 dBA in a 100 foot distance (a 4.5 dBA reduction for a doubling of distance over soft ground) and to approximately 50 dBA from the truck turn-around. This noise would not be noticeable due to the existing ambient noise levels, which averaged more than 10 dBA higher (existing ambient sound levels are provided in Table 3.11-5 of the DEIS).

Refer to Responses 4.9-2 and 4.9-4.

In conducting the air quality analysis, the intersection of NYS Route 311 and Interstate 84 was analyzed based on site proximity and traffic volume at that intersection. Appendix I, Table 8 identifies the 8 hour CO impact increase from the no-build condition (future conditions without the project in 2010) to the build condition (future conditions with the project in 2010) with regard to the State and Federal Ambient Air Quality Standard (NAAQS). The comparison must be made between the no-build forecast and the build forecast, as traffic volumes will increase over time regardless. Presently, approximately 57,000 cars a day travel past the property on Interstate 84 (NYS DOT "2006 Traffic Volume Report", July 16, 2007) and this

number is expected to increase under the No Build Condition. The trips generated by the Proposed Action would have no significant impact on local air quality.

The established air quality standard level for CO in an 8 hour period is shown at 9 ppm (part per million). The no-build level to the build condition level increases from 4.3 ppm to 4.5 ppm, an increase of 4.6 percent. The air quality level, although reflecting a marginal increase is projected to be no more than half of the State and Federal standard (9 ppm) at the intersection anticipated to have the greatest traffic volume impact. Air quality impacts to all other intersections, including the one referred to in the comment would be less than the studied intersection.

Comment 4.15-6 (Letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): The DEIS fails to support its contention that emissions from vehicles and their contributions to overall air quality in the region will be negligible. Particularly during construction, idling trucks and equipment will be on site. That no truck will be allowed to idle for more than 5 minutes, as suggested by the DEIS' mitigation plan, is highly unlikely and insupportable.

Response 4.15-6: *Comment Noted. The NYSDOT Environmental Procedures Manual, January 2001, (EPM) methodology was used to evaluate air quality impacts. The EPM details criteria to determine if a microscale (local) or mesoscale (regional) analysis is required. The criteria set forth required that a mesoscale analysis was not required. The analyses conducted therefore meets the requirements and intention of the adopted scope.*

Comment 4.15-7 (Letter C-44 Peter Riebold September 22, 2006): Construction vehicles are not required to meet the emission requirements of passenger vehicles. It is very doubtful that any of the construction contractors will spend the time and money to properly tune their engines.

Response 4.15-7: *Although construction vehicles may not be required to meet the same emission standards as passenger vehicles, inefficient machines are more expensive to operate. Tuned engines and mufflers add to increased operating efficiency and less down-time due to breakdowns. Properly functioning machinery is beneficial to the contractor's operation.*

Comment 4.15-8 (Public Hearing, September 14, 2006, Susan Russo): The background quality air studies that were done were cited in there from 1983. If I am correct, this is the year 2006. They really need to be redone. You can't be using studies from twenty years ago.

Response 4.15-8: *A revised table is cited below and replaces Table 4.15-1 in the DEIS. This revised table has been updated from the 1983 background quality air studies and now reflects 2007 background quality air studies.*

Table 4.15-1 Principal Sources of Air Pollutants	
Pollutant	***Principal Sources***
Carbon Monoxide (CO)	*Motor Vehicles (78%), Fuel Combustion (6%), Industrial Processes (4%), Other Sources (12%)*
Emissions leading to the creation of Ozone	*Produced by the Action of Sunlight on Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO_x) Compounds in the Atmosphere*
• *VOC*	*Industrial/Commercial Processes (50%), Motor Vehicles (45%), Consumer Solvents (5%)*
• *NO_x*	*Motor Vehicles (55%), Utilities (22%), Industrial/Commercial/Residential (22%), Other Sources (1%)*
Particulate Matter (PM)	*Many Sources (Stationary and Mobile) Including Crushing and Grinding Operations and Natural Resources*
Sulfur Dioxide (SO_2)	*Electric Power Generation (67%), Fuel Combustion (18%), Non-road engines (5%), Metal Processing (3%), Other Sources (7%)*
Lead	*Metal Processing (52%), Waste Disposal (16%), Non-road Engines (13%), Fuel Combustion (13%), Other Sources (6%)*
Source: US Environmental Protection Agency, 2007.	

Comment 4.15-9 (Public Hearing, September 14, 2006,Susan Russo): We need some guarantees to keep the dust levels down, to keep all the construction debris from flying all over the place, that these are all in place. I don't want any ifs, would haves, should haves and could haves.

Response 4.15-9: *Refer to Response 4.15-3.*

Comment 4.15-10 (Public Hearing, September 14, 2006,Susan Russo): I am also asking for during construction the law that the trucks cannot idle for more than five minutes at a time. That's before construction and after delivery times. Who is going to monitor this? It's a law, but there is no one that monitors this.

Response 4.15-10: *Refer to Response 4.15-6.*

Comment 4.15-11 (Letter C-9 Joan Castiner, September 25, 2006): With the constant cars and trucks coming and going, what noise levels and air pollution will the adjacent residents be subjected to?

Response 4.15-11: *Potential noise impacts are addressed in Chapter 4.9 herein. Refer to Response 4.9-20.*

Air quality impacts related to this comment are addressed above in Response 4.15-5.

Comment 4.15-12 (Letter C-9 Joan Castiner, September 25, 2006): Just what town or agency will set the standards for noise and quality of air standards? How will these standards be enforced and monitored? Will monitoring, if any, be done on a monthly or yearly basis, and who will be apprised of any results? If there is a problem with noise and air pollution, what steps can then be taken to remedy this?

Response 4.15-12: *Noise standards are addressed in Chapter 4.9 herein. See Response 4.9-21.*

Air quality standards are discussed in Response 4.15-5 above. An air quality study was completed for the existing property and modeling was completed to determine future build and no build air quality conditions in the vicinity of the Proposed Action. The modeling determined that the increase in air pollution under the build and no build conditions were similar but both would be below the State and Federal Standard. Therefore further monitoring would be required after the proposed project is developed. Further discussion of the air quality testing is discussed in Response 4.15-5.

5.0 ALTERNATIVES COMMENTS AND RESPONSES

Comment 5.0-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 5-5, the discussion of alternative project size should include a quantitative evaluation of potential impacts rather than rely on qualitative guesswork. In particular, the discussion needs to include an assessment of traffic impacts and analysis of whether a reduction in the overall project size, and the concomitant reduction in the volume of traffic generated, would act to mitigate the adverse impacts to the operating levels of service of the studied intersections.

> ***Response 5.0-1:*** *The modified site plan, which reduces the gross leasable floor area to 374,340 square feet from 405,850 square feet, results in a slightly more than five percent reduction in trips generated by the developed site. See Appendix L for trip reduction.*
>
> *Trip generation for shopping centers is based on the gross leasable floor area of the development. Based on this, the Alternate Project Size development would generate roughly 13 percent fewer trips than the original Proposed Action presented in the DEIS and approximately 7.5 percent fewer trips than the reduced development plan put forth in this FEIS. As only the NYS Route 311/NYS Route 52 intersection drops to a Level of Service F between the future No Build and Build Conditions, and the proposed mitigation to address that change is retiming the traffic signal, the adverse impact would be negligible with the alternative.*

Comment 5.0-1A (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): The Board as lead agency has the obligation to set forth a reasonable range of alternatives and choose the alternative that minimizes the project's impacts to the maximum extent practicable. Reasonable alternatives should be presented that comply in all respects with the zoning of both Kent and Patterson.

> ***Response 5.0-1A:*** *Alternatives to be considered were developed during the scoping phase of the SEQRA process. These alternatives, as identified in the Lead Agency's adopted scope, are presented in the DEIS. Impacts from each alternative are compared with the impacts identified under the Proposed Action for the Lead Agency to Review. SEQRA does not require the alternative comply with all aspects of the Town Zoning Code.*

Comment 5.0-2 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Evaluate stormwater controls and quantify pollutant loadings for all alternatives, including the low build alternative. Stormwater management protocols were not developed for the different development alternatives. DEIS Section 5. As a result, the stormwater management practices associated with the development alternatives did not receive a necessary evaluation in the DEIS, so as to allow for an informed choice among alternatives. The same is true with respect to the calculation of pollutant loadings. As discussed, a true "low build" alternative involving a 60% reduction in impervious surfaces (two stores and some stacked parking) should be included in a supplemented DEIS and fully evaluated.

> ***Response 5.0-2:*** *As documented in the DEIS, a SWPPP could be developed for each alternative that would, like the SWPPP developed for the Proposed Action, be designed in accordance with NYSDEC and NYCDEP guidelines and regulations, and would include stormwater treatment practices to ensure that post development*

changes in the peak rate and volume of stormwater discharges, as well as changes in pollutant loading, are minimal. As such, the potential adverse impacts associated with stormwater for each alternative, and the Proposed Action, would be nearly equivalent.

There is no requirement under SEQRA to analyze each alternative's impacts at the same level required for the Proposed Action. The intent of the environmental review process is to provide enough information in the environmental documents for the Lead Agency to make a decision between the Proposed Action and one of the alternatives. SEQRA requires only a description and evaluation of the range of reasonable alternatives to the action that are feasible, considering the objectives and capabilities of the project sponsor [6NYCRR 617.9(b)(5)(v)]. The project Applicant's clear goal and objective is to develop an environmentally sound project, consistent with current zoning standards, that produces a sufficient and fair return on investment to warrant the time, money, and effort expended.

Comment 5.0-3 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): As presented, the discussion of alternatives in the DEIS fails to provide clear and meaningful choices for informed public comment and agency decision-making. The applicant should be required to offer detailed analysis of a full range of alternatives, including lower-build or otherwise lower-impact alternatives.

Response 5.0-3: *Alternatives to be considered were developed during the scoping phase of the SEQRA process with input from the public and all Involved and Interested Agencies. The DEIS presents and compares the alternatives to the Proposed Action for each environmental parameter in both a narrative format as well as in a tabular format at a level of detail sufficient to allow for a comparative assessment of the plans. The Planning Board and their consultants determined that alternative analysis satisfied the requirements of the scope and accepted the DEIS as complete. See Response 5.0-2, second paragraph.*

The new proposed development is analyzed with lower impacts as the project is reduced to 374,340 square feet of gross leasable floor area from 405,850 square feet.

Comment 5.0-4 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): [T]he applicant has merely offered one [alternative] with an *increase* in square footage in an altered layout, and one with a reduction in footprint of approximately 10%. Not surprisingly, the perfunctory "analysis" accompanying the former of those alternatives concludes that a variety of impacts will be the same or greater than that of the preferred project.

Response 5.0-4: *The DEIS presents alternatives as approved by the Lead Agency during the scoping process. There is no requirement for each alternative to reduce impacts identified under the Proposed Action. The Alternate Building Orientation plan, which includes approximately 20,000 square feet of additional retail space when compared to the DEIS Proposed Action, is a viable alternative that could be built on this project site. The Alternate Project Size plan also complies with the requirements of the adopted scope. See Response and 5.0-3.*

Comment 5.0-5 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): The applicant also dismisses the concept of a multistory parking facility on the basis that it would actually increase environmental impact. In particular, the applicant notes that the additional cost associated with such construction would have to be offset by revenue from additional retail buildings. Of course, there is no analysis whatsoever to substantiate such a claim. Moreover, if it were the applicant's intention and need to construct additional buildings, it is not at all clear where such buildings would be sited as virtually all of the useable acreage (and some of it not suitable, for that matter) is already occupied by buildings, parking, and wastewater disposal under the current plan.

> ***Response 5.0-5:*** *The Applicant seriously considered a multistory parking facility. As documented in the DEIS, a multistory parking garage would add significant cost ($15 to $30 million) to the development of the retail center. An economic analysis is not required to show that the economics of the project would not bear out the additional cost of such a parking facility without an approach to offset those added costs. To that end, one option considered by the Applicant included an increase in the lease rate for the future tenants. The increase in the rates needed to offset the costs would have created a situation where it would have been more difficult to lease the available space and left the Applicant with a significantly less viable project as a result.*
>
> *To increase the competitiveness of the retail center, the Applicant determined that the best way to offset these cost would be to incorporate a significant increase in the gross leasable floor area. Under this alternative, the area from which parking is removed would be used to site the additional retail space. With little or no net benefit in area of disturbance (similar impacts to existing vegetation and habitat and decrease in impervious surface) between this alternative and the Proposed Action increased construction and maintenance costs, and increase in the use of materials and natural resources to construct the garage and increased visual impacts, the Applicant believes that incorporation of a multistory parking garage is unfeasible.*

Comment 5.0-5A (Letter C4, Elena Bao, 09/25/06): I have reviewed all of the written scoping comments submitted to the Patterson Planning Board in early 2005 as part of the Scoping phase of this project's SEQR review. During scoping, many residents requested that the Applicant explore an alternative site given the sensitivity of a retail use on this site due to its close proximity to the residential community. Additionally, an alternative use of a corporate park was suggested by many given that the community has a great need for professional level, decent paying jobs (rather than low-paying jobs which will be available at Patterson Crossing). Neither of these two alternatives were included in the Final Scope. At the very least, a corporate park should be explored in this DEIS for that site given that there is enormous need county-wide for high-paying professional-level jobs.

> ***Response 5.0-5A:*** *The alternatives presented in the DEIS were specified by the Planning Board's adopted scope. The Planning Board and their consultants determined that the alternative analysis presented in the DEIS satisfied the requirements of the Scope and deemed the document complete.*

Comment 5.0-6 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): As for the "Alternative Project Size" proposal, which ultimately reduces building square footage by slightly more than 10% and eliminates a few hundred parking spots, the applicant rejects this

alternative because it "does not utilize the site to its full potential" and "for a variety of financial reasons." ... Here, the applicant has made no showing that this alternative would not result in a reasonable return on the property.

In addition, the applicant actually asserts that this alternative would ultimately lead to increased impacts, as the reduction in retail space at this site would lead to development of other sites to make up for the retail "shortage". Again, there is no substantiation whatsoever for this assertion. It is abundantly clear that the sole purpose of the alternatives section in this DEIS is to direct the lead agency only to the applicant's preferred project.

> ***Response 5.0-6:*** *Refer to Responses 5.0-3 and 5.0-5A. It is the Lead Agencies responsibility to review all the information presented in the EIS in reaching their conclusions regarding the viability of a specific development plan. It is the Applicant's opinion that the Lead Agency is fully capable of meeting its responsibilities without being lead into one alternative or another by the information presented in the environmental documents. Furthermore, the DEIS and the FEIS are the Lead Agencies documents and they must be comfortable with the level of detail and type of information presented in each before they accept them as complete.*

Comment 5.0-7 (Letter C4, Elena Bao, 09/25/06): In this "Comparison of Alternatives" table there is no section which provides the state, county, municipal, or park district COSTS associated with each alternative. The Applicant has failed to provide ANY financial cost analysis data in this entire DEIS which is quite unacceptable. A supplement economic impact statement should be prepared for this project given its magnitude and potential for imposing significant costs on the host communities. The supplemental economic impact statement should also include a cost analysis of all the "alternatives" proposed. The result of this cost analysis for the alternatives must then be incorporated into Table 5-1, so the lead and involved agencies can see at a glance the "costs" of each alternative in relation to the other alternatives. The costs of each alternative may very well be a major "deciding" factor as to whether each alternative is viable from a fiscal accountability perspective. Without this cost analysis data, it is impossible to weigh the alternatives appropriately.

> ***Response 5.0-7:*** *The information provided to date is adequate to determine the impacts of the alternatives when compared with the Proposed Action. If the Applicant were required to produce a complete fiscal analysis for every alternative, the process would be prolonged in an unreasonable manner. SEQRA requires only a description and evaluation of a range of reasonable alternatives that are feasible and consistent with the considered objectives and capabilities of the project applicant [6NYCRR 617.9(b)(5)(v)]. The project Applicant's clear goal and objective is to develop an environmentally sound project, consistent with current zoning standards, that produces a sufficient and fair return on investment to warrant the time, money, and effort expended.*

Comment 5.0-8 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): Under SEQRA, "[t]he description and evaluation of each alternative should be at a level of detail sufficient to permit a comparative assessment of alternatives discussed." 6 NYCRR § 617.9(b)(5)(v). "The degree of detail with which each alternative must be discussed will, of course, vary with the circumstances and nature of each proposal." Webster, 59 N.Y.2d at 228. In this case, the proposed project is vast, with numerous potential impacts. The dedication of but a few of these pages to a discussion of alternatives, which is at the heart of the SEQRA mandate

to mitigate adverse environmental impacts through reasoned and informed decision making, is grossly inadequate.

Response 5.0-8: *Refer to Responses 5.0-3, 5.0-5A and 5.0-6.*

Comment 5.1-1 (Letter C4, Elena Bao, 09/25/06): It is false that there is a scarcity of developable land that can be accessed by major roadways. There are several hundred industrial/commercial acres for sale on Route 311 right now.

Response 5.1-1: *Comment noted. It is the Applicant's opinion that the development of the land identified by the commentor would result in the same or very similar impacts to those that would result from the Proposed Action. Obviously, the further any site is situated from Interstate 84, the more community impacts would result.*

Comment 5.1-2 (Letter C4, Elena Bao, 09/25/06): While Patterson's Comprehensive Plan deems the intersection of Route 84 and Route 311 an appropriate location for retail, it is most certainly debatable whether the Applicant's proposed project size is appropriate given that it will pose too great of an impact on the surrounding community. It is unfortunate that the Town of Patterson did not adequately consider the fate of the Kent community when they adopted their comprehensive plan. The result of this failure is that Mr. Camarda has proposed an action that is grossly over-scaled for the site and surrounding community. The Town of Patterson should absolutely consider amending their zoning laws to impose a square footage cap on retail centers to protect both Patterson and Kent from poorly planned and grossly over-scaled projects such as Patterson Crossing.

Response 5.1-2: *The Applicant has reduced the size of the Proposed Action from 405,850 square feet with a 28,200 square foot garden center to 382,560 square feet (374,340 gross leasable floor area) with a 28,000 square foot garden center in order to reduce the overall impact of the project. The proposal, as noted in the comment, is in accordance with the Comprehensive Plan and zoning regulations. The Applicant is not responsible for the revision of the Comprehensive Plan.*

Comment 5.1-3 (Letter C4, Elena Bao, 09/25/06): The Applicant implies that Patterson Crossing would give residents the opportunity to "live and work locally" - this is silly. Putnam residents won't be quitting their high-paying professional jobs to work at Patterson Crossing's retail restaurant establishments! We couldn't support ourselves on those low wages.

Response 5.1-3: *The DEIS indicates that lower income jobs at the proposed businesses are expected to be filled by workers currently residing in Putnam County and surrounding counties. The U.S. Census Bureau reports that the updated unemployment rate in Putnam County for the third quarter of 2006 was 3.6 percent, indicating that there are residents within Putnam County that can be employed at the proposed Patterson Crossing Retail Center development. Employees would be expected to come from this available pool of labor within Putnam County, and possibly surrounding counties, or from individuals and part time workers, including youth or seniors, who may not be actively searching for employment now and are not currently counted as unemployed. See Responses 4.12-8, 4.12-12 and 4.12-28 for more information on employment at the Patterson Crossing Retail Center.*

The Applicant does not expect residents with high paying jobs to leave them for a lower paying job at the Patterson Crossing Retail Center. It should be noted however

that there are local residents who could benefit from a job with similar or higher wages and similar or better benefits than they are currently receiving from their employer that is located closer to their home, or a simply a job.

Comment 5.1-4 (Letter C4, Elena Bao, 09/25/06): Applicant states that the no-action alternative would contradict the Shop Putnam initiative. Actually, the opposite is true. Big-box retail contradicts the Shop Putnam initiative. Many studies show that locally owned business promotes the health of the economy while big box retail harms the economy by putting local business out of business and by not investing their earnings into local community. These studies have been included with my comments to illustrate that these impacts are common-place and well-documented and we can expect these impacts right here in Putnam County as they have happened everywhere else in the country for decades. The Applicant is not doing the "shop Putnam" initiative any favors with Patterson Crossing. We will lose local businesses and the pervious revenue they generate.

Response 5.1-4: *As stated in Response 4.12-1, the DEIS examines the potential effects on existing businesses and downtown areas in the Towns of Patterson and Kent. Page 4.12-6 of the DEIS indicates that "the proposed project is not expected to significantly alter the character or local economies of its surrounding downtown areas, or significantly alter the character of the Towns of Kent and Patterson." An empirical evaluation of such potential effects is beyond the scope of the DEIS as adopted by the Lead Agency. See Response 3.1-8.*

In the Applicant's opinion, the location of the proposed project -- being removed for the most part from other commercial sites and residential areas, and being located at the crossroads of a major interstate highway -- will serve to minimize its effects, and may attract additional shoppers to nearby areas as a spin-off benefit to existing businesses. Adding consumers to the area may also have the secondary effect of making the current empty storefronts look more attractive to perspective future business shop owners and potentially increase the number of small business owners in the project vicinity.

Comment 5.1-5 (Letter C4, Elena Bao, 09/25/06): No Action Alternative: I would like to note here that the Applicant is conceding here that the proposed action WOULD have an increased demand on community services and emergency services. The Applicant must quantify what that increased demand on community services and emergency services entails from a financial, contractual, equipment and resource standpoint.

The Applicant states there would be "no improvement to those services as a result of tax generation at the site". The Applicant absolutely HAS NOT performed any cost/benefit analysis in this DEIS. Hence, the Applicant has not proven that this project will yield "net economic benefit". Failure to prove there will be net economic benefit means that the Applicant is in no position to state whether any money will be available for "improvements to services". We must not allow the Applicant to say that this project will provide revenue for improvements when he hasn't proven there will be any revenue for said improvements. **[Similar comments were found in the following letter: Letter C4, Elena Bao, 09/25/06]**

Response 5.1-5: *Costs to and responsibilities of fire, emergency and police service providers resulting from the Proposed Action are addressed in Chapters 3.0 and 4.11 of the DEIS and this FEIS. The evaluation of the potential cost impacts to these services was performed with the input of local service providers. No significant costs*

were identified that are not addressed either by measures that are part of the Proposed Action, or through projected increases in tax revenues. See Response 4.12-22.

The economic benefits derived from the proposed project are well documented in Chapter 3.0 of the DEIS and this FEIS. See Response 3.1-5.

The property and expected sales tax revenues that would be generated should the project be developed would not be available to the taxing jurisdictions under the No Action Alternative. The statement was included in the DEIS to convey this fact.

Comment 5.1-6 (Letter C-23 Daniel Kuchta, September 25, 2006): Section 5.1 on page 5-1: Paragraphs 3, 4 and 5 are not relevant to the SEQRA regulations pertaining to 'no action' and should be removed from the document.

Response 5.1-6: *The Applicant does not agree with the commentor's conclusions regarding the information presented in these three paragraphs. The project site is not located in an area designated by either Town for land conservation or preservation therefore, in order to remain undeveloped it would have to be purchased at fair market value specifically for that purpose. The Comprehensive plans do identify the need for additional retail and the Town of Patterson's Plan specifically identifies the project site as an area appropriate for such development. Finally, the Proposed Action does comply with Putnam County planning documents and initiatives. It is the Applicant's opinion that all of these planning and zoning issues are relevant in determining where and how the Towns move forward with economic development.*

Comment 5.2-1 (Letter B-6 Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space, September 25, 2006): The applicant does address "Alternative Project Size" eliminating 3 stores and a coffee shop and thereby reducing the project by some 52,750 ft. His rationalization for not doing so is as follow: "It does not utilize the site to full potential, does not provide retail synergy between tenants, nor does it provide adequate gross square footage for ancillary retail.

Response 5.2-1: *See Response 5.0-6.*

Comment 5.2-2 (Letter B-7 Cathleen Breen, Watershed Protection Coordinator, September 25, 2006): The DEIS fails to provide the required detailed analysis of a full range of alternatives, including those that are lower build or otherwise lower impact alternatives. While there is discussion in the DEIS on the use of low-impact design techniques to mitigate environmental impacts, there are more extensive better site design strategies and lower build alternatives that should be thoroughly examined that would significantly reduce the impervious cover and avoid the use of steep slopes and wetlands.

Response 5.2-2: *The DEIS evaluated the alternatives that were required by the Adopted Scoping Document.*

The reduced development plan proposes no disturbance to on-site wetlands or watercourses and no impervious surface within the NYCDEP 100 foot impervious restriction zone.. The Applicant believes that the proposed plan has been developed taking into consideration the natural features of the site and minimize impacts to slopes, wetlands and watercourses. Also, the modified project specific SWPPP and

the Phosphorous Report have been designed so that post-construction peak discharge rates and volumes of stormwater will be lower than pre-development rates, following treatment by the proposed stormwater management facilities.

Comment 5.2-3 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): The DEIS fails to present and assess a real Lower Build Alternative. SEQRA requires that the DEIS contain a detailed assessment of a reasonable range of alternatives so as to provide decision-makers with an ability to choose (as they must) an alternative that mitigates adverse environmental impacts to the maximum extent practicable. The DEIS, however, only presents a two-page, generalized analysis of a slightly smaller version of the proposed big box retail outlet. This would appear to be legally deficient. Previous "scoping" comments recommended to the SEQRA lead agency that the DEIS contain an analysis of an alternative that reduces overall impervious surfaces by 60% (two large box stores with some parking stacked) so that sensitive areas could be avoided and the intensity of adverse impacts reduced. The Project sponsor's vague and unsupported assertions in the DEIS that such an alternative is not fiscally practicable does not justify the failure to evaluate a lower build alternative. Any claim that a lower build, lower impact, alternative is not fiscally viable must be justified with specific numbers and projections.

Response 5.2-3: *Under SEQRA, a DEIS must include "...a description and evaluation of the range of reasonable alternatives to the action that are feasible, considering the objectives and capabilities of the project sponsor. The description and evaluation of each alternative should be at a level of detail sufficient to permit a comparative assessment of the alternatives discussed." Section [6NYCRR 617.9(b)(5)(v) goes on to state that "[t]he range of alternatives **may** also include, as appropriate, an alternative scale or magnitude development plan (emphasis added). The law does not establish physical limits for such an alternative, that is left to the Lead Agency. In the case of this project, the Patterson Planning Board decided that such an alternative was merited and incorporated it into the adopted scope. The DEIS describes and evaluates a reduced scale alternative in compliance with the scope and as such it was accepted as complete by the Lead Agency.*

In response to the comments received during the review of the DEIS and in order to reduce the level of impact associated with the Proposed Action, the Applicant has had the project engineered to reduce its scale. Under this plan, the gross leasable floor area is reduced to 374,340 square feet from 405,850 square feet, an eight percent reduction. This reduced scale plan also incorporates a number of new components, including an historic gateway design and entry drive, a community gathering place, improved pedestrian connections, cohesive architectural style, smaller parking fields, meeting space, and a cohesive signage program. The reduced scale plan is presented in this FEIS. See Responses 5.0-6 and 5.0-6A.

Comment 5.2-4 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Lower Build Alternative. A frequent defect in the draft EIS is a lack of adequate detail in the presentation of lower-build alternatives to the development desired by the Project's sponsor. SEQRA required the lead agency to direct that the DEIS contain sufficiently detailed reduced-build and reduced-impact alternatives so as to make the choice among alternatives a real one. The Town of Patterson Planning Board should identify a much lower build alternative and specify an analysis of potentially adverse environmental impacts to the same extent as the alternative desired by the Project sponsor. The developer's preferred project should not be studied in detail while other alternatives are given only limited

review. Any decision to reject a lower build alternative as not being feasible should be explained in detail. All alternatives should be developed to an extent that "apple to apple" comparisons can be made between them by the lead agency. We recommend that the project sponsor be required, in a supplemental DEIS, to develop in detail a lower build alternative that reduces impervious surfaces by 60%, keeps all development off slopes that exceed 15%, and avoids all wetlands and their associated buffers.

Response 5.2-4: *The Lead Agency developed the scope for the Patterson Crossing Retail Center DEIS in accordance with SEQRA. This included outlining a series of alternatives to the Proposed Action. After careful consideration of all the comments presented during the scoping review process, including those from the public and all Involved and Interested Agencies, the Lead Agency finalized and adopted the scope which was used as the template for the generation of the project DEIS.*

As noted above, the alternatives were chosen in accordance with State Law. The DEIS adequately identified the impacts related to these alternatives and compared them to the Proposed Action to allow the Lead Agency the ability to decide between development options. Again there is no requirement under SEQRA to assess the alternative's impacts at the same level of detail reserved for the Proposed Action. The law states "[t]he description and evaluation of each alternative should be at a level of detail sufficient to permit a comparative assessment of the alternatives discussed" and not at the same level as required for the Proposed Action.

The project has been reduced in scale to lessen the levels of impact associated the development. Significant expenditures are associated with this reduction and the associated improvements, both on- and off-site. The off-site traffic mitigation costs are estimated to total approximately $2.6 million of which the applicant will contribute more than half. In addition, the design improvements that are offered by the Applicant will add significantly to the overall cost of the development, while improving and enhancing the visual appeal of the project. New design components include an historic gateway design and entry drive, community gathering place, well designed pedestrian connections, cohesive architectural style, smaller parking fields, a cohesive signage program, and improved site lighting.

See Responses 5.0-6, 5.0-6A and 5.2-3.

Comment 5.2-5 (Letter C4, Elena Bao, 09/25/06): Costco would likely be one of the most "heavy traffic" destinations on the project site. Why is the Costco building situated the "deepest" within the project site (i.e. the "last building)? Wouldn't it have been less of an impact on the community from a project-generated traffic noise standpoint to have a place one of the less busy businesses deepest into the site so that the high volume of traffic associated with Costco wouldn't pass by the homes adjacent the project site?

Response 5.2-5: *Internal traffic circulation is most efficient for vehicles traveling on the internal access road from the north end of the site toward NYS Route 311, when the volume on the access road increases as vehicles enter from the parking areas decreases. In other words, the internal traffic circulates most efficiently when the volume of vehicles entering from the parking areas is lowest when the access road volume greatest. As a result, the smallest trip generators (smaller retailers) should be closest to NYS Route 311.*

Comment 5.2-6 (Letter C4, Elena Bao, 09/25/06): Building Orientation Alternative. This Alternative is an insult to residents and demonstrates the applicant's callous disregard for the residents bordering the site. Not only does the design place the offensive big-box buildings ridiculously close to residents, but it would bring all the truck traffic noise and pollution and adverse visual impacts closer to the residential border! And to add insult to injury, the site plan INCREASES the square footage! I honestly feel that the applicant has made a "game" out of the Alternative in the DEIS with the intent to proposed alternatives that would even more offensive than the proposed action so that the proposed action would seem "preferable" to the alternatives. This alternative brings more impervious surface, more water usage, more land clearing, more noise, greater visual impact, and greater cumulative impacts overall. This "alternative" is most certainly Not a course of action that one would choose over the proposed action- which was exactly the intent of the applicant's proposal of this absurd site plan!

Response 5.2-6: *The Building Orientation Alternative meets the requirements of the Adopted Scoping Document for the DEIS. The Scoping Document only requires the alternative propose a modified building layout, which the Applicant has provided. The placement of the buildings on the western side of the project site was suggested due to site characteristics, including slopes and wetlands, the shape of the project parcel, area requirements for buildings, internal roadways and parking, as well as zoning requirements. The Applicant chose the building layout evaluated in the DEIS as the proposed plan because it was believed to be a better plan and have reduced impacts to the local residents as compared to the Building Orientation Alternative which sites the buildings and loading docks closer to the adjacent residences. See Response 5.0-6.*

Comment 5.2-7 (Letter C4, Elena Bao, 09/25/06): The Final Scope outlined that the Applicant provide an alternative size site plan with retail space of 350,000 square feet. Why did the Lead Agency select such a high number of square feet for the "lesser build" alternative for the Final Scope? The sheer scale of this project has always been the major reason for resident opposition to the project and it would have been appropriate for the Lead Agency to have required a much lower number of square feet for the "lesser build" alternative. The Applicant should be required to provide an alternative for a site plan of -200,000 square feet, approximately half the size of the original action.

Response 5.2-7: *See Response 5.2-4.*

Comment 5.2-8 (Letter C4, Elena Bao, 09/25/06): "It should be noted that this alternative, by reducing the total area of retail development at the project site, does not utilize the site to its full potential, does not provide retail synergy"

I would like to note here the site's potential is currently unknown at this time since all involved agencies have not arrived at their findings. This site's "potential" may actually prove to be significantly lower than the Applicant expects. Environmental constraints, the site's close proximity to a residential lake community, the nature of the existing road infrastructure, and various other issues are all factors which will impact the build "potential" of this site. So the applicant's statement here that a lesser build alternative on the site "would not utilize the site to its full potential" is a completely baseless statement at this point in time.

Response 5.2-8: *The "potential" of the site was based on the zoning requirements, proximity to major roads and the Applicant's development experience. The Lead*

Agency will make a decision regarding development of the site based on many factors including their understanding of the project site's development potential.

Comment 5.2-9 (Letter C4, Elena Bao, 09/25/06): "...project site, does not utilize the site to its full potential, does not provide retail synergy between tenants, nor does it provide adequate gross square footage for ancillary retail. The scenario would likely result in the development of other sites in the area to provide supporting retail space and food services for the existing market demand, This alternative would increase traffic congestion, vehicle emissions and vehicle miles traveled along local roads. The development of associated retail services at other sites would have increased impacts than the proposed development, such as visual resources."

The logic the Applicant uses here to "convince" the reader that the mix of stores proposed for this alternative would result in our area becoming even more developed is ridiculous. Development of vacant parcels in our towns will occur regardless of the types of stores that would go in to Patterson Crossing. This is the best demonstrated by the fact the applicant is proposing a Lowe's 3.5 miles from a Home Depot, a Home Goods store 3.5 miles from a Linens-N-Things, a clothing store 3.5 miles from Marshall's and Kohl's, and a coffee shop ¼ mile from the Lake Carmel general Store. The Applicant intends to saturate our local market with unnecessary stores to make a buck, and there is no question that other developers would do the same in pursuit of profit, despite which stores were located at Patterson Crossing. The Applicant's logic here is absurd.

Response 5.2-9: *The point made in the DEIS is, should the project site not be developed to its full potential, nearby vacant parcels could be developed with supporting retail. This would spread the impacts of the commercial development beyond the borders of the project site.*

The DEIS notes that there would be limited overlap in services and product offerings with other retailers in the area. However, it is anticipated that the Project would draw additional consumers into the area, offsetting any "drawing off" effect due to comparison shopping and competition. Development of vacant parcels in the area may continue to occur, further enhancing the area as a shopping destination.

Comment 5.2-10 (Letter C4, Elena Bao, 09/25/06): "The Applicant is unlikely to pursue this alternative for a variety of financial reasons."

This statement demonstrates the applicant's unwillingness to deviate in any way from the proposed action. This statement confirms my conclusion that the Applicant, in suggesting these alternatives, is merely "going through the motions". In this SEQR process, with no intent of working with officials and the community to create a project which minimizes impacts for the greater good of the host community. The size of the proposed project is the #1 reason for the large-scale opposition to the project, and the Applicant is just not willing to scale down the plan. This unwillingness to compromise reflects poorly on the applicant. I also feel that if the applicant is claiming he can't pursue a lesser build because of "financial reasons", then those financial reasons should be listed in the DEIS.

Response 5.2-10: *The Patterson Crossing Retail Center development plan has been modified from the original proposal, in response to comments received and concerns expressed during the public comment period on the DEIS. The modified site plan*

reduces the gross leasable floor area to 374,340 square feet from 405,850 square feet, thereby reducing impacts associated with the proposed development.

Refer to Responses 5.2-3 and 5.2-4.

Comment 5.2-11 (Letter C4, Elena Bao, 09/25/06): On page 5-4, under the "Cultural Resources" header, the applicant states that both the proposed action and the alternative being discussed would have NO impact on historic and archeological resources. However, in this section, the applicant by default implies that there are impacts on cultural resources with the proposed action and also with this action. This is contradictory data.

Response 5.2-11: *A Phase 1 Cultural Resources investigation was conducted on the project parcel. Over 800 shovel tests were excavated within areas of the site proposed for development. No significant cultural resources were discovered on the site. The NYS Office of Parks, Recreation and Historic Preservation reviewed the final report and concluded that the proposed project is considered to have "No Impact" on cultural resources. Refer to Appendix A for a copy of the State Letter.*

Comment 5.2-12 (Letter C-44 Peter Liebold, September 22, 2006): The developer has not seriously explored a downsized project or presented any real alternatives in this document. He wants Patterson Crossing as presented in this document and nothing else. The developer must be required to offer a serious alternative to the project described in the DEIS. This is a SEQRA requirement and was called for by the Patterson Planning Board in part VI of the scoping *document.*

Response 5.2-12: *The DEIS evaluated alternatives which complied with the requirements of the Adopted Scoping Document. However, in response to comments received and concerns expressed during the public comment period on the DEIS, the Patterson Crossing Retail Center development plan has been reengineered. The modified site plan reduces the gross leasable floor area to 374,340 square feet from 405,850 square feet, thereby reducing impacts associated with the proposed development.*

Not only has the gross leasable space been reduced by more than 23,000 square feet when compared with the DEIS plan and over 43,000 square feet when compared with the plan presented to the Town in May 2003, but many design changes have been made to reduce the impacts of the overall development. The project will create a new gateway to both Patterson and Kent along Route 311 which will be defined by stone walls and fences, reflecting the area's historically rural character. The entrance drive will be shaped and softened by landscaping with fencing defining the edges. Rows of trees will define the major on-site drives and trees will establish the boundaries of each parking area.

A new public plaza will be the center of a group of small shop retailers and of the entire project. The space will anchor walkways that connect all of the retail, creating a more pedestrian friendly site. Street trees will offer shade and add character.

Rural equestrian architecture will be the basis of the building design. This architecture is appropriate for small or large tenants. The scale of the buildings will be lessened through the use of smaller elements. Design will incorporate vertical towers, bay windows, awnings and canopies, trellises and arcades, and shed dormers.

Comment 5.3-1 (Letter C4, Elena Bao, 09/25/06): When I read this alternative I was shocked at the Applicant's audacity to even suggest an alternative with a 740,000 square foot building footprint. An alternative as insulting as this was not the intent of the Final Scope's inclusion of an alternative inclusive of "industrial use ". Again, what we have here is the Applicant putting forth an alternative that is more offensive than the proposed action, thereby making the proposed action a "preferable" alternative. It is worthy to note that this alternative's site plan covers almost as much "area on the site as the proposed action, which doesn't resolve any of the impacts that will result from the original actions size. **[Similar comments were found in the following letter: Letter C-44 Peter Liebold, September 22, 2006]**

Response 5.3-1: *The DEIS presents alternatives as approved by the Lead Agency during the scoping process. There is no requirement for each alternative to reduce impacts identified under the Proposed Action. The Alternate Use Plan, which is a viable alternative that could be built on this project site, does reduce impacts in some areas. This alternative complies with the requirements of the adopted scope and the existing zoning for the project site. See Response 5.0-3.*

6.0 ENVIRONMENTAL IMPACTS THAT CANNOT BE AVOIDED IF THE PROPOSED ACTION IS IMPLEMENTED COMMENTS AND RESPONSES

Comment 6.0-1 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The DEIS fails to identify increased stormwater volume, degradation of nearby water quality (e.g. hydrocarbons), increased demand for low-income housing options, and increased loading of air pollutants (e.g. CO and particulate) as long-term adverse impacts.

Response 6.0-1: *Potential long term adverse impacts associated with increases in stormwater volume are primarily related to downstream channel erosion, subsequent sedimentation, and flooding. The stormwater management system proposed for the Patterson Crossing Retail Center has been specifically designed to avoid these potential adverse impacts by providing detention of the 24-hour plug flow from the 2-year, 24-hour storm. The proposed stormwater detention ponds would also reduce post-construction peak rates of stormwater discharge from the 2, 10, 25, and 100-year, 24-hour design storms to below pre-construction rates. The proposed reduction in discharge rates from the ponds satisfies the requirements of NYCDEP and would allow for an evenly distributed discharge of the volume of stormwater generated on the site over 24 hours. Evenly distributing the discharge would avoid adverse impacts associated with channel erosion, sedimentation, and flooding, that could result from any post-construction increase in the volume of stormwater from the project site.*

The two proposed multiple series of stormwater treatment ponds, one consisting of two ponds and one consisting of four ponds, will detain runoff from the site and meet NYSDEC detention and water quality treatment requirements as well as NYCDEP's. Potential long term adverse impacts associated with post-construction changes in stormwater volume discharging at Design Point 1 are further avoided by detention of the one-year center of mass for the 1-year, 24-hour design storm for 24 hours to meet the NYSDEC requirements for Stream Channel Protection. Twelve hour detention of the center of mass for the 1-year, 24-hour design storm will be provided in the two stormwater ponds discharging to Design Line 3. The design of the ponds discharging to Design Point 3 (Middle Branch Croton River) provides a shorter detention time to comply with the provisions of the 2003 NYSDEC Stormwater Management Design Manual (Manual) that address stormwater practices that discharge to trout streams such as the Middle Branch Croton River. Attenuation of the 10-year and 100-year, 24-hour design storm has also been provided to meet the NYSDEC requirements for Overbank Flood Control (Q_r) and Extreme Flood Control (Q_f) respectively. Based upon the detention provided in the proposed ponds that reduce the peak rates of stormwater discharge, and complies with all NYCDEP and NYSDEC requirements increases in stormwater volume would have no significant long term adverse environmental impacts.

Long term environmental impacts associated with polycyclic aromatic hydrocarbons (PAHs) are primarily associated with airborne contamination rather than water quality degradation. According to the United States Department of Health Services, Agency for Toxic Substances and Disease Registry, PAHs are "formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat and enter the air mostly as releases from volcanoes, forest fires, burning coal, and automobile exhaust. Notwithstanding, the Manual identifies PAHs

as a pollutant found in stormwater and notes that urban land uses and activities can degrade groundwater quality if stormwater runoff is infiltrated without adequate treatment. The manual further indicates that certain land uses and activities are known to produce higher loads of toxic chemicals, and are designated as stormwater hot spots, from which soluble pollutants, such as some PAHs can migrate into groundwater and potentially contaminate wells.

A stormwater hotspot is defined in the Manual as "a land use or activity that generates higher concentrations of hydrocarbons, trace metals or toxicants than are found in typical stormwater runoff, based on monitoring studies." Further, according to the Manual, "if a site is designated as a hotspot, it has important implications for how stormwater is managed. First and foremost, stormwater runoff from hotspots cannot be allowed to infiltrate into groundwater, where it may contaminate water supplies. Second, a greater level of stormwater treatment is needed at hotspot sites to prevent pollutant washoff after construction. This treatment plan typically involves preparing and implementing a stormwater pollution prevention plan that involves a series of operational practices at the site that reduce the generation of pollutants from a site or prevent contact of rainfall with the pollutants." Table 4.3 in the Manual provides a list of designated hotspots for the State of New York.

Of the land uses and activities which are designated as stormwater hot spots in the Manual, only the proposed outdoor loading/unloading facilities at the Patterson Crossing Retail Center is listed. The proposed Garden Center does not constitute a "commercial container nursery", a use that is also identified as a hotspot in the Manual. Although the Garden Center is not considered a "hot spot", the stormwater runoff is proposed to be pretreated in a "Stormfilter" treatment unit prior to discharging into the stormwater ponds. The "Stormfilter" treatment unit has been proposed to provide an additional stormwater benefit above the required treatment being provided in the stormwater ponds.

The Manual cautions that stormwater runoff from designated hot spots should never be infiltrated, unless the runoff receives full pretreatment with another practice. The stormwater treatment plan proposed in the Patterson Crossing Retail Center SWPPP involves a series of operational practices at the site that reduce the generation of pollutants from the site, and includes measures to prevents the contact of rainfall with the pollutants, as recommended in the Manual. In addition, no stormwater from the site will be infiltrated, even after treatment, as further recommended in the Manual.

To prevent long term degradation of nearby water quality, stormwater from the majority of the development (subcatchments 1.1, 1.2, 1.3) will be treated in three wet stormwater ponds in series (ponds 1.1P, 1.2P, 1.4P). Runoff from a smaller portion of the development (subcatchment 1.3) will be treated in two wet ponds in series (ponds 1.3P, 1.4P). The first pond in both of these treatment trains, pond 1.1P and 1.3P have been designed as micropool extended detention ponds (design P-1 in the Manual). Treatment ponds 1.2P and 1.4P have been designed as extended detention wet ponds. The proposed stormwater management practices will provide the necessary pollutant removals while attenuating the peak stormwater flows to predevelopment levels at Design Point 1.

Stormwater now discharging to Design Point 2, also in the East Branch watershed, will continue as sheet flow from the hillside from west to east following development

of the site. A portion of subcatchment PRE 2 (shown on FEIS Figure 4.5-3) will be diverted in the post-development condition to Design Point 1 for treatment. The reduction in drainage area to Design Point 2 resulting from the diversion will reduce overall pollutant loading to Design Point 2 despite the change in ground cover resulting from construction of the proposed septic system in subcatchment PRE 2.

There are three components of the post-development stormwater runoff discharging to the Middle Branch of the Croton River (Design Line 3) in the Middle Branch Reservoir watershed. The first component of the runoff (subcatchment 3.2) is generated from the northern portion of the site which includes the proposed access road, northern parking area, and side slopes. A proposed stormwater treatment train consisting of two stormwater ponds in series (ponds 3.1P and 3.2P) will treat runoff from a portion of the entrance road and from the lower parking areas for the main retail pad. Subcatchment 3.2 consists of the northern portion of the access road and adjacent side slopes in addition to an area along New York State Route 311 and portions of the Interstate 84 median and exit ramps. Stormwater from subcatchment 3.2 will be treated in pond 3.2P before discharging to Design Line 3. The proposed project includes the renovation of a portion of the existing stormwater collection system along NYS Route 311 to allow for proposed road safety improvements. After treatment in pond 3.2P, stormwater will discharge into the renovated collection system along the south side of NYS Route 311 which outlets into an existing roadside swale that flows directly into the Middle Branch of the Croton River. Both ponds 3.1P and 3.2P have been designed as a micropool extended detention ponds (P-1) in accordance with the Manual.

The outlet from ponds 3.1P and 3.2P will discharge into the renovated stormwater collection system on the southern side of NYS Route 311. As part of the proposed development, the existing collection system would be replaced to allow for proposed safety improvements on NYS Route 311. The watercourse that flows parallel to NYS Route 311 is fed by a combination of swales and drainage pipes carrying runoff from the Interstate 84 and NYS Route 311. The proposed project also includes replacing a pipe that currently conveys the watercourse to the Middle Branch Croton River with a pipe that would discharge the flow to a stable outlet at the river.

The second component of the stormwater runoff discharging to Design Line 3 is from the area discharging directly to the design line from subcatchment 3.3. The drainage area contributing to the watercourse in subcatchment 3.3 will be maintained allowing for continued flow and a direct discharge to Design Line 3.

The third component of stormwater runoff discharging to Design Line 3 is the runoff from the existing Lake Carmel residential development on Concord Road. This runoff discharges to a highly eroded ditch (a NYCDEP flagged watercourse) that flows down the slope towards New York State Route 311. Although treatment of this runoff is not required, a treatment pond is proposed to improve stormwater quality and rectify a chronic source of sediment entering Lake Carmel. The low flow portion of the stormwater from the existing development would diverted from the channel and into pond 3.4P via a pipe where it would be treated. The water would then be returned to the existing watercourse. The pond has been designed as a micropool extended detention pond (P-1), pursuant to the Manual. The pond would improve stormwater quality, while continuing flow in the watercourse that is tributary to the Middle Branch of the Croton River. Implementing the repair project is not required for the project to

proceed and has been eliminated from the Proposed Action. However, the Applicant is willing to implement this improvement if requested by the Towns of Kent and Patterson and permitted by the regulatory agencies.

In addition to the on-site stormwater treatment practices, the proposed project now includes stormwater treatment measures to treat runoff from an additional area in the East Branch Reservoir Basin. This treatment, which exceeds State and City requirements, will remove additional, existing, pollutant loads from currently untreated stormwater runoff. FEIS Figure 4.5-4, Off-site Stormwater Treatment Sites, depicts the Putnam County Highways Facility (PCHF) site along Fair Street in the Town of Patterson where the practices are proposed. Stormwater from the PCHF subcatchments will be treated in micropool extended detention ponds to provide additional pollutant removal and improve water quality in the receiving reservoir basin.

The reduction in post-construction pollutant loads are a result of revisions to the proposed project that reduce the area of impervious surfaces and the water quality improvements resulting from the diversion and treatment of the flows entering the site from Concord Road, and the additional on and off site stormwater treatment practices now proposed. As demonstrated in the detailed calculations in the SWPPP (Appendix F), these constituents would be reduced even without treatment of the runoff from Concord Road. The SWPPP also includes calculations that demonstrate compliance with the NYSDEC required 90th percentile water quality volume treatment for the 1, 2, 10, 25 and 100 year, 24 hour, storm events pursuant to the Final Scoping Document. The Applicant notes that even without the additional measures proposed on and off the site, the project would result in a reduction in existing pollutant loading in the Middle Branch and East Branch watersheds that would avoid long term impacts on water quality.

The Patterson Crossing Retail Center, upon its completion and full operation, would employ approximately 488 permanent employees. These jobs would provide local part- and full-time employment opportunities and the salaries of these long term employment positions would range from high to low income (i.e. management/supervisior positions = high income; sales positions and administrative positions = moderate income; clerks and stock personnel, janitorial staff, and service staff = low income).

The potential impacts, including secondary growth impacts (population growth) from the Proposed Action and increase in permanent employment was analyzed and evaluated in the DEIS. Jobs at the proposed Patterson Crossing Retail Center, including lower paying jobs, are likely to be filled by workers already residing in homes in Putnam County and the immediately surrounding area. Secondary growth impacts (population growth) related to the influx of people relocating to the surrounding area to fill jobs at the Patterson Crossing Retail Center is anticipated to be minor and the resultant need or demand for new housing, including affordable housing, even more limited.

Even though potential secondary growth impacts were not identified as a result of the Proposed Action, additional analysis was conducted to access any possible impacts on local housing demands, specifically affordable housing, associated with the proposed development. Various resources, including input from local economists, and

methodologies were used to access the possible increase of housing demands, including affordable housing, resulting from the Proposed Action. Specifically, an impact analysis model was developed by TMA staff for the proposed development using IMPLAN (Impact Analysis for Planning) Pro Software. In general the IMPLAN model is an effective tool used to project various primary and secondary impacts from future (proposed) development including commercial development. However, due to the constant fluctuation of the housing market and other local (Towns of Kent and Patterson) economic factors, it was determined that this model and similar development impact analysis models are not configured to project local housing demands associated with jobs from the proposed commercial development. Furthermore, in a conversation between IMPLAN Software Developers and TMA Staff, it was determined that the modeling program did not include housing market data and other local economic data[1].

The availability of another model that can provide data on secondary impacts related to housing was researched by both TMA and a local economist. No defensible models were found capable of providing the detailed information requested in this and other comments. Few were found that are capable of generating data similar to that identified in the comment. Of these, ***all*** *the available models are econometric modeling systems that are multivariate tools good for use in developing broad brush policy data; they are all missing the ability to be for small geographic areas using available local data. They are not useful for assessing increased demand within the trade area for low-income housing resulting from the Proposed Action.*

In order to evaluate the Proposed Action's demand on affordable housing, TMA staff identified residential areas within a reasonable commuting distance (forty five minutes or less) of the project site that contain existing affordable housing units. Refer to FEIS Figure 6.0-1, Local Affordable Housing Locations. This methodology was used with the assumption that employees do not generally relocate for jobs in the unskilled or less skilled labor categories. This is an important distinction that points to low growth inducing effects, in the opinion of the Applicant (i.e. increased demand for low-income housing options).

Affordable housing is generally defined as the housing cost burden or the 30 percent rule, which states that not more than 30 percent of a family's monthly income should be devoted to housing costs[2]. For analysis purposes, the median annual salary for a retail sales staff employee (full time)[3] was used to calculate the amount of monthly income a single person could devote to housing costs if employed at Patterson Crossing Retail Center. The median salary for an employee of retail sales staff working in the Town of Patterson, as of June 2007, is $27,764. Thirty percent of this salary would be $8,329.20, allotting approximately $694.10 per month to be devoted

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[1] *Sourced from various phone conversations between IMPLAN and TMA staff during June, 2007.*

[2] Addressing Affordable Housing - Cases and Practical Solutions. Jacobowitz and Gubits, LLP, Counselors at Law, " 18 June 2007, <www.jacobowitz.com>

[3] Salary.com's Salary Wizard - Do you know what you are worth?. Salary.com. June 2007. 20 June 2007. <http://swz.salary.com> Note: analysis conducted for a Retail Sales Staff (see below definition) employed in Patterson, NY 12563. Retail Sales Staff - Full Time: Duties include selling goods and attending to customers on the selling floor. May require a high school diploma or its equivalent. No experience necessary. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Primary job functions do not typically require exercising independent judgment. Typically reports to a supervisor or manager. Hourly salary annualized based on a 2,080 hour work year.

to housing costs by this one individual (i.e. rent, mortgage). To reiterate, this monthly calculation is for a single person not a household.

As illustrated in FEIS Figure 6.0-1, there are residential areas that contain existing affordable housing within the aforementioned commuting distance. The identified housing units, located in both single and multifamily housing developments include studio and one bedroom apartments, two to three bedroom apartment shares, and individual room rentals. For example, in the Towns of East Fishkill (15 minutes) and Poughkeepsie (36 minutes) and the City of Poughkeepsie (36 minutes), the average rent for a studio apartment in 2006 was $600, $616 and $644, respectively[4]. All three options would be considered affordable by the above mentioned retail sales staff employee.

Other areas identified within a reasonable commuting distance that include an affordable housing stock, such as the Village of Brewster in Putnam County (10 minutes), the City of White Plains (40 minutes) and Danbury, Connecticut (20 minutes are also accessible to/from the project site by public transit. Additionally communities with extensive rental and multi-family housing units that are within commuting distance of the project site are the Cities of Newburgh (31 minutes), Poughkeepsie, and Peekskill (43 minutes), among others. Westchester Urban County Consortium's 2000 Consolidated Plan indicates that the northern Westchester City of Peekskill and Town of Cortlandt (39 minutes) each contain a substantial number of smaller multi-family housing units, and that the City of Peekskill (which is located approximately 43 minutes from the project site) contains more than 3,000 rental units[5].

The data above supports the information discussed in the DEIS, that there are areas within commuting distance, either by automobile or public transit, that contain affordable housing resources to support the future labor force at the Patterson Crossing Retail Center. While the information above does not indicate an increase in the availability of affordable housing in the areas where Patterson Crossing Retail Center workers would be likely to reside, it does indicate that there are affordable housing options for workers within reasonable commuting distance of the project site. Therefore, the new workers would not be expected to induce significant changes in housing market conditions that would lead to significant secondary impacts.

An analysis was conducted in accordance with the approved scoping document and used to evaluate year 2010 for traffic air pollutants. The analysis included modeling using CAL3QHC and MOBILE6 analyses for CO in conformance with the New York State Department of Transportation (NYSDOT) Environmental Procedures Manual and the report of this analysis was included as Appendix I of the DEIS. Results indicate that levels at the worst-case receptor were found to be at 50 percent of the 8-hour standard, as stated on page 4.15-5 of the DEIS, creating no known long-term adverse impact. Particulate matter analyses are normally conducted as a part of NYSDOT transportation projects, not site development and was not part of the analysis conducted for the proposed development.

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[4] Rental Housing Survey, 2006. Dutchess County Planning and Development. 2006. 15 June 2007. <http://www.co.dutchess.ny.us/CountyGov/Departments/Planning/PLpublications.htm>

[5] *Westchester Urban County Consortium 2000 Consolidated Plan, page 37.*



Figure 6.0-1: Local Affordable Housing Locations

Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York

Source: Delorme

Scale: 1 inch = 10 mi.

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7.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES COMMENTS AND RESPONSES

No comments were received on this chapter.

8.0 GROWTH INDUCING IMPACTS COMMENTS AND RESPONSES

Comment 8.0-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 8-2, the discussion of additional development potential overlooks the extent of vacant land to the east of the project site on the other side of Interstate 84 as well as the vacant land to the north of the site on the other side of NYS Route 311 that is owned by the applicant. In fact, public statements attributed to the applicant, indicate an intention to develop the northern property once the signal on NYS Route 311 has been installed. The discussion of growth inducing aspects must be greatly expanded to explain and analyze the secondary effects of the project.

> ***Response 8.0-1:*** *Retail growth in this area has occurred as a result of historic population growth in the "trade area" of the site and the infrastructure proximate to the site (NYS Route 311 and Interstate 84) which carries substantial volumes of traffic. This is little reason to expect significant secondary growth as a result of the development of the Patterson Crossing Retail Center. The conditions already exist for such growth to occur.*
>
> *Examination of soft sites (vacant land) is best done by the Town at the Master Plan level of review. Perhaps the Town of Kent has already undertaken such background studies as precedent to its recent Master Planning efforts.*
>
> *There are presently no plans for the development of the properties mentioned in Comment 8.0-1. While there is certainly potential for development of these properties, the impacts that would be associated with such development would be subject to the SEQRA process but cannot be assessed without a development plan. Currently, the* site *located to north of the project site within the Town of Kent is zoned Commercial and could be developed as such. As a note, the Town of Kent's Master Plan, adopted in 1990, recommends commercial and industrial development for this site. The vacant site located to the east of the project site within the Town of Patterson is zoned Industrial and could be developed as such.*

Comment 8.0-2 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The DEIS scope calls for the sponsor to provide information about the type and salary level of the jobs created and the potential impact this would have on the pressure for affordable housing. This was to be addressed in the context of the fact that Putnam County's unemployment level had been determined to be approximately 4% which is a level widely considered to be at full employment.

> ***Response 8.0-2:*** *The proposed project would generate a variety of short and long term employment opportunities. As discussed in Section 3.0, Economic and Social Benefits, based on labor hour estimates included in the Development Impact Assessment Handbook, published by the Urban Land Institute (1994), the Patterson Crossing Retail Center project is expected to generate a total of approximately 226 person-years of employment of construction-related (directly and indirectly) jobs. It is anticipated that the majority of the construction-related workers for the proposed development would come from the Towns of Patterson and Kent and other municipalities in the immediate vicinity and this generation of workers would not create a secondary growth impact on housing demands, including affordable housing*

demands within the project's region. As many of these people are already employed by local or regional building trades.

In regards to long term employment, the Patterson Crossing Retail Center, upon its completion and full operation, would employ approximately 488 employees. These jobs would provide local part- and full-time employment opportunities. Salaries of these long term employment positions would range from high to low income (i.e. management/supervisior positions = high income; sales positions and administrative positions = moderate income; clerks and stock personnel, janitorial staff, and service staff = low income).

Non-supervisory retail of workers, which would be the majority of the positions available at Patterson Crossing, earn an average $12.69 per hour (Department of Labor, January 2007). However, the median salary of a shipping clerk in Lake Mahopac, a local example south of the project site, is $30,880[1]. This equates to $15.29 in hourly salary.

The potential impacts, including secondary growth impacts (population growth) from the Proposed Action and increase in permanent employment was analyzed and evaluated in the DEIS. Jobs at the proposed Patterson Crossing Retail Center, including lower paying jobs, are likely to be filled by workers already residing in homes in Putnam County and the immediately surrounding area. Secondary growth impacts (population growth) related to the influx of people relocating to the surrounding area to fill jobs at the Patterson Crossing Retail Center is anticipated to be minor and the resultant need or demand for new housing, including affordable housing, even more limited.

Even though potential secondary growth impacts were not identified as a result of the Proposed Action, additional analysis was conducted to access any possible impacts on local housing demands, specifically affordable housing from the proposed development. Various resources, including input from local economists, and methodologies were used to access the possible increase of housing demands, including affordable housing, resulting from the Proposed Action. Specifically, an impact analysis model was developed by TMA staff for the proposed development using IMPLAN (Impact Analysis for Planning) Pro Software. In general the IMPLAN model is an effective tool used to project various primary and secondary impacts from future (proposed) development including commercial development. However, due to the constant fluctuation of the housing market and other local (Towns of Kent and Patterson) economic factors, it was determined that this model and similar development impact analysis models arenot configured to project local housing demands associated with jobs from the proposed commercial development. Furthermore, in a conversation between IMPLAN Software Developers and TMA Staff, it was determined that the modeling program did not include housing market data and other local economic data[2].

The availability of another model that can provide data on secondary impacts related to housing was researched by both TMA and a local economist. No defensible models were found capable of providing the detailed information requested in this

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[1] *Salary.hotjobs.com ; <www.salary.hotjobs.com/salarywizard>*

[2] Sourced from various phone conversations between IMPLAN and TMA staff during June, 2007.

and other comments. Few were found that are capable of generating data similar to that identified in the comment. Of these, ***all*** *the available models are econometric modeling systems that are multivariate tools good for use in developing broad brush policy data; they are all missing the ability to be fine tuned for small geographic areas using available local data. They are not useful for assessing* increased demand within the trade area for low-income housing *resulting from the Proposed Action.*

In order to evaluate the Proposed Action's demand on affordable housing, TMA staff identified residential areas within a reasonable commuting distance of the project site (forty five minutes or less) that contain existing affordable housing units. Refer to FEIS Figure 6.0-1, Local Affordable Housing Locations, located immediately after Section 6.0 of this FEIS. According to the 2000 Census, residents of northern Westchester County, Putnam County and southeastern Dutchess County traveled an average 35.4 to 59.4 minutes to work. Refer to FEIS Figure 8.0-1. The mean travel time to work for residents of Connecticut's Fairfield and Litchfield Counties, as noted in the 2000 Census, was slightly lower (average of 25.4 to 28.0 minutes to work). In combination with the mean travel time data by County gathered from the 2000 US Census and the anticipation that many of the future employees of Patterson Crossing Retail Center would be traveling from the above mentioned areas, a reasonable commuting distance of forty five minutes or less was established.

This methodology was used with the understanding that employees do not generally relocate for jobs in lower salaried positions. Gould and Penley have found that lower salaried persons have a lower likelihood to relocate as there is a degree of financial risk associated with relocating, including unrecoverable moving expenses. Lower salaried individuals are less likely to have the surplus financial reserves to cover the financial risks of relocation. Also, to the extent that lower salaried workers are in a household with two wage earners or with a family, relocation is also less likely.[3] This points to low growth inducing effects, in the opinion of the Applicant (i.e. increased demand for low-income housing options).

Affordable housing is generally defined as the housing cost burden or the 30 percent rule, which states that not more than 30 percent of a family's monthly income should be devoted to housing costs[4]. For analysis purposes, the median annual salary for a retail sales staff employee (full time)[5] was used to calculate the amount of monthly income a single person could devote to housing costs if employed at Patterson Crossing Retail Center. The median salary for an employee of retail sales staff working in the Town of Patterson, as of June 2007, is $27,764. Thirty percent of this salary would be $8,329.20, allotting approximately $694.10 per month to be devoted

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[3] Gould and Penley. "A Study of the Correlates of the Willingness to Relocate." Academy of Management Journal. Vol 28, No 2 (June 1985): 472-478.

[4] Addressing Affordable Housing - Cases and Practical Solutions. Jacobowitz and Gubits, LLP, Counselors at Law, " 18 June 2007, <www.jacobowitz.com>

[5] Salary.com's Salary Wizard - Do you know what you are worth?. Salary.com. June 2007. 20 June 2007. <http://swz.salary.com> Note: analysis conducted for a Retail Sales Staff (see below definition) employed in Patterson, NY 12563. Retail Sales Staff - Full Time: Duties include selling goods and attending to customers on the selling floor. May require a high school diploma or its equivalent. No experience necessary. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Primary job functions do not typically require exercising independent judgment. Typically reports to a supervisor or manager. Hourly salary annualized based on a 2,080 hour work year.

to housing costs by this one individual (i.e. rent, mortgage). To reiterate, this monthly calculation is for a single person not a household.

As illustrated in FEIS Figure 6.0-1, there are residential areas that contain existing affordable housing within the aforementioned commuting distance. The identified housing units, located in both single and multifamily housing developments include studio and one bedroom apartments, two to three bedroom apartment shares, and individual room rentals. For example, in the Towns of East Fishkill (15 minutes) and Poughkeepsie (36 minutes) and the City of Poughkeepsie (36 minutes), the average rent for a studio apartment in 2006 was $600, $616 and $644, respectively[6]. All three options would be considered affordable by the above mentioned retail sales staff employee.

The data above supports that there are areas within commuting distance, either by automobile or public transit, that contain affordable housing resources to support the future labor force at Patterson Crossing. While the information above does not indicate an increase in the availability of affordable housing in the areas where Patterson Crossing workers would be likely to reside, it does indicate that there are affordable housing options for workers within reasonable commuting distance of the project site should there be an increased demand for such housing. Based on historic trends however, the new workers would not be expected to induce significant changes in market conditions related to housing that would lead to significant secondary impacts.

Comment 8.0-3 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): With regard to the number of post-construction jobs, there is variability within the DEIS. Section 3 states that the project would generate 516 jobs while section 8 indicates 549 new jobs and the EAF indicates over 1,000 new jobs. The Final EIS should clarify this issue.

Response 8.0-3: *The number of post-construction jobs estimated for Proposed Action presented in the DEIS is 516. Under the reduced development plan presented in this FEIS, the total number of projected post-construction employees would be 488.*

Comment 8.0-4 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The DEIS suggests that the salary for the majority of the new jobs will likely be approximately $10 per hour (page 3-11) This would result in an approximate gross income of a full-time worker of approximately $20,000.

According to the Patterson Comprehensive Plan, the National Association of Realtors has issued guidelines that state that a household should not purchase a house which costs more than two and one-half times their gross income or rent a home where monthly rent exceeds 30% of gross income. Using these recommendations, full-time workers would need to find residences for purchase of approximately $50,000 or rental of a home not to exceed $500 per month.

[6] Rental Housing Survey, 2006. Dutchess County Planning and Development. 2006. 15 June 2007. <http://www.co.dutchess.ny.us/CountyGov/Departments/Planning/PLpublications.htm>

Based on these figures, it is evident that the proposed project would place significant demands on the need for additional affordable housing. The DEIS states that "any increase in local resident population due to the proposed project would be expected to be relatively small and would not be expected to induce further growth. Existing and proposed housing resources within Patterson and Kent would be expected to accommodate any workers that could potentially relocate from outside the region". However, any analysis to substantiate this claim is entirely absent from the DEIS. Currently, there is no indication that affordable housing or lower-priced rental unit are available within the Towns of Kent and Patterson.

The DEIS should provide information with that shows that the jobs created will provide the salary necessary to reside in existing homes within the area or it should indicate the amount of new affordable housing needed to houses over 500 new workers. If additional housing stock is needed, the impacts should be addressed and appropriate mitigation should be proposed.

> ***Response 8.0-4:*** *Affordable housing options within the Towns of Kent and Patterson maybe fewer than other areas in the immediate vicinity of the project site. Refer to Response 8.0-2, above and Section 6.0, Response 6.0-1 (paragraphs 12-21) regarding affordable housing options and FEIS Figure 6.0-1, Local Affordable Housing Locations, which is located immediately after Section 6.0, Unavoidable Impacts. Additionally, within these above mentioned locations, which include a diversity of housing types (i.e. single family, multifamily, rentals, etc.), there are various housing options, such as apartment shares and individual room rentals.*

Comment 8.0-5 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): Lastly, DEIS fails to adequately address the required roadway expansion projects that would need to be constructed if the project were to be completed. The environmental impacts of these subsequent roadway projects should be discussed as part of the review of development potential.

> ***Response 8.0-5:*** *As discussed in DEIS Section 4.8-8, and further discussed in FEIS Section 4.8, no new roads, or modifications to the causeway over Lake Carmel, are proposed as part of the Proposed Action. Eight of the thirteen intersections studied during preparation of the DEIS were determined to potentially warrant safety improvements. These potential improvements, described in the April 27, 2007 memorandum from Tim Miller Associates, Inc. to the Putnam County Department of Highways and Facilities (FEIS Appendix A, Correspondence) include:*
>
> - *A right turn lane at NYS Route 311 and Fair Street;*
> - *Lane improvements at NYS Route 311 and Route 164;*
> - *Turn lanes or traffic circle at NYS Route 311 and the east and west bound lanes of Route 84;*
> - *A turn lane/island at NYS Route 311 and Terry Hill Road; and*
> - *Turn lanes at NYS Route 311 and the access to the project site.*
>
> *The modification of State roads made by the NYSDOT in New York City's drinking water supply watershed would be subject to the provisions of an existing Memoranda of Understanding between NYSDOT and NYCDEP. Under the terms of this agreement, NYSDOT would be required to comply with the erosion and sediment control and stormwater management provisions of GP-93-06, which is incorporated*

by reference in the WR&R. By complying with State and City stormwater regulations, impacts associated with erosion during construction and post-construction increases in pollutant loading in stormwater from new impervious surfaces will be addressed.

The Proposed Action has been enhanced and now includes proposed stormwater management facilities, beyond those required by NYCDEP and NYSDEC, that will treat runoff from portions of the Interstate 84 ramps, NYS Route 311, and the Putnam County Highway Facility. These practices, detailed in Appendix G, Phosphorous Report, will achieve an overall reduction in existing annual phosphorous loads of some 17 lbs/yr in the New York City Watershed following construction of the project. The reduction in expected to offset any potential increases in phosphorous resulting from unforeseen secondary growth that may occur. Based upon the modified site development plan, and the effectiveness of the on and off-site measures now proposed, post-construction annual phosphorous loads in the East Branch and Middle Branch Reservoirs are expected to be reduced from 9.71 lbs/yr to 9.09 lbs/yr and from 30.93 lbs/yr to 24.28 lbs/yr, respectively, following construction of the project. These reductions in existing phosphorous loads further mitigate potential impacts that may result from stormwater that is discharged from any modified roads in the watershed.

Comment 8.0-6 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): (Appendix F) The potential thermal impacts of waters flowing from detention basins into streams should be addressed more thoroughly by use of appropriate plantings near the basins. Please indicate the effects of increased water temperature on the receiving stream in terms of the stream's fishery.

Response 8.0-6: *The 2003 New York Stormwater Management Design Manual (the Manual) indicates that runoff from impervious surfaces may increase temperature in receiving waters. This can adversely impact aquatic organisms that require cold and cool water conditions such as trout. The Manual also notes "data suggest that increasing development can increase stream temperatures by between five and twelve degrees Fahrenheit, that the increase is related to the level of impervious cover in the drainage area (Galli, 1991)", and that "thermal impacts are a serious concern in trout waters, where cold temperatures are critical to species survival."*

Measures to avoid thermal impacts have been incorporated into the design of the stormwater ponds discharging to the on-site watercourse (within Design Line 3) that discharges to the Middle Branch Croton River, a NYSDEC classified trout protected waterbody. NYSDEC's classification impose specific design components be incorporated into the stormwater ponds discharging to the river. Accordingly, the proposed ponds discharging to Design Line 3 have been designed as micropool extended detentions ponds. These ponds have relatively small permanent pools which reduce the potential for increased thermal impacts on the receiving waters. NYSDEC recommends the proposed micropool extended detention ponds in cases where stormwater will discharge into trout protected waterbodies.

To further reduce the potential for impacts on the river's fishery associated with increases in water temperature, the basins discharging to the river have been designed to provide 12 hour detention rather than 24 hour in accordance with the Manual to further reduce its exposure to heating sunlight. The stormwater for the

1-year storm will be released over a shorter period of time to eliminate the potential for increases in the temperature of stormwater discharging to the trout stream as well. Furthermore, each stormwater pond discharging to Design Line 3 is located on a north-facing slope, which reduces the amount of direct sunlight on the permanent pools. The northern slopes of each pond will be left undisturbed to provide additional shading of the permanent pools. The siting of the ponds and the design aspects incorporated in them, satisfy the provisions in the NYSDEC design manual to help reduce thermal impacts on the receiving trout stream.

Finally, the proposed stormwater treatment ponds will be planted in accordance with Appendix H of the 2003 New York State Stormwater Management Design Manual (Manual). During final design of the basins, the type of hydrologic zones that will be created within the basins will be determined in concert with the Manual. These hydrologic zones designate the tolerance that certain plants exhibit to different degrees of inundation and will be the basis for plant species selection. Table H.5 at the end of Appendix H, designates appropriate plants for each zone based upon the hydrology of the zone, the stormwater functions required of the plant, and the desired landscape effect. Planting plans for the ponds are currently being developed. Establishing the vegetation in the stormwater management basins, as proposed, would shade the stormwater detained in the three basins and further reduce its exposure to the warming effects of the sun.

As discussed above, the three stormwater treatment ponds that would discharge to the trout protected Middle Branch Croton River have been designed as micropool extended detention basins with limited pool areas and decreased detention times of 12, rather than twenty-four, hours in accordance with the Manual. In addition, the ponds have been sited on northern slopes on the property and will be planted in accordance with the Manual to further reduce detained stormwater's exposure to sunlight. Combined, these measures are expected to prevent increases in water temperature in the river resulting from stormwater discharged from the project site. As such, adverse impacts on the river's fishery associated with increased water temperatures are not anticipated.

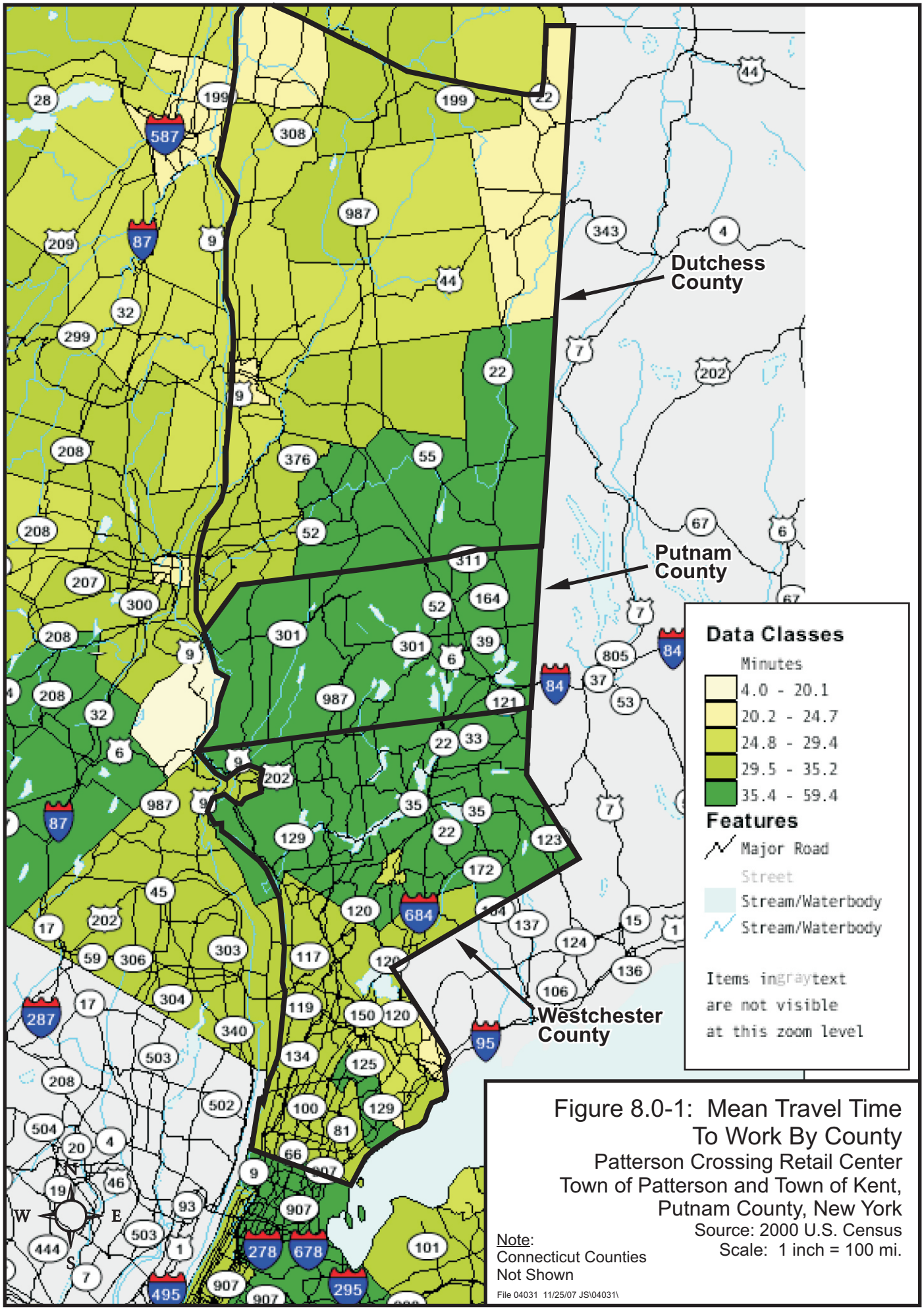


Figure 8.0-1: Mean Travel Time To Work By County

Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York

Source: 2000 U.S. Census
Scale: 1 inch = 100 mi.

Note:
Connecticut Counties Not Shown

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9.0 EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES COMMENTS AND RESPONSES

Comment 9.0-1 (Letter C-44 Peter Liebold, September 22, 2006): DEIS page 9-1 Section 9.0 Effects on the use and Conservation of Energy Resources... This needs to be specific. This is required in Section J.2.b.1 of the Scoping Document: b. Future conditions, 1. Discuss demand created for electric, fuel oil and/or gas.

Response 9.0-1: *In a letter dated June 12, 2007, Mr. Paul Lounsbury, Key Account Manager of New York State Electric & Gas Corporation (NYSEG) provided an estimate of the electrical load and usage for the proposed Patterson Crossing Retail Center (See Appendix A). Based upon a total development of 382,345 square feet, Mr. Lounsbury estimated the annual usage of electricity in kilowatt hours (kwh) to be 17,261,096. The estimates are based upon annual usage of 6,100 hours for the retail space and 2,350 hours for the office space. At a rate of $0.12/kwh, the total estimated annual cost would be $2,071,332. This demand assumes that all building heating and cooling systems will be electric. As square footage of the current Proposed Action is only 215 square feet (0.05 percent) greater than that assessed by NYSEG, the numbers provided above remain a good representation of the electric usage of the retail center.*

Mr. Lounsbury indicated in his letter that NYSEG presently has electric facilities at the location for providing service to the site. Further study will be needed to determine if existing electric circuits can accommodate the anticipated loads or whether upgrades will be required. If upgrades are required, NYSEG would design and construct the facilities.

Under the current configuration, fuel oil and natural gas are not proposed for use at this site.

APPENDICES COMMENTS AND RESPONSES

Comment Appendix B-1 (Elena Bao, Letter #C-4, September 25, 2006): Appendix B-1: I'd like to point out that the Applicant (on page 4.11-12 of the DEIS) uses Sheriff Smith's opinion "out of context" from his original letter which results in an incorrect impression that the Sheriff's opinion is that Patterson Crossing will have "little impact" on police service at large. The facts provided by Sheriff Smith in his letter indicate quite clearly that the Putnam County Sheriff's department will likely not handle the majority of Patterson Crossing's police calls because the "closest car concept" will make Kent responsible for handling the majority of the calls due to the application of the "closest car concept" when those police calls start pouring in.

Response Appendix B-1: *Sheriff Smith notes in his letter, dated October 22, 2004, that the closet police car will be dispatched from any of the three responding departments (State and County Police across the entire retail center and Kent Police in the Town of Kent portion of the development), but makes no assertion that the Department will not handle the majority of calls. In fact, his letter makes no reference whatsoever to which police department would be most likely to handle calls for service. Additionally, Sheriff Smith stated in his response letter:*

> *"We do not anticipate a significant impact to the Putnam County Sheriff's Department in providing police protection specifically attributed to the proposed Patterson Crossing project."*

It was noted in Chapter 4.11 of the DEIS, that future development within Putnam County would likely have a collective impact on police protection and create the need for additional law enforcement resources in future years. The following statement can be found on Page 4.11-2 of the accepted DEIS:

> *"Due to the increase in development County wide, there is an expectation for an increase in law enforcement resources in the forthcoming years however, there is no specific plan to that effect."*

In addition, the Applicant has incorporated a Putnam County Police Substation in the modified plan. This substation would be located on site in the 2,000 square foot Building H proposed on the north end of the development in the Town of Kent. Alternately, this use could be sited in the building that would contain the management, office and meeting space in the Town of Patterson. Based on input from the Putnam County Sheriff at a meeting with the Applicant, the substation floor plan has been developed and provided to the Sheriff for review. The Sheriff also noted that he will man the substation as appropriate. The substation would reduce the number of calls to which the Kent Police Department would be required to respond.

Comment Appendix B-2 (Elena Bao, Letter #C-4, September 25, 2006): The Applicant has not appropriately addressed project-related impacts on police services and costs in this DEIS. We need to know approximately how many additional police calls annually a project of Patterson Crossing's scale and type will generate for our state, county, and town policy forces. We need to know how many police resources this increase will require. It is unacceptable that there is no date of this nature in this DEIS when it is a well-documented fact that police calls increase exponentially with a development like Patterson Crossing. Failure to include the date in the DEIS minimizes the impact on police service and conceals

the costs associated with project-generated police calls. This is unacceptable and needs to be addressed in a cost analysis in a supplemental economic impact statement.

> ***Response Appendix B-2:*** *Based on the very conservative estimate where every parking space in the development is filled, demand for police services equating to an additional officer and no additional police vehicles would be expected. Since there are three departments that would absorb this additional demand (State and County Police across the entire retail center and Kent Police within the Town of Kent portion of the development), no one Department would be expected to experience an increase in calls or demand for services at a level requiring new staff or facilities.*
>
> *Based on the number of calls generated by the Highlands Shopping Center, which is a comparable development, it can be assumed that less than 70 calls for service per year requiring emergency response would be generated by the Patterson Crossing Retail Center. See Response 4.11-1.*

Comment Appendix B-3 (Elena Bao, Letter #C-4, September 25, 2006): Chief of Police Donald L. Smith, Jr. has indicated he feels Patterson Crossing could "severely impact: his department." However the Applicant's "translation" of his opinion on page 4.11-2 of this DEIS is "The Town of Kent Police Department has made a comment regarding the impacts of additional traffic on the local road network."

Chief Smith noted that impacts not related to traffic were difficult to determine at this time. It was the Applicant's job in the DEIS to identify the project-related impacts which would affect the Town of Kent Police Department. Why has the Applicant instead concealed the severe impact Patterson Crossing will have on the Kent Police Department? The Applicant must determine the approximate number of additional police calls this project will generate to the state, county, and town police forces and must attach a projected service cost to these calls in terms of resources that will be required The analysis needs to take place within a supplemented economic impact statement.

> ***Response Appendix B-3:*** *Refer to Responses 4.11-1, 4.11-6 and B-2.*

Comment Appendix B-4 (Elena Bao, Letter #C-4, September 25, 2006): There is no correspondence [from the OPRHP] in the DEIS which indicates the Applicant has received a determination of impact/effect. This document is required.

> ***Response Appendix B-4:*** *The letter from OPRHP indicating the project will have "No Impact" is provided in Appendix A of this document.*

Comment Appendix B-5 (Elena Bao, Letter #C-4, September 25, 2006): The "check box" marked on this form indicates the Applicant failed to notify the OPRHP of the existence of the Lake Carmel Clubhouse, a large and prominent structure which exists on the corner of Clubhouse Road and Vernon, feet from the project site. Built in 1931 and retaining for the most part its original exterior appearance, this building is architecturally striking and is significant in the historical context of Lake Carmel. I have included photos of this structure in the Appendices of my comments. The Applicant has performed reconnaissance of this neighborhood so he knows this building is there yet he failed to mention this structure, which qualifies as a potentially significant historical structure, to the OPRHP. This structure needs to be addressed in the DEIS. The OPRHP needs to be re-contacted by the Applicant and a

historical analysis of this structure must be performed to determine whether it qualifies for National Historic Register inclusion.

> ***Response Appendix B-5:*** *The former Lake Carmel Clubhouse building was constructed c. 1931, based on available information. The building facade incorporates a variety of materials including fieldstone, horizontal siding, stucco and cinderblock. Extensive stone work on the building and the stone terrace, steps and walls appear to have been built at the same time. Portions of the building appear to have been added or modified at a later time, including the front porches (recent construction), second floor front doorway, casement windows, and skylights. Architecturally, this building is a 5-bay stone building with the chimney built into the gable end of the house (as opposed to being built outside the wall). The wood and stucco portions of the facade are in a Swiss or Tyrolean style. The changes to the building make listing on the National Register unlikely.*
>
> *The former Clubhouse building will not be impacted by the project (refer to Response 4.13-13). According to City/Scape Cultural Resource Consultants, there are no houses in the vicinity of the project site that are considered to be architecturally distinguished, of historic importance, nor eligible for listing on the National Register.*

Comment Appendix B-6 (Elena Bao, Letter #C-4, September 25, 2006): My health and safety and the health and safety of my community depends on whether Patterson can respond to a fire at Patterson Crossing. Am I expected to take Paul Piazza's and Brian Burdick's "word" that they are willing and able to respond or should this organization be providing concrete data regarding the man-power and equipment they currently posses to prove that they can actually fight a fire at the Patterson Crossing project site. This agency needs to provide data supporting their claims they can handle a fire situation on this site. It is unacceptable for the Applicant to think he's "done his job" in researching this matter with his letter.

> ***Response Appendix B-6:*** *Comment noted. The Patterson Fire Department No. 1, Inc. was contacted and provided the response included in the DEIS. The Department is the authority on these matters and its staff the individuals capable of accurately assessing it's capacity and determining it's ability to deal with a fire emergency at the proposed development. The subject letter states that they are "...ready, willing and able to provide the necessary protection for all areas within [their] fire district."*

Comment Appendix B-7 (Elena Bao, Letter #C-4, September 25, 2006): Question - Is Patterson Fire Department President Brian M. Burdick, who clearly endorses the Patterson Crossing project, related to Marianne Burdick who is on the Patterson Zoning Board of appeals? Marianne Burdick will be instrumental in voting on whether to grant a special use permit and various other zoning variances relative to this project.

> ***Response Appendix B-7:*** *The relationship of Town employees or board members to each other is not relevant in identifying and assessing potential significant impacts. In addition, neither individual identified in the comment is related to nor an employee of the Applicant.*

Comment Appendix B-8 (Elena Bao, Letter #C-4, September 25, 2006): Where are the other 17 pages of this correspondence? Also, where is the excel spreadsheet with the data referenced here? I could not find it in the DEIS.

Response Appendix B-8: *The noted information is included in Appendix B of this FEIS.*

Comment Appendix E-1 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): Section 1.10 states that bedrock was encountered at depths ranging from 16 to 47 feet. This appears to conflict with Section 4.1 of the DEIS, which reports a till thickness of 90 feet.

Response Appendix E-1: *As stated on page 4.1-1 of the DEIS, thirty-two borings were completed on the property to establish depths to refusal or assumed bedrock. The soil boring study found that depths to bedrock or refusal ranged from one and half feet to thirty-seven (37) feet below the ground surface (ft bgs). The DEIS also describes another investigation conducted in the southwestern portion of the property to determine the area's potential for siting of a subsurface sewage treatment system (SSTS). This investigation showed 90 feet of till in the north section of the SSTS and sixteen feet of till in the southern section of the southern SSTS area.*

Comment Appendix E-2 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): Section 1.10 states that 1.5 to 2 feet of fine silty sand subsoil overlies a dense to very dense glacial till deposit comprised of a heterogeneous mixture of sand, silt, gravel, cobbles and boulders.

Such dense, thick deposits of low-permeability till are not conducive to infiltration and recharge. This appears to conflict with statements in the DEIS that precipitation and on-site disposal sewage will contribute to aquifer recharge.

Response Appendix E-2: *All soils and unconsolidated material will transmit water, just at varying rates, depending upon the soil's composition. The drilling logs do show that the site contains silty sand subsoil, overlying very dense glacial till. While the rates of infiltration and flow through glacial till material would be slower than for other soil types, the water from precipitation and from the proposed wastewater disposal system will still enter the groundwater system. The wastewater disposal system is being designed and field tested to accommodate the wastewater from the project. Such systems, by design, must return the wastewater to the groundwater at rates faster than the rate of wastewater flow.*

Comment Appendix E-3 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): The DEIS states that 566,500 yd^3 of soil and rock will be cut, and that all of this material will be used on site (no export of fill). Of this volume, 119,000 yd^3 will consist of bedrock rubble and 447,000 yd^3 will consist of unconsolidated soil. Will any of this soil or bedrock fill be used within the 8.7 acre sewage treatment area? If so, how will the properties of this fill compare to the soil properties assumed for the mounding analysis?

Response Appendix E-3: *No rock cut, with the exception of the possible use of crushed rock as aggregate in the SSTS trenches, would be utilized as fill within the proposed SSTS area. Only soil acceptable for use in a septic area will be utilized as fill on the SSTS. This approach would have no impact on the results of the mounding analysis and no impact on the ability of the proposed SSTS to function as designed.*

Comment Appendix E-4 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): To what extent would this disturbance (cutting and filling) affect shallow groundwater movement and recharge?

Response Appendix E-4: *The proposed grading would affect the shallow groundwater in those areas where shallow groundwater is relatively close to the surface. For example, shallow groundwater was found at 2.0 feet in boring S-9 completed by GeoDesign. The groundwater at this location was perched or was limited in its flow downward by a more dense soil or confining layer. Groundwater was 12.0 feet deep in boring S9A, located 40 feet to the northwest of S-9. It is likely that if this area were to be graded and the more dense soils removed, the shallow groundwater would move more quickly through the soils. In certain areas of fill, if the soil is compacted to a greater degree than natural soils, shallow groundwater may move more slowly, than under natural conditions.*

The introduction of impervious surface, and the grading on the property is likely to slow or lessen overall recharge rates on the site. The post-development recharge rate has been estimated for the site and is provided in Response 4.4-11. The post-development recharge is estimated to be approximately 6 times the project water demand.

Comment Appendix E-5 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): How did GeoDesign's permeability assessment compare to Insite's test pit data and percolation assessment? Were the two sets of results corroborative?

Response Appendix E-5: *GeoDesign's permeability estimates [assessment] were not compared to Insite's estimates since the former are based on soils at depth within the saturated zone while the latter are based on near surface conditions in the unsaturated zone where the septic effluent will percolate away from the shallow leaching trenches. Each data set has a different use and application so they need not be compared to each other. However, please note that the sizing and flow capacity of the SSTS can be affected and limited by either data set.*

Comment Appendix E-6 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): If the Insite data had been incorporated into the mounding analysis and model, how would the mounding analysis results been affected?

Response Appendix E-6: *This was not done because it is not technically appropriate to do so.*

Comment Appendix E-7 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): How does GeoDesign justify excluding the Insite test pit and percolation data generated by Insite?

Response Appendix E-7: *Refer to Responses E-5 and E-6.*

Comment Appendix E-8 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): This discussion of permeability test results is too vague to be meaningful. This section should include a clearer and more in-depth explanation of how the estimated soil permeability's, and their variability, will impact the subsurface sewage treatment system (SSTS) design and function.

Response Appendix E-8: *The permeability discussion included in the Hydrogeology Investigation (Mounding Analysis) is very specific as to where and how the in-situ tests were made and all the data is reported (including variability). An average permeability was calculated and is reported in Table 6. As a check, permeabilities were also estimated (and reported in Appendix 4 of the report) using the Kozeny-Carman methodology. These two methods are compared in Section 5 of the report. The results were used in the groundwater model as described in Section 6.20.*

Comment Appendix E-9 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): What, specifically, is meant by the conclusion that "...the gradation and the density of the unconsolidated material are highly variable at the site, thus impacting the soil's ability to transport water." This could be taken to mean that on-site soils are unsuitable for on-site sewage disposal, as proposed.

Response Appendix E-9: *This comment in question means that due to the variability of site soil gradation and density there is a corresponding variability in the permeability of site soils with a resulting variability in flow gradients and transmissivities at the site. This does not mean that the site is "unsuitable for on-site sewage disposal", but rather that the analyses and the modeling should account for the variability.*

Comment Appendix E-10 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): The DEIS characterizes on-site soils as follows: 1.5 to 2 feet of fine silty sand subsoil overlies a dense to very dense glacial till deposit comprised of a heterogeneous mixture of sand, silt, gravel, cobbles and boulders. Is it feasible for such soils to adequately transmit and filter sewage wastewater flows of 10,740 gpd, as proposed?

Response Appendix E-10: *The generalized characterization of site soils should not be used in lieu of the detailed hydrogeologic investigation and groundwater modeling to make predictions as to suitability [adequacy] of site soil to transmit and filter wastewater flows. The assessment presented in the Hydrogeology Investigation (Mounding Analysis) indicates that the area proposed for the SSTS is capable of processing the project's wastewater flows.*

Comment Appendix E-11 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): In Section 3.40 (Groundwater Levels), it states that stabilized groundwater levels were measured in May and June 2005.

These measurements do not by themselves reflect the seasonable variability of groundwater levels on the subject property. How can such a narrow window of groundwater levels suffice, when it can generally be assumed that a much wider range of groundwater levels will occur from season-to-season and year-to-year?

Response Appendix E-11: *The May/June period is generally representative of the highest groundwater levels in this locale. The model was calibrated to these water levels and corresponding base flows for this time of the year, so the analyses are consistent and reflect the anticipated highest groundwater levels at the site.*

Comment Appendix E-12 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): In Section 4.20 (Geologic Materials) Rock Quality Density (RQD), a measure of fracture density, is reported to range from 12% to 77%.

How will the variable RQD affect the SSTS design and function?

> ***Response Appendix E-12:*** *The RQD variability will affect the groundwater flow rates at the site and are reflected in the measured groundwater levels and the modeled levels.*

Comment Appendix E-13 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): This section [4.20 Geological Materials] should discuss in more detail the pattern and pervasiveness of bedrock fracturing underlying the proposed 8.7 acre SSTS treatment area.

> ***Response Appendix E-13:*** *As long as sufficient separation distances exist between the septic trenches and the bedrock and receptors (nearby wells, wetlands, etc.), which is the case (See Section 7.70 of the Mounding Analysis), the degree of bedrock fracturing will not adversely impact the functioning of the SSTS.*

Comment Appendix E-14 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): This section [6.40 Precipitation, Estimated, and Published Base Flow Data] should discuss how the period May & June 2005 compares to historical averages and ranges of precipitation.

Although historical precipitation data are appended, such tables are not a substitute for discussion and comparison within the report itself.

> ***Response Appendix E-14:*** *Section 7.70 of the Mounding Analysis notes that the highest observed groundwater levels (May/June 2005 period) were used to calibrate the model. The extensive notes provided in Tables 7 and 8A of that analysis provide a detailed discussion of the effect that precipitation and base flow have on the groundwater model*.

Comment Appendix E-15 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): Section 7.10 (Model Description) indicates that the simulation was performed using a "confined" layer option, and that neither variation in water levels over time nor aquifer storage coefficient were accounted for.

What is the justification for the confined layer assumption when the proposed SSTS system will operate under unconfined conditions?

> ***Response Appendix E-15:*** *For this site, this single-layer model, and based on the available data, the assumption of a confined aquifer in the model is believed to yield results similar to those that would have resulted had the unconfined aquifer option been selected.*

Comment Appendix E-16 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): What is the justification for omitting variation in water levels and storage coefficient?

> ***Response Appendix E-16:*** *The model does not model transient conditions, but rather it simulates a reasonably assumed worst-case static high groundwater level*

condition which is sufficient to predict worst-case mounding conditions and thus potential for break-out or flooding of septic trenches. The precipitation and resulting estimated base flow were selected to match the season and recent recorded precipitation preceding the dates of the observed groundwater levels used to calibrate the model. This is a commonly accepted approach for this type of investigation.

Comment Appendix E-17 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): The calibration range of plus or minus 1 foot may be of limited validity if actual groundwater levels were measured only in May and June 2005, and if actual groundwater levels were not measured in some wells.

Response Appendix E-17: *The calibration range (of plus or minus one foot) is a tolerance range (or degree of precision) and has no bearing on the time groundwater measurements were made.*

Comment Appendix E-18 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): The calibration range of plus or minus 1 foot is suspect given the complexities of surface topography and variable hydraulic gradients.

Response Appendix E-18: *The calibration range (of plus or minus one foot) is a tolerance range for the model calibration and is not impacted by the site topography. Given the spacing of the wells (calibration points) it is the consultant's judgment that there is no need to calibrate the model any more closely than this tolerance which would require more effort without increasing the reliability of the predictions. The predicted groundwater rise was calculated by subtracting the pre-development levels from the post-development levels, as such, the tolerance errors are accounted for in the predicted water level rise (mounding). In other words, the tolerance balances out in the sense that, in any target well, even if the calibrated model underestimates the pre-development water level, comparing the predicted water level rise to the site topography effectively eliminates the calibration tolerance effects.*

Comment Appendix E-19 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): The post-construction model predicts leachate breakout within certain areas of the leaching field, and there is a recommendation to add two feet of fill material to prevent breakout in those areas.

Given the above-stated uncertainties and complexities in the model assumptions, and the assumed accuracy of plus or minus 1 foot, is the model accurate enough to rule out the need for breakthrough mitigation in other areas of the leaching field?

Response Appendix E-19: *Yes. Please refer to Response E-18 for an explanation of the effect of the calibration tolerance.*

Comment Appendix E-20 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): If leachate is within 2 feet of the surface in certain areas where breakout areas are mitigated with 2 feet of clean fill, what will prevent leachate from freezing during the winter months?

Response Appendix E-20: *Groundwater temperature (including that laden with leachate) remains at a fairly constant 50 degrees year-around even if it's surface is only two feet below grades due to the thermal characteristics of soil and groundwater*

(its high specific heat capacity), and thus will not freeze. These predicted high groundwater levels are likely to occur only during the non-winter months when significant precipitation and/or snow-melt occur and freezing temperatures are not a factor.

Comment Appendix E-21 (Letter B-3 John A. Conrad, Senior Hydrogeologist, September 25, 2006): Section 8 (Conclusions) estimates a 3-year travel time for leachate to reach the property line 175 feet, and states that, "this travel time is sufficient to provide adequate treatment of the septic effluent."

What is the quantitative basis for the conclusion that the travel time is sufficient to provide adequate treatment? What is meant by "adequate treatment?"

Response Appendix E-21: *Depending on which reference one uses, a duration of about three weeks is sufficient to treat septic effluent before it reaches nearby receptors.*

Comment Appendix F-1 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Even though the Town of Patterson has declared the Draft Environmental Impact Statement to be complete, significant, basic information that one would normally expect to find is not included in the Storm Water Pollution Prevention Plan (SWPPP). For instance, the simple act of having the Storm Water Pollution Prevention Plan signed and sealed by the design professional responsible for its content was not done.

Response Appendix F-1: *The February 4, 2008 updated version of the Stormwater Pollution Prevention Plan (SWPPP) included with this FEIS contains all of the information required by NYSDEC General Permits for Stormwater Discharges GP-93-06 (which is incorporated into the New York City Watershed Regulations by reference) and GP-0-08-001. In accordance with GP-0-08-001, the owner or operator shall have the SWPPP preparer sign the "Preparer Certification" statement on the NOI prior to submitting the form to the Department.*

All design calculations and reports submitted to the Town in support of the site plans will include the Professional Seal and signature of the Licensed Engineer responsible for its preparation.

Comment Appendix F-2 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): The time of Concentration calculations, a relative simple exercise, were not included in the body of the report. Instead, one must rely on the accuracy of the manually entered Times of Concentration shown in the Pre-Development and Post-Development Computer Data. There is no way to check that the manually entered Times of Concentration are correct. An incorrect Time of Concentration, particularly if it is too long, will result in an actual peak drainage flow that will be more than predicted.

Response Appendix F-2: *Time of Concentration values are provided in Appendix A and Appendix B of the updated SWPPP, included with this FEIS, for the Pre-Development and Post-Development conditions, respectively. These accurate Tc values, which were utilized with other information to determine that peak rates of stormwater discharge would be reduced following construction, could be checked by performing a relatively simple calculation with the information included in the FEIS and the SWPPP.*

Comment Appendix F-3 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): The Pre- and Post-Development maps are inadequate. They are presented only in the SWPPP and are of a size that is so small as to render the useless. The Travel Time paths are not shown - one more reason the validity of the "manually entered" Times of Concentration cannot be verified. Drawings at a scale no less than 1"=50' should be presented.

Response Appendix F-3: *Refer to Response F-2 regarding Time of Concentration. The maps included in the SWPPP were utilized, in part, to develop the Times of Concentration and are at a scale consistent with acceptable practices for presenting the type of data in the Pre- and Post-Development Drainage Area drawings. Please refer to the 1" = 50' Site Plan Drawing set for more detailed site specific information.*

Comment Appendix F-4 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): The plan for the proposed stormwater collection system is shown. However, the profiles are not. How does one determine the invert of the pipe feeding the stormwater management basin without knowing how deep the pipe will be? One would also expect to see pipe sizes and slopes in the profile view. Since there are no pipe profiles, pipe sizes and slopes are not shown.

Response Appendix F-4: *Details noted in the comment, such as stormwater management feature profiles, pipe sizes and slopes are not required as part of the SEQRA environmental impact assessment. These details will be provided with the full Site Plan Set once the development program and site layout are finalized; this information does not affect the conclusions in the DEIS concerning the adequacy of the proposed measures to avoid impacts on surface water associated with post-construction changes in stormwater runoff.*

Comment Appendix F-5 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): A Notice of Intent is not included in the SWPPP.

Response Appendix F-5: *GP-0-08-001 specifies that a SWPPP must be developed prior to the submission of a Notice of Intent (NOI) to NYSDEC not that the NOI be included in the SWPPP. The Applicant notes that, in accordance with GP-0-08-001, the SWPPP will be subject to five day coverage by NYSDEC once the NYSDEC receives a complete NOI and signed "MS4 SWPPP Acceptance" Form.*

Comment Appendix F-6 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): The SWPPP does not address housekeeping measures and waste management during the construction phase of the project.

Response Appendix F-6: *The text of the SWPPP has been revised to address the general housekeeping measures and waste management protocols that will be employed during the construction phase of the project.*

Comment Appendix F-7 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): In general, the SWPPP and stormwater management practices and plans lack the detail one would expect at this stage of project development. Profiles of the water, sewer and stormwater collection systems are not shown. There are no specific diversion swale designs provided. The generic swales shown on the plans are unacceptable. Outlet structures from the stormwater management basin do not appear on the drawings, yet calculations have

been provided indicating that the data is available to show the design of the individual outlet structures. The flow into each stormwater management practice has been determined, yet specific designs and cross sections showing the water quality, channel protection, overbank flood and extreme storm elevations for each pond have not been shown. Plantings for each pond are not shown.

Response Appendix F-7: *The SWPPP, including its Erosion and Sediment Control Plan and stormwater management components, contain the information specifically required by GP-0-08-001. This information includes detailed pre- and post-construction rates and volumes of stormwater discharge, pre- and post-construction pollutant loading, and construction details, including those of the proposed diversion swales. This information is provided in sufficient detail to allow for a thorough assessment of potential significant adverse environmental impacts associated with post-construction changes in stormwater characteristics as required by SEQRA. The NYSDEC water quality volume, channel protection, overbank flooding and extreme storm elevation criteria noted in the comment are specifically addressed in the February 4, 2008 SWPPP included with this FEIS.*

The proposed stormwater treatment ponds will be planted in accordance with Appendix H of the Manual. The type of hydrologic zones that will be created within the basins will be determined in concert with the Manual. The hydrologic zones designate the degree of tolerance that certain plants exhibit to different degrees of inundation and is the basis for plant species selection. The hydrologic zones identified in the Manual applicable to the stormwater management facilities at the Patterson Crossing Retail Center are expected to include Zone 2: Shallow Water Bench (6 inches to 1 foot deep), Zone 3: Shoreline Fringe (regularly inundated). Zone 4: Riparian Fringe (periodically inundated), Zone 5: Floodplain Terrace (infrequently Inundated) and Zone 6: Upland Slopes (seldom or never inundated).

Table H.5 (Native Plant Guide for Stormwater Management Areas), at the end of Appendix H, designates appropriate plants for each zone based upon the hydrology of the zone, the stormwater functions required of the plant, and the desired landscape effect. The planting plans now being developed for each of the zones in the proposed stormwater treatment ponds will specify species set forth in the Manual such as those identified to be planted in accordance with in FEIS Table 4.5-7.

Comment Appendix F-8 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): The outlet from pond 3.2P does not discharge into the proposed collection system on the southern side of NYS Route 311, but rather into NYCDEP regulated watercourses.

Response Appendix F-8: *Proposed pond 3.2P would discharge into the proposed renovated collection system along the south side of NYS Route 311 which outlets into an existing roadside swale that flows directly into the Middle Branch of the Croton River.*

Comment Appendix F-9 (Letter B-5 David B. Clouser, P.E., LS September 21, 2006): The results of the pollutant removal modeling indicates that there may be a reduction in pollutant transport from the site if the best case (i.e. highest rate) removal limit range is met by the proposed facilities and that pollutant export would exceed existing pollutant loadings if only the lower removal range were met.

Given the location of this proposed project, where the pollutant export will directly affect the water supply of more than half the residents in New York State, it is critical to increase the modeling's predictive accuracy for evaluation of these important potential significant adverse environmental impacts. The Board should therefore request that the Applicant either: 1) design the pollutant removal facilities using the lowest range pollutant removal range factors, or 2) employ a modeling method that will more accurately predict pollutant removal efficiencies (i.e., several are suggested by the US EPA, including SWIM, SLAM, etc.) for the facilities being proposed for this development. The results of accurate modeling will produce a revised pollutant removal facility design with larger treatment facilities.

> ***Response Appendix F-9:*** *The projections of stormwater management facility efficiencies, and post-construction pollutant loadings, are expressed as a range indicating best and worse case pollutant reductions. As detailed in the SWPPP the most conservative estimates of pollutant reductions indicate that overall pollutant loads from the entire site will be reduced following construction. These reductions would be realized even without implementation of the proposed on- and off-site measures that treat stormwater from Interstate 84, NYS Route 311, and Putnam County Highways Facility and Concord Road, and far exceed those required by New York State and City regulations.*
>
> *The Applicant notes that the methods used to predict pre- and post-construction loading are those sanctioned by NYSDEC and NYCDEP and that no documentation exists to suggest that alternative methods noted in the comment produce more accurate estimates than the methods used by the Applicant. The Applicant notes that the Supplemental Phosphorous Calculations included in the SWPPP were performed with the Simple Method, as specifically requested by the New York State Watershed Inspector General. Based upon the calculations performed with these accepted methodologies, the project is expected to result in an overall reduction in pollutant loading following construction of the project.*

Comment Appendix F-10 (Letter B-5 David B. Clouser, P.E.,LS September 21, 2006):
Amended pollutant loading rates for Phosphorus specific to the project area are used by the NYCDEP in TMDL reports as in "*TMDL Calculations for the Middle Branch Reservoir*", "*Table 4.1 - Land Use Export Coefficients for the Middle Branch Reservoir*." These more recent pollutant loading rates have been validated through years of field monitoring throughout the watershed basin area and are specifically valid for use in the pollutant loading calculations for this project. The pollutant loading rates are commonly used by the NYCDEP throughout their extensive researching and reporting of the Croton Falls Reservoir Watershed as well as many other reservoirs east of the Hudson River.

The phosphorus pollutant loading values utilized in the above referenced TMDL Reports for undeveloped forest is significantly less than what was used in the project analysis. The following table summarizes the different pollutant loading values and provides an example of the disparity between the DEIS values that are being used in the Applicant's documentation that is purported to model the pollutant loading and removal rates for this project.

Phosphorus Loading Rates

Land Cover	Terrene Institute Document Rates (used in The DEIS) (lbs/acre-yr)	NYCDEP TMDL Report Rates (lbs/acre-yr) [current standard]
Undeveloped forest	0.1	0.045

As shown in the above table, the pre-development pollutant loading estimates have been overstated in the DEIS analysis information by a multiplier of approximately 2.2. The analysis should be revised to use the proper loading rates, and subsequently the stormwater quality treatment design must be revised to accommodate these significantly more stringent standards.

Response Appendix F-10: *Estimates of annual pre-development and post-development loads of BOD, TP, TN, and TSS were calculated with the pollutant loading coefficient method. Loading rates from TP, TN, and TSS were derived from the publication Fundamentals of Urban Runoff Management: Technical and Institutional Issues produced by the Terrene Institute. The appropriate loading rates were utilized to calculate the annual pollutant export values. Variables involved with this calculation include soil type and land use/ground cover characteristics.*

The Applicant notes that NYSDEC requires no calculation of pre- and post-construction pollutant loading rates for the Project, and its SWPPP, to gain coverage under GP-0-08-001. Instead, by treating the calculated "Water Quality Volume" (WQv), compliance with New York State water quality goals are assumed by NYSDEC to be met.

The phosphorus TMDLs for the Croton reservoirs were determined based on reservoir monitoring data and the Vollenweider model to estimate the total watershed loading. Modeling of the watershed sources, utilizing export coefficients, was not used in the TMDL calculation but was provided to guide implementation of phosphorus reductions. Additionally, no site-specific data was used for the nonpoint source load estimates. The phosphorus export coefficients were based on an average of literature values from the New York and Connecticut area.

Site-specific loading rate data is difficult to obtain and requires years of intensive monitoring. That level of monitoring is rarely available for individual development Projects. Routine monitoring data from the reservoirs and streams are not at the proper scale or frequency to calculate export coefficients for a single land use.

Comment Appendix F-11 (Letter B-5 David B. Clouser, P.E.,LS September 21, 2006):
The document that is typically referenced and utilized for these calculations in New York State is NYSDEC's publication "Reducing the Impacts of Stormwater Runoff from New Development" (Reducing the Impacts). The values contained in this document are specific to New York State and are commonly used in this area.

The values contained in the Terrene Institute document are significantly less than what is utilized in NYSDEC's "*Reducing the Impacts*" document. The following table summarizes the different phosphorus loading values for the site and provides an example of the disparity

between the DEIS values that are being used in the Applicant' s documentation that is purported to model the pollutant loading and removal rates for this project:

Phosphorus Loading Rates

Land Cover	Terrene Institute Document Rates (used in The DEIS) (lbs/acre-yr)	NYSDEC "Reducing the Impacts" Rate (lbs/acre-yr)
Commercial	0.71	1.5

As shown in the above table, the pre-development pollutant loading estimates have been understated by a multiplier approximately 2.1. The analysis should be revised to use the proper loading rates and then the stormwater quality treatment design must be revised to accommodate these significantly more stringent standards.

Response Appendix F-11: *The pre-development phosphorous loading rates utilized in the SWPPP are from references cited in the 1993 and 2001 NYSDEC General Permits for Stormwater Discharges from Construction Sites used to estimate pollutant loads in stormwater runoff. These loading rates are accepted by the NYSDEC and NYCDEP. The Applicant notes that the coefficient used by NYSDEC and NYCDEP in the TMDL program was developed for use at a reservoir watershed scale and not developed for use at a the site specific scale.*

Comment Appendix F-12 (Letter B-5 David B. Clouser, P.E.,LS, September 21, 2006): It should also be noted that other pollutants have also been underestimated in the post-development loading calculations such as Total Nitrogen (TN), Total Suspended Solids (TSS) and Biological Oxygen Demand (BOD). The pollutant loading calculations for each of these pollutants also must be revised, properly utilizing the pollutant loading rates taken from the "Reducing the Impacts" document.

Response Appendix F-12: *Refer to Responses F-10 and F-11.*

Comment Appendix F-13 (Letter B-5 David B. Clouser, P.E.,LS, September 21, 2006): The post-development runoff calculations should be revised to reflect the more accurate CN values. It should also be noted that this office conducted preliminary calculations to determine what effect this change would have on the analysis. Our findings indicate that the post-development runoff quantities have been underestimated due to the Applicant's selection of the "general" CN values that were used.

Response Appendix F-13: *Curve numbers (CN) utilized in the SWPPP calculations are accurate as they were developed utilizing the widely used United States Department of Agriculture Natural Resource Conservation Service curve number method for determining the amount of runoff. The CN are based on the area's hydrologic soil group, land use, treatment and hydrologic condition.*

Comment Appendix F-14 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Place the phasing plan on the grading plan sheets to better assure it will be followed. In order to better manage cuts, fills, waste materials, construction, and stabilization efforts at the project site, the phasing plan should be established on the grading

plan sheets (see the SWPPP in Appendix). This will provide more control at the site and further clarify the step by step details of construction for the construction contractor.

> ***Response Appendix F-14:*** *As specified in GP-0-08--001, the Erosion and Sediment Control Plan is a required element of the SWPPP. GP-0-08-001 further specifies that the operator must comply with all conditions of the permit, and that all contractors and subcontractors associated with the project must comply with the terms of the SWPPP. The permit further indicates that any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the ECL and is grounds for an enforcement action against either the operator or the contractor/subcontractor; permit revocation or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all construction activity at the site until the non-compliance is remedied. The stop work order would be in writing, describe the non-compliance in detail, and would be sent to the operator or the operator's on-site representative.*
>
> *Based upon the compliance requirements, enforcement provisions, and penalties for noncompliance, set forth in GP-0-08-001, the Applicant does not believe that significant potential exists for deviation from the terms of the phasing plan. The Applicant notes that the twenty-four phases of construction are depicted graphically, and described in narrative form, on sheets SP-4.1, SP-4.2, and SP-4.3 that accompany this FEIS. The information provided on these sheets will allow for compliance with the phasing plan.*

Comment Appendix F-15 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Important portions of the stormwater management plan are missing. DEIS Section 2.3.6 "Sewage Disposal System" and Appendix M "Wastewater Report" describes an approximately 11,000 gallon per day subsurface sewage treatment system. The erosion and sediment control details for construction of this system are not presented in the SWPPP.

> ***Response Appendix F-15:*** *Controls that will prevent erosion and sedimentation associated with construction of the proposed subsurface sewage disposal system are depicted on the Erosion and Sediment Control Plan included in the SWPPP that accompanies this FEIS. Details of these controls are provided on Sheet D-2 that also accompanies this FEIS.*

Comment Appendix K-1 (Elena Bao, Letter #C-4, September 25, 2006): The Applicant has drawn in extra lanes under the I-84 bridges where there is currently no space available to accommodate them. The proposed traffic modifications underneath these bridges would require that the bridges themselves be modified to accommodate the proposed traffic flow pattern beneath them. This DEIS doesn't say one word about bridgework needing to be done on I-84 to accommodate the Patterson Crossing project when this picture clearly indicates that bridgework would be necessary. Bridge modifications are among the most costly traffic modifications there are - the Applicant needs to provide an estimated cost for these bridge modifications. Further, the Applicant needs to estimate every single other traffic modification cost associated with this project. A supplemented economic impact statement with traffic modification cost projections needs to be prepared. The lead and involved agencies cannot appropriately weigh this project without a detailed cost analysis of the traffic modifications this project would require.

Response Appendix K-1: *The Applicant is not proposing changes to the Interstate 84 overpasses at NYS Route 311 but is proposing one (not two) center lane on NYS Route 311 utilizing existing space under the Interstate 84 overpasses (see Figure K-3). The State will determine the final design of the improvement as part of the Highway Work Permit process..*

The proposed improvements, as noted in Appendix K of this FEIS will be funded by the Applicant. The cost to the Applicant will vary depending on the final design chosen by the State. The FEIS does not propose any additional costs to the State Highway program or municipalities. Costs to the County are anticipated at several hundred thousand dollars or a few months of sales tax revenue.

Comment Appendix K-2 (Elena Bao, Letter #C-4, September 25, 2006): There are no major parks in the study area? How blatantly FALSE. This project site is located 1/4 mile from the legally designated Lake Carmel Park District. Lake Carmel itself is located within a 1/4 mile of the project site. On any given day you can see pedestrians jogging, walking, biking, walking their dogs around the park district and its roadways. The Applicant is concealing here that there is a scenic and beautiful recreational resource with 1/4 mile of the project site. The Applicant fails to reference the Lake Carmel Park District at all in the DEIS. This DEIS crosses the line in terms of a misrepresentation of the facts relative to social impacts in a most unacceptable fashion. Patterson Crossing would sit feet from a legally designated park district, within a 1/4 mile of a beautiful and scenic lake that stretches for miles. In an area where residents regularly walk the streets to enjoy the park district. These are the facts - the Applicant must acknowledge these facts so that all agencies can weigh this project in an appropriate context in this DEIS.

Response Appendix K-2: *Refer to Response 4.13-2 for information on the Lake Carmel Park District and Response K-3 for information on pedestrian traffic.*

Comment Appendix K-3 (Letter C-12 Edward Durkee, September 22, 2006): "Based on field observations, there is little pedestrian activity in this area likely due to the lack of pedestrian destinations. There are no nearby schools, (see Attachment B)... There are no major parks or train stations in the study area... Some vehicle pull off areas on US Route 52 near NYS Route 311, which may be used seasonally for fishing, were observed...

This statement is blatantly False. There is the little omission of the entire Lake Carmel, the Lake Carmel Park district and the Ryan Fields Park.

Response Appendix K-3: *There is a crosswalk traversing NYS Route 52 at Barrett Hill Road as shown in DEIS Appendix K-2. There was limited pedestrian activity observed on the west side of Lake Carmel.*

Ryan Fields Park is on the east or opposite side of Lake Carmel about a mile from NYS Route 52. The Fair Street and Terry Hill Road intersection is the nearest intersection to Ryan Fields Park and the worse case scenario assessed for an intersection of two non-State roads when considering impacts resulting from the Proposed Action. The level of service calculations show that there would be no impact to the traffic at this intersection between the No-Build and Build Conditions and thus no impact is anticipated in this area.

Refer to Responses K-4 and K-5.

Comment Appendix K-4 (Letter C-12 Edward Durkee, September 22, 2006): Lake Carmel has a large number of teenage children who are constantly walking and biking on its streets. A large portion of these children live across Route 311 and have to walk across it to get to the lake, an obvious teenage favorite destination. On the lake you will find numerous beaches that are used constantly during the summer months by both older teens and younger children with their parents. These beaches are set up to be available all day long during the peak summer months. Parents and their children use these throughout the day and early evening. During the rest of the year, the beauty of the lake with its walking path, grassy area, fishing docks, and boating capabilities all are "Pedestrian Destinations" that make up the heart of this community. Ryan Field Park is the central park for the Kent Recreation Dept. and hosts all community outdoor activities. It is at most 2 miles away and bike and pedestrian access to it will be significantly affected by increases in daily traffic.

Response Appendix K-4: *Refer to Response K-3. The provision of a traffic signal at Terry Hill Road and NYS Route 311 would be a significant improvement over existing pedestrian access across NYS Route 311 toward the community assets of Ryan Field Park and the eastern shore of Lake Carmel. The signal will introduce breaks in the flow of traffic to allow pedestrians the ability to more easily cross NYS Route 311 especially from the local roadways in the area of Longfellow Drive and North Terry Hill Road.*

Towners Road on the opposite end of the Lake Carmel already has a traffic signal. Most of the park district residents are east of NYS Route 52 and NYS Route 311 and do not have to cross the state highways to reach walking paths, Ryan Field Park, or Lake Carmel.

The Barrett Hill Road area is very steep and not conducive to pedestrian or bicycle traffic. For those residents who do walk these roadways, there is an existing crosswalk across NYS Route 52 at Barrett Hill Road.

Comment Appendix K-5 (Letter C-12 Edward Durkee, September 22, 2006): The Planning Board must demand a legitimate detailed study of pedestrian traffic of the entire area. With the DEIS stating that the usage of Street Lights is to force traffic onto the minor side streets for access to 311, it is obvious that this project will significantly effect the safety of our children in their own neighborhoods and as they utilize the most central recreation features of the area, the lake and Ryan Field Park.

Response Appendix K-5**:** *Refer to Responses K-3 and K-4. The DEIS states that the purpose of traffic signals are to provide gaps in major street traffic allowing minor street traffic to enter the major street not force traffic onto minor streets. Traffic signals would allow the local residents who wish to walk to a local destination breaks in traffic flow on the roadways thereby improving local pedestrian safety.*

Comment Appendix K-6 (Letter C-12 Edward Durkee, September 22, 2006): There is no discussion of impacts on the safety of our children who use the school bus system to ride to schools.

Response Appendix K-6**:** *Refer to Responses 4.8-25 and 4.8-134.*

Comment Appendix K-7 (Letter C-12 Edward Durkee, September 22, 2006): A large number of elementary school buses travel on Route 311 to go to Matthew Patterson Elementary School in the heart of Patterson. Of course, they are traveling every side street as well to pick up the children.

Response Appendix K-7: *Refer to Responses 4.8-25 and 4.8-134.*

Comment Appendix K-8 (Letter C-12 Edward Durkee, September 22, 2006): While the exact numbers of Bus trips has been requested from the Carmel School system, (through the FOIL process) the public has yet to see any updated realistic figures. These must be acquired by the Planning Board in order to asses the levels of risk that this project will increase concerning accidents with school buses. Make no mistake that with the increase in traffic being at around 3 million more trips a year on Route 311 we will be increasing the danger of a serious accident with a school bus full of children.

Response Appendix K-8: *The Proposed Action does not include residential units that would increase the number of bus trips on the local roadways. The Applicant is proposing transportation improvements as noted in Appendix K. Refer to Responses 4.8-25 and 4.8-134 for information on school bus routes and schedules. .*

Comment Appendix K-9 (Letter C-12 Edward Durkee, September 22, 2006): We must at least know the totals for:

- The number of runs full and empty
- The Number of Children Transported
- The average number of stops on these major roads as they are all ones targeted to be analyzed by the applicant.
- Current up to date accident data
- Average length of trip
- Breakdown of Destination Schools and neighborhoods.
- Breakdown of Data by street including all streets included in the intersection analysis.

Response Appendix K-9: *The Proposed Action would not alter the number of school bus trips, number of children transported, number of bus stops, nor the origin and destination of school bus trips. Bus trips, when present, were included in vehicle volume counts. As noted in Response 4.8-25, school bus stops generally occur before the weekday peak hour for site generated traffic and not at all on Saturday when the site traffic volumes would be highest.*

Accident data has been updated and is included in Appendix J of this FEIS.

The provision of traffic signals may permit the bus company to alter routes as access to the arterials would be safer at these signalized locations. Response 4.8-25 also identifies schools in the area. The school bus company alters routing and stops depending on the location of children.

All streets that compose a studied intersection were included in the intersection analysis. Traffic analyses were performed at the intersections where conflicting movements are the most frequent, not along the entire length of the roadways that leads to the intersection.

Comment Appendix Q-1 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): Appendix Q attempts to reassure us that blasting is not a danger to foundations or wells. It states that "[b]lasting typically does not result in damage to existing foundations and wells if the work is completed to industry standards." (Appendix Q, p. 3. This begs the question of what happens when work is **not** completed to industry standards. There are many variables that can arise in blasting including accidents and human errors. Any comfort to be taken from the compliance with industry standards is dissipated by the Developer's own statement that **"[l]ocal variation in subsurface conditions or geology may occasionally result in unanticipated impacts to existing structures and wells."** Appendix Q, p.3. That the Orange, Westchester, and Putnam Health departments have no recorded instances of well failure as a result of blasting in their records (appendix Q, p.3) is merely anecdotal. There is no indication of the whether any of the blasting in those counties occurred in close proximity to homes, the amount of blasting to be done or of any other vital information. This anecdotal evidence supports the notion that no one really knows the extent of the damage that could occur at this site.

Response Appendix Q-1: *The commentor is correct that all circumstances related to future construction and blasting cannot be predicted. Therefore, mitigation procedures have been established and described in the DEIS Appendix Q - Blasting Mitigation Plan. Also, see Responses 2.0-72, 2.0-73, 2.0-79, 2.0-80, 2.0-86 and 2.0-88.*

Comment Appendix Q-2 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): Finally, Appendix Q provides a detailed plan for reporting complaints to the Town if a resident believes there has been blast-related damage. If there is damage to a structure, the resident must seek damages form the blasting contractor with no assistance from the Town. The resident will have to provide temporary measures to protect herself and her family, hire an attorney to represent their interests against the insurer's interest, hire contractor's to assess the value of the loss, and oversee temporary and final repairs, all the while living with whatever damage the blasting may have caused. No bond is posted by the blasting contractor or Developer. No fund is available to assist aggrieved families. Given that any funds for repairs will come from an insurance company that is seeking to protect its own interests and those of its investors, families damaged by the blasting could essentially be left with little or no protection.

Response Appendix Q-2: *As noted in the DEIS, damage resulting from blasting is rare. Should blasting result in damage to a property, the insured blasting contractor would be the party responsible for correcting the damage.*

DRAWINGS

DRAW 1 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Refer to Drawings No. SP-2.1 through SP-2.3, Sheets 4 of 19 through 6 of 19, each entitled Layout & Landscape Plan: The aisles for the accessible parking spaces scale at both 7-feet wide and 5-feet wide. Note that neither is acceptable. The New York State Building Code requires that all accessible aisles be a minimum of 8-feet wide.

> ***Response DRAW 1:*** *All proposed handicap aisles are now shown at the required 8 foot width.*

DRAW 2 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Refer to Drawing No. SP-3.1, Sheet 7 of 19, Grading and Utilities Plan:

While it can be inferred that the dotted line is the limit of disturbance, it should also be confirmed by showing the limit of disturbance in the Legend*.*

> ***Response DRAW 2:*** *The proposed limit of disturbance line has been added to all applicable legends as requested.*

DRAW 3 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Refer to Drawing No. SP-3.2, Sheet 8 of 19, Grading and Utilities Plan:

The Post Development Drainage Map shows a drainage area contributory to Concord Road that extends some distance to the west of Concord Road. Drawing SP-3.2 does not show any topography west of what appears to be the Concord right-of-way. Additional topography to the west of Concord Road should be shown so that the drainage area contributory to Concord Road can be confirmed.

> ***Response DRAW 3:*** *NYCDEP watershed topographic mapping was used to determine the offsite contributing drainage areas shown on the drainage maps. Figures 2 and 3 of the SWPPP and 4.5-2 and 4.5-3 of the FEIS have been revised to show the topography to the west of Concord Road based on NYCDEP topography.*

DRAW 4 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): See Drawing No. D-2, Sheet 17 of 19, Site Details:

The Rip Rap Apron as shown is dimensionless and requires a table showing the identify of each outfall, as well as the dimensions of each outfall. If the SWPPP calculations relating to the discharges from the various stormwater management ponds are correct, then the information needed to design these rip rap aprons is available. Provide the calculations used to determine the size of the Rip Rap Apron, Rip Rap Swale and the Grass Swale. Show their locations on the plans.

> ***Response DRAW 4:*** *The locations of all rip rap aprons proposed at the stormwater outfalls, as well as the proposed cut off swales and grass swale, are shown on the Erosion and Sediment Control Plans that were included in the DEIS, and that accompany this FEIS. Construction details of these measures are included on Sheet D.2, which also specifies the calculations used for determining the dimensions of the aprons. The Applicant notes that these facilities, as specified in the Manual and detailed*

in this FEIS, are proposed solely as a means of preventing erosion and sedimentation by eliminating contact between bare soil and flowing stormwater during and following construction. The measures are sufficiently detailed on the plans to allow for an assessment of their effectiveness in preventing erosion and mitigating the impacts associated with it.

DRAW 5 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): See Drawing No. D-2, Sheet 17 of 19, Site Details:
The Inlet Protection Detail does not comply with current standards and once again shows that the recognized authority for erosion and sediment control, the New York State Standards and Specifications for Erosion and Sediment Control, was not consulted. Hay bales are not approved for use as a filtering device for the Inlet Protection. The only acceptable means (of which there are 4) are shown on pages 5A.27 - 5A.32 of the Blue Book.

Response DRAW 5: *The inlet protection detail has been revised as requested.*

DRAW 6 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Refer to Drawing No. D-4, Sheet 19 of 19, Site Details:

The details shown on this drawing do not relate to the structures shown on the plans. A surface sand filter (F-1) detail is shown, yet there are no surface sand filters shown on the plans. A surface sand filter is not addressed in the SWPPP.

Response DRAW 6: *The detail has been removed.*

DRAW 7 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Refer to Drawing No. D-4, Sheet 19 of 19, Site Details:

A pocket pond is shown on the plans at the foot of the main entrance to the site. A pocket pond detail is shown. However, the depth of the permanent pool is not stated; the size of the orifice in the threaded cap is not shown; nor is the size of outlet pipe indicated. The latter two should be available since the flow from the pond had been determined in the calculations provided in the SWPPP. Additionally, there is no forebay shown in the cross sectional view.

Response DRAW 7: *The proposed pond has been redesigned as a micropool extended detention pond (P-1) in accordance with the New York State Stormwater Management Design Manual (Manual) and is no longer proposed as a pocket pond. The required storage volume in the pond, upon which the ponds effectiveness is based, was computed in strict accordance the unified sizing criteria in the Manual to meet pollutant removal goals, reduce channel erosion, prevent overbank flooding, and control extreme floods. The level of detail provided in the drawing is consistent with the stormwater pond plan and profile details provided in Section 6.1 of the Manual, and in combination with the information in the SWPPP, is sufficient to assess the pond's effectiveness in mitigating potential adverse impacts associated with post development changes in stormwater runoff. The pond's forebay, which has been included in the design as required by Section 6.1.3 of the Manual, is depicted on the construction drawings that accompany this FEIS.*

DRAW 8 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Refer to Drawing No. D-4, Sheet 19 of 19, Site Details:

As a general comment, this drawing is too generic. Specific stormwater management practices have been identified on the plans. Details that are specific to each individual stormwater management practice should be provided as well.

> ***Response DRAW 8:*** *Specific stormwater management practices were used to analyze and design the stormwater management system in order to assess impacts. Additional detail of the proposed stormwater management practices have been added to drawing D-4 including a detail illustrating practice designation, top and bottom elevations, permanent pool elevation, total pond volume, and permanent pool storage volume for each pond.*

DRAW 9 (Letter A-C42 Virginia M. Reeves, September 22, 2006): Grading and utilities Plan SP-3.1 Rev# l 3 -24-06 The Retail buildings shown here Building #F, G ,H & I have customer parking facing the north side of the stores and on the south side of these stores is where the tractor trailers will be when delivering their goods and idling year round .There are "Noise Pollution" and "Air Quality Issues" here that need to be addressed.

The homes affected here are along Brentwood Road, Greenridge Court and Lakeside Road. What recourse do these homeowners have? What guarantee do these homeowners have that hours of operation will be enforced? Who will enforce restrictions? Who sets and enforces noise pollution standards and air quality standards? How often will they be monitored? Who will get the results? Patterson? Homeowners?

> ***Response DRAW 9:*** *Buildings F, G, H & I and associated infrastructure has been removed from the Proposed Action. Under the current plan, only a 2,000 SF building and parking is proposed in the Town of Kent. Of this 1,700 square feet will be used for retail purposes. The remaining 300 square feet will be for a Putnam County Sheriff's Substation.*
>
> *Based on the reduced size of retail building, there will not be an associated loading area. Deliveries, when needed, will be through the front door or employee entrance to the building. The reduced development plan eliminates idling tractor trailers from the area behind the noted residences thereby eliminating associated noise and air quality impacts. It should be noted that both the noise and air quality analyses performed as part of the DEIS concluded that no significant impact to either parameter would result from the Proposed Action, see Chapters 4.9 and 4.15 respectively.*

DRAW 10 (Letter A-C42 Virginia M. Reeves, September 22, 2006):
Layout Landscape Plan SP-2.3 Rev. # l, 3-24-06:

New Waste Treatment Area Tax, Map #33. 2-23, Septic area, approximately 300 000 Square Feet of area. Homes effected here are Kent residence Lot #145, 147, 148, 149, 184,185, 186, 187, 189, 190, 192, 197, 198, 199, 141, 142, 144, 145, 177, 176, 175, 174, 173, 172. Homes effected here are Patterson residence Lot #145, 24, 25, 26, 27, 28. I could not find anywhere, test results of the necessary perk test for the septic field. Was there a physical perk test performed? If so where are the results? If not, why not?

Response DRAW 10: *SSTS deep test holes and percolation tests were performed in June 2005 and witnessed by the NYCDEP and PCHD. The results of the SSTS soil testing can be found in the Wastewater Report (Appendix H).*