

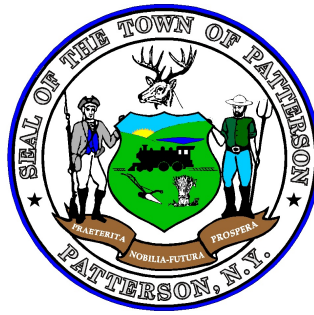
**PLANNING DEPARTMENT**

P.O. Box 470  
1142 Route 311  
Patterson, NY 12563

Michelle Russo  
Sarah Wagar  
*Secretary*

Richard Williams  
*Town Planner*

*Telephone* (845) 878-6500  
*FAX* (845) 878-2019



**TOWN OF PATTERSON  
PLANNING & ZONING OFFICE**

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**LEAD AGENCY  
SEQRA FINDINGS STATEMENT**

**Patterson Crossing Retail Center**

Proposed Development

NYS ROUTE 311  
TOWNS OF PATTERSON AND KENT  
PUTNAM COUNTY, NEW YORK

*Lead Agency:*

TOWN OF PATTERSON PLANNING BOARD

Patterson Town Hall  
1142 Route 311, P.O. Box 470  
Patterson, New York 12563

Contact: Mr. Richard Williams Sr., Town Planner  
(845) 878-6500

**July 17, 2008**

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**Title of Action:** Patterson Crossing Retail Center

**SEQR Status:** Type 1 Action

**Location of Action:** The site proposed for the retail center is located along NYS Route 311, at the intersection of Interstate 84, in the Towns of Patterson and Kent, Putnam County.

**Lead Agency:** Town of Patterson Planning Board Patterson Town Hall 1142 Route 311, P.O. Box 470 Patterson, New York 12563

**Project Sponsor:** Patterson Crossing Realty, L.L.C.  
1699 Route 6, Suite 1  
Carmel, N.Y. 10512

**Date of Acceptance of FEIS:** June 12, 2008

## **1.0 INTRODUCTION**

Pursuant to Section 8-0101 et seq. of the Environmental Conservation Law (SEQRA) and 6 N.Y.C.R.R. Part 617, the Planning Board of the Town of Patterson, as lead agency, makes this statement of findings for the Patterson Crossing Retail Center. This Findings Statement draws upon the facts and conclusions of the Draft Environmental Impact Statement (the "DEIS") accepted by the Town of Patterson Planning Board (the Planning Board) on July 27, 2006, and the Final Environmental Impact Statement (the "FEIS") accepted by the Planning Board on June 12, 2008.

This Findings Statement attests to the fact that the Town of Patterson Planning Board, as Lead Agency, has complied with all of the applicable procedural requirements of Part 617 in reviewing this matter, including but not limited to:

- Coordinated designation of the Planning Board as Lead Agency;
- Issuance of a Positive Declaration by the Planning Board;
- Public Scoping Session and adoption of Scoping Document for DEIS;
- Preparation of a DEIS by the Project Sponsor; Acceptance of the DEIS by the Planning Board; Filing of the DEIS and a Notice of Completion;
- Establishment of a Comment Period and the holding of a Public Hearing on the DEIS by the Planning Board;
- Consideration of correspondence between the Applicant and the Involved and Interested Agencies as well as outside organizations;
- Preparation of a FEIS;
- Acceptance of the FEIS by the Planning Board;
- Filing of the FEIS and a Notice of Completion by the Planning Board;
- Establishment of a reasonable period for review of the FEIS by the public and

- involved agencies prior to adoptions of a findings statement; and
- Preparation and adoption of this Findings Statement by the Planning Board.

This Findings Statement also attests to the fact that the Planning Board has given due consideration to the EIS prepared in conjunction with this action. Further, this Findings Statement contains the facts and conclusions in the EIS relied upon by the Planning Board to support its future decisions and indicate the social, economic and other essential factors and standards which will form the basis for its decisions.

## **2.0 PROJECT DESCRIPTION**

### **2.1 Location and Background**

The proposed Patterson Crossing Retail Center site straddles the border between the Town of Patterson and the Town of Kent, in northern Putnam County, New York. The existing project site consists of approximately 90.5 acres of vacant, forested land, except for one telecommunications tower, which has been installed on the site. The 74.1 acres in the Town of Patterson are zoned Industrial (57.9 acres) and R-4 (residential (16.2 acres), and the 16.4 acres in the Town of Kent are commercially zoned. The site is located at the crossroads of Interstate 84 and NYS Route 311.

The project site consists of five tax parcels. The three lots located in the Town of Patterson (22-3-1, 33-2-23, 24-2-3) have a combined area of approximately 74.1 acres. The remaining two tax lots in the Town of Kent (22-2-47 and 22-2-48) have a combined area of 16.4 acres.

The Town of Patterson circulated its notice to assume lead agency in the review of the project on July 2, 2004. The Town of Kent formally contested the Patterson Planning Board acting as Lead Agency in a letter to the Commissioner of the New York State Department of Environmental Conservation dated July 29, 2004. On December 13, 2004, the Commissioner concluded that "...based on the facts presented, that the Town of Patterson Planning Board should be lead agency for the conduct of the environmental review for the proposed Patterson Crossing Retail Center due to the local nature of the impacts and the broad scope of authority afforded to the Patterson Board under its site development plan review and erosion control permit processes".

The Applicant, Patterson Crossing Realty, L.L.C. prepared the DEIS in response to a Positive Declaration issued by the Town of Patterson Planning Board, and a scoping document adopted by the Planning Board on April 14, 2005, after a public scoping session. Based upon comments received from the lead agency and its consultant, the Applicant submitted a revised DEIS to the Planning Board on May 24, 2006. Additional revisions, made to address subsequent Town comments, were submitted, reviewed for content and adequacy with respect to the scope, and approved by the Town prior to the resubmission of the finalized DEIS on July 27, 2006. The lead agency then issued a Notice of Completion for the DEIS and a Notice of SEQRA Hearing on July 27, 2006.

Public hearings on the DEIS were held on September 13 and September 14, 2006 in Patterson, New York, to afford the interested public and organizations the opportunity to provide oral testimony on the DEIS. The hearing was closed on September 14, 2006 and the period for submitting written comments from public, involved agencies, and interested organizations remained open until September 25, 2006.

Modifications to the project were made based on all of these comments and on input provided during meetings the Applicant initiated with local officials and State agencies. Meetings with the Putnam County Executive, the County Highway Commissioner, the Putnam County Department of Planning, Development & Public Transportation, and the New York State Department of Transportation (NYSDOT) were used to develop plans and mitigation to offset impacts related to the changes in traffic related to the Proposed Action. The modifications based on these meetings include altering the site access road, agreeing on improvements required for several of the local intersections and relocating the emergency access.

Other modifications to the plan were developed through meetings with the Watershed Inspector General (WIG) for the New York State Office of the Attorney General along with the Riverkeeper, as well as separate discussions with the New York City Department of Environmental Protection (NYCDEP) and comments received by the Croton Watershed Clean Water Coalition and the Putnam County Coalition to Preserve Open Space. These meetings, discussions and comments provided input and direction on developing a plan to assess potential stormwater impacts conservatively and develop mitigation both on and off the project site to address water quality concerns.

The first of the meetings with the WIG and Riverkeeper involved a review of the project plans that were presented in the DEIS and discussion of environmental concerns and goals to be used in revising the plans including the reduction of the project footprint, the use of the Simple Method and related analytical approach as recommended by the WIG to determine pre- and post-development pollutant loads, and the assessment of the potential to address existing off-site drainage problems as part of the project plan. The Applicant also considered potential impacts to water quality based on secondary growth impacts related to population changes and future worker housing needs. Subsequently, modified plans that reduced the overall square footage of the retail center and impervious surfaces and depicted updates and upgrades to the originally proposed stormwater management facilities on-site were presented to the Watershed Inspector General and Riverkeeper. In addition, off-site improvements to address existing runoff related pollutant issues from Interstate 84, NYS Route 311, Concord Road and the Putnam County Highway Facility were incorporated into the Proposed Action.

These revisions were further reviewed and refined based on a meeting between the Applicant and the NYCDEP in February of 2008 as well as discussion with the NYSDEC. The revisions to the Plan provide increased phosphorous reduction in the stormwater runoff from on- and off-site sources. Refer to Appendix A of the FEIS for a copy of a letter from the Applicant's Engineer to the NYCDEP summarizing the discussions at that meeting.

The initial draft of the Final EIS was submitted to the lead agency for review on September

7, 2007. The Town Planner, Town Engineer and the Planning Board (at three meetings held specifically for the review of the document on October 18, November 15 and November 27, 2007) thoroughly reviewed the FEIS and determined it incomplete. The Applicant worked with the Town Engineer and Town Planner over subsequent months to address all the concerns identified during the review of initial version of the FEIS. The Town Planner recommended a draft of the FEIS for acceptance as complete on February 28, 2008 (telecon between TMA staff and Town Planner) and the Town Engineer recommended the same on March 7, 2008 (email from the Town Engineer to TMA Staff and the Town Planner).

The FEIS was further modified and formally resubmitted to the lead agency on March 31, 2008 for review. The FEIS was accepted as complete on June 12, 2008.

## **2.2 Summary of Proposed Action**

The Patterson Crossing Retail Center revised plan presented in the FEIS consists of a 382,560 square-foot retail center with management and meeting space, a substation for the Putnam County Sheriff's Department and a 28,000 square-foot garden center on approximately 90.05 acres of predominantly undeveloped land. The Applicant's initial plan, as presented to the Town in May of 2003, proposed a 425,700 retail center with a roughly 28,200 square foot garden center. Upon further investigation, the Applicant modified the plan to that originally proposed in the DEIS, a 405,850 square foot retail center with a 28,200 square foot garden center. The scale of the project was again reduced to the square footage noted above in response to public and agency comment on the plan presented in the DEIS.

Environmental impacts related to impervious surface, slope and watercourse disturbance and buffer encroachment have been reduced or eliminated. The plan incorporates a number of components including a gateway design and entry drive, a public plaza, improved pedestrian connections, cohesive architectural style and signage, and smaller parking fields. The project provides management, office, and meeting space as well as a substation for the Putnam County Sheriff's Department. In addition, the Applicant has committed to implementing off-site stormwater improvements to address existing water quality issues. Finally, the Applicant, with possible assistance from Putnam County and New York State will implement off-site roadway and intersection improvements that will address current and future traffic issues.

The site abuts NYS Route 311 on the north and Interstate Route 84 on the east. Areas surrounding the project site contain a mix of residential, commercial, office, transportation, and community facility uses, as well as vacant land. Single-family residences in the Town of Kent and the Town of Patterson abut the site to the west. A cellular telecommunications facility is situated near the southern end of the site and will remain in operation. The site is located in a New York City regulated watershed and consists predominately of second growth woodlands that were formerly pastureland. Approximately 27 acres of the site would remain undisturbed by construction of the project and roughly 33 additional acres would be revegetated and landscaped. As such, 60 of the 90 acres would be vegetated upon completion of the Proposed Action.

### **2.3 Land Use and Zoning**

The proposed project conforms to the Town of Patterson Comprehensive Plan and zoning ordinance (except for signage) which designates the majority of subject site as a commercial parcel. The retail use of the property proposed within the Industrial District of the Town of Patterson is subject to approval of a special use permit by the Patterson Zoning Board of Appeals.

The Town of Kent portion of the subject site which has been zoned Commercial (C) for over twenty years, also permits as a principal use, commercial and retail operations. The 1990 Master Plan for the Town of Kent designates the site as commercial as well. As such the Proposed Action complies with the Town of Kent planning and zoning except signage. Project compliance with both the 1989 and 1990 versions of the Town's Master Plan were addressed in the DEIS and FEIS respectively. A full assessment of the project's compliance with the existing Town of Kent Zoning Code was provided in the EIS. The Town is updating its Comprehensive Plan, however, at the time of this writing, the considered changes have not been adopted. A draft of the proposed plan leaves the site as commercial. It is noted however that the Draft Plan dated March 2008 continues to call for commercial development of the Kent portion of the project site. In addition, the commercial development of this property is consistent with the aims articulated in the Town's determination that its Interim Development Law was necessary. The Town Board has noted the Town needs to "expand its commercial and business tax base to help diversify and stabilize the Town's revenue fund." As such the Proposed Action complies with the Town of Kent planning and zoning except for signage.

The majority of the new construction associated with the Patterson Crossing Retail Center is proposed within the Industrial District of the Town of Patterson, while a small portion of the proposed building development (2,000 square feet) is located in the Commercial District in the Town of Kent. The proposed site access would be from NYS Route 311 in the Town of Kent.

It was documented in the FEIS that the proposed access road location from the State highway through the subject parcel in the Town of Kent is the only drive access that functionally works for the development of the subject site, whether it is developed for retail or an industrial use.

The proposed retail use at the Patterson Crossing Retail Center will be housed in four separate buildings within the eastern and central portion of the site. The remainder of the site will support parking areas, stormwater management facilities and associated infrastructure. Nearly two thirds of the site will be retained as open space composed of undisturbed, revegetated and landscaped areas.

As part of the Proposed Action, beneficial stormwater treatment practices both on- and off-site that will reduce existing runoff related pollutant loads currently contributing to water quality degradation of Lake Carmel and the East and Middle Branch Reservoirs will be



implemented. Improvement measures to treat stormwater from Interstate 84, NYS Route 311, Concord Road and the Putnam County Highways Facility (located on the opposite side of NYS Route 311 from the project site) will be constructed as part of the development of the Patterson Crossing Retail Center.

The reduced square footage will generate less traffic than under previous proposals. The proposed action includes improvements to address future and long-standing traffic deficiencies at the Terry Hill Road intersection with NYS Route 311, the Interstate 84 westbound ramp intersection with NYS Route 311, and the Interstate 84 ramp eastbound intersection with NYS Route 311. The final plan relocates the emergency access to a point more centrally located on the project site.

The retail center would help to expand the commercial tax base of the Towns of Patterson and Kent. A retail project at the crossroads of Interstate 84 and NYS Route 311 will draw patrons from other parts of the County and the greater region. The large-scale retail stores would respond to the increased demand for retail services due to past and projected population growth, both locally, in Putnam County and the greater region as a whole. The proposed project would enhance the convenience of comparative shopping for County residents. Items presently unavailable in the area, including electronics, sporting goods and some durable goods would be offered, and in providing more shopping opportunities, Patterson Crossing Retail Center would address the current loss of tax revenue to areas outside of the County known as the Putnam Paradox.

The phrase Putnam Paradox was coined in response to the way Putnam residents spend their disposable income. Marc Goloven, an economist for JP Morgan Chase, conducted research that showed that two thirds of the disposable income generated by Putnam residents is spent outside of Putnam County resulting in the loss of tax revenues annually to neighboring municipalities.”<sup>1</sup> “Every time a resident of Putnam County drives across the border into Connecticut, Westchester, Dutchess or other neighboring municipalities to shop, they take their sales tax dollars with them. So, instead of Putnam County receiving the sales tax collected on goods and services bought, other municipalities benefit from such purchases.”

<sup>2</sup>

Economically, the Patterson Crossing Retail Center will benefit Putnam County and New York State by recapturing and maintaining sales tax revenues in Putnam County and New York State; sales tax revenues that are currently exported out of the County and the State. 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 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 correcting the Putnam Paradox by

<sup>1</sup>

“What does this mean to you and your family ”, Putnam Paradox. 18 April 2007  
<<http://www.putnamcountyny.com/paradox/main.htm>>

<sup>2</sup> “What is the Putnam Paradox”, Putnam Paradox. 18 April 2007  
<<http://www.putnamcountyny.com/paradox/main.htm>>

offering new retail shopping opportunities within the County for its residents and beyond. This economic benefit will help turn the tide of rising property taxes in Putnam, which have risen faster (77%) in the last ten years than any other County in the State, as reported by NYS Comptroller Alan Hevesi in April 2006. County Executive Robert J. Bondi, in his State of the County address of 2007, recommended that Putnam County raise its sales tax rate from the current 3.5 percent to 4.0 percent to avoid eliminating essential services. According to Mr. Bondi, the "...sales tax recommendation will yield \$12 million dollars per year, based on actual collections in 2006, which represents 10 percent of the 2007 gross operating budget" and without the sales tax increase, the County Executive stated that "...the total tax levy increase for 2008 will be 66%..." not including costs unknown at the time of his address.

In his 2008 State of the County address, the County Executive stated that "[i]f County revenue does not increase...real property tax payers will face a 22% property tax increase" in 2009. By providing local shopping opportunities and capturing exported tax dollars, the project will provide the County a new revenue source, which could be used to limit tax increases that have been required in recent years including the 18.5 percent increase in 2007 and 28 percent increase in 2008. In addition, during his speech, the Mr. Bondi expressed the Counties support for the Patterson Crossing Retail Center and other smart-growth commercial projects.

## **2.4 Project Layout**

The Patterson Crossing Retail Center project at 410,560 total square feet is 23,290 square feet less than the plan presented in the DEIS and 43,100 square feet less than originally presented to the Town in May of 2003. Modifications to the layout have been made to create a focal point of the northernmost building of the retail center within the Town of Patterson, and to reduce the size and visibility of the building within the Town of Kent. Unlike previous plans, the project includes non-retail related space for management, office, and meeting space as well as a Putnam County Sheriff's Department Substation. The plan further reduces the area of impact and the building footprint through the incorporation of two-story buildings that will house retail uses and the previously noted non-retail uses.

The plan will result in the construction of three building pads totaling 408,560 square feet (372,340 square feet of retail, and 8,220 square feet for management, office and meeting space) associated parking a subsurface treatment system and stormwater management basins along with other related infrastructure in the Town of Patterson.

In the portion of the site lying within the Town of Kent, the plan includes one 2,000 square foot building with 1,700 square feet for retail space and 300 feet for the Sheriff's Department Substation. This building would be served by a separate subsurface treatment system (SSTS) located to the north of the building as well as a separate well located within the Kent portion of the site.

The revised project discussed in the FEIS will generate less traffic than the proposal

evaluated in the DEIS. Trip generation projected by the current Proposed Action would be 82 fewer trips in the p.m. peak hour, and 110 fewer trips in the Saturday peak hour. The Site Plan includes a reconfiguration and widening of the access road to NYS Route 311. The building configuration eliminates the pattern of drives required to provide access for the truck route and the northern most building pad shown under previous plans. These changes improve the internal traffic circulation of the proposed development and reduce the area of impervious surface.

Traffic along the truck route would be restricted to delivery and emergency vehicle use only. The configuration of the truck route creates an alternative emergency route for all but the northern most portion of the site access (between the truck route entrance and NYS Route 311) which can be utilized should the main access road be blocked to traffic. The use of the emergency access road from the site to Concord Road would be required should the access road between NYS Route 311 and the truck route be blocked or as appropriate in emergency situations, at the discretion of the emergency services personnel.

Another modification to the Proposed Action involves the relocation and shortening of the emergency access drive from Echo Road at the existing entrance to the telecommunications facility to Concord Road from a centrally located point on the west side of the proposed development. The new emergency access drive location would intersect Concord Road at a point just to the south of its intersection with Woodstock Road. Emergency access gates will be installed and locked to prevent unauthorized use; emergency responders such as the local fire department would be provided with keys for the gates.

Alternative access routes other than from NYS Route 311 were investigated, including Fair Street, Concord Road and Interstate Route 84 ramps, and none was found to be acceptable. For the traffic associated with a large-scale commercial or industrial development (cars, delivery vehicles and tractor trailers), access to the site through the residential neighborhood to the west would be unsuitable. Further, steep slopes down to Fair Street render this unacceptable for development as a functional access. While the project site fronts on the Interstate 84 eastbound on-ramp, existing steep slopes prevent developing access at this location. In addition, the NYS DOT acquired the ramp right of way "without access" meaning connection to the ramp is not permitted. A full discussion of these analyses is provided below in the Section 4.8 Traffic and Transportation.

Intersection improvements would be constructed in conjunction with the project. Three intersections have been identified as having currently failing levels of service under existing or future No-Build conditions (Terry Hill Road at NYS Route 311, the Interstate 84 westbound ramp at NYS Route 311, and the Interstate 84 ramp eastbound at NYS Route 311). The Applicant would fund improvements including NYS Route 311 at the site access drive, which would be widened and signalized, at the intersection of NYS Route 311 with both the east and westbound ramps of Interstate 84 and contribute to improvements at the NYS Route 311 and Fair Street intersection. For improvements at the intersection(s) of NYS Route 311 and NYS Route 164 as well as NYS Route 52 and Barrett Hill Road, the Applicant will bond improvements to be constructed only if warranted after the completion of the project and approved by NYSDOT. Further, the modified plan reduces traffic to and

from the site, simplifies the access road, and eliminates loading areas facing residences.

## **2.5 Construction, Operation, and Maintenance**

### **2.5.1 Construction**

The development will be constructed over an approximately 24 to 36 month period after the issuance of all regulatory permits. Prior to the beginning of construction, a representative of the project sponsor will confer with municipal and State representatives to review the provisions of the SWPPP and discuss their implementation. In general, erosion control provisions and stormwater management practices will be installed in the early phases and stormwater will be directed to the appropriate sediment basins throughout construction activities.

Construction will follow proposed sequencing and phasing set forth in the project plans that adhere to NYSDEC SPDES general permit requirements relating to erosion control and the NYSDEC and the NYCDEP stormwater requirements set forth in the FEIS. The revised Erosion and Sediment Control Plan included in the SWPPP includes specific measures to eliminate existing erosion, and to prevent erosion during construction, that meet or exceed the requirements set forth in the New York State Standards and Specifications for Erosion and Sediment Control Standards and Specifications. These measures also exceed those required by NYSDEC GP-02-01, and by GP-93-06, which is incorporated into the WR&R by reference. While there is no obligation under any regulation to address pre-existing erosion issues under the Proposed Action, the Applicant would construct “extra” stormwater improvements designed to attend to the existing stormwater problems. The measures to repair the eroded channels included in the Proposed Action will not be implemented if the project is not constructed.

In accordance with the NYSDEC regulations, the contractor will install all sediment and erosion control measures and maintain them throughout the entire construction process. These measures will be monitored during construction by the contractor, site engineer and representatives of the Towns, and will be inspected by the NYSDEC throughout the construction period. The stormwater management facilities and control structures will be installed and stabilized during the early stages of the construction. In addition, construction phasing has been planned to adhere to the NYSDEC's five-acre ground disturbance guideline. For each phase of work, sediment and erosion control measures will be installed in accordance with best management practices and prior to the commencement of clearing, grubbing or grading operations.

In addition to these enhanced measures, the Patterson Crossing Erosion and Sediment Control Plan includes the measures noted below in the Soil section that go beyond those set forth in the Standards and Specifications in order to further ensure the plan's effectiveness in protecting water quality in downstream resources. The internal roads and infrastructure will be maintained by the Applicants throughout the construction period as necessary to provide safe and adequate site access and to ensure properly functioning stormwater management facilities. Any Town, County or State road surfaces impacted during

construction will be cleaned at the end of each day, at a minimum, to remove tracked soil from truck movements. Road surfaces will be cleared on a more frequent basis, as needed or directed by the Town. The Applicant will repair any damage attributed to construction traffic on local roads from this site.

### **2.5.2 Operation and Maintenance**

Once construction of the project is completed, and the site has been stabilized, normal operations of the facilities will begin. Normal operations include maintenance of the post construction stormwater management practices to ensure that they continue to operate as designed. The proposed retail center development and the infrastructure associated with it will be subject to a comprehensive inspection and maintenance program. Elements of the proposal that will be subject to such inspection and maintenance activities include the post construction stormwater management components of the SWPPP, all roads, parking areas and water and wastewater infrastructure. The management company hired for the retail center will be responsible for the maintenance of permanent stormwater facilities.

Off-site stormwater improvements will be maintained based on agreements with the NYSDOT and the Putnam County Department of Highways and Facilities (PCDH&F). It is anticipated that the stormwater management improvements located on the project site would be maintained by the Applicant, those on the PCDH&F property and in their ROW would be maintained by the County and the improvements sited in then NYSDOT ROW would be looked after by the State.

## **3.0 ECONOMIC AND SOCIAL BENEFITS**

The proposed action will result in a number of economic and social benefits to the communities, which were addressed in the EIS.

The net annual property taxes currently generated by the project site are \$56,735. The existing site has generated property tax revenues to the Town of Patterson and the Town of Kent, Putnam County, the Carmel Central School District, and other local taxing jurisdictions including Fire, Library and Parks Districts for many years without incurring any notable costs to local governments. The current assessed valuation of the project site totals \$1,496,393.

The Patterson Crossing Retail Center will result in a substantial increase in the property and sales tax revenues generated by the site. Overall, the Project Sponsor has estimated that the project will generate between \$12.2 million and \$14.6 million in tax revenues (based on the 2005 tax rates if twelve percent of the sales fall in the exempt categories of food products, beverages, health supplements, drugs and medical supplies). While the bulk of the tax revenues are sales tax, \$839,934 in property tax revenue would be divided between the County, the Towns of Patterson and Kent, and the Carmel Central School District. The substantial increase in commercial ratables would also come with no increase in the resident population or number of public school students. Additional visitors to the area are likely to

increase sales at existing, non-competing business establishments as a secondary benefit of the project, strengthening the local business climate.

The Patterson Crossing Retail Center will provide additional retail opportunities for the community, retail opportunities which, at present, are severely lacking in Putnam County. The center will provide variety and convenience, and will significantly reduce local residents' need to travel outside the area for certain purchases, saving time and gasoline.

The proposed project will help to strengthen the local economy by creating additional jobs. The project is anticipated to create 75 to 113 jobs during the 2 to 3 years that it will take to construct the retail center. Local retailers will benefit during the construction period in sales of goods and materials used to build the project. The project is anticipated to create approximately 488 jobs after construction is completed, although many of the jobs created would be in a non-supervisory capacity in the anticipated average salary range of \$12.00 to \$13.00. These jobs would represent a sizable increase in employment in the Towns of Patterson and Kent and in Putnam County; the development will provide a wider variety of local part- and full-time employment than are currently available in the area. Workers at the retail center are expected to have a positive impact on existing local businesses, purchasing food, convenience items, gasoline, and other items. Further, as described previously, the Town of Kent has a stated goal of encouraging commercial and business development to expand its tax base and reduce the strain on resources caused by the increase in residential developments.

As a retail/commercial operation, the proposed development would generate minimal direct expenses to the Towns of Patterson and Kent. The project would not increase the local resident population, and thus not require any additional municipal expenses relating to social services, recreation services, or other residentially induced expenses. The project would be served by a private water supply and subsurface treatment systems, and thus not require any connections to existing municipal infrastructure. Increased need for roadway maintenance would be limited due to the nearly direct highway access of the project.

Because most of the traffic generated by the project would travel on Interstate 84, State routes or County roads, the potential wear and tear and added maintenance on local town roads as a result of the project is not expected to be significant.

No specific measures to mitigate impacts for residentially induced expenses or for connections to municipal infrastructure for water or septic systems are necessary or proposed. The local highway departments can use a portion of the tax revenues collected by the Towns of Patterson and Kent for maintenance of local roads.

There would be no cost to the Carmel Central School district because the proposed commercial development would not result in an increase in the number of school-aged children. In addition, the project would generate more than \$550,000 in annual taxes for the school district. This revenue would benefit all taxpayers within the school district. As mentioned previously, the entire Town of Kent is in the Carmel School District, where 100 percent of the school taxes from the proposed project would be paid. Accordingly, Kent is

receiving 75 percent of town taxes into their school district even though the portion of the proposed development (2,000 square feet) within the Town of Kent is significantly less than development proposed within the Town of Patterson (380,560 square feet of retail, management, office and meeting space and a 28,200 square foot garden center).

As stated in the FEIS, "The projected increase in Full Value is not large enough to cause a major reduction in aid ratios and does not impact certain aids at all. Foundation is not impacted because Carmel is not receiving aid on the Foundation formula. [The] district is receiving aid as a result of the Foundation "minimum aid guarantee" which provides districts with an increase annually of not less than 3 percent over the prior year base, capped at not more than 12.55% above the 2006-07 Foundation Aid Base by 2010-11. Building Aid ratios for Carmel are likewise not impacted, because your district receives Building Aid based upon the selected 99-2000 Building Aid ratio instead of the lower current RWADA aid ratio. The aid ratios reduced by an increase in Full Value include Excess Cost, Private Excess Cost, Transportation, BOCES and Computer Hardware/Technology".

The project will also contribute to stemming the flow of retail sales tax dollars out of Putnam County addressing the Putnam Paradox and the Shop Putnam Initiative, as well as out of New York State into Connecticut.

Finally, County Executive Robert J. Bondi, in his State of the County address of 2007, recommended that Putnam County raise its sales tax rate from the current 3.5 percent to 4.0 percent to avoid eliminating essential services. According to Mr. Bondi, the "...sales tax recommendation will yield \$12 million dollars per year, based on actual collections in 2006, which represents 10 percent of the 2007 gross operating budget" and without the sales tax increase, the County Executive stated that "...the total tax levy increase for 2008 will be 66%..." not including costs unknown at the time of his address.

In his 2008 address, the County Executive stated the following:

"Commercial growth has long been an issue in our County and the lack of smart, environmentally safe commercial growth has hurt us tremendously. We, at the County level, have sought to advocate for projects that meet this requirement but we find that we are rebuffed at every turn-by territorial town boards, by special interest groups and, worst of all, misinformation about projects and proposals. What we see happening in our County – ever increasing needs by our expanding population and a dearth of commercial outlets that would generate the sales tax revenue to provide them – is the culmination of these types of roadblocks. We will continue to advocate for projects such as Patterson Crossing,...and other projects that have yet to be unveiled. Imagine the better financial situation that Putnam County would be in if even just one of these projects had been approved and built five years ago."

Mr. Bondi went on to state that "In 2009, spending is projected to increase by a minimum of \$7.8 million if services are provided at current levels...and...if County revenue does not increase to keep pace, our real property tax payers will face a 22% property tax increase."

Totaling the tax hikes over the past three years results in an overall increase of over 75 percent. The Proposed Action would contribute significant retail sales dollars to the County helping to reduce future County tax increases on residents.

#### **4.0 STATEMENT OF FACTS AND BASIS FOR CONCLUSIONS**

The following is a summary of the relevant areas of concern discussed in the Environmental Impact Statement (EIS), and the mitigation proposed. It is not intended to be a complete list of all adverse impacts discussed, or mitigation proposed in the EIS.

##### **4.1 Geology**

###### **a. Potential Impacts**

The Environmental Impact Statement described the geologic setting of the project including the extent of bedrock underlying the site, the different types of bedrock found on the site, and the depth of soil to bedrock. A total of forty-seven borings were completed at the project site to provide a comprehensive analysis of the on-site soils, bedrock and hydrogeology. This information was used in designing the overall layout of the site, and developing a grading plan which balances the cut and fill operations to the maximum extent possible. In assessing the potential impact that might occur from the proposed action, the greatest impact to geology on the site is the removal of rock necessary to develop the retail center.

Responding to concerns raised by the public regarding the amount of blasting required and the volume of rock to be processed on-site, the building pad elevations were raised from those originally proposed in earlier plans to better balance on-site earthwork under the modified plan for the retail center. The raising of the building pads of the home improvement center by approximately four feet and the wholesale warehouse by roughly six feet has measurably reduced the area and volume of rock to be removed. The area within which rock removal is required was reduced to approximately 9.8 acres in an area that extends from the south-central portion of the site north towards the western boundary. As a result, the volume of rock to be removed was reduced by approximately 50 percent from that presented in the DEIS.

It is anticipated that blasting would be limited to areas that have greater than four feet of material cut. The bedrock excavated on the site would then be used as fill, or processed and used as subbase material for the driveways and parking areas. The cut and fill analysis performed for the reduced development plan included in this FEIS, shows that the site earthwork would result in approximately 590,000 cubic yards (cy) of cut and roughly 565,000 cy of fill, requiring approximately 25,000 cy of net export.

###### **b. Mitigation Proposed**

As described above, rock removal by blasting is expected to be required for construction of the project. All required blasting at the site would be conducted using methods to mitigate



potential impacts to neighboring properties and residences. Where blasting is required, the blasting protocol set forth in the Environmental Impact Statement, and summarized below would be followed. A more detailed description of the measures that will be employed to mitigate blasting concerns can be found in the blasting mitigation plan, which is included in the Environmental Impact Statement. To further offset potential impacts related to site preparation work, a temporary berm of soil and/or rock would be constructed surrounding the area(s) where rock removal and/or processing is required.

All structures, including residential dwellings, located within 500 feet of the blast site will be identified. Pre-blasting inspections will be conducted at all off-site structures located within 500 feet of the blast site, if authorized by the property owner. These inspections will include photographic or video documentation. A qualified independent specialist would inspect site foundations within 500 feet of potential blasting sites before and after blasting work. The Applicant will fund all inspection work. The 500-foot radius is based upon technical studies and professional blasting standards, as described in the EIS.

Neighboring property owners and appropriate municipal representatives (Town Clerk and Police Department) will be notified of the intent to blast not more than 30 days nor less than 72 hours prior to planned blasting activities, and such persons will be notified not more than 72 hours nor less than 24 hours prior to the commencement of blasting. Notification will be accomplished through mailings and by telephone calls to the residents. The mailings documenting the blasting schedule will be sent through the US Postal Service to the appropriate officials and all residents within 500 feet of the site. Phone calls to these residents will be made within the specified time frames noted above to provide additional notification of the pending blasting. The mailed notifications will include information regarding the blasting locations and the approximate time during which the blasting would occur.

While there is potential for impacts to nearby private or local wells (no public water supply exists in this area), any documented impact to private or local wells will be remedied by the blasting contractor. The Applicant has developed a Blasting Mitigation Plan that includes provisions to monitor wells during the period of construction blasting for a period of not less than two weeks prior to the blast, and two weeks after the final blast has occurred. The well monitoring plan includes the collection of water level data on a representative number of wells within 500 feet of blasting sites, before, during and after blasting. Foundation surveys of structures within 500 feet of the blasting sites are included in this plan. Copies of all documentation concerning off-site structures, including photographic and/or video documentation, will be provided to the Towns of Patterson and/or Kent depending on the location. It is noted that the Applicant and Blasting Contractor cannot survey or monitor pre-blast conditions on relevant adjacent properties unless given permission by the respective owner. An owner in the pre-blast area cannot be allowed to prevent or delay blasting simply by refusing access to their property for the pre-blast inspection. Accordingly, if access is not granted within twenty-one days of when a written request for access is made by certified mail, and access to the property allowed within 60 days of notice, the pre-blast survey may be completed without the inclusion of such property.

The contractor will conduct test blasting and seismographic monitoring prior to carrying out blasting operations in order to develop a final blasting plan and determine appropriate on-site blasting techniques. The quantity of explosives would be limited to the amount necessary to fracture the rock without endangering persons or property. Before firing, all targeted areas will be covered with a suitable protective device to prevent escape of broken rock. Seismographic monitoring will continue throughout the periods of blasting at the site, and daily logs of seismographic data, explosive use and field conditions will be maintained.

Warning flags or other means will be used at a reasonable distance to give proper warning to the public at least three minutes in advance of firing. Blasting would not be conducted between the hours of 5:00 PM and 8:00 AM, nor on Saturdays, Sundays or those legal holidays identified in the EIS.

The Blasting Contractor retained to complete the blasting is required to be licensed by NY State and carry insurance sufficient to cover all claims for damage to private property. All blasting will be conducted in compliance with New York State requirements (Title 12 of the New York Code of Rules and Regulations (12 NYCRR Part 39). The Town Building Inspector or any professional hydrogeologist retained by the Town (and funded by the Applicant) would be the arbitrator for claims of damage to wells.

The Town of Patterson Town Board and the Town of Kent Town Board are currently considering adopting a new local blasting laws. Should the law be enacted, all blasting on the project site would comply with any requirements that are more restrictive than those documented herein and in the blasting plan.

## **4.2 Soils**

### **a. Potential Impacts**

The Environmental Impact Statement identified the different soil types on the subject property, and discussed the potential activities that will occur in each different soil type; whether it will remain undisturbed, regraded, revegetated or covered by buildings or other types of impervious surface. Initially, soils on the site were identified using the Soil Survey of Putnam and Westchester Counties. Soil samples were then collected at 15 locations, and a geologist and wetland scientist visited the site several times, to confirm the accuracy of the soil survey. There are four types of soil on the site that will be affected by development of the retail center; Paxton, Charlton-Chatfield, Udorthents and Woodbridge. With development of the Retail Center there will be approximately 63.2 acres of soil disturbed. The majority of soil disturbance will occur on Paxton soils (84.4% or 60.1 acres). When complete, approximately 31 acres of the 90.5 acres project site will be impervious surface, and roughly 33 acres will be re-vegetated with grass and landscaping, (the remaining 27 acres will remain undisturbed), meaning nearly 60 acres or two-thirds of the site will be vegetated.

As noted previously, the raising of the building pads has balanced the earthwork on the site to the greatest extent practicable to reduce the potential environmental impacts associated

with grading and rock removal, to reduce construction costs, and to facilitate use of excavated materials within the project thereby avoiding or minimizing the need to export material from the property. As with all land development projects, the cut materials that are determined to be physically (geotechnically) unsuitable for use during development of the project site will be removed. The cut and fill required for the modified development plan shows that the site earthwork would result in approximately 590,000 cubic yards (cy) of cut and roughly 565,000 cy of fill resulting in approximately 25,000 cy of net export.

A variety of soil tests have been conducted for the project. These include the initial borings completed in early 2004 to determine general soil types and depth of rock throughout the cut portions of site. A second series of borings were conducted in late 2004 and 2005 to evaluate the northern and southern SSTS areas and specifically to support the mounding analysis performed for the southern SSTS. In addition, percolation tests and deep hole tests were conducted in both the north and south SSTS areas which were witnessed by PCDOH and NYCDEP. This information is included in the appendix to the Wastewater Report. Deep hole tests were also performed in, or adjacent to, the proposed stormwater basin areas to assess the soils conditions in these areas. These too were witnessed by NYCDEP. Refer to FEIS Figure 4.5-7, Stormwater Testing Plan for test pit locations, and to the SWPPP for a summary of the testing conducted. In addition, soil conditions in the vicinity of Basin 3.4 were confirmed through investigation of the exposed soil strata in the Concord Road eight-foot deep drainage ditch.

b. Grading and Soil Mitigation Proposed

The USDA identifies each of the affected soils as possessing potential limitations for development of roads, buildings and excavations due to their characteristics. Such limitations require planning and engineering considerations prior to development. The presence of these constraints does not mean the land cannot be developed, rather that engineering methods to compensate for soil limitations, such as erosion controls, footing drains or other drainage improvements will be required. These soils are found throughout Putnam County and have successfully sustained development through the use of appropriate design and engineering practices. Soil limitations exist generally in most areas throughout Putnam County and engineering principals are used to develop designs and practices that offset the limitations. These limitations include building on rock, sand, wet soils, steep slopes, etc.

During construction, soils may be subject to increased erosion and sedimentation when the existing surface cover is disturbed during grading operations. In response to specific comments from NYCDEP, the Watershed Inspector General, and other organizations concerning construction sequencing, erosion and sediment control, and related water quality impacts, the development plans for the project were modified to reduce its overall scope, area of impervious surface, area of construction on steep slopes, and the overall area to be graded. The plans were also revised to enhance the effectiveness of erosion control methods to be applied during construction and to improve water quality during and after construction.

An Erosion and Sediment Control Plan, which is an integral component of the SWPPP, has

been developed for the project to prevent erosion of soils exposed during construction. The proposed soil erosion control features would be installed in accordance with the New York State Technical Standards for controlling erosion and sediment (New York Standards and Specifications for Erosion and Sediment Control) specified in the NYS DEC SPDES General Permits for Stormwater Discharges from Construction Activities (GP-02-01, GP-0-08-001 and GP-93-06), and their appendices, and the Towns of Kent and Patterson Municipal Code. As the construction and development plans are refined during the site plan review phase conducted by the Planning Board and other agencies, the Erosion and Sediment Control Plan will also be refined and further developed. Special consideration has been and will continue to be given to construction protocol and erosion control for the small area of the property that drains to Lake Carmel.

The Applicant notes that SPDES General Permit for Stormwater Discharges from Construction Activity Permit GP-0-08-001 (Draft GP-0-08-001), as of May 1, 2008 has replaced NYSDEC GP-02-01 requires preparation of a SWPPP for the Patterson Crossing Retail Center project since it would disturb more than five thousand square feet of soil. The Applicant notes that while the Manual, which includes a design supplement for phosphorous, is in draft form and GP-0-08-001 has yet to be adopted, the Patterson Crossing Retail Center SWPPP can satisfy the Enhanced Phosphorous Removal Criteria to further minimize any potential impacts associated with increased phosphorous loading.

As detailed in the project-specific SWPPP, construction of the project will be carefully phased, and sequenced, to further control erosion and sedimentation. As specified, the phasing plan will limit the area of exposed soil on the site to a maximum of five acres at any time. Detailed construction sequencing plans have been developed that significantly reduces the potential for erosion from the project sites during construction.

As required by the NYSDEC SPDES General Permit GP-02-01, inspections will be conducted by an independent qualified Professional retained by the Applicant to ensure that all erosion and sediment control practices are properly maintained and in good working order. These measures also would be monitored during construction by the NYCDEP, and by representatives of the Town(s) paid for by inspection fees funded by the Applicant pursuant to the Town Code. Also, as required by the Town Code, the Applicant will provide to the Towns of Patterson and Kent the required performance and maintenance bond for erosion and sediment control measures and completion of site restoration.

Prior to construction, the proposed erosion and sediment control features would be installed according to the Erosion and Sediment Control Plan. As required, these features would be closely monitored, and maintained in effective condition, and left in place until permanent vegetative cover is established. All disturbances of steep slopes would be appropriately stabilized to minimize their erosion potential and ensure their long-term stability.

Because of the site's close proximity to the Middle Branch Croton River and Lake Carmel, in addition to the enhanced measures noted above, the Patterson Crossing Retail Center Erosion and Sediment Control Plan includes the following measures, beyond those set forth in the Standards and Specifications, to further ensure the plan's effectiveness in protecting

water quality in Lake Carmel during construction in the Middle Branch Reservoir/Lake Carmel Watershed:

- A representative from INSITE Engineering, or a licensed geo-technical engineer, will inspect the stabilization of slopes in excess of 15 percent. In addition, no more than 2.5 acres of slopes in excess of 15 percent will be disturbed at any time;
- Disturbed slopes greater than 15 percent in the Middle Branch/Lake Carmel Watershed in the Town of Kent will be protected with erosion control matting or hydroseeded;
- Although GP-02-01 requires that the erosion and sediment controls be inspected only once every seven calendar days, and following rainfall events of one half inch and greater, a representative from INSITE Engineering and/or a geo-technical engineer will inspect the erosion and sediment controls twice a week;
- A representative of the Applicant responsible for overseeing implementation of the Erosion and Sediment Control Plan shall be available twenty-four hours a day, seven days a week;
- The representative of the Applicant responsible for overseeing implementation of the Erosion and Sediment Control Plan shall submit weekly reports to the Towns of Kent or Patterson during weeks when work is performed in their respective Towns;
- The site contractor will maintain a stock of contingency erosion control materials, including crushed stone, rip rap, silt fence, dewatering pumps and piping, hay bales, and seed, on the site. These materials will be stored for immediate use to address unanticipated conditions.

#### **4.3 Topography**

##### **a. Potential Impacts**

The EIS evaluated the potential impacts that the proposed action would have on the topography or slopes located on the project site. Potential impacts include erosion of slopes during construction, and long-term stability of the slopes after construction has been completed. Approximately 80% of the 63.2 acres of the site that will be affected during construction will occur on slopes less than 15% in grade. Site disturbance on slopes greater than 25% is limited to less than 4% of the overall area that will be disturbed.

##### **b. Mitigation Proposed**

Exposing soils on steep slopes during construction increases the potential for erosion and instability in the short term. These potential impacts will be mitigated by adherence to the soil erosion and sediment control plan and construction-phasing plan. Following construction, soil erosion from the property is expected to be minimal since developed areas will be stabilized with vegetation, pavement, and buildings.

Where a reduction in grade is required, most of the slopes are constructed to a 2H:1V (horizontal to vertical) in order to minimize the volume and area of soil disturbance. It is anticipated that proposed slope cuts and slopes of 2H:1V (horizontal to vertical) will be

stable if they are well drained, If ground water is encountered during slope cutting, the slopes will need to be stabilized by one of four methods including slope drainage, slope armoring, slope flattening or retaining walls.

#### **4.4 Groundwater**

##### **a. Potential Impacts**

The proposed project will result in the installation of three individual groundwater wells to provide potable water and two individual subsurface sewage treatment systems (SSTSs) to meet wastewater needs. Impacts and mitigation relevant to the SSTSs are discussed in Section 4.10 Utilities herein. The adjoining residential community of Lake Carmel, located on the western edge of the Patterson Crossing Retail Center site, also utilizes individual wells and SSTSs.

The project will be comprised of dry retail with the exception of the wholesale warehouse store, coffee shop, and sandwich shop. Water use and wastewater discharge the dry retail users will be primarily associated with restroom usage. The use of water-saving plumbing fixtures, as required by the building code, would limit water usage at the site. The irrigation water will be supplied by a separate system that will collect and store roof runoff for that purpose.

The New York State Department of Conservation (NYSDEC) publication "Design Standards for Wastewater Treatment Works, 1988" provides two alternatives for establishing design flows: hydraulic loading rates tables or water usage data. In either case a daily design flow rate must be calculated. The daily design flow rate is a conservatively high estimate of daily flow used by the engineer in the design of the water and sewer infrastructure.

In order to establish design flows, the EIS notes that it is acceptable to use actual flows multiplied by a factor of safety of 1.5, or design flows based on published hydraulic loading rates. The design flows for the subject project have been calculated based upon actual water usage data from retail stores similar to the proposed Patterson Crossing Retail Center uses.

The project has an estimated water demand of approximately 15,000 gallons per day (gpd) or 10.4 gallons per minute (gpm). Project wastewater flows will be limited to the 11,400 gpd or 7.9 gpm design flow (11,000 gpd southern SSTS and 400 gpd northern SSTS), recognizing the fact that the Kent portion of the project site could be increased from 400 gpd to 2,000 to 3,000 gpd..

The design flows for the subject project have been calculated based upon actual water usage data from retail stores similar to the proposed Patterson Crossing Retail Center uses multiplied by a factor of safety of 1.5 per the New York State Department of Conservation (NYSDEC) publication "Design Standards for Wastewater Treatment Works, 1988". The Applicant's Engineer obtained actual water usage data from retailers in the region including BJ's, Sam's Club, Lowes, Home Depot, Village Paint, Radio Shack, Rockaway Bedding, Pier 1 Imports, CVS, Rite Aid, Payhalf, Michael's, AC Moore, Linens N Things, Bed Bath &

Beyond, Toys R Us, Best Buy, Dick's Sporting Goods, Kohls and Gander Mountain as a basis for determining the actual water demand of the potential retail establishments at Patterson Crossing Retail Center.

Future retail users must have wastewater flows that fit into the flow projections for the project. In order to assure the project wastewater design flow is not exceeded the applicant would agree to appropriate controls to assure each user's wastewater flows fit the project's design flows. One such control would require each specific user present the Town Building Department with a wastewater design flow at the time they apply for their building permit, or with any change in occupancy. This be required as part of the water and sewer permitting with the PCDOH, NYCDEP and NYSDEC. This metering/monitoring will provide an assurance that the actual project flows do not exceed the system design capacity. Individual water meters could also be installed for each store to monitor usage. It should be noted that actual water and wastewater flow metering/monitoring will be required as part of the water and sewer permitting with the PCDOH, NYCDEP and NYSDEC. This metering/monitoring will provide an assurance that the actual project flows do not exceed the system design capacity.

The wastewater design flow (11,400 gpd) differs from the water design flow (15,000 gpd) due to water loss related to irrigation at the Home Improvement Center garden center. The difference also reflects a small amount of water (100 gpd) taken off-site from the Coffee Shop through coffee and soft drink sales.

Water supply for the development would be provided by, three bedrock wells to be installed on the Patterson Crossing Retail Center site. Two of these wells have been drilled to a depth of 805 feet and 705 feet, with a static water level at 50 feet and 61 feet, respectively. The nearby residential wells are drilled to depths ranging from 150 to 500 feet. The Patterson Crossing Retail Center wells were drilled a minimum of 600 feet from any private residential well. The third well will be installed on the Kent portion of the project site to supply the estimated 400 gpd (0.28 gpm) required for the 2,000 square foot building to be built in Kent or more if necessitated by an increase in the building size; it will also comply with all state and local requirements.

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 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. To analyze possible impacts from water usage by the retail center, a fracture transe analysis, a drawdown test and recharge analysis were conducted for the Environmental Impact Statement.

A protocol for the well pump test was prepared by Tim Miller Associates, Inc. and reviewed by the Putnam County Health Department and the Patterson Planning Board. The purpose of the pump test was to determine if sufficient groundwater was available to support the project, and to determine if future operations of the project wells would have any adverse

impact on existing private wells near the site. A total of eight off-site wells were monitored on adjacent properties, and the on-site wells were pumped at a rate of 22 gallons per minute each for the duration of the 72-hour pump test. This was more than four times the anticipated usage for the project. The results of the test demonstrated that there exists an adequate on-site water supply for the project. In addition, The 72 hour pump test did not show any influence or drawdown in the eight private wells that were monitored on adjacent properties, as agreed upon by the Putnam County Health Department, during the test.

Near the end of the pump test water samples were collected for analysis to ensure that the quality of water found in the wells met the New York State Drinking Water Standards. The tests showed no exceedance of a water quality parameter.

A recharge analysis provides a general estimate of the amount of water that is contributed to a groundwater system by a defined area over a given period of time. The recharge analysis found that the amount of recharge that would occur after construction is approximately 18.95 gpm. This recharge estimate is based upon the following assumptions: 1) only unpaved areas are available for recharge (no contribution from stormwater basins or septic system which will provide significant recharge), 2) a conservative estimate of rainwater lost to evapotranspiration and run-off (80 percent), and 3) a further reduction of 6 percent for drought conditions. This 18.95 gpm estimate exceeds the project water demand of 10.4 gpm. The 18.95 gpm estimate, does not account for the volume of water from parking lots and rooftops that is directed to stormwater basins, a portion of which will recharge the groundwater or the volume of wastewater recharge through the septic areas. In addition, the volume of recharge was limited to the 90.5 acres of the project site, and did not include the likely recharge contributed from off-site sources.

The Patterson Fire Department requested a 60,000-gallon underground water storage tank be provided to accommodate fire protection services. The Patterson Crossing Retail Center plan proposes on-site water storage totaling 270,000 gallons, which is more than four times the amount requested. The water storage tank(s) will cover fire protection water requirements for the entire project site. The 270,000-gallon storage tank(s) for fire protection will be separate from the potable water supply.

b. Groundwater Mitigation Proposed

The public expressed concern about the quality of groundwater and the impact on supply of water to area wells, particularly from the southern septic area on existing wells in the Town of Kent. While no adverse impacts to groundwater resources were identified during the investigations conducted, several mitigation measures are proposed. Undeveloped and landscaped portions of the site will remain undeveloped and will allow continued recharge of the aquifer. The nearly 60 acres of land to remain vegetated provides a more than adequate recharge area.

A well testing protocol was prepared by Tim Miller Associates, Inc. and reviewed by the PCDOH as well as the Town of Patterson. The purpose of the pumping test was to determine if sufficient groundwater was available to support the project and to determine if future



operation of the project wells would have any adverse impact on existing private wells near the site. A full 72-hour pump test of the proposed wells was carried out in accordance with PCDOH standards.

During the pump test no influence or drawdown attributable to the on-site pumping was observed in any of the private off-site monitored wells. Even so, the Project Sponsor has agreed to implement a long-term off-site well monitoring program, reviewed and approved by the Patterson Planning Board, in consultation with any professional consultants retained by the Planning Board, and with the Putnam County Department of Health. The monitoring program would monitor up to five wells for a period of up to two years following the completion and full occupancy of the retail center. The Project Sponsor would be responsible for the repair or replacement of any neighboring well that might be damaged by the use and pumping of the Patterson Crossing Retail Center wells. A summary of the Applicant's process for evaluating and resolving damage claims to a off-site well was provided in the EIS. Well monitoring data and further discussion of the pump test results is provided in the Patterson Crossing Retail Center Water Supply Report.

Future retail users must have wastewater flows that fit into the flow projections for the project. In order to assure the project wastewater design flow is not exceeded the applicant would agree to appropriate controls to assure each user's wastewater flows fit the project's design flows. One such control would require each specific user present the Town Building Department with a wastewater design flow at the time they apply for their building permit, or with any change in occupancy. This will allow for the monitoring of design flow to assure that all user's wastewater generation falls within the system design capacity. It should be noted that actual water and wastewater flow metering/monitoring will be required as part of the water and sewer permitting with the PCDOH, NYCDEP and NYSDEC. This metering/monitoring will provide an assurance that the actual project flows do not exceed the system design capacity.

The Applicant is committed to providing fire protection through incorporation of an on-site water storage system capable of protecting the critical building, or building with highest fire protection needs, in the complex. Presently the critical building in the complex is the home improvement center. The 270,000-gallon tank system noted in the EIS is based on a conservative estimate provided by a home improvement center company. If this type of tenant does not lease space in the retail center or the final stored water volume is other than that presented based on the actual configuration of the proposed development, the storage tank system volume will be adjusted to provide fire protection for the modified critical building.

With regard to the fire flow demand and storage, the water to be stored in on-site underground tanks would be drawn over a period of time, at equal to or less than the anticipated rates that were used for pump testing purposes as noted in the DEIS. This supply would be solely for fire protection purposes and would be held until required for a fire emergency. Should this water be used to fight a fire, water will be drawn from the two on-site production wells at the appropriate rate in order to refill the tanks so as not to impact neighboring wells, or refilled through water supply trucks delivering water from off-site.

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## **4.5 Surface Waters**

### **a. Potential Impacts**

The EIS identified that surface waters could experience impacts from changes in site hydrology that would increase the rate of stormwater runoff, or from changes to the quality of runoff caused by increased nutrients and sediment. The NYCDEP, Water Inspector General of the Attorney General's Office, Croton Watershed Clean Water Coalition, the Kent and Patterson Planning Boards and others have expressed concern about the potential impacts on surface water quality that could result from the proposed development.

The development of the modified project would require construction of approximately 31.0 acres (roughly one third of the property) of new impervious area (building roofs, parking areas, etc.) on the site. Without mitigation the peak rates of runoff from the developed areas would increase and the response time (time of concentration) would decrease. The project site is located on the divide between two drainage areas (Middle Branch System and East Branch System) within the watershed of the Croton Reservoir System. Although construction of the project would require the regrading across this basin divide in the central portions of the site, existing drainage patterns would generally be maintained. There would not be any significant diversion of runoff from one drainage area to the other.

The NYCDEP regulates certain activities within this watershed for purposes of protecting the drinking water resources within their control. Both the Middle Branch and East Branch Reservoir basins are designated in New York City's Watershed Regulations (WR&R) as phosphorous restricted, and according to the New York State Department of Environmental Conservation (NYSDEC), are both currently exceeding the Total Maximum Daily Loads (TMDL) that NYSDEC assigned to them.

For many years, Lake Carmel has suffered from heavy pollutant loading from sediment, and pollutants adsorbed to it, carried in stormwater runoff conveyed from surrounding roadways and dense residential developments constructed on one-eighth to one-quarter acre lots. Stormwater from the Interstate 84 ramps, NYS Route 311, Concord Road and the Town of Kent Highways Facility, located on the opposite side of NYS Route 311 from the project site, are all chronic sources of pollutants and sediment to the Lake. The existing erosion in the Middle Branch Reservoir/Lake Carmel watershed has caused many tons of sediment to enter the Lake thereby degrading its water quality.

Several modifications and enhancements are now proposed for addressing concerns related to stormwater management. As part of the Proposed Action, beneficial stormwater treatment is proposed to reduce existing pollutant loads that contribute to water quality degradation of Lake Carmel and the East and Middle Branch Reservoirs. In response to the request from the Watershed Inspector General from the NYS Attorney General's Office and the Riverkeeper, the Applicant's engineer has performed additional phosphorous loading calculations employing the site specific Simple Method.

The proposed project now includes on-site and off-site stormwater treatment practices that

reduce existing phosphorus loading to each of the two reservoir basins including Lake Carmel. The on-site stormwater will be treated by a series of wet ponds that will mitigate potential impacts on surface waters associated with post construction increases in phosphorous loading from the project site. To further reduce phosphorus loading to both of the reservoir basins, off-site wet ponds will be constructed to treat runoff from off-site drainage areas. The off-site improvements, which exceed any statutory requirements, include practices to treat currently untreated stormwater from the dense residential development to the west of the project site on Concord Road, a portion of NYS Route 311 and the exit ramps from Interstate 84, as well as the Putnam County Highway Facility (PCHF). 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.

b. Mitigation Proposed

Throughout the site planning and SEQRA processes, the Applicant has paid particular attention to mitigating potential adverse impacts to surface water resources, including those to water quality, since the project is located in New York City's public drinking water supply watershed. To that end, the Applicant initiated several meetings with the Watershed Inspector General and the Riverkeeper, as well as a meeting with the NYCDEP and discussions with NYSDEC to fully understand their concerns and determine what modifications could be made to the project to address them.

The Proposed Action reduces impervious surfaces and refines the stormwater management system to reduce projected pollutant loading from the development. Under the modified project, potential impacts to surface water are addressed through implementation of the on-site and off-site treatment practices set forth in the SWPPP. Included in the SWPPP are a Erosion and Sediment Control Plan and a Stormwater Management Plan that address stormwater runoff quantity and quality concerns. Combined, these measures will prevent erosion and sedimentation and will achieve a significant reduction in current phosphorous loads entering the reservoirs and Lake Carmel.

The Operation and Maintenance Plan included in the Patterson Crossing Retail Center SWPPP specifies a schedule for the long-term inspection and maintenance of all stormwater management facilities. Implementing the maintenance procedures specified in the plan would be the responsibility of a management and maintenance company and will be paid for by the property owner(s) through the rental revenues collected by the management company. Overall responsibility for maintaining the stormwater management facilities will, in accordance with New York State Department of Environmental Conservation's August 2003 Stormwater Management Design Manual, be vested with a responsible authority by means of a legally binding and enforceable maintenance agreement that is executed as a condition of plan approval. As such, the effectiveness of the stormwater facilities will be maintained long term.

Deep hole tests were performed in, or adjacent to, the proposed stormwater basin areas to assess the soils conditions in these areas. These tests were witnessed by NYCDEP. All

relevant soil information is included in an appendix to the project SWPPP. In addition, soil conditions in the vicinity of Basin 3.4 were confirmed through investigation of the exposed soil strata in the approximately eight foot deep Concord Road drainage ditch.

c. Erosion control

To address erosion and sediment control during construction, the proposed project includes the construction of a series of temporary surface water diversions and temporary sediment basins to control water runoff. In addition, the revised Patterson Crossing Retail Center SWPPP includes a description of the measures proposed to control erosion and prevent sedimentation to the water resources on the project site during construction. As shown on the construction plans, positive drainage will be established and maintained by the proposed grading of the site.

Implementing the proposed sequence of the construction and phasing plan included in the Erosion and Sediment Control Plan will further reduce the potential for erosion. The proposed sequencing plan divides construction into twenty-four separate phases and will limit the area of disturbed soil at any time, thereby reducing potential impacts associated with erosion, and subsequent sedimentation of on- and off-site water resources. Soil disturbance will be limited to a maximum of five acres at any given time. Any disturbed areas will be stabilized in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, April 2005.

Refer to Section 4.2 Soils herein for additional information on the erosion and sediment control plan and the measures, beyond those set forth in the Standards and Specifications, that will be implemented as part of the development to further ensure the plan's effectiveness in protecting water quality in Lake Carmel during construction in the Middle Branch Reservoir/Lake Carmel Watershed.

d. Stormwater Quantity

In response to concerns raised by several groups, individuals, the NYCDEP and the Watershed Inspector General from the Attorney General's Office, the Applicant modified the project thereby reducing the area of impervious surface required to develop the retail center. This reduction in impervious surface results directly in the reduction of surface water runoff volume that requires treatment.

Potential adverse effects due to the increase in the peak rate of stormwater runoff that would result from the proposed development have been addressed by the proposed multiple stormwater management facilities. These were selected, designed, and would be constructed in accordance with the NYSDEC and NYCDEP design guidelines and regulations. Accepted stormwater management techniques address the discharge rate of runoff, as the rate is the determining factor in flooding, erosion and stream channel degradation. By reducing the post-development discharge rates to below pre-developed levels, potential impacts on down-gradient water resources from the effects of streambed and bank erosion have been

addressed.

The Project Sponsor has also agreed to address an existing, unrelated runoff problem which is resulting in a severely eroded channel which discharges to the Middle Branch River, pending receipt of all required regulatory approvals. The eroding channel originates at the end of a pipe that conveys untreated stormwater from Concord Road and other connected roads onto the project site. The channel does not appear to be natural and because of the unmanaged discharge, would not be considered undisturbed. Following construction of the project, stormwater will be detained in a micropool extended detention pond prior to being discharged to the NYCDEP flagged watercourse. Detaining the stormwater in the pond will treat the runoff and reduce peak rates of discharge to below existing rates, thereby reducing the potential for additional erosion of the bed or banks of watercourse NYC-A and related sediment discharging into Lake Carmel.

e. Stormwater Quality

The Applicant has prepared a preliminary stormwater pollution prevention plan (SWPPP) that addresses stormwater management concerns. Stormwater generated by the developed areas of the site will be treated by a series of wet ponds. The system has been designed in a “treatment train” providing pretreatment, primary treatment, secondary treatment, and in certain locations, tertiary treatment. These treatment trains will provide enhanced pollutant removal prior to stormwater being discharged from the site. The proposed planting plans for the stormwater treatment ponds will specify species of non-invasive native species as set forth in the New York State Stormwater Design Manual, 2003. Beyond these measures, to mitigate potential impacts associated with post construction increases in TSS, the proposed project includes the installation of a hydrodynamic separator in Fair Street that will reduce TSS in a portion of the stormwater runoff from the project site.

The revised project layout and stormwater management system have been specifically developed to reduce post-construction phosphorous loads from the site to below pre-development levels within each of the two drainage basins. To further reduce phosphorus loading to both of the reservoir basins, off-site wet ponds are now proposed to treat runoff from off-site drainage areas. The off-site improvements include practices to treat currently untreated stormwater from the residential development to the west of the project site on Concord Road, a portion of NYS Route 311 and the entry and exit ramps to and from Interstate 84, as well as the Putnam County Highway Facility (PCHF). These measures far exceed the requirements set forth in the New York State Standards and Specifications for Erosion and Sediment Control (Standards and Specifications), those required by NYSDEC General Permit for Stormwater Discharges GP-02-01, and those required by General Permit GP-93-06, which is incorporated into the Watershed Rule and Regulations (WR&R) by reference.

As further mitigation the Applicant would construct these “extra” stormwater improvements designed to attend to the existing stormwater problems. The Applicant notes that the proposed stormwater management facilities that will treat runoff from the PCHF, Concord Road, NYS Route 311, and the Interstate 84 ramps, exceed State and City regulatory

requirements, and that even without these measures, adverse impacts on surface water resulting directly from the Proposed Action will be avoided with the required on-site treatment practices specified in the SWPPP. The additional measures beyond those required by the regulations to repair the eroded channels (Concord Road and NYS Route 311/Interstate 84) and the Putnam County Highway Facility included in the Proposed Action will not be implemented if the project is not constructed; existing conditions will remain and sediments and adsorbed pollutants, including phosphorous, from these sources will continue to be deposited into Lake Carmel and the reservoirs.

This approach to treating on- and off-site stormwater will advance the goals of the TMDL program and assist the towns in meeting their TMDL obligations. The construction of the off-site stormwater treatment practices in the East Branch Reservoir Watershed (improvements to the Putnam County Highway Facility) is proposed as a cooperative effort between the County and the Applicant. Stormwater, currently untreated, from subcatchments on the Putnam County Highways Facility (PCHF) site along Fair Street in the Town of Patterson will be treated in two micropool extended detention ponds to provide additional pollutant removal and improve water quality in the receiving reservoir basin.

A pollutant loading analysis for the proposed development was completed in the DEIS using the pollutant loading coefficient method to meet the requirements of New York City's stormwater regulations. This pollutant loading analysis is included in the project specific SWPPP. The calculations show an overall reduction in phosphorus loads discharging from the site in the proposed condition for all of the design points. Though not normally done, in response to conversations at meetings held with the Watershed Inspector General, additional calculations of pre- and post-construction phosphorous loads were performed with the Simple Method. The Simple Method used in conjunction with the 1996 Terrene Institutes publication "A Watershed Approach to Urban Runoff" is a site-specific method for determining pollutant loading. These calculations, included in the SWPPP, demonstrate an overall reduction in annual post construction phosphorous loading in the New York City Watershed of 7.26 lbs.

It is noted that in reviewing the letters from the Croton Watershed Clean Water Coalition, Inc. dated July 7, 2008 and from Insite Engineering, Surveying & Landscape Architecture, P.C. dated July 15, 2008, the Lead Agency finds that the Applicant utilized recognized and accepted methodology, techniques, and related coefficients to determine that the proposed action will not negatively impact water quality.

The EIS discussed winter maintenance of the roads and driveways, and the use of de-icing compounds, particularly salt, which can have a negative impact on receiving water quality. The Project sponsor committed to limiting deicing materials on the site to traction sand, which has a low phosphorus concentration, applied in accordance with the "Recommendations for Winter Traction Materials Management on roadways Adjacent to Bodies of Water". Salt will not be used for winter road and parking lot maintenance with the exception of the access road should conditions require for patron safety. In addition, it is expected that some small amounts of salt will be used immediately around the buildings and on pedestrian walkways where it is most critical for safe pedestrian passage. To ensure

future compliance, a deed restriction or restrictive covenants, of any sale between the Applicant and any future owners/leasees of the project, will require any future owner or contractor engaged to conduct the deicing practices, to provide maintenance in accordance with the requirements and limitations contained in the EIS and Finding Statement for the Patterson Crossing Retail Center.

Funding for all of these improvements with the exception of the off-site improvements to the PCHF will be provided should the Applicant develop the project. The County is willing to utilize grant money it received to fund fifty percent of the cost of constructing off-site Pond PC-2 at the PCHF located in the East Branch Reservoir watershed. The Applicant notes his willingness to fund the remaining fifty percent of constructing Pond PC-2 and to fund one hundred percent of the cost of constructing Pond PC-1, which is also located off the project site. The County has expressed its willingness to permit the construction of all stormwater management facilities proposed on County owned lands.

The Applicant notes that stormwater basin 3.2 is currently proposed in the State owned NYS Route 311 Right of Way (ROW). Based upon communications with NYSDOT staff, the Applicant proposes to acquire from NYSDOT the land in the ROW on which the basin is located, and to construct and maintain the basin. Alternatively, the basin could be built in the configuration shown in the FEIS with the basin owned and maintained by NYSDOT, by eliminating the pipe that discharges stormwater from Pond 3.1 to Pond 3.2 in accordance with policy of not permitting substantial discharges of stormwater from private developments into State owned stormwater management facilities. As a consequence of the redesign, stormwater from Pond 3.1 would not receive secondary treatment in Pond 3.2. However, the proposed project, including the proposed off-site treatment practices, would still result in an overall reduction in phosphorous loading in the Middle Branch Reservoir/Lake Carmel Watershed and the East Branch Reservoir Basin. Accordingly, the Applicant may implement either alternative.

Only 28 acres of the 90.5-acre site currently drains to Lake Carmel. DEIS, Section 4.6 (Wetlands, Streams and Waterbodies) indicates that stormwater runoff from 19 percent of the proposed impervious surface shown on the site development plans included in the DEIS would have drained to Lake Carmel after treatment by the proposed stormwater management facilities. Subsequent to the acceptance of the DEIS, the site development plan was revised to reduce the area of impervious surface. As now proposed, stormwater from only 2.1 acres, or 6.8 percent of the total thirty-one acres of on-site impervious surface would discharge to the Lake Carmel/Middle Branch Reservoir watershed.

#### **4.6 Wetlands, Streams, and Waterbodies**

##### **a. Potential Impacts**

The project site contains one wetland that measures 0.52± acres in size. It is located adjacent to the Middle Branch of the Croton River, in the northwest corner of the project site. Under the Proposed Action, only treated stormwater discharges would be directed toward the on-site wetland and other downstream water resources via an existing channel. No physical

disturbance of the wetland would result from the development of the retail center. The stormwater quantity and quality features that are incorporated into the revised project SWPPP will prevent nutrient loading and other potential water quality impacts to the on-site wetland and other downstream water resources. Such is not the case at present. Untreated stormwater runoff from Concord Road and the connecting streets as well as that from the Interstate 84 entry and exit ramps and NYS Route 311 all drain into the Middle Branch Croton River at a point approximately four tenths of a mile before it enters into Lake Carmel.

Under the Town of Kent Code, wetlands are defined in 39A-4 as areas that "have a contiguous area of at least forty thousand (40,000) square feet..." The on-site wetland is less than 40,000 s.f. (approximately 22,000 square feet), and is therefore not regulated by the Town. This wetland also falls below the minimum size limit (12.4 acres) for wetland resources regulated by the NYSDEC. As such, there is no regulated buffer associated with this resource.

The Army Corps of Engineers (ACOE), which regulates all non-isolated wetlands of any size, has jurisdiction over the on-site wetland. However, a jurisdictional determination was not requested from the United States Army Corps of Engineers because the proposed project does not involve dredging or filling in any wetland, or in other waters of the United States, as defined in Section 404 of the Clean Water Act.

In correspondence from the ACOE, it is stated "If the Applicant can design the project to completely avoid waters of the United States, including wetlands, then written authorization from this office would not be necessary. In addition, if no written authorization would be necessary, no written confirmation of the limits of Corps jurisdiction would be necessary either."

Also located on the site is an ephemeral stream channel, which has been identified by the NYCDEP as a watercourse regulated by the City. This severely eroded drainage channel extends from Concord Road to NYS Route 311 and ultimately discharges into the Middle Branch of the Croton River and then into Lake Carmel. Field inspections of the channel confirm that it was formed entirely as a consequence of uncontrolled stormwater discharges from Concord Road. The channel conveys stormwater runoff from Concord Road and surrounding areas to the Middle Branch of the Croton River.

This channel continues to be a significant source of sediment, and the pollutants that adsorb to the sediment, including phosphorous, to Lake Carmel and the reservoir. This chronic erosion is evidenced by FEIS Figure 4.5-5, and can be seen in aerial photographs dating as far back as 1964. The Applicant notes that while the discharge of stormwater from Concord Road has generated many tons of sediment that have entered Lake Carmel, no steps have been taken to repair the eroded channel or to prevent the resulting sedimentation. Although not required to do so, the Applicant is willing to stabilize this channel to eliminate the continual source of pollution to Lake Carmel. As the Applicant remains sensitive to the environmental features of the site, the proposed stormwater basins originally sited within the drainage area have been relocated to points outside of any regulated area.



In the EIS the applicant acknowledges that a watercourse diversion permit would be required from the NYCDEP to convey stormwater runoff from the channel for treatment prior to discharging it back into the channel. Lacking any base flow or observed seasonal groundwater discharge, it is the Applicant's opinion that the drainage channel does not meet the definition of waters of the United States (as ephemeral or other watercourse), as defined in Section 404 of the Clean Water Act, so no permission from the Army Corps of Engineers is required for the proposed project.

The Applicant is sensitive to the need to maintain the water quality of Lake Carmel. The revised site development plan reduces the area of impervious surface. As such, stormwater from only 4.4 percent of the site, or 4.0 acres, would eventually reach the lake. Before this stormwater runoff leaves the project site, it will be intercepted and treated by the stormwater management systems that will be installed on site. This system will be reviewed and approved by all appropriate regulatory authorities.

**b. Mitigation Proposed**

As a result of the design and mitigation measures proposed for the Patterson Crossing Retail Center, impacts to Lake Carmel would not occur. Capture of existing runoff from the Concord Road area and diverting it through the stormwater treatment facilities proposed for the project will eliminate a source of sediment and nutrients to the Middle Branch of the Croton River and ultimately to Lake Carmel and could aid in improving water quality. Under the Proposed Action, the stormwater from Concord Road would be piped to a water quality/detention basin outside of the main channel of this feature. The outlet of this basin will then be discharged back to the existing watercourse channel (NYC-B). While most of the flow to the original channel will be diverted through this new arrangement, the existing channel will remain in place.

The slope, intense runoff characteristics, and unstable nature of the existing drainage feature create erosive velocities and cause sedimentation of down-gradient water resources. Diverting the initial flows from Concord Road to a properly designed and maintained stormwater basin, would reduce the velocity to a rate that would not further impact the receiving waters. Additionally, a reduction in existing pollutant levels, including phosphorus and sediments, from Concord Road would assist the Town in meeting its Total Maximum Daily Load requirements.

As no impacts or disturbance to the on-site wetland would result from the development of the retail center and there is no buffer associated with the federally regulated resource, no federally mandated mitigation is required.

**4.7 Vegetation and Wildlife**

**a. Potential Impacts**

The project site consists almost entirely of successional deciduous woodland with limited brushlands and one wetland. The woodlands provide wildlife habitat for a number of

common species, including deer, raccoon, opossum, chipmunk and gray squirrel among others. Bird species that selectively reside within smaller woodlands are also likely to be present, including wood thrush, owls, warblers and vireos. The woodlands on this site offer a number of cavities for cavity nesting birds and small mammals.

State and Federal agencies provided input from their databases of known records for all listed species and identified "...no known occurrence of rare or state-listed animals, plants, significant natural communities or other significant habitats, on or in the immediate vicinity" of the project site. No protected wildlife species were identified or observed on the project site during numerous field visits conducted in the spring and summer of 2005 and spring of 2006. To the west of the project site exists moderately high residential development. To the north, south and east are highway corridors. In the context of the overall landscape, the project site is somewhat isolated, and its value as a wildlife corridor is negligible.

The land subject to grading and development in the proposed project comprises 63.75 acres, mostly in the north and central portions of the site. Of this area, approximately 32.75 acres are proposed to be revegetated and would be available after development as wildlife habitat, albeit altered from its existing condition. The existing vegetative cover and habitat on the balance of the site (approximately 22 acres) would not be disturbed by the project. These areas would continue to provide habitat for many typical woodland species, although the habitat value would be lessened by the presence of the retail shopping center proximate to the remaining habitat.

The proposed construction of the site will alter and reduce wildlife habitat, and this reduction will result in the local loss or displacement of wildlife relying upon that habitat. Wildlife currently using habitat on the project site would relocate to areas with similar habitat off-site. Most wildlife movement from this site would be expected toward the north, south and east (beyond Interstate 84) of the property. These areas offer similar habitat and are less densely developed than the areas to the west. There have been no recorded reports that nearby habitats are saturated to their carrying capacities from local, State or Federal agencies that would monitor these conditions, and areas of the site will remain available for local relocation of some individuals.

Many of the interior woodland bird species found on the project site are migratory. Therefore, they have always left the project site during certain times of the year. Most migratory species would adaptively seek other nearby or regionally available environments in response to alterations to on-site habitat. Most of these species would be expected to find alternative habitat in the existing undisturbed woodland areas located in close proximity to the site. The possible displacement of locally common species is not expected to have a regional impact on the population of these species.

It should be noted that just northeast of the project site is the roughly 800 acre Wonder Lake State Park (Passive) and other large properties that provide higher quality, more contiguous habitat for wildlife.

After the project development is completed, the composition of the wildlife population on

the project site would adjust to final site conditions. Species better able to adapt to open and landscaped environments (such as raccoons, opossum, woodchucks, mice and certain songbirds) would have a greater ability to populate the site in comparison to species that are less tolerant of human activity.

**b. Mitigation Proposed**

The proposed site plan minimizes the amount of vegetation to be removed while allowing for the scheduled program of temporary and permanent uses and the need for associated parking and infrastructure. The phased construction of the project is likely to result in the phased movement of wildlife from disturbed areas on the site to undisturbed areas on and off site.

All areas that are not proposed to be impervious surfaces would be re-vegetated, including the large area on the southern portion of the site where the septic system would be located. Upon completion of the proposed development, approximately 59 acres of the site would be vegetated, combining existing vegetative communities and landscaped areas.

The developed areas of the project site would be landscaped, where possible, to maximize the available wildlife habitat and would employ native, non-invasive vegetation in many areas including the open meadow on the south side of the site, the cut banks, detention and water quality basins and planted buffer areas. Many species of trees and shrubs chosen for the proposed landscaping would provide forage and nesting sites for birds, and or denning sites for small mammals, while the preserved habitat areas and re-vegetated open space areas would still be used by deer and other wildlife. The septic area in the southern part of the site would be re-vegetated as open meadow, and would provide a contrast to the surrounding tree line providing new habitat opportunities for bird, reptile and small mammal species. In addition, certain invasive species such as multiflora rose, barberry, tree-of heaven and Phragmites will be eliminated where encountered on the project site. The replacement of these invasive species would be beneficial to most wildlife species that repopulate the site.

**4.8 Traffic and Transportation**

**a. Potential Impacts**

Frontage to the subject site is located on NYS Route 311 in the Towns of Kent and Patterson. NYS Route 311 is classified as an arterial two-lane road that runs from NYS Route 22 to the east, to NYS Route 52 to the west. The generally east-west heading Interstate 84 runs in a north-south direction along the eastern border of the site, and provides access to NYS Route 311. Fair Street (County Road CR-60) runs along the southerly border of the site however, topography is such that access from Fair Street is not possible.

The EIS evaluated the operation of nearby intersections to ascertain the potential impacts and to identify the mitigation measures required to offset the significant impacts resulting from the proposed development. Intersection analyses (rather than roadway segment analyses) were performed because the capacities of the intersections that feed the

interconnecting roadway segments are the limiting factor on the ability of the subject roadway system to efficiently support the movement of people and goods.

The intersection analyses were performed for future conditions both with (Build) and without (No-Build) the Project. Both future conditions factored in increased traffic volumes associated with background growth and other proposed developments. The No-Build condition is used as a baseline for comparisons with future conditions resulting from the proposed development.

The EIS analyzed the changes to traffic conditions that may occur due to construction of the proposed project. Traffic counts were taken during the spring and summer of 2004 to determine the existing level of traffic and the p.m. peak hour of traffic. Additional traffic counts for select intersections were taken in the spring of 2005. Under current conditions, the number of vehicle trips which pass by the proposed project entrance on NYS Route 311 during the p.m. peak hour is 995 vehicle trips, and the number of vehicle trips for existing conditions at the project entrance and NYS Route 311 during the Saturday peak hour is 674. The DEIS traffic analysis for the future conditions without the project found 1,253 vehicle trips passing the site during the p.m. peak hour, and 837 vehicle trips passing the site during the Saturday peak hour.

The modified project would generate less traffic than the proposal evaluated in the DEIS. Between the presentation of the DEIS and the FEIS, some other real estate developments in the project area were no longer projected to be built or have been modified as identified in the EIS, resulting in a decrease in trip generation of 1,036 p.m. peak hour trips and 625 Saturday peak hour trips. In future conditions without the project, trips passing the site were reduced to 1,157 in the p.m. peak hour and 792 in the Saturday a.m. peak hour. The revised traffic analysis presented in the FEIS showed that trip generation projected by the current proposed action would be 82 fewer trips in the p.m. peak hour, and 110 fewer trips in the Saturday a.m. peak hour than the proposal presented in the DEIS. Excluding trips already passing the site, the site is anticipated to generate non-passby trips: 1,272 p.m. peak hour trips, 1,736 Saturday peak hour trips, and 1,998 Saturday holiday peak hour trips.

With the project completed, NYS Route 311 north of the site would carry 1698 vehicles in the p.m. peak hour and 1948 vehicles in the Saturday a.m. peak hour during holiday season. The number of vehicle trips at the project entrance during the p.m. peak hour would be increased to 2,541 vehicle trips, and the Saturday holiday season peak hour vehicle trips would be increased to 2,966 trips. This is not directly comparable with the No-Build non-holiday seasonal traffic. This presents a significant increase in traffic to the road network surrounding the proposed project, which is addressed in the proposed improvements described in the mitigation discussion below.

The Traffic Analysis evaluated six intersections in the Town of Patterson, and six intersections in the Town of Kent. The proposed access road intersection with NYS Route 311 was studied as part of the 2010 future network traffic with the site traffic for the projected Build-Condition. Eight intersections within the site were also studied as part of the Build Condition in the DEIS. Three additional studies were provided in the FEIS: A warrant

analysis for a signal on NYS Route 311 and Terry Hill Road under existing conditions and at NYS Route 311 and the proposed site access under build conditions; and a combined sensitivity and signal coordination analysis for NYS Route 311 from the proposed 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.

Changes in traffic volumes will occur under various conditions on NYS Route 52 and NYS Route 311 during the weekday p.m. and Saturday peak hour periods at all intersections studied. Based on the results of the analysis performed as part of the environmental review, existing and future traffic conditions necessitate road improvements regardless of whether the Proposed Action is developed. There would be decreases in level of service on intersections along NYS Route 52 and NYS Route 311 and the delays entering these roads would increase, with or without the anticipated development of the project site. Although the analysis showed that when Patterson Crossing Retail Center is complete there will be additional decreases in the level of service at key intersections, the analysis also showed that most of the traffic is expected to travel to and from the interstate. Projected increases in volume beyond Interstate 84 to the east in Patterson, and to the west in Kent, are relatively modest during peak hours.

During construction the site will generate traffic associated with construction activities. It is expected that heavy construction truck traffic typically would not travel local roads to reach the site, thereby limiting impacts on the Town roads, but would use NYS Route 311 from Interstate 84. The trucks typically arrive and depart prior to standard peak hours of traffic, thereby having no significant impact on the traffic at these times.

In addition to performing intersection capacity analyses to evaluate the operational impacts of the proposed development, the EIS evaluated the performance of the surrounding roadways with respect to traffic safety (both intersections and intervening roadway segments) and identified safety improvements. Stantec, a consulting engineering firm serving on behalf of the Town of Patterson, as well as the NYSDOT, PCDH&F, and engineering firms all reviewed the traffic analyses done by the Applicant.

The proposed access road location from the state highway through the subject parcel in the Town of Kent is the only access that functionally works for the development of the subject site, whether it is developed for retail or an industrial use. Other alternatives were analyzed and found unacceptable.

Full access to the west would be to Concord Road to another local road such as Brentwood, Greenridge, 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 bring traffic to residential streets in the vicinity. The western part of the north access to NYS Route 311 is blocked by a wetland and the NYSDEP regulated watercourse.

While the project fronts on the Interstate 84 eastbound-on ramp, the steep grade precludes access there. In order to build a new ramp and introduce a new access road, major rock and earth cuts in excess of 40 feet would be required to accommodate both roadways while

maintaining a ramp grade acceptable to the FHWA. Further, the ramp right of way was acquired by the NYSDOT “without access,” meaning the connection to the ramp is not permitted.

Since the current access road plan, which has a separate driveway connection to NYS Route 311 in excess of 800 feet from the interstate interchange, has been found feasible and has been conceptually approved by the NYSDOT, there is little likelihood of an approval for the somewhat unusual ramp/access road configuration that would be required to gain access to the site from this area. In addition, the Applicant does not own the land over which the access road would need to be sited. Finally, site and ramp left hand turn storage capacity would be restricted by the physical constraints of the area and the Interstate, thereby limiting the ability of the intersection to accommodate future traffic increases and concentrating even more traffic at the intersection.

Access from Fair Street into the project site was investigated and rejected. 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, which generally should be around eight percent for safety reasons. Steep slopes in this area also prohibit the siting of the stormwater features on the project site required to treat the runoff from an access drive. 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, presents a significant impediment to constructing a road in this area. This right of way separates the proposed development from Fair Street.

b. Mitigation Proposed

Improvements to intersections, discussed in the FEIS and summarized below will improve the level of service to acceptable levels for all of the intersections that were shown to experience a significant decrease in the level of service. Further, 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 reduction in the total square footage aids in reducing traffic to and from the site.

The traffic analysis performed by the Proposed Action, which evaluated the pre-development and post-development condition for road intersections in the area of the proposed retail center, identified that the anticipated increase in traffic resulting from development of the project will reduce the level of service at several intersections. The traffic analysis found that the level of service at one or more of these intersections would drop even if the retail center were not to be built, and as such the agency responsible for maintaining these roads have identified improvements that will be completed, irrespective of development of the retail center. The FEIS has identified several improvements that will be completed by the Project Sponsor to mitigate the increase in traffic resulting from the retail center including:

- NYS Route 311 at the Project entrance would be improved with right and left turn lanes and a new traffic signal;
- At the Fair Street/NYS Route 311 intersection the curb radii will be widened;
- At the NYS Route 311/Interstate 84 Westbound ramp a left turn lane, off-ramp turn lane, signalization and queue detection will be added; and
- At the NYS Route 311/Interstate 84 Eastbound ramp a left turn lane, off-ramp turn lane, signalization and queue detection will be added.

Simplifying and widening the access road provides additional queuing for exiting vehicles. The modified plan eliminates loading areas facing residences and significantly shortens the emergency access.

A preliminary plan for completing the transportation improvements was discussed in the DEIS and based on subsequent meetings with the NYS DOT and PCDH&F a more detailed plan has evolved. As noted in the DEIS, the developer would construct improvements to NYS Route 311 at the site access road which would be widened and signalized. The EIS 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, except as noted below.

The level of service of Terry Hill Road was shown under the “build” conditions to deteriorate from a LOS of “C” to a LOS of “F”. To address this deterioration in the level of service the Applicant and Putnam County have agreed to work on additional improvements at the NYS Route 311 and Terry Hill Road intersection that 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. The Putnam County Executive has agreed that the County would implement the improvements to this intersection (Letter dated August 22, 2007). While it is acceptable that the County and the Project Sponsor partner to complete improvements necessary to mitigate impacts which result from the project, the ultimate obligation to complete mitigating road improvements, including those at the Terry Hill Road/Route 311 intersection continue to reside with the Project Sponsor.

As noted the Applicant will bond two potential traffic signals should they be warranted and permitted after the project is developed. To that end, the Applicant has agreed to place \$100,000 in escrow with the Towns of Patterson and Kent for each of the two signals (total \$200,000) and monitor the intersections of NYS Route 311 and NYS Route 164 in Patterson and NYS Route 52 and Barrett Hill Road in Kent annually for a period of three years after Patterson Crossing Retail Center is open. If the NYS DOT permits installation of a traffic signal at one or both of these intersections, those funds may be used for that improvement. If after three years, no signal is approved, the escrow would be returned to the Applicant.

With the installation of the road and intersection improvements proposed, all of the signalized intersections that were studied should operate at or better than level of service D,

the minimum level of service recommended by NYS DOT for signalized intersections. With the noted improvements, all studied unsignalized intersection are anticipated to perform at level of service D or better with the exception of Longfellow Drive /NYS Route 311 intersection, which should perform at level of service E. A reduction in the delay at this intersection is expected as traffic diverts to an adjoining intersection (intersection of Terry Hill Road and NYS Route 311) that is to be signalized.

The potential increase in traffic is mitigated in part, as the project is anticipated to capture trips passing by on Interstate 84 currently destined for other shopping opportunities. The project is also expected to capture commuter trips passing the site during the p.m. weekday commute and to capture Saturday trips of local residents that might otherwise have left the Town, County, and/or State for other shopping opportunities. This would reduce the number of longer distance trips currently taken by local residents.

#### **4.9 Noise**

##### **a. Potential Impacts**

No man-made noise is currently generated on the Patterson Crossing Retail Center property, since the site is undeveloped. Existing noise levels in the vicinity of the Patterson Crossing Retail Center site reflect surrounding land uses, which include residential, Interstate 84 and NYS Route 311. The highest levels of noise currently measured on the site are generated by the vehicular traffic on Interstate 84, which runs along the eastern border of the property. The primary noise “receptor” in the vicinity of the project is the existing residential neighborhood located along the western edge of the property.

A short-term increase in local daytime ambient noise levels would occur both on and off of the project site during construction. Noise levels due to construction activities will vary widely, depending on the construction phase. Rock processing will occur on the site during the initial phase of construction. Blasting will produce very short term, loud noise impacts. The maximum noise levels during construction could range from 65 to 90 dBA, and will occur only when construction equipment for tree removal, grading, and paving are used near the property line.

For the completed project, noise levels would be associated with a variety of on- and off-site factors, which would include normal vehicular traffic, truck deliveries for commercial merchandise, snow plowing and shoveling, garbage disposal activities, heating and air-conditioning equipment.

##### **b. Mitigation Proposed**

The projected noise levels described in the EIS are provided without any noise mitigation and only account for the lessening of noise over distance. Therefore, with mitigation, no significant, long-term noise impact is projected to result from the project. In response to concerns raised by local residents over impacts on their daily life, their pets, and local wildlife, the Applicant has further limited the hours of construction activities and changed



the visual barrier wooden fence along the property line to a noise barrier.

A noise barrier fence would extend along the property line where it is adjacent to developed residential properties. Green Ridge Court is the last road extending to the property boundary of the proposed development within the Town of Kent (see the Aerial View). Note that while two other roads (Lakeside and Como) are shown on the Site Vicinity Map, these roads have not been extended to the property boundary. Beyond Green Ridge Court there is no development adjacent to the property line nor is disturbance proposed on the subject property adjacent to this area, therefore no screening or buffering is proposed.

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.

c. Construction Noise

Construction activity would be limited to the hours of 7:00 AM and 6:00 PM, Monday through Saturday, exclusive of Sundays and national holidays. Typically, construction activities would be expected to cease prior to 6:00 PM. Blasting will be conducted according to a general blasting schedule and permit, and would take place between the hours of 8:00 AM and 5:00 PM Monday through Friday. It would not be conducted on Saturdays, Sundays or national holidays identified in the EIS. It is anticipated that rock blasting will occur for short periods of time over a six to nine month interval. Blasting, no matter the duration, will be subject to the mitigation program set forth in the SEQRA process and with applicable laws.

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. A temporary berm of soil and/or rock will be constructed around the area(s) where rock removal and/or processing are required. In addition, rock processing equipment will be placed as far as practical from residents on Concord Road and Vernon Drive to lessen the noise impacts associated with this operation. By properly siting the rock processing equipment, reducing the hours of rock removal and processing, and constructing a berm, the temporary impact of the rock removal and processing operation would be mitigated.

d. Operational Noise

The Patterson Crossing Retail Center project has been designed specifically to minimize noise impacts to adjoining residential properties. The majority of buildings would be located

towards the eastern edge of the property, adjoining Interstate 84. Loading docks and refuse collection areas for the retail buildings adjoining Interstate 84 would be located at the rear (east side) of the buildings. Noise associated with truck deliveries, unloading and garbage pickup would be mitigated to a large degree by the location of the buildings between the loading docks and the residential properties along the western property line.

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.

Noise walls or fences are proposed in two locations to reduce both operational noise and existing noise generated from Interstate 84. The row of retail buildings located between Interstate 84 and Concord Road/Vernon Drive residents would act as a noise barrier for the existing traffic noise from Interstate 84. Since there is a gap between the proposed wholesale warehouse store and the home improvement center, the Applicant has proposed a landscaped sound barrier wall in this location, to provide a more continuous noise barrier along the Interstate.

The Project Sponsor will provide a six-foot high noise barrier fence and three rows of evergreen trees along the western boundary of the project site as part of noise mitigation for any areas adjacent to residentially-developed lands. In the remaining areas landscaping (two to three rows of evergreen trees) and/or a noise barrier fence may also be required. The specific location of landscaping and or fencing will be determined during review of the site plan. The Applicant will provide a detailed barrier plan as part of site plan approval, and the fence installed will be at a density of 4 psf or greater. It is expected that with the installation of the noise barriers and fences, the placement of the buildings along Interstate 84, and operational controls (loading behind buildings), noise levels for residences adjoining the site would not change substantially from existing conditions.

Noise from retail buildings totaling nearly 15,000 square feet in the Town of Kent has been reduced through a reduction in development in the Kent portion of the site. The plan now calls for a 2,000 square foot building the use of which would not require large delivery trucks.

To avoid impacts to neighboring residents, no outdoor loudspeaker systems would be used in any of the proposed stores including the proposed home improvement center and the wholesale warehouse store.

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#### **4.10 Utilities**

##### **4.10.1 Wastewater Disposal**

###### **a. Potential Impacts**

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 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 EIS. 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. 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 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. As documented in the project Wastewater Report, the northern SSTS area provides SSTS capacity of 2,000 to 3,000 gpd to accommodate a retail building up to approximately 15,000 square feet

Extensive testing of the soils performed on the project site in the vicinity of the proposed SSTSs and witnessed by the PCDOH and NYCDEP and a mounding analysis performed on the areas all indicate that requirements for subsurface treatment of the wastewater generated by the Proposed Action can be met and that no significant adverse impacts would result. The 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.

Project wastewater flows will be limited to the 11,400 gpd or 7.9 gpm design flow (11,000 gpd southern SSTS and 400 gpd northern SSTS), recognizing the fact that the project will be serviced by SSTSs with an engineered available capacity. As noted above the northern SSTS capacity is not 400 gpd but 2,000 to 3,000 gpd. The wastewater design flow differs from the water design flow (15,000 gpd) due to water loss related to irrigation at the Home Improvement Center garden center. The difference also reflects a small amount of water (100 gpd) taken off-site from the Coffee Shop through coffee and soft drink sales.

The calculated waste stream would need to be treated prior to release back into the environment. The largest contributing sources of wastewater from the proposed uses would include the lavatories in each of the proposed retail stores and the water used in conjunction

with food sales at the proposed wholesale warehouse store and the coffee shop.

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 Project Engineer has modified the design of the southern SSTS by increasing the distance between the SSTS and adjoining wells. The relocation of the emergency access drive also improved the design of the southern SSTS. 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 down gradient and 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 down gradient in a direct line of drainage of the southern SSTS system, and therefore a 100-foot separation distance should apply.

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 well in excess of regulatory standards.

A collection system of gravity fed concrete septic tanks would service each building. These tanks would discharge to a sewer collection system that terminates at a pump pit in the north end of the retail center. This pump pit feeds a forcemain that will convey effluent to the southern SSTS area. The proposed subsurface SSTSs designed for the proposed action meet all the requirements and standards set forth by the Putnam County Department of Health (PCDH) and the NYCDEP. Negative water quality impacts associated with the proposed method of wastewater treatment and disposal would not occur. All wastewater would be treated on-site and filtered through a soil medium prior to entering the water table. Water quality impacts, including increased levels of phosphorous, would not result from the proposed project. Once completed and operational, there will be no odors associated with the septic field and no noise generated. Extensive subsurface investigations by the Applicants consultants have led to the conclusion that the potential for leachate breakout is extremely limited. Furthermore, the system will be inspected regularly to ensure it continues to operate properly.

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.

Finally, concerns were raised during the comment period regarding the siting of an SSTS for a commercial property on a parcel zoned for residential development. The Town of Patterson 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 that 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 commenter suggested 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. Such an interpretation has never been previously utilized or implemented in the Town.

b. Mitigation Measures

Potential impacts of the SSTS will be addressed by controlling the project flows and with the design of a sand gravel fill layer to be placed over the proposed disposal area to increase separation between the bottom of the leach fields and the groundwater. The simulation run for the site predicts there will be no leachate breakout at the ground surface and no leaching trench flooding. In addition, 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", meaning the SSTS will not adversely impact the water quality of adjacent residential wells. Future retail users must have wastewater flows that fit into the flow projections for the project.

In order to assure the project wastewater design flow is not exceeded the EIS proposed placing appropriate controls to assure each user's wastewater flows fit the project's design flows. One such control would require each specific user present the Town Building Department with a wastewater design flow at the time they apply for their building permit, or with any change in occupancy. This will allow for the monitoring of design flow to assure that wastewater generation from all users fall within the system design capacity. In addition, each individual store or separate leaseable area shall have its own water meter, with quarterly readings taken and submitted to the Planning Department and Building Department.

It should be noted that actual water and wastewater flow metering/monitoring will be

required as part of the water and sewer permitting with the PCDOH, NYCDEP and NYSDEC. This metering/monitoring will provide an assurance that the actual project flows do not exceed the system design capacity. It is noted that the northern SSTS capacity of 2,000 to 3,000 gpd provides additional flexibility regarding wastewater disposal.

#### **4.10.2 Electricity and Gas**

##### **a. Potential Impacts**

The entire project is estimated to have a total electric load of 10,000 to 13,000 amps. This demand assumes all building heating and cooling systems operate on electricity. 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.

##### **b. Mitigation Measures**

The design and plans would meet the requirements of the New York State Energy Code, as well as other applicable state and town building codes. All building systems, including electrical, mechanical, heating and insulation would be modern and energy-efficient. Similarly, the project would utilize energy efficient lighting fixtures and equipment to the greatest extent practicable, including the use of “Energy Star” rated merchandise.

#### **4.10.3 Solid Waste Disposal**

##### **a. Potential Impacts**

The project is expected to generate approximately 180 tons of solid waste material per year. Of this amount, approximately one third is expected to include recyclable materials.

##### **b. Mitigation Measures**

Private contractor will transport the solid wastes to an existing disposal facility in Danbury, CT. No municipal trash collection services are proposed for this development.

Source reduction and recycling at the individual proposed commercial operations will help to minimize the wastes produced at the proposed development. There will be a cost incentive passed onto the individual stores to reduce the volume of solid wastes produced, encouraging the reuse of packaging materials and the separation of other recyclable materials, including plastic, glass, paper and cardboard from the waste stream.

Several measures are proposed to control litter and maintain the development in a clean condition. First, all dumpsters and refuse storage areas would be covered and screened to physically contain solid wastes within designated areas and deter nuisance animals, the description of which includes rodent populations. Supplemental measures, which may include additional fencing and the use of traps, would be employed as needed. Second, trash

and recyclable-only collection cans will be placed in convenient locations between the parking lot and the stores for use by patrons. These facilities will have covered lids that will help to reduce the chance of litter falling out. Finally, the development will retain personnel to routinely patrol and remove litter from the project site. In addition, a street sweeping/vacuum vehicle will be used on a weekly basis (more often as needed) to maintain trash-free project site roads and parking areas.

For food service operations within the proposed development, the compliance with Putnam County Department of Health Food Service Protection Program regulations, designed to protect the public health from adverse impacts of the operation of food service facilities, would be implemented. Inspections conducted by the Department of Health are expected to enforce all applicable regulations related to refuse handling and storage and pest control at these facilities. As this is a dry retail proposal, full-scale restaurants are not included in the proposal.

#### **4.11 Community Services and Facilities**

##### **4.11.1 Police Protection**

###### **a. Potential Impacts**

The impacts from the proposed retail center related to police protection would be associated with traffic to and from the development, general security at the retail center, as well as the use of the neighboring residential properties for access to the project site. Police protection for the project site would be provided by a combination of Putnam County Sheriff's Office, Town of Kent Police Department (responding to only those calls originating from the portion of the development in the Town of Kent) and the New York State Police. In addition, individual stores may employ their own security services.

Based on a comparison with the Highlands Shopping Center in Brewster, it can be conservatively assumed that less than 70 calls for service per year requiring emergency response will be generated by the Patterson Crossing Retail Center. 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. It is expected that only during peak shopping times all of the proposed parking spaces could potentially 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.

The Proposed Action presented in the DEIS and as modified in the FEIS would not result in significant adverse impacts to the State and County police services and police protection in the area according to Sheriff Smith of the Putnam County Sheriff Department. 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 proposed in the Town of Kent, it is reasonable to expect that the Proposed Action will not adversely impact the Kent Police Department.

b. Mitigation Measures

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.

Road improvements including the addition of right and left turn lanes and a signal at the proposed entrance to the development would reduce the potential for development related traffic accidents.

In addition to the police protection provided by the local forces, site security would be provided based on the needs of the retail establishments. Each store would have its own internal security system including burglar alarms, which would be directly connected to the Putnam County Sheriff's Office, and security cameras. Some of the stores may also choose to hire their own security personnel. The stores would also have exterior lighting and security cameras to help deter criminal activity. Parking areas would be illuminated as an additional security measure.

Finally, 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 proposed on the north end of the development in the Town of Kent or, alternately, within the building that would contain the Community Center and Management Offices. According to a letter from the Putnam County Sheriff, the substation will be staffed as appropriate. Inclusion of this substation on the project site will mitigate reduce impacts to all police departments.

**4.11.2 Fire and Other Emergency Services**

The Patterson Fire Department has acknowledged that with the proper automatic aid established with neighboring departments and a pressurized hydrant and fire suppression systems on site they would be able provide adequate fire protection to the Patterson Crossing Retail Center. The additional calls that would be expected would be an incremental increase for existing service providers. The provision of other emergency services (e.g., fire and medical) to the project site would only occur as needed and would not have a direct cost to



Patterson or Kent.

The project would generate tax revenues to the Patterson Fire District and the Lake Carmel Fire Department. These taxing districts exist to generate funds to support the operations of these emergency service providers.

a. Potential Impacts

The vast majority of the Patterson Crossing Retail Center project falls within the Town of Patterson, with only a small section in the Town of Kent. The Patterson Fire Department would provide fire protection for all buildings of the Patterson Crossing Retail Center development. Response to vehicular accidents occurring at the project site would be determined based on the location of the accident. It is anticipated that accidents at the project entrance would trigger a response from the Lake Carmel Fire Department, as the entrance is in the Town of Kent, and the Patterson Fire District would address accidents within the project site. The existing Mutual Aid agreement for all Fire Departments in Putnam County ensures that additional fire fighting and rescue resources are available if required.

According to the Patterson Fire Department, the proposed project would not result in a significant impact to the Department. The Patterson Fire Department has all necessary equipment and manpower to respond to calls from the project site.

b. Mitigation Measures

The Applicant is committed to providing fire protection through incorporation of an on-site water storage system capable of protecting the critical building, or building with highest fire protection needs, in the complex. Presently the critical building in the complex is the home improvement center. The 270,000 gallon tank system noted in the DEIS is based on a conservative estimate provided by a home improvement center company. If this type of tenant does not lease space in the retail center or the final stored water volume is other than that presented based on the actual configuration of the proposed development, the storage tank system volume will be adjusted to provide fire protection for the modified critical building.

All buildings would be equipped with sprinkler systems. The currently proposed water supply and storage facility's 270,000 gallon storage tank(s) is over four times that requested by the Patterson Fire Department and would cover all fire protection water requirements for the entire project site.

In addition to the primary driveway access from NYS Route 311, a secondary means for emergency access to the site will be constructed from Concord Road. The primary purpose of the emergency access is to provide for an alternative entrance for emergency vehicles, should the need arise. This access road would be gravel, and gated at both ends. 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. Both the primary driveway providing access, and the emergency access drive are designed to accommodate

fire engines and truck traffic.

#### **4.12 Socioeconomic**

##### **a. Potential Impacts**

Some overlap of goods and services provided by the proposed uses at Patterson Crossing Retail Center and the goods and services offered by establishments in the Putnam Lake, Lake Carmel and Patterson Hamlet areas would be expected. This would most likely occur in the home improvement sector, but affected establishments are likely to provide more specialized products and assistance for area contractors that now patronize them. Competition with the Home Depot and Linens-n-Things and to a lesser extent Kohl's at the Highlands has the potential to provide shoppers with a greater selection for the purpose of comparison-shopping. The coffee shop proposed at Patterson Crossing Retail Center would have little overlap with existing local restaurants but may compete with local convenience stores. However, the coffee shop is expected to serve consumers patronizing Patterson Crossing Retail Center and is likely to increase and enhance dining options in the area.

The proposed project is expected to have an overall positive economic effect on nearby commercial centers in the Lake Carmel and Patterson Hamlets. Highway-oriented businesses such as gas stations and convenience stores are 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 and services. In addition, the proposed project will provide residents with a much needed alternative to long-distance shopping and is expected to recapture a significant proportion of the retail spending to capture currently lost to retail centers in surrounding areas of the region. The Proposed Action will help keep retail sales tax dollars in Putnam County help correct the Putnam Paradox and support the Shop Putnam Initiative as well as keep sales tax dollars in New York State by providing an alternative to shopping in Connecticut.

The introduction of 410,560 square feet of retail space may draw some shopping dollars away from the surrounding downtown areas. This would be more likely to occur among existing retailers that have a high degree of overlap with the goods and services to be provided at Patterson Crossing Retail Center. The increase in competition could potentially lead to secondary displacement should an establishment no longer remain viable from a competitive standpoint. Although unlikely, should secondary displacement occur, the vacated sites would most likely be reused by some other commercial enterprise allowed pursuant to zoning. This transition of businesses will not result in significant long-term economic impacts to either the Lake Carmel or Route 22 commercial centers.

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 an 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.

**b. Mitigation Proposed**

There is no mitigation measure to offset the affects of retail competition. This has occurred historically in the region and will continue to occur in a capitalistic system of economics. Competition is not expected to cause land use blighting, and therefore avoidance measures are not needed.

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 and New York State. 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 on Economic and Social Benefits for additional information regarding the economic benefits that will be generated by the Proposed Action.

**4.13 Cultural Resources**

**4.13.1 Historic and Archaeological Resources**

No historic resources are located on the project site. Therefore, the proposed project would not result in any significant impacts to historic resources. A Phase 1A and B Archeological Assessment was conducted for the project site. No resources of cultural import were found and therefore no mitigation is needed. The DEIS includes the letter of no impact from OPRHP dated June 29, 2004.

**4.13.2 Visual Resources**

**a. Potential Impacts**

Construction of the project as proposed will remove some 64 acres of existing woods on the middle portions of the site and replace it with buildings, pavement, and new plantings, thus creating a change to the visual character of the site. However, given the orientation of the

project site on the north and east sides of a small ridge and the variability of the local topography, potential visibility of the site from local vantage points is notably limited. The potential viewshed of the project site from the major roadways is limited to a corridor that follows Interstate 84 with sight lines to the site no more than three-quarters of a mile to the south and north of the site. Given this, views of the project as a whole and particularly the parking fields will be limited. Additionally, tree cover that exists within the road rights-of-way will remain as a buffer to views from these roadways.

The four buildings will be situated on the east side of the property along the Interstate 84 frontage such that they will be visible from the highway. Parking and most circulation will occur west of the buildings and out of view from points east. Portions of the parking areas and the buildings beyond may be visible from residential properties immediately to the west and from public roads in the vicinity including Concord Road and the easternmost ends of Echo Road and several other roads. The two central buildings will have truck dock facilities located on the rear of the buildings facing the highway. Potential views of the northern two buildings and associated parking and circulation are possible over a distance of about 2,000 feet from Longfellow Drive to the northwest. A short portion of NYS Route 311 will have views to the site as well. The highest point of the site ridgeline in the southern end of the property is proposed to remain wooded, and an existing telecommunications facility in this area will not change. The proposed layout will not result in distance views of the retail center.

The project site is located next to Lake Carmel Park District, but 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. Potential visibility of the site from points west is limited to the immediately adjacent properties and local roads.

Some of the proposed signage and lighting will be visible from off site. The Applicant has proposed large-scale freestanding signs for the project which would be visible from two locations; the entrance on NYS Route 311, and along the property boundary overlooking Interstate Route 84. The project is expected to require variances for particular aspects of the proposed signage program. A variance for all signs not in conformance with Town Zoning Codes will be sought from the Town of Patterson Zoning Board of Appeals and the Town of Kent Zoning Board.

The proposed lighting will provide pedestrian and vehicle safety and security throughout the developed portion of the project site. Lighting has also been designed to minimize off-site effects to the greatest extent practicable. While portions of the project may be visible from abutting residential properties to the west, it is noted that the project as proposed complies 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. While, the EIS 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.

The FEIS site plan shows the extent of the proposed visual and noise barrier fencing and plantings along a portion of the western property line. The fence and buffer landscaping have been proposed in the areas adjacent to developed residential properties. Green Ridge Court is the last road extending to the property boundary of the proposed development within the Town of Kent. Note that while two other roads (Lakeside and Como) are shown on the Site Vicinity Map, these roads have not been extended to the property boundary. To the north of Green Ridge Court there is no development adjacent to the property line nor is disturbance proposed on the subject property adjacent to this area, therefore no screening or buffering is proposed.

A twelve-foot wide access way to Stormwater Basin 3.4 is proposed from Green Ridge Court. The proposed six-foot high fence and double row of evergreen trees will extend to a location beyond Brentwood Road where the access to Stormwater Basin 3.4 is proposed. This opening for the access road does not impact views of the proposed building and parking area from Brentwood Road. The fence and evergreen screen are proposed to run along the outer edge of the 50-foot reservation area. Existing vegetation that will be retained between the property line and the proposed building in the Town of Kent will provide additional screening in the direction of the proposed building. Once constructed, the need to access the pond should be approximately once per year for visual inspection purposes, which can be done on foot, and roughly once every five years for removal of organic matter, sand and sediments.

Another section of fence would be provided along the property line to the west of Brentwood Road to screen northerly views opened up as a result of site work, including stormwater basins and the landscaped access road to the development. Views towards NYS Route 311 across the site to the northwest from this location would be through approximately 500 feet of existing woods.

The fence and landscaping will not extend beyond the proposed access to Stormwater Basin 3.4. The view from the end of that road towards the building, which include approximately 80 feet of existing deciduous woods; then approximately 160 feet of open area adjacent to Stormwater Basin 3.4; and then approximately 50 feet of existing woods within the Impervious Restriction Zone. Beyond these areas is the edge of the retail center parking lot. No unobstructed view to the buildings would exist. Northeast of this location approximately 400 feet of existing trees would be retained between the property boundary and Stormwater Basin 3.1. Views towards the northwest from this location will be largely unchanged since no development is proposed in this area.

b. Mitigation Proposed

As a result of comments received on the plan presented in the DEIS, the Applicant has significantly modified the plan to incorporate measures that will reinforce the position of the proposed development as the gateway into the Towns of Kent and Patterson at the NYS Route 311 and Interstate 84 interchange. The project has been reduced in scale, buildings

reconfigured and the site plan modified to incorporate 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. 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 as permitted along NYS Route 311;
- 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 rural architectural style concept throughout the project.

Particular to the visibility of the project from the "gateway" to Kent and Patterson, the Applicant proposes a conceptual design style that will reflect the historically rural architecture and pastoral landscape that exists in Putnam County. The design concept includes retaining existing vegetation and stone walls on the north end of the property and using new stone walls, wooden fences, and tree plantings along the frontage on NYS Route 311 (where permitted) and the project entry drive. Details including color, lighting, signage and landscape features will be integrated to present an appearance at the gateway location that is inviting and appropriate to the local setting. Large building masses will be segmented and their facades detailed to visually diminish their size. It is noted that the Patterson Crossing Retail Center Plan Enhancements are conceptual framework designs and further project-specific architectural details will be developed as part of the final site plans for the project.

The Applicant's design team has developed a signage concept that meets the requirements of the tenants, and the proposed unified architectural style. Location of the site, meets the requirements of the tenants, and the proposed unified architectural style. Sign designs will reflect consideration of the potential visibility from off-site locations. The two proposed freestanding signs will include identification of the primary tenants of the Patterson Crossing Retail Center and will be designed to strike a balance between the needs of users and Town regulations. Smaller signs within the development are proposed to be compatible with the overall traditional style of the project architecture.

The lighting design has considered potential visibility from off-site locations to minimize the visual impact to residential properties. Height, size, intensity, and glare were considered to minimize the visual impact to the surrounding area. Hours of lighting will focus on the nighttime operation of the stores, with reduced security lighting during non-operating hours (11:00 PM to 6:00 AM). The project plan calls for automatic lighting control devices to reduce illumination over the entire site after hours.

The proposed plan includes a six-foot tall noise barrier fence and landscaping (two to three rows of evergreens) to be installed at or near the property line nearest the residences that are located adjacent to the site to the west, which will limit the view of the development from these homes.

c. Project Architecture and Landscaping

In response to concerns expressed regarding the potential visual impacts that would result from development of the Proposed Action, the Applicant has significantly modified the plan to incorporate conceptual architectural components that will reflect the rural character of the surrounding area. 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 relation to the Kent/Patterson community.

The proposed plan enhances the image of the gateway to Kent and Patterson with a landscape treatment along the entry to the project site that is appropriate to the rural character of the locale. The plan provides a public outdoor plaza as a focal point in front of the main building entrance and convenient, safe, and attractive pedestrian connections among all stores that goes well beyond the aesthetics of a prototypical large retail format development. A conceptual rural, equestrian style is proposed for the architecture. Lighting, signage, and other elements will be designed with careful attention to color, scale, placement, and materials appropriate to this style and the setting, to produce a quality, unified design. The proposed landscape design includes large areas of native trees and shrubs, decorative fences, new and existing stonewalls, shade trees, and shrubs and grasses. The landscape layout and plantings create significant screening and an attractive foreground to the interior of the development even though it is not readily visible from NYS Route 311.

As noted in the DEIS, a 25 to 50 foot landscaped Reservation Area is proposed along the neighboring properties to the west between the existing telecommunications facility access drive on the south and Brentwood Road on the north. This reservation area would contain a privacy fence and evergreen plantings 25 to 50 feet inside the Patterson Crossing Retail Center site separating the residential properties from the site. In addition, approximately two thirds of the site would be maintained as open space following completion of the project. These areas are depicted on the site development plans and an easement will be created to restrict further development by the Applicant according to the conditions of the Town of Patterson and Town of Kent Site Plan approvals.

**4.14 Cumulative Impacts**

Potential cumulative impacts were assessed as part of the EIS. No significant cumulative impacts were identified and no mitigation is proposed. Impacts related to each of the environmental categories have been identified in the Sections herein and appropriate mitigation identified.

**4.15 Air Quality**

a. Potential Impacts

Air quality impacts from projected vehicular traffic associated with the project have been

analyzed for build year 2010. The screening analysis performed at various intersections in the vicinity of the project revealed that traffic generated by the proposed project was insufficient to require a refined air analysis of any intersection. However, one intersection (NYS Route 311 and Interstate 84 East Bound Ramps) was selected as a worse case scenario for a refined analysis to quantify the actual impacts expected.

The impact analysis results indicate that carbon monoxide (CO) levels for “Build-Conditions” would be within established air quality standards for both 1-hour and 8-hour averaging periods. The analysis shows that traffic generated air quality pollutant levels are expected to increase from existing conditions to “No Build” and “Build-Conditions” due to the natural increase in traffic with or without the site being developed. However, levels at the worst-case receptor would only be at 50 percent of the 8-hour standard.

Construction-related impacts would vary based on the proximity of the activities to the adjacent properties and the type and amount of construction equipment used for each project phase. Construction activities would have a potential impact on the local air quality through generation of fugitive or airborne dust. Fugitive dust is generated during ground clearing and excavation activities, and generally when soils are exposed during dry periods. Residences, on Concord Road, closest to the proposed areas of grading and would have the greatest potential to be impacted by dust. Construction-related air emissions would result from the use of diesel fuel as a source of energy for construction vehicles and equipment. Pollution from the construction vehicle engines comes from the combustion process in the form of exhaust. If the proposed mitigation measures are properly applied, adverse air quality impacts should be minimized; therefore, a quantitative impact analysis related to construction activities was not performed.

The operation of the retail center will result in minor increases in the overall atmospheric air pollutant burden. Heating and air conditioning systems may release small amounts of air pollutants that when compared to the regional burden are insignificant and should not cause an exacerbation of applicable standards or guidelines. The net difference in total air pollution burden is considered to be minimal for the Proposed Action. The relative air pollution burden added by the construction and operation of the project is insignificant when compared to the current and expected conditions in 2010.

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.

#### b. Mitigation Measures

The air quality analysis of the proposed project focused on CO impacts from traffic generated by the project, which is the critical impact from an air quality perspective. The analyses show that the existing conditions for the year 2004 along with the “No Build” and “Build-Conditions” for the year 2010 are not expected to cause a violation of the current regulatory standards. Therefore, no mitigation measures during facility operations will be



required. During construction, standard mitigation measures such as dust control and others should be adequate to maintain air quality levels within applicable standards. These methods include:

- Minimizing the area of grading at any one time and stabilizing exposed areas with mulch and seed as soon as practicable
- Minimizing vehicle movement over areas of exposed soil, and covering all trucks transporting soil; and
- Spraying unpaved areas subject to traffic with water to reduce dust generation.

The potential for emissions from construction vehicle exhaust can be reduced by the proper maintenance of engines and air pollution controls.

## **5.0 ALTERNATIVES**

The New York State Environmental Quality Review Act (SEQRA) calls for a description and evaluation of the range of reasonable alternatives to the action, which are feasible, considering the objectives and capabilities of the project sponsor. Alternatives for the Patterson crossing retail center that have been analyzed include a “No-Build Alternative”, an “Alternative Scale or Magnitude” development plan, and an “Alternative Use” development plan.

### **5.1 No-Action**

The No-Action Alternative is the scenario that would occur if no development were to take place on the project site. This is effectively an open space preservation alternative. The site would remain in its current undeveloped state. The No-Build Alternative would eliminate the adverse impacts identified in the EIS. However, the No-build Alternative would not be consistent with the objectives of the local Comprehensive Plans of Patterson and Kent, since both Town Comprehensive Plans and Zoning have identified these parcels as appropriate for commercial development.

This alternative would be contradictory to providing a reasonable level of shopping opportunities for residents of the Towns and County. Under the No-Build Alternative, the local county and state governments, and the Carmel Central School District would not realize significant tax revenues. As such, this alternative does not meet the need for additional tax revenue and does not represent an economically viable alternative.

### **5.2 Alternative Scale or Magnitude**

Alternative scale and magnitude alternatives were also examined in the EIS. These alternatives are an Alternative Site Plan Layout, which includes altering the building orientation on the site and minimizing the parking area with a multi-story parking facility and an alternative project size plan that reduces the square footage of the development to approximately 350,000 square feet.

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a. Alternate Building Orientation

An alternate building orientation for a retail project was considered that concentrated the proposed buildings on the western side of the property and the parking on the eastern side. This alternative provides approximately 426,000 square feet of building space, a 28,600 square foot garden center and 2,138 parking spaces. The mixture of buildings and uses in this layout include a restaurant, office supply store, supermarket, and a home improvement store and garden center among others. Impacts associated with this alternative would be similar to or greater than those of the proposed action.

It is noted that the Building Orientation Alternative, has 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 resulting in greater impacts to the residents along Concord Road.

An alternative, which incorporated a multistory parking facility for approximately 1,000 vehicles, was considered. Typical costs for construction of such above ground parking facilities range from \$15,000 to \$23,000 per parking space. However, construction costs for below ground parking facilities are greater and typically cost \$18,000 or more per parking space due to the additional construction requirements and infrastructure, such as ventilation systems. For areas where rock removal is required, construction costs may exceed \$30,000 per parking space. Thus, a 1,000 space-parking garage would cost between \$15 and \$30 million. To pay for this, the development would require a very significant increase in leasable floor area. Although a parking garage would reduce the area of impervious surface by paved parking, the necessary additional retail buildings would offset this, resulting in little to no overall reduction in impervious surfaces. Without this additional floor space, the center could not be leased at reasonable rates and would therefore fail. The EIS acknowledged that the cost of this additional construction is not justified, since the environmental impacts are the same or greater (more construction related to the garage and more traffic associated with the additional retail floor space) than those created by the proposed project. Community impacts would also increase with the construction of a parking garage, since neighboring residents would incur additional visual impacts as a result of multilevel parking garage and noise and air pollution related to its construction.

b. Alternate Project Size

Under this alternative the northernmost building pad and associated parking area would be eliminated. This alternative has a total of 353,100 square feet of building area and would provide a total of 1,773 parking spaces. This alternative simplifies the internal road network by eliminating the turning lanes proposed to accommodate the vehicular movements into and out of the northernmost building pad that is part of the proposed development.

It should be noted that this alternative, by reducing the total area of retail development at the project does it provide adequate gross square footage for ancillary retail.

Impacts of this alternative are similar or less than those of the proposed action. In addition, this alternative would result in a decreased tax revenue generation for the taxing districts.

The cumulative impacts would be less than that of the proposed development, until such time as other retail sites are developed.

The EIS acknowledged that the reduction in retail floor space renders this alternative economically unfeasible for the applicant given the work proposed offsite including:

Additional work proposed to address offsite stormwater problems along Concord Road, NYS Route 311, the Interstate 84 ramps and the Putnam County Highway Facility garage;  
Offsite road improvements that will address existing network deficiencies; and  
Installation of onsite infrastructure including water supply and wastewater disposal systems.

### **5.3 Alternative Use**

An alternative consistent with site zoning was considered. This alternative evaluates the development of the project parcel as light industrial. The site plan prepared for this alternative shows four buildings of warehouse space, totaling 740,000 square feet. However, due to lower parking requirements for warehousing, only 802 parking spaces are proposed for this alternative. Impacts would be similar to, greater than or less (depending on the impact category) than those related to the proposed action. As with the Alternate Project Size Alternative, tax revenues collected by the local, county and state governments would be significantly less than those projected for the proposed action.

This development plan does not meet the County need for additional sales tax revenue and does not represent an economically viable alternative for the Applicant.

## 6.0 CERTIFICATION OF FINDINGS TO APPROVE

Having considered the Draft and Final EIS, and having considered the preceding written facts and conclusions relied upon to evaluate whether the requirements of 6 N.Y.C.R.R. 617.11 have been met and a hard look given, this Statement of Findings certifies that:

The Planning Board of the Town of Patterson has carefully and thoroughly weighed and balanced the relevant potential environmental impacts anticipated from the proposed action for Patterson Crossing Retail Center, as modified and set forth in the Environmental Impact Statement, with social, economic and other considerations, and hereby certifies that the requirements of 6 N.Y.C.R.R. Part 617 (SEQRA) and the corresponding SEQRA Regulations have been met.

Consistent with social, economic and other essential considerations from among the reasonable alternatives available, the proposed action for Patterson Crossing Retail Center as modified and set forth in the FEIS avoids or minimize adverse environmental impacts to 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 modified proposed action for Patterson Crossing Retail Center (set forth in the FEIS) is subject to the mitigation measures described in the DEIS, FEIS and set forth in this Findings Statement. These findings are substantiated by the analyses in the DEIS and FEIS, which disclose potential environmental impacts and demonstrates that the potential environmental impacts associated with the action would be mitigated to the maximum extent practicable.

The preceding facts, as documented in the DEIS, the FEIS, and in the public record associated with these proceedings support these findings. After due consideration, the lead agency finds that this revised proposed action for Patterson Crossing Retail Center set forth in the FEIS will achieve a balance between the protection of the environment and the need to accommodate social, economic and other considerations.

Name of Agency:

Town of Patterson Planning Board

Name of Responsible Officer:

Mr. Shawn Rogan

Signature of Responsible Officer:



Title:

Planning Board Chair

Date:

7/17/08

Address of Lead Agency

1142 Route 311  
P.O. Box 470  
Patterson, New York 12563