3.2 WETLANDS COMMENTS AND RESPONSES

Following the submission and review of the DGEIS, the Applicant evaluated comments made by the Town, involved and interested agencies and the public. This resulted in re-delineation of the DEC and Town regulated wetlands boundaries, as well as significant changes to the proposed development program. These changes resulted in significant decreases to wetland buffer encroachments, elimination of any potential wetland and buffer impacts associated with the access road to Fair Street, and considerable reduction in the total impervious surfaces associated with the two projects. The elimination of the Fair Street access road reduced the total area of proposed impervious surfaces by 0.88 acres and reduced total site disturbance by 3.7 acres. The revised action further reduced overall disturbance from 73.6 acres to 55.32 acres on the Gateway Summit project site, and from 41.8 acres to 25.90 acres on The Fairways project site. The revised projects have also further reduced disturbance to steep slopes of greater than 15 percent on the Gateway Summit project site from 38.6 acres to 24.93 acres, and on The Fairways project site from 26.1 acres to 14.83 acres. The amount of impervious surface has been reduced from 12.8 acres to 9.5 acres for The Fairways. These reductions further reduce potential impacts on wetlands that might result from erosion, sedimentation and stormwater runoff following development.

Following meetings between the Applicant and the New York City DEP, a stormwater management strategy was developed, upon which the two SWPPPs for the action are based. That strategy results in the reduction of the number of stormwater treatment basins and the elimination of all but minor grading within the 100 foot adjacent area (buffer) to DEC mapped wetlands. Larger areas of undisturbed open space are now preserved.

To mitigate potential adverse impacts, significant amendments were made to the September 2003 SWPPPs, included in the DGEIS, and are found in the March 31, 2006 SWPPPs included in the FGEIS. In addition to the Applicant's commitment in the FGEIS to engage a Certified Professional Erosion and Sediment Control Specials (CPESC)/Certified Professional in Stormwater Quality (CPSWQ) to oversee implementation of the two SWPPPs enhancements to the SWPPPs since the DGEIS include:

- More detailed Erosion and Sediment Control Plans and Narratives;
- More detailed Construction Sequencing;
- Additional specifications that limit the area of disturbed soil on either site to five acres at any time;
- Maintenance of a Construction Site Log Book and Inspections pursuant to GP-02-01;
- More detailed Erosion Control Facilities Inspection and Maintenance Program;
- More detailed Stormwater Management Plans;
- Further engineered Stormwater Management Practices and Maintenance Program; and,
- Additional pollutant loading analyses confirming that post construction total nitrogen, total phosphorous, total suspended solids and biological oxygen demand will be reduced to pre-construction levels.

As now proposed, the development plans for the action, and the SWPPPs included in them, adequately mitigate potential impacts on wetlands.

Comment 3.2-1 (Public Hearing, February 2, 2005, Anne Fanizzi): If there are problems obtaining wetland permits for wetlands near Fair Street, then the emergency access road for The Fairways may instead be proposed as primary access.

Response 3.2-1: *As described in the Introduction to this FGEIS, Section 1.0, the Applicant has eliminated the proposed access to Fair Street. The Fairways will now be accessed solely via Route 6, using the common access road for the Gateway Summit project. Thus, no wetland permits will be required for this Fair Street access. As in the original plan, the Applicant proposes only emergency access to Kelly Ridge Road. This access will consist of a 12-foot wide gravel drive, gated at both ends to prevent unauthorized use by residents or visitors.*

Comment 3.2-2 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): The Proposed Action in the DGEIS includes a combined 1.5 acres of wetland buffer disturbance related to the construction of stormwater management basins on the Gateway Summit and Fairways projects. The location of stormwater management practices within wetland buffers is a practice DEP has consistently discouraged because construction activity and the associated loss of forest cover may overload and ultimately degrade the wetland's natural runoff polishing mechanisms. It is well established that wooded buffer areas support adjoining wetlands primarily by filtering sediment and nutrients and by maintaining conditions that promote sheet flow, infiltration, and recharge of runoff. The DGEIS suggests that sizing requirements and/or steep slopes necessitate the placement of these practices within the 100-foot wetland buffer. However, DEP feels that it is overdevelopment of the site, not the steep slopes or sizing requirement, that necessitates the placement of these basins within the buffer.

The DGEIS suggests that stabilization and regular maintenance of stormwater management basins will "replicate the stormwater filtering and bioattenuation function that the existing buffers currently provide" and thus serve as mitigation for buffer disturbance. However, the primary functions of stormwater basins, attenuation of peak storm flows and treatment of pollutant-laden runoff, will not provide adequate mitigation for the impacts of basin construction, specifically the disturbance of forested areas and creation of point discharges. In fact, regrading and revegetation of the wetland buffer, that is, the replacement of established wooded cover with shrub and ground cover plantings, will result in the loss of forest loam and compaction of subsoils thereby reducing the infiltrative capacity of buffer soils. Basin construction will also result in the creation of slopes in excess of current conditions, ultimately limiting opportunities for the overland sheet flow of stormwater runoff and increasing the likelihood of erosion and down gradient sedimentation. As such, DEP strongly urges the Applicant to pursue an alternative approach to project layout and site access that fully avoids adverse wetland and wetland buffer impacts.

Response 3.2-2: *The extent of wetland buffer disturbance that will result from the revised action, particularly in the NYSDEC regulated area adjacent to the recently flagged southern extension of Wetland LC-27, has been dramatically reduced, as have the potential impacts on the water quality function(s) of the buffer, according to the Applicant. While the re-delineation of wetlands expanded the regulated buffers in this area significantly, the buffer encroachment in this area has been reduced to 0.47 acres. This is some 66 percent less encroachment than the previously proposed plan. As indicated in the comment, the level of development previously proposed led to the need for large stormwater treatment basins on relatively steep slopes, with significant grading within the wetland buffer. With the reduction in the scope of the action, several stormwater basins have been eliminated, allowing the grading in the buffer to be*

greatly reduced. The total area of disturbance to the State and Town regulated wetland buffer resulting from the proposed action is approximately 3.69 acres.

Comment 3.2-3 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): Appendix N discusses a small wetland on the Gateway Summit site referred to as the ECB wetland. It is unclear whether this wetland is the same wetland identified elsewhere in the DGEIS as federally or Town regulated. Appendix N also states that land investigated to the north and south of wetland ECB is not suitable for possible wetland creation areas because they are also wetland areas. The Applicant should clarify in the Final Generic Environmental Impact Statement ("FGEIS") whether the areas previously mentioned as adjacent to wetland ECB are contiguous with this wetland.

Response 3.2-3: *The Applicant has revisited the wetland delineation, and following consultation with the Town and the NYSDEC, has revised the wetland boundary on the FGEIS plans. The wetland corridor associated with the watercourse flowing from north to south in the eastern part of the property is now recognized as an extension of NYSDEC Wetland LC-27. With the exception of one area at the southern end of the wetland, the wetland boundary for both the NYSDEC and the Town of Carmel are the same. At the southern end of the wetland, the Town boundary extends slightly further south than the line flagged by the NYSDEC. These wetlands are now shown on Figures 3.2-1a and 3.2-1b. The revised NYSDEC wetland mapping generally showing this wetland extension is provided as Figure 3.2-2.*

Comment 3.2-4 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): Lastly, the United States Army Corps of Engineers "(USACE") is not listed in the section entitled "Required Permits and Approvals, Involved Agencies, and Interested Parties." The Executive Summary states that there is a wetland within the Gateway portion of the project that is regulated by the Town and the USACE. The USACE should be contacted to determine regulatory requirements prior to issuance of the FGEIS.

Response 3.2-4: *Comment noted. The proposed road crossing involves the "discharge" of less than 25 cubic yards of fill, the USACE threshold for requiring authorization for such activities in New York City's drinking water supply watershed East of Hudson. In the Applicant's opinion, therefore, the road crossing will not require any authorization from the USACE.*

Comment 3.2-5 (Memorandum, June 19, 2003, David Klotzle, Town Wetland Inspector): For Gateway Summit, the Carmel wetlands shown on the conceptual site plans dated August 24, 2001 are larger than shown on this map but are reflected on the second line outside of the so-called ECB Line. There are also two small fresh meadow wetlands on the lower section of the property just in from the old recycling building that are not indicated on the plan.

Response 3.2-5: *As indicated in the response to Comment 3.2-3, the entire wetland corridor has been re-delineated and flagged. The new delineation is consistent with the boundary as described in this comment. The Applicant has conducted additional inspections in the vicinity of the Town building and confirmed the absence of any areas that meet the Town criteria of a regulated wetland.*

Comment 3.2-6 (Letter February 28, 2003, Mathew Giannetta, New York City Department of Environmental Protection) Because the Watershed Regulations generally prohibit the construction of new impervious surfaces within 100 feet of a watercourse or New York State freshwater wetland, the DEIS must include engineering *drawings* depicting the locations of proposed site improvements with respect to DEP flagged watercourses and state wetlands LC-26 and LC-27.

Response 3.2-6: *The site plans for the revised proposals include the locations of the NYCDEP flagged watercourses and the field delineated boundaries of the State mapped wetlands, and show the relationship between the proposed action and such wetlands.*

The Applicant acknowledges that the Watershed Regulations, with some exceptions, prohibit the construction of impervious surfaces within 100 feet of watercourses and State mapped wetlands. However, plan revisions, based upon this comment and others, eliminate construction of any impervious surfaces within the "limiting distance" of 100 feet to NYSDEC mapped wetlands LC-26 and LC-27.

The Gateway and Fairways sites contain a number of watercourses delineated and flagged by NYCDEP. The majority of these flagged watercourses lie within The Fairways project site, and no impervious surfaces are proposed to be constructed within the limiting distances of these features.

The proposed action includes the crossing of the NYCDEP regulated watercourse that flows through the Gateway Summit project site with the access road for the Gateway Summit and the Fairways projects. The proposed crossing of this perennial stream will require permitting from the Town of Carmel Environmental Conservation Board. This crossing, therefore, will not require a Crossing, Piping, or Diversion Permit from NYCDEP.

Construction of the proposed impervious surface (roadway) is permitted pursuant to Section 18-39 (a) (6) (ii) of the NYCDEP Watershed Rules and Regulations, which permits the construction of impervious surfaces for a new road necessary to provide access to two or more parcels or to a subdivision. The subject new road is necessary to access the proposed subdivision of the Gateway site and two existing parcels -- the Gateway Summit project site (tax parcel 55.-2-23.1), and The Fairways project site (tax parcel 44-2-1). The proposal clearly meets the provision of the above-cited section of the regulations that permits the construction of the impervious surface associated with the new road.

The proposed road has been designed to provide safe and adequate access to the subject parcels. Safety concerns related to Town requirements for road grades, and the proposed US Route 6 intersection location, dictate the proposed road alignment. Alternate road alignments were studied, but were less desirable from traffic and safety perspectives, specifically the location of the proposed signalized intersection. Thus, the road involving the watercourse crossing is the preferred alternative to access the subject parcels and the subdivision.

According to the Applicant, the curvilinear design of the proposed road system limits disturbance to steep slopes to the maximum extent practical and minimizes lengthy unbroken views of internal buildings. The buildings are proposed in locations where the existing topography provides the most favorable opportunities for construction in order to limit impacts to steep slopes and further advance the environmental objectives of the Applicant.

Following the submission of an initial draft of this FGEIS to the Town for its review, the Applicant had several meetings and discussions with NYCDEP to further review the proposed watercourse crossing. At that meeting, the Applicant was informed by NYCDEP that construction of the impervious road within the 100-foot limiting distance to a watercourse requires a variance from NYCDEP. Accordingly, the Applicant will submit an application for the variance to NYCDEP. That application seeks to demonstrate to NYCDEP that the need for the variance is not self imposed, that the proposed mitigation measures are at least as protective of the water supply as the provision(s) of New York City's Watershed Regulations from which the variance is sought, and that the variance is the minimum necessary to afford relief from the Regulations.

As stated above herein, the Applicant further refined Alternative 2 first presented in the DGEIS as "Alternative Road Configuration Alternative for Gateway Summit Site" based on comments to the DGEIS and subsequent discussions and meetings with NYCDEP. This refined Alternative 2, referred to in this FGEIS as the "Modified Road Configuration Alternative for Gateway Summit," incorporates the enhanced layout features and overall reduction in development included in the current revised development program. Additionally, this refined alternative further reduces overall development and reduces environmental impacts by eliminating a 10,000-square foot office building and an additional approximately 500 linear feet of impervious roadway surface. Under this alternative the upper portions of the Gateway Summit site are accessed by extending the westerly access point on Route 6 rather than extending from the easterly access point at the proposed hotel, thereby eliminating the stream crossing. The hotel would be accessed from its own separate driveway from Route 6.

Comment 3.2-7 (Letter February 28, 2003, Mathew Giannetta, New York City Department of Environmental Protection) The DEIS must identify the impacts of altered drainage patterns and the resulting change in runoff amounts to watercourses and reservoirs. The DEIS must demonstrate that these adverse impacts may be avoided or adequately mitigated.

Response 3.2-7: *The SWPPPs contained in the DGEIS include stormwater management practices that will attenuate increases in post development increases in peak rates of stormwater discharge, thereby mitigating impacts on receiving waters. Further, proposed post-development drainage patterns will not be significantly different from pre-development patterns, according to the Applicant.*

The stormwater management basins on The Fairways project site have been moved up the hill away from the existing wetlands, leaving a large wooded buffer slope above the wetland. Stormwater runoff from The Fairways will be directed to several stormwater management basins. The stormwater treatment system will

discharge to the upstream section of the wetland to help maintain flows through the wetland. Stormwater runoff from the Gateway Summit project site will also discharge to an on-site stream after being treated by a series of stormwater basins.

Comment 3.2-8 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): Scant detail is provided for the drainage diversion plan for the adjoining Centennial Golf Course. This needs to be integrated into the drainage analysis for the Fairways. Without this, a sound assessment of the potential impacts to receiving streams or wetland LC-27 cannot be made.

Response 3.2-8: *Information regarding the drainage diversion plan for the adjoining Centennial Golf Course is included on the utility plan prepared for The Fairways project (see Figure 3.7-1). Information has also been incorporated into the Fairways SWPPP found in the Appendix of this FGEIS.*

Treated stormwater discharging from Centennial Golf Club is proposed to be collected and conveyed along the western boundary of The Fairways project. The eroded drainage channels on The Fairways site were created by the concentration of stormwater runoff resulting from the construction of the golf course. In the existing condition, treated stormwater currently discharges from the golf course onto the site and to the drainage channels that flow down the slope towards the onsite wetland. As part of The Fairways project, stormwater will be collected at the critical points along the common property line and conveyed through the proposed development towards the existing onsite wetlands. A combination of grass cut-off swales, drainage structures, and drainage piping will be used to collect the off-site stormwater to be piped through the subject property. In general grass cut-off swales are proposed along the majority of the common property line to collect the stormwater runoff. Additionally, drainage structures are proposed adjacent to the property line in areas where there are pipe discharges onto the subject property from stormwater management practices on the golf course. The grass cut-off swales in combination with the drainage structures will provide the necessary means to collect the off-site runoff and safely convey the stormwater through the proposed development, continuing the current drainage patterns. The existing eroding onsite drainage channels will be repaired and stabilized with appropriately sized stone lining.

Comment 3.2-9 (Letter February 28, 2003, Mathew Giannetta, New York City Department of Environmental Protection; Attorney General, Environmental Protection Bureau Letter, March 26, 2005): The project sponsor must consider alternatives that locate site improvements, including SMPs, outside the standard 100-foot adjacent area to on-site wetlands thus avoiding the loss or impairment of valuable buffer areas.

Response 3.2-9: *The project sponsor has considered alternatives in great detail in direct response to comments such as this one. Buffer encroachments have been significantly reduced. Please see the response to Comment 3.2-3.*

Comment 3.2-10 (Letter February 28, 2003, Mathew Giannetta, New York City Department of Environmental Protection): The function, value and extent of any proposed wetland mitigation measure, whether replacement, enhancement or preservation, must be described in detail.

Response 3.2-10: *Wetland and wetland buffer encroachments have been substantially reduced as a result of revisions to the development plans for the two projects. As such, no direct or indirect adverse impacts to wetlands are anticipated, and no mitigation beyond that which has been incorporated into the designs of the projects is required. The construction of the main access road for the Gateway Summit and The Fairways project will require the installation of a proposed culvert in the vicinity of the existing watercourse crossing. The Applicant proposes to construct the culvert with no disturbance to the bed or banks of this watercourse. The culvert will be constructed of a metal plate arch that will follow the alignment of the watercourse. Foundations for the arch culvert will be constructed on either side of the watercourse and the arch culvert sections will be bolted to the foundations. The wing wall will be constructed with no disturbance to the watercourse and the culvert will be back filled to grade and the roadway constructed. Therefore, no disturbance to this watercourse, or to wetlands regulated by the USACE or NYSDEC, is proposed. The crossing will result in the disturbance of 0.04 acres of a Town regulated wetland. The watercourse crossing on the Gateway Summit site involves the deposition of less than twenty-five cubic yards of fill into waters of the United States, as defined by the USACE. As such, no authorization from the USACE is required prior to construction of the crossing.*

The Applicant analyzed the potential environmental impacts anticipated from the proposed stream crossing in the DGEIS, which was prepared to satisfy SEQRA requirements. Consistent with the USACE determination that activities involving the discharge of less than 25 cubic yards of fill into waters of the United States will have a "minimal impact on the aquatic environment", the DGEIS concluded that the crossing would not result in any significant adverse impacts, that impacts might only occur downstream of the crossing, and that they would be short term, and primarily from erosion and sedimentation during construction. The DGEIS also concluded that all potential impacts would be fully mitigated through the design of the free flowing crossing, and by implementing the erosion and sediment control provisions of the Gateway Summit SWPPP, particularly the construction sequencing plan. Absent the potential for significant impacts resulting from the crossing, and with adequate impact mitigation incorporated into the proposed design, no additional mitigation measures are necessary to satisfy SEQRA.

As described in Section 1.2 and in Chapter 3.0, subsequent to the DGEIS the Applicant was notified by NYCDEP that construction of the impervious road within the 100-foot limiting distance to a watercourse requires a variance from NYCDEP. Accordingly, the Applicant will submit an application for the variance to NYCDEP. Additionally, an alternative that eliminates this watercourse crossing that was first presented in the DGEIS as Alternate 2, "Alternative Road Configuration Alternative for the Gateway Summit Site" is further refined and

presented in Chapter 4.0 herein as the "Modified Road Configuration Alternative for Gateway Summit."

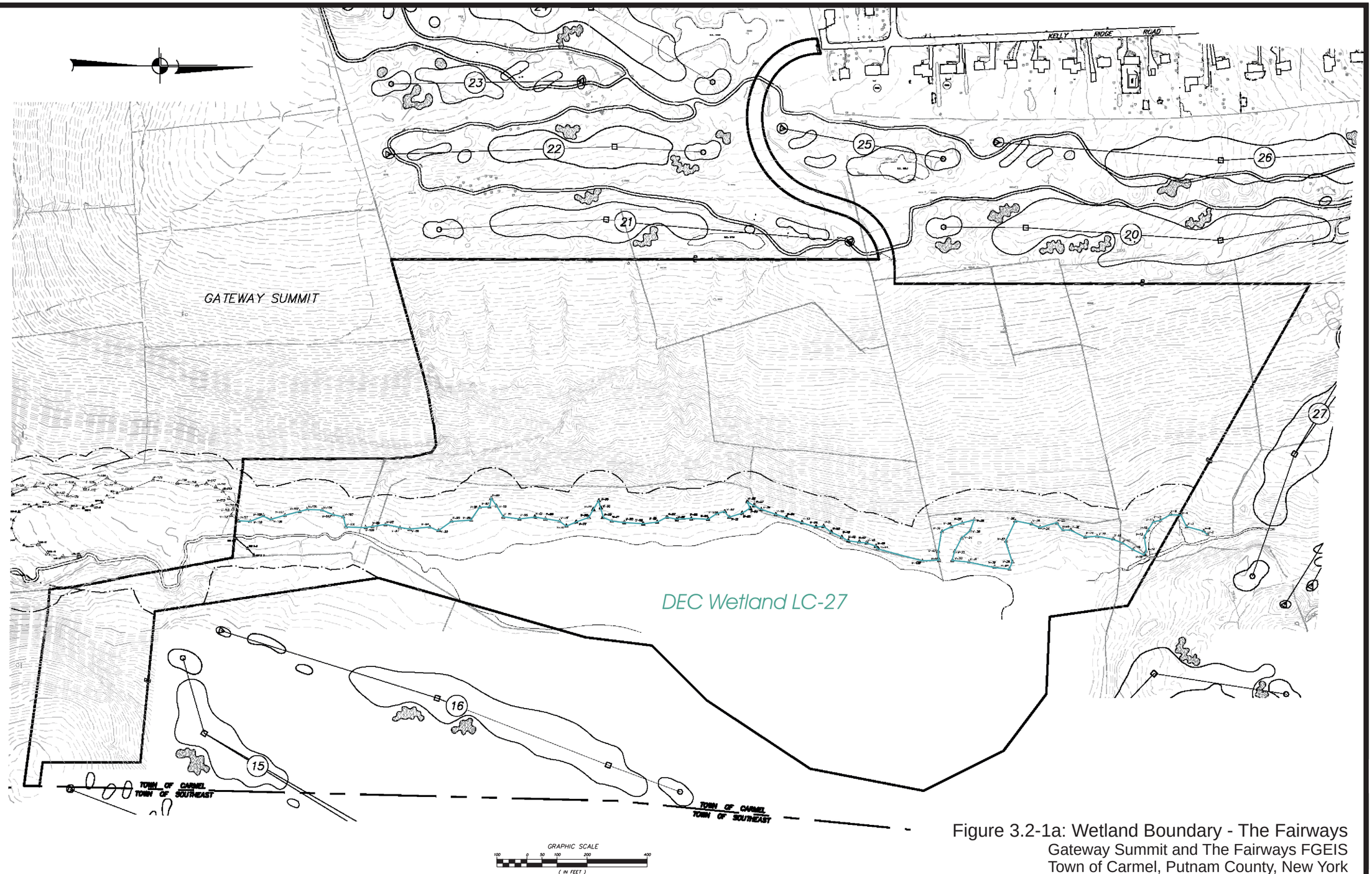

Figure 3.2-1a: Wetland Boundary - The Fairways
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 10/14/05
Scale: Graphic

File 02136 04/25/06
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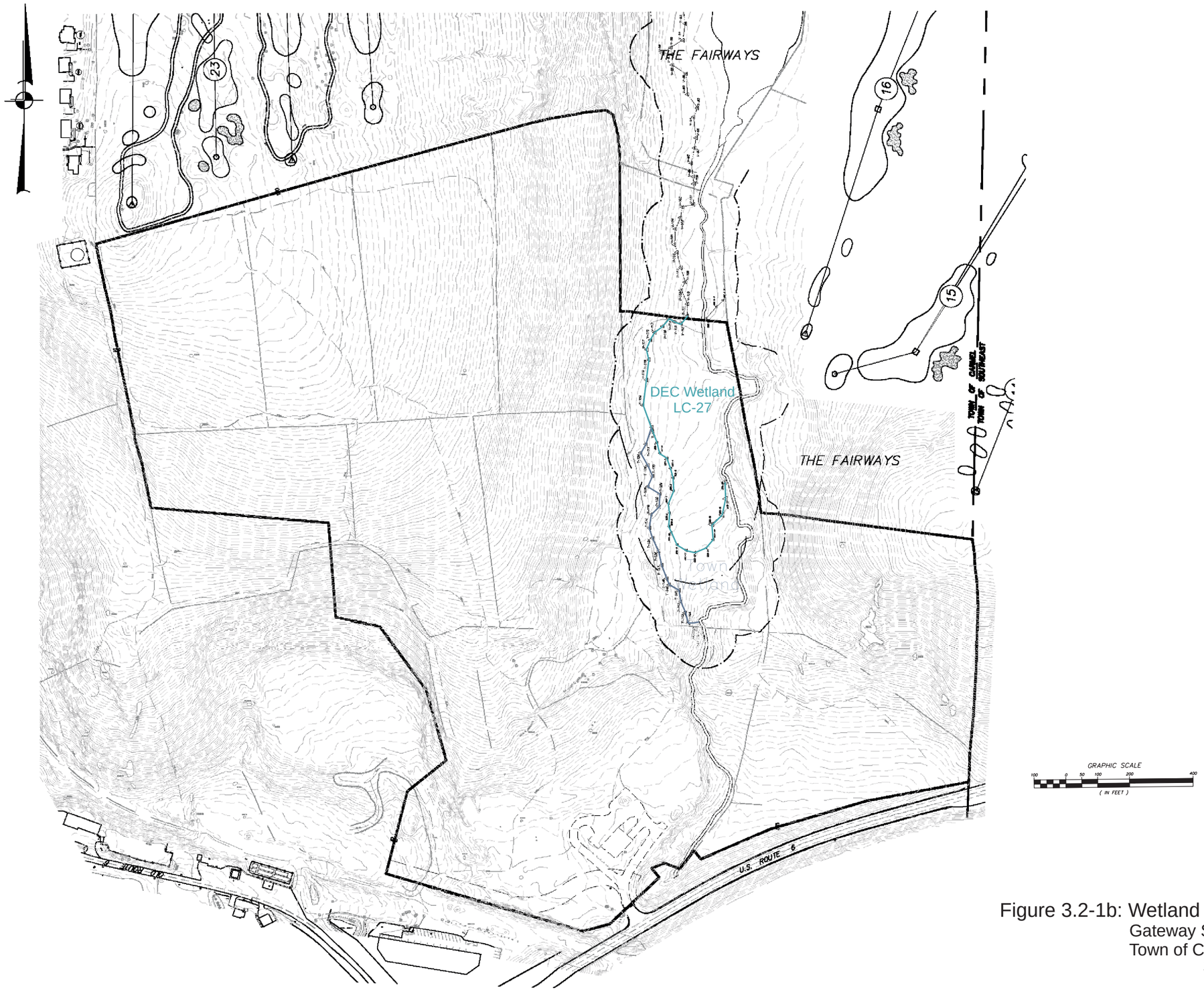

Figure 3.2-1b: Wetland Boundary -Gateway Summit
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 10/14/05
Scale: Graphic

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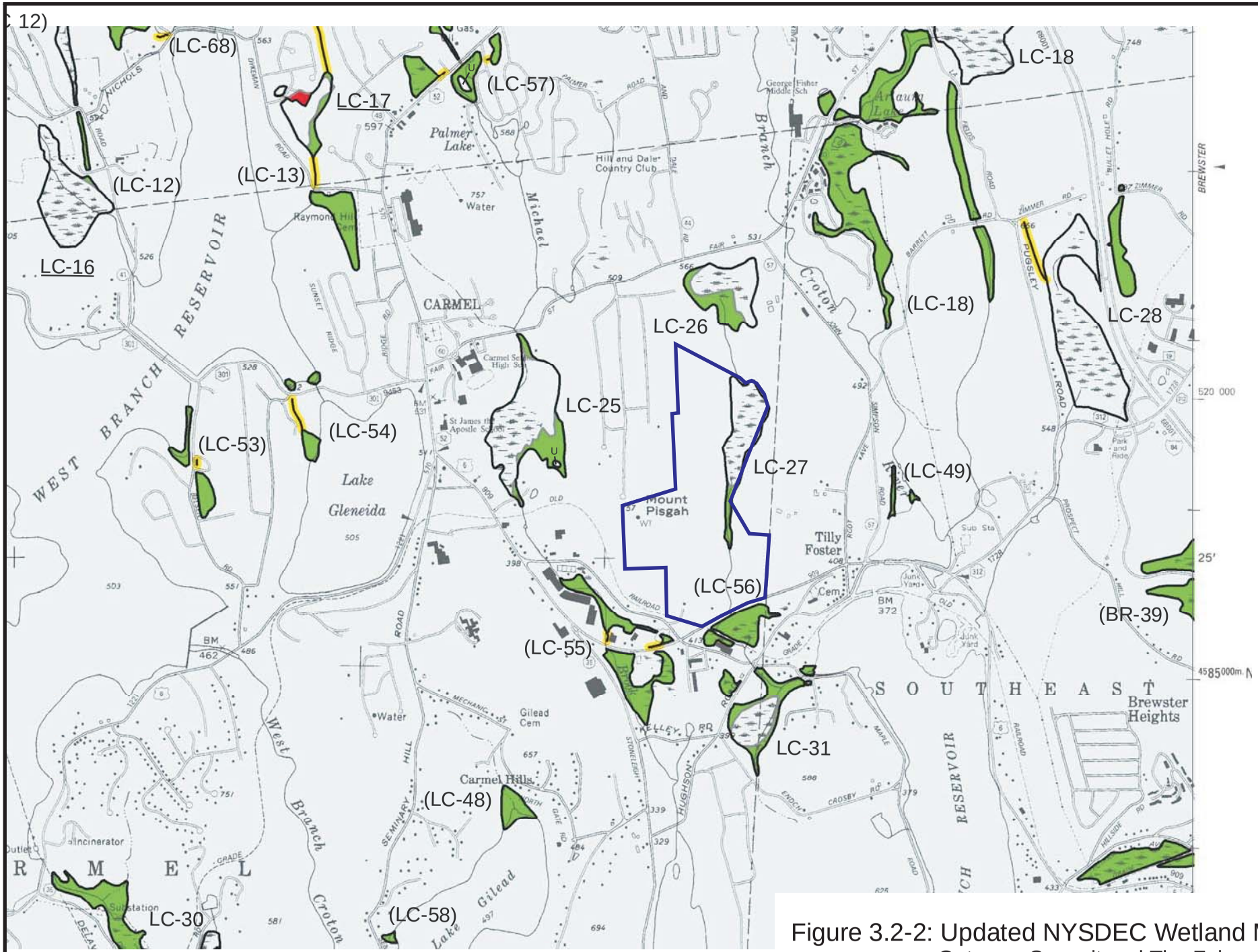

Figure 3.2-2: Updated NYSDEC Wetland Mapping
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: New York State DEC
Scale: NTS

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3.3 TERRESTRIAL & AQUATIC ECOLOGY COMMENTS AND RESPONSES

Comment 3.3-1 (Public Hearing, February 2, 2005, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc.): The NYS DEC Natural Heritage Program correspondence referenced in the DGEIS was not included in the Appendix.

> ***Response 3.3-1:*** *A letter from the NYSDEC dated September 23, 2003 regarding rare and endangered species and NYSDEC's review of the Natural Heritage Program database is attached in the Appendix of this FGEIS.*
>
> *This correspondence indicates that there are no known occurrences of rare or unusual habitat types on this parcel. This was confirmed during site visits conducted on multiple site walks between August 2001 and June 2005. Photos of habitat conditions on the site are included in the DGEIS.*
>
> *As stated in the DGEIS, this same correspondence indicates that a rare plant species, shining bedstraw (Galium concinnum, reported in 1938), once existed in the area. Populations of Galium concinnum in New York State are at the Northeastern extent of this species range, which extends westward from New York into Ontario, Canada and Minnesota, and southward to Oklahoma and Virginia. However, according to the Applicant this species is more common in the westward part of its range. This fact may account for shining bedstraw's listing as an endangered species in New York State.*
>
> *According to the New York Natural Heritage Program, this species has been found in New York within Hemlock-northern hardwood forests, oak-hickory forests and along dry, sandy roadsides. None of these forest or habitat types are present on the Gateway Summit or Fairways parcels. A detailed field survey of the Camarda Park site in the Town of Carmel in 2003, did not reveal the presence of shining bedstraw. According to the Applicant, based on this habitat assessment it appears highly unlikely that shining bedstraw is growing on the Gateway Summit and Fairways project sites.*

Comment 3.3-2 (Public Hearing, February 2, 2005, and February 10, 2005 Letter, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc.): The presence of Tussock sedge and Sphagnum moss on the site as identified in the report by Paul Jaehnig and the presence of palms muck and sun loam soils together indicate that there is potential for the presence of the Federally listed endangered species including Bog turtle, eastern box turtle, wood turtle, blue spotted salamander or other species likely to be found in this area, as indicated in Hudsonia's Biodiversity Assessment Manual and pursuant to Hudsonia and the Metropolitan Conservation Alliance. The Bog turtle relies on this vegetation for nesting and basking. The United States Fish and Wildlife Service talks about the need for a phase one Bog turtle survey if these indicators are present. Such a survey should be done when the vegetation is in full bloom, ideally in April or May. The investigation for this and other rare or endangered species should be done during the proper time.

> ***Response 3.3-2:*** *No evidence of the presence of Bog turtles was found in surveys of the project site conducted for the DGEIS, and the NYSDEC Natural*

Heritage Area database did not indicate any known occurrences of this species on the Gateway Summit or The Fairways parcels.

According to the Applicant, the plant species and soil types referenced by Mr. Bacon by themselves do not indicate the likely presence of Bog turtle without basking areas used by this species. The Applicant further notes that the absence of open canopy makes it unlikely that these sites would be utilized by the Bog turtle.

Comment 3.3-3 (Public Hearing, February 2, 2005, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc.): The Applicant needs to conduct wildlife surveys following the standards and procedures set forth in Hudsonia's Biodiversity Assessment Manual as well as Federal protocols that have been established.

Response 3.3-3: *There was no requirement in the SEQRA scoping document for this project that specified a survey protocol for this project. The Applicant's consultants visited the site numerous times between 2001 and 2005. According to the Applicant, each field visit included observations of existing wildlife and habitat potential. Wildlife and vegetation observances were made throughout the site during all seasons of the year. Site investigations were conducted on 8/17/01, 9/7/01, 9/13/01, 10/15/01, 7/18/03, 7/22/03, 12/1/03, 12/11/03, 12/12/03, 3/30/05, 4/20/05, 4/28/05 and 6/1/05. Observations were documented in field notebooks, on site plans used in the field and using a tape recorder to record observations as they were made.*

Comment 3.3-4 (February 10, 2005 Letter, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc.): Were on-site wildlife or rare plant species conducted? What was the date, time spent on-site, and scope of such studies, if done? The DEIS does not include information on whether a "qualified biologist" was employed to conduct an on-site flora and fauna survey as requested in scoping comments provided by Croton Watershed Clean Water Coalition, Inc.

Response 3.3-4: *Site surveys and habitat evaluations were conducted by field biologists from Tim Miller Associates, Inc., with over 30 years combined experience. Over 60 man hours were spent on site by field biologists from Tim Miller Associates, Inc., between 2001 and 2003, during all seasons, specifically for the evaluation of site habitat and wetlands and observation of wildlife and plant species.*

Comment 3.3-5 (Public Hearing, February 2, 2005 and Letter March 3, 2005, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc.): Impacts to wildlife were not adequately discussed. This topic should be covered in a Supplemental EIS. . . In addition to the missing information on wildlife, the DEIS overall is defective. For example, rather than include items required in the scoping document, the Applicant has presented a DEIS with general information, contradictory information, conclusory statements and assertions unsupported by any facts. Moreover, the DEIS' lack of specificity prevents any substantive review and prevents the lead agency from fulfilling it's SEQRA obligations in determining whether the Applicant's mitigation measures will sufficiently protect the public health and safety as well as the environment.

The Planning Board should rescind its approval of the DEIS. The Applicant should be directed to present the Planning Board with a DEIS that provides responses to the scope that are capable of being analyzed by the public and other interested agencies. In the alternative, the Applicant should be directed to prepare a Supplemental EIS (SEIS) to cure the omissions and inadequacies of the DEIS.

> ***Response 3.3-5:*** *The Planning Board reviewed the DGEIS as required by SEQRA and, following revisions, found it to be complete on January 5, 2005 relative to the approved scoping document.*
>
> *The DGEIS recognizes that the proposed development will impact areas of wildlife habitat, and indicates which species are most likely to be affected. The revised plans for Gateway Summit and The Fairways will preserve additional areas of the site, particularly those important areas on the eastern part of the site that border the NYSDEC wetland corridor. More than 65 acres of the revised Fairways parcel will be preserved as contiguous open space following development.*
>
> *The comment suggested above (that the Applicant be required to submit a supplemental DGEIS) was reviewed against the SEQRA Regulations relating to when a SEIS should be required. Under Section 617.9, a lead agency may require a SEIS based upon newly discovered information, project revisions, or a change in circumstances that relate to specific "significant adverse environmental impacts" not addressed or inadequately addressed in the EIS. Since the Applicant's proposed revisions mitigate potential impacts and decrease environmental impacts, a SEIS is not warranted here.*

Comment 3.3-6 (Public Hearing, February 2, 2005, Lisa Aurello): The biodiversity of this area is so impressive. Where are these animals going to go? None of this land has been designated as a place for them to retreat to. Where do they go, in front of our cars? I'm a concerned community member and I'm immediately and personally impacts by this development.

> ***Response 3.3-6:*** *As shown on the recent aerial photograph presented as Figure 3.3-1 in this FGEIS, there are large blocks of open space and undisturbed land to the southwest and east of the project sites, as well as nearly 80 acres to be forever preserved on the Gateway Summit and Fairways parcels, meaning that over 70 percent of the site will remain in a natural state. According to the Applicant, these undeveloped acres will remain part of more than 700 acres of open space that exist in this part of Carmel, most of which will now continue to exist as open space for the long term. These areas, including the Centennial Golf Course property, the Tilly Foster Farm, the Carl Dill Preserve adjacent to the Gateway Summit parcel, and undeveloped areas on the west side of Mount Pisgah, will remain available for wildlife use.*

Comment 3.3-7 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): The DGEIS indicates that two major habitat requirements for the endangered shining bedstraw, full leaf cover and well-drained soils, are present on-site. The DGEIS lacks discussion of this issue and should have included an investigation of the presence of the species, any potential impacts on it, and its habitat, and, if appropriate, means to mitigate

any adverse impacts. DEP notes that populations of shining bedstraw have been found in sections of Westchester County that did not meet the specific habitat criteria (oak-hickory overstory) noted in the document.

> ***Response 3.3-7:*** *The DGEIS states that "(s)hining bedstraw seems to prefer well drained soils, and heavily shaded conditions over those of partial to full sun. While the Gateway Summit and Fairways parcels meet the criteria for canopy density, these sites do not support applicable soils, and do not meet the habitat requirements for this species."*
>
> *Generally, this site is made up of the moderately well drained Paxton loams, which are hydrologic class C and not known to meet the "dry sandy roadsides" criteria often associated with shining bedstraw (Natural Heritage Program correspondence, 2005). The Applicant notes again that this species was last reported in the area in 1938. Significant agricultural and soil mining activities have occurred on these parcels since that time resulting in extirpation of any shining bedstraw that may have been reported in that area at the time.*

Figure 3.3-1: 2004 Aerial Photo
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: NYSDEC GIS

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3.4 WATER RESOURCES COMMENTS AND RESPONSES

Comment 3.4-1 (Public Hearing, February 2, 2005, Matthew Bennett; Public Hearing, February 2, 2005, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc.; Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates): Regarding the pollutant loading factors used to calculate runoff impacts, were the lower or higher factors utilized? NYS DEC will require that the lower numbers be used so the analysis should reflect those rates. Correct stormwater coefficients should have been used in analyzing redevelopment conditions on the site, and for the east of the Hudson area. The Total Maximum Daily Load (TMDL) requirement promulgated by DEC and DEP identifies that the correct figure is 0.05 kilograms per half acre per year.

The pre-development pollutant loading estimates have been overstated by a multiplier of approximately 2.2. Using these revised loading rates will clearly indicate that the current project design does not even remotely provide the water quality treatment that is required to meet the more stringent pollutant values for pre-development conditions, let alone providing for a required reduction in post-development pollutant loading transport from the site.

> ***Response 3.4-1:*** *According to the Applicant, the pre-development phosphorous loading rates utilized in the SWPPPs are standard ones from references cited in the 1993 and 2001 NYSDEC General Permits for Stormwater Discharges from Construction Sites used to estimate pollutant loads in stormwater runoff. These loading rates are accepted by the NYSDEC and NYCDEP. The SWPPPs will be subject to NYSDEC and NYCDEP review and approval prior to any disturbance of either site. During that review and approval process, both agencies will have the opportunity to comment on the pollutant loading coefficients used in the design of the stormwater management practices, and to estimate pre and post construction pollutant loading. The Applicant notes that the coefficient used by NYSDEC and NYCDEP in the TMDL program was developed for use at a reservoir watershed scale and not for use at a site specific scale.*

Comment 3.4-2 (Public Hearing, February 2, 2005, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc.): The Croton Watershed Clean Water Coalition did not receive a copy of the storm water CD ROM in the Volume II DEIS that it received.

> ***Response 3.4-2:*** *The requested material was mailed by the Applicant to James Bryan Bacon following the public hearing. The public comment period was extended by 30 days (comment period ended March 4, 2005) to allow the Lead, Interested, and Involved Agencies, and the public additional time to review and comment on the DGEIS. The SWPPPs that were prepared for the previous version of the proposed action described in the DGEIS have since been replaced with significantly refined plans. (See Appendices D and E and Figures 3.4-1 to 3.4-4).*

Comment 3.4-3 (Public Hearing, February 2, 2005, Christopher Wilde, Riverkeeper): Riverkeeper is concerned about the magnitude of the project and resulting levels of disturbance. It appears that 20 percent of the site will be covered with buildings or pavements. Another 40 percent will be semipervious landscaped areas, which should not be counted as natural areas, contrary to the DGEIS note stating that landscaped areas are considered to be 10 percent impervious. This level of impervious coverage can lead to extreme impacts on water

volume, storm water volume, and flooding. We [Riverkeeper] urge the Board to give consideration to alternatives with less overall disturbance.

> ***Response 3.4-3:*** *The revised development plans for the Gateway Summit and The Fairways projects have been developed in response to this, and other comments. As recommended by Riverkeeper, development density and the amount of impervious surfaces have been significantly reduced. See Chapter 1.0 of this FGEIS for full description of plan revisions and background on discussions with Riverkeeper. Further, post construction runoff from all areas for which the post construction perviousness has changed from pre construction conditons as a result of the project will be captured and treated in accordance with State and New York City regulations, according to the Applicant.*
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> *As now proposed, the SWPPPs provide adequate mitigation of potential impacts, including any potential impacts on New York City's Croton water supply system. According to the Applicant, the curvilinear design of the proposed road system limits disturbance to steep slopes to the maximum extent practical and minimizes lengthy unbroken views of internal buildings. The buildings are proposed in locations where the existing topography provides the most favorable opportunities for construction in order to limit impacts to steep slopes and further advance the environmental objectives of the Applicant. The revised action further reduces overall disturbance from 73.6 acres to 55.32 acres on the Gateway Summit project site, and from 41.8 acres to 25.90 acres on The Fairways project site. The revised projects have also further reduced disturbance to steep slopes of greater than 15 percent on the Gateway Summit project site from 38.6 acres to 24.93 acres, and on The Fairways project site from 26.1 acres to 14.83 acres. The amount of impervious surface has been reduced from 12.8 acres to 9.50 acres for The Fairways.*

Comment 3.4-4 (Matthew Bennett, Letter, January 5, 2005): Stormwater and erosion controls will have to be specific regarding construction and, therefore, merely establishing thresholds may not be sufficient for such a challenging site.

> ***Response 3.4-4:*** *See Response 3.1-3. Refined SWPPP's for Gateway Summit and The Fairways are provided in Appendices D and E of this FGEIS and are specific to the projects currently under consideration. The refined Sediment and Erosion Control Plan components of the SWPPPs are attached (see large scale drawings SP-4).*

Comment 3.4-5 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): According to the DGEIS, approximately 41.8 acres of the Fairways site (41%) and 73.6 acres (82%) of the Gateway Summit site will be disturbed during construction. Given the extent of disturbance, the soil characteristics on-site, and the area of steep slopes that will potentially be disturbed, there is a great likelihood that overland flow of stormwater during construction will result in accelerated erosion and sedimentation of surface waters on and off the site, as well as erosion and sediment control plan to mitigate the potential adverse impacts to water quality resulting from accelerated erosion, no site plans were included in the material provided to DEP. Moreover, only very limited analysis of impacts resulting from erosion and sedimentation and mitigation of those impacts is included in the DGEIS. Therefore, DEP cannot make a determination as to the adequacy of the plan at this time. In order for DEP to determine the adequacy of the DGEIS and assess the extent to which the referenced erosion

and sediment controls and stormwater management facilities will mitigate water quality impacts, they must be included in the DGEIS in the form of a detailed plan.

> ***Response 3.4-5:*** *SWPPPs have been developed for both the Gateway and The Fairways sites. These project specific plans, which were prepared in accordance with New York State and City regulations and design guidelines, are designed to mitigate all impacts relating to stormwater runoff, both during and following construction.*
>
> *According to the Applicant, the two project SWPPPs have been significantly refined since the issuance of the DGEIS to provide further mitigation of potential impacts. Upon closure of the SEQRA environmental review process, the SWPPPs will be subject to additional review and revisions as deemed necessary by NYSDEC and NYCDEP. The plans will also be subject to review by the Stormwater Project Review Committee established pursuant to the New York City Watershed Regulations. The Stormwater Project Review Committee is comprised of representatives from NYCDEP, Putnam County, the Town of Carmel, and the NYSDEC. Once NYCDEP deems the SWPPP application(s) complete, and notifies the Committee of its determination, the Committee may, at its discretion, review the applications and convene a meeting to discuss the SWPPPs.*
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> *The amendments made to the September 2003 SWPPPs included in the DGEIS are found in the March 31, 2006 SWPPPs included in this FGEIS. In addition to the Applicant's commitment in the FGEIS to engage a Certified Professional Erosion and Sediment Control Specialist (CPESC)/Certified Professional in Stormwater Quality (CPSWQ) to oversee implementation of the two SWPPPs, refinements to the SWPPPs since the DGEIS include the following:*
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> - *More detailed Erosion and Sediment Control Plans and Narratives;*
> - *More detailed Construction Sequencing;*
> - *Additional specifications that limit the area of disturbed soil on either site to five acres at any time;*
> - *Maintenance of a Construction Site Log Book and Inspections pursuant to GP-02-01;*
> - *More detailed Erosion Control Facilities Inspection and Maintenance Program;*
> - *More detailed Stormwater Management Plans;*
> - *Further engineered Stormwater Management Practices and Maintenance Program; and,*
> - *Additional pollutant loading analyses confirming that post construction total nitrogen, total phosphorous, total suspended solids and biological oxygen demand will be reduced to pre- construction levels.*

Comment 3.4-6 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection; Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): The proposed Action includes a watercourse crossing for the subdivision road at Gateway Summit. Under this scenario, the stream would be conveyed through a pipe for a total of 190 feet and result in approximately 0.04 acres of

streambed disturbance. According to the DGEIS, a permit from the Town of Carmel and possibly one from the USACE is required for this crossing.

Based on the information provided in the DGEIS, it does not appear that the Applicant is required to obtain a Crossing, Piping, or Diversion Permit ("CPDP") from DEP. However, the Applicant will be required to obtain a variance for any associated impervious surfaces (i.e. roadways) to be created within 100-feet of the perennial stream in accordance with Section 18-39(a)(1) of the Watershed Rules and Regulations. The Applicant should also contact the USACE to determine whether a permit from that agency is required for the crossing prior to issuance of the FGEIS.

Impacts to watercourses posed by road crossings must be identified. The DEIS must demonstrate that those adverse impacts may be avoided or adequately mitigated.

Response 3.4-6: *The proposed subdivision road will cross a NYCDEP regulated watercourse that flows through the Gateway Summit site. The proposed crossing of this perennial stream has been revised (See Figure 3.4-5) and will require a permit from the Town of Carmel Environmental Conservation Board. The crossing will therefore require no permit from NYCDEP, according to the Applicant. The revised proposal (Figure 3.4-5) entails the installation of a culvert in the vicinity of the existing watercourse crossing. The Applicant proposes to construct the culvert without disturbing the bed or banks of the watercourse. The culvert will be constructed of a metal plate arch which will follow the alignment of the watercourse. Foundations for the arch culvert will be constructed on either side of the watercourse and the arch culvert sections will be bolted to the foundations. The wing wall will be constructed with no disturbance to the watercourse and the culvert will be back-filled to grade and the roadway constructed.*

The refined stream crossing plan (Figure 3.4-5) would result in less than 25 cubic yards of fill in "Waters of the United States" as defined by the United States Army Corps of Engineers (USACE). Accordingly, the USACE has determined that the proposal does not represent the potential to significantly impact the watercourse, and in the Applicant's opinion, it does not constitute an activity regulated by the USACE. Accordingly, neither an Individual Permit from the USACE, or coverage under a USACE Nationwide Permit, will be required. Mitigation of impacts will be further ensured through the stream crossing permit from the Town of Carmel.

The proposed impervious surfaces (roadway) are permitted pursuant to Section 18-39 (a) (6) (ii) of the NYCDEP regulations, which permits the construction of an impervious surface for a new road necessary to provide an access road to two or more parcels of a subdivision. The subject new road is necessary to access the proposed subdivision and the two existing parcels -- one associated with the Gateway Summit project (tax parcel 55.-2-23.1), and the other associated with The Fairways project (tax parcel 44-2-1). According to the Applicant, the new road has been designed to provide safe and adequate access to the subject parcels.

Although, in the Applicant's opinion, the configuration of the onsite roadway in the proposed action presents the least potential for adverse impacts of the alternatives evaluated, and Section 18-39 (a) (6) (ii) of the Watershed

Regulations precludes the need for a variance to allow the construction of the road, NYCDEP has indicated that a variance for the watercourse crossing is needed. Accordingly, the Applicant will submit an application for the variance to NYCDEP. That application seeks to demonstrate to NYCDEP that the need for the variance is not self imposed, that the proposed mitigation measures are at least as protective of the water supply as the provision(s) of New York City's Watershed Regulations from which the variance is sought, and that the variance is the minimum necessary to afford relief from the Regulations.

As stated in Chapter 1.0, the Applicant further refined Alternative 2 first presented in the DGEIS as "Alternative Road Configuration Alternative for Gateway Summit Site" based on comments to the DGEIS and subsequent discussions and meetings with NYCDEP. This refined Alternative 2, referred to in this FGEIS as the "Modified Road Configuration Alternative for Gateway Summit," incorporates the enhanced layout features and overall reduction in development included in the current revised development program. Additionally, this refined alternative further reduces overall development and reduces environmental impacts by eliminating a 10,000-square foot office building and an additional approximately 500 linear feet of impervious roadway surface. Under this alternative the upper portions of the Gateway Summit site are accessed by extending the westerly access point on Route 6 rather than extending from the easterly access point at the proposed hotel, thereby eliminating the stream crossing. The Modified Road Configuration Alternative for Gateway Summit does not require a watercourse crossing variance from NYCDEP. The Modified Road Configuration Alternative for Gateway Summit was found feasible after further engineering analysis, consultation with the NYS DOT regarding its plans to replace the bridge along Route 6, and with a reduction in development. Eliminating the 10,000-square foot office under the proposed plan allows the westerly access points on Route 6 to be extended into the site at an acceptable grade without extensive cutting and grading of existing soils, making it a desirable alternative.

Comment 3.4-7 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): The Proposed Action also includes a pedestrian bridge between Lots 1 and 2 on the Gateway Summit site. Construction of this bridge over the primary stream is regarded in Section 3.2.3 as a "minor temporary disturbance" and thus no attempt to avoid or mitigate impacts is proposed. The FGEIS should quantify the extent of disturbance, the potential impacts anticipated from the disturbance, and measures to mitigate those impacts.

Response 3.4-7: *A prefabricated wooden or steel pedestrian bridge is proposed to connect the proposed hotel site and restaurant site for pedestrian access, in order to minimize vehicular traffic between the two sites. According to the Applicant, temporary disturbance associated with the construction of this bridge would be required for the installation of the footings on either side of the watercourse; there will be no direct disturbance of the stream channel. Proper erosion control measures such as silt fencing and immediate stabilization of all disturbed soils, will be utilized during the construction of the pedestrian bridge. Additional details, including a construction sequence, the area of disturbance required for construction of the bridge, and a dewatering plan, will be provided for final site plan approval and when the Applicant seeks the necessary permits. At that time, the exact nature of the bridge and required footings will be known.*

The only potential impacts anticipated from the construction and operation of the bridge are temporary ones relating to erosion and sedimentation during construction. Those potential impacts will be fully mitigated with the erosion and sediment control measures that will be implemented.

Comment 3.4-8 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection; Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): Inadequately controlled stormwater would pose a significant risk to water quality both on and off the project site. Accelerated erosion of soils disturbed during construction can result in the discharge of significant volumes of sediment and other pollutants into receiving waters, wetlands, and the downstream reservoirs. The introduction of such volumes of sediment into the on-site surface waters can have substantial, long-lasting, region-wide impacts on water quality.

The Proposed Action has the potential to increase the volume and velocity of stormwater through land clearing and conversion of existing land forms into impervious surfaces. The increases in stormwater velocity will likely lead to accelerated erosion and sedimentation both during and after construction. Sedimentation of the receiving water bodies will result in decreased light penetration and nutrient enrichment, increased turbidity, increased transport of pollutants that are absorbed to the sediment particles, shielding of pathogens from disinfection, and clogging of gills and filters in aquatic organisms. In order to reduce stormwater-induced impacts from the Project, it is essential that the Applicant design and construct adequate erosion and sediment control practices to mitigate these potential impacts. An erosion and sediment control plan with sufficient detail, including sequencing, to allow for a thorough review of its potential to mitigate impacts associated with sedimentation, was not included in the proposal.

The DGEIS must identify the impacts of altered drainage patterns and the resulting change in runoff amounts to watercourses and reservoirs. The DGEIS must demonstrate that these adverse impacts may be avoided or adequately mitigated.

Response 3.4-8: *The refined SWPPPs prepared for the Gateway Summit and The Fairways projects include Erosion and Sediment Control Plans (see Appendices D and E and accompanying plans) that clearly identify the measures, including construction phasing and sequencing, that will mitigate any potential short term impacts associated with erosion and sedimentation during construction. By limiting the area of disturbed soils to five acres during construction, and by implementing the specific erosion control measures specified in the Erosion and Sediment control plans, potential impacts that might be anticipated from the activity will be fully mitigated. The Applicant has forwarded the entire SWPPPs to NYCDEP Engineering staff for review, and will modify the plans if necessary based on input from the NYCDEP. The Applicant can not commence construction until the SWPPPs, including its Erosion and Sediment Control Plan component, have been approved by NYCDEP and NYSDEC. Further, the Applicant will engage a Certified Erosion and Sediment Control Professional (CPESC)/Certified Professional in Stormwater Quality (CPSWQ) to oversee implementation of the SWPPP and coordinate the implementation with appropriate State, municipal, and New York City personnel.*

The proposed plan for The Fairways also addresses stormwater issues related to Centennial Golf Club. Treated stormwater discharging from Centennial Golf

Club is proposed to be collected and conveyed along the western boundary of The Fairways project. The eroded drainage channels on The Fairways site were created by the concentration of stormwater runoff resulting from the construction of the golf course. In the existing condition, treated stormwater currently discharges from the golf course onto the site and to the drainage channels that flow down the slope towards the onsite wetland. As part of The Fairways project, stormwater will be collected at the critical points along the common property line and conveyed through the proposed development towards the existing onsite wetlands. A combination of grass cut-off swales, drainage structures, and drainage piping will be used to collect the off-site stormwater to be piped through the subject property. In general grass cut-off swales are proposed along the majority of the common property line to collect the stormwater runoff. Additionally, drainage structures are proposed adjacent to the property line in areas where there are pipe discharges onto the subject property from stormwater management practices on the golf course. The grass cut-off swales in combination with the drainage structures will provide the necessary means to collect the off-site runoff and safely convey the stormwater through the proposed development, continuing the current drainage patterns. The existing eroding onsite drainage channels will be repaired and stabilized with appropriately sized stone lining.

Finally, there will be no significant alteration of drainage patterns as a consequence of the proposed action. As such, no mitigation measures specific to altered drainage areas are proposed.

Comment 3.4-9 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): The SPPP that was included with the DGEIS as mitigation for impacts to water resources is both conceptually and fundamentally incomplete and as such, adverse impacts to watercourses, wetlands, and reservoirs cannot be fully assessed at this time. The DGEIS correctly identifies the Middle Branch Reservoir as the primary drainage basin for the action yet fails to note that a portion of the Gateway Summit property is located within the watershed of the Croton Falls Reservoir.

While stormwater management practices are shown on the conceptual site drawings, insufficient detail concerning the hydraulic function, storm routing, and sequential order of the basins is provided. Many of the post-construction drainage areas shown on Figure 3.4-5 do not correspond to the runoff report for Gateway Summit (Appendix L). Further the stormwater design point specified in the Fairways narrative (Appendix K) is located upstream from the discharge from the site.

As such, assumptions regarding the accuracy of the pre- and post-construction analysis are speculative, at best. Because the materials contained in the DGEIS lack detail regarding the location, nature, and capacity of post-construction stormwater outfalls, it is not possible to determine what, if any, alterations to the site's natural drainage divide are not proposed. Further, the adverse impacts to receiving streams and wetlands posed by erosion, sedimentation, excess runoff volumes, increased velocity of flows, and extended periods of low flow discharge during dry weather conditions cannot be assessed.

Response 3.4-9: *In the Applicant's opinion, the refined SWPPPs for the projects submitted with this FGEIS are complete and allow for a determination of their adequacy to mitigate potential adverse impacts associated with stormwater. The*

refined Fairways SWPPP specifies that the project is located in the Phosphorous Restricted Middle Branch and Croton Falls Reservoir drainage basins (see response to comment 3.4-16).

The refined SWPPPs for Gateway Summit and The Fairways (Appendix D and E) include hydraulic routing through the stormwater basins, revised drainage area maps, and sufficient detail to allow for an assessment of their effectiveness and potential adverse impacts associated with post construction stormwater runoff.

In response to discussions with NYSDEC concerning specific State design criteria for stormwater management practices , the two SWPPPs were refined again on March 31, 2006. The designs for all stormwater management practices included in the SWPPPs are now based upon State stormwater routing and treatment pond design criteria. The refined SWPPPs include a NYSDEC listed stormwater management practice followed by an additional practice, a dry pond, followed by a supplemental NYSDEC listed practice. Conclusions made during the environmental impact assessment process concerning the ability of the two SWPPPs to mitigate impacts are based, in part, upon the submitted plans and the requirements of New York State General Permits 93-06 (incorporated by reference in the NYC Watershed Regulations) and 02-01, with which the Applicant's SWPPPs must ultimately comply. As noted, the Sediment and Erosion Control Plan components of the SWPPPs (Appendices D and E) identify the measures, including construction phasing and sequencing, that will mitigate any potential short term impacts associated with erosion and sedimentation during construction. By limiting the area of disturbed soils to five acres during construction, and implementing the erosion control measures specified in the Erosion and Sediment Control Plan, potential impacts resulting from erosion will be avoided. The Applicant has forwarded the Erosion and Sediment Control Plans to NYCDEP Engineering staff for review. The Applicant can not commence construction until the SWPPPs, including their Erosion and Sediment Control Plan components, have gained the approval of NYCDEP and NYSDEC. Further, the Applicant will engage a Certified Erosion and Sediment Control Professional (CPESC) and Certified Professional in Stormwater Quality (CPSWQ) to oversee implementation of the SWPPPs and coordinate its implementation with appropriate State, municipal, and New York City personnel.

Comment 3.4-10 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): The FGEIS should explain and justify the Applicant's excessive reliance on "Design 1" detention basins for treatment of stormwater runoff. "Design 1" basins providing less than twelve hours of detention time are among the least efficient practices with respect to phosphorus and nitrogen removal. Reducing the Impacts of Stormwater Runoff from New Development, 1992. The use of a smaller number of more efficient, site-appropriate practices would help to ensure long-term pollutant removal and would result in reduced overall site disturbance, as well as preservation of existing forested areas.

Response 3.4-10: *The SWPPPs for the proposed action include designs for detention basins that have been revised to capture and treat the 2 year, 24-hour design storm as required by the New York City Watershed Regulations. The pollutant removal efficiencies for the basins are based on "Design 2" detention*

basins per the NYSDEC publication "Reducing The Impacts of Stormwater Runoff From New Development" (1992). To achieve the greatest stormwater treatment attainable, the basins are supplemented with smaller, adjunct stormwater treatment practices.

A "Design 2" basin requires 24-hour detention of the runoff volume produced by a 1.0-inch storm. The proposed basins will detain the 2 year, 24-hour storm (3.5 inches) for 24 hours, providing enhanced pollutant removal efficiencies. Also see Response 3-4-9 for discussion of SWPPPs approval and implementation.

Comment 3.4-11 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): Preserving the recharge capacity of a given area should be a primary consideration of proper site design. Recharge of stormwater runoff assists in maintaining stream base flows, limiting the duration and frequency of bank-full flood events, and sustaining wetland hydroperiods. Accordingly, DEP's February 28, 2003 scoping comments requested analysis of a site design or designs that would maximize groundwater recharge through, among other practices, conservation of forested areas, limited site disturbance, limited and disconnected impervious surfaces, and the use of infiltration practices to manage stormwater runoff.

The Applicant, however, has instead proposed a project that will result in the loss of over 100 acres of woodland and the creation of approximately 37 acres of impervious surfaces. Moreover, the Applicant proposes to manage post-construction stormwater runoff through extended detention, located primarily (and incongruously), in areas of infiltrative soils. The combined effect will result in a post-construction condition that will cause runoff volumes significantly in excess of existing conditions and that will greatly diminish infiltrative capacity and recharge. Conspicuously absent from the "Aquifer Recharge" and "Future Groundwater Conditions" sections of the DGEIS is any discussion or analysis, much less any proposed mitigation, of the potential for increased runoff volume and diminished recharge.

Response 3.4-11: *The revised site designs for the two projects are based, in part, on an analysis of various site design options. The current plans maximize groundwater recharge to the fullest extent attainable by, among other things, increased conservation of forested areas and limiting site disturbance and separating discrete areas of impervious surface. However, the majority of the development, including the areas where the proposed stormwater management practices are sited, is located on Hydrologic Group C soils, as designated by the United States Department of Agriculture, Soil Survey of Putnam and Westchester Counties. These soils are Paxton fine sandy loam (PnB, PnC), which are characterized in the survey as having rapid runoff, and very slow permeability. These characteristics do not meet the criteria for infiltration practices set forth in stormwater practices design manuals incorporated by reference into the 1993 and 2002 New York State General Permits. Furthermore, because these soils have poor permeability and rapid runoff, existing recharge within such areas is limited and the anticipated post construction reduction in regional groundwater recharge is not anticipated to be significant. The proposed pond bottoms, which are designed to treat stormwater as well as attenuate post development increases in the rate and volume of stormwater discharged from the site, will be excavated into the substratum layer of the soil. The permeability of the soil's substratum, per the Survey, is very slow (< 0.2 inches per hour). In addition, an offline infiltration pond would need to be added to the series of*

basins to treat the 2 year, 24-hour design storm, as required by NYCDEP. In the Applicant's opinion, because of poor soil permeability, infiltration basins would need to be substantially larger than the proposed treatment basins to treat the same volume of runoff and would result in significantly greater land disturbance.

The slow percolation rate through the substratum would require the infiltration pond to be as large as the other ponds in series, thus creating more disturbance on the project site without any significant water quality benefits. Regarding impacts to woodlands on the project site, the revised plans indicate that 49.63 acres of upland woods would be disturbed through grading activities on the Gateway Summit project site, and that 27.51 acres of upland woods would be disturbed through grading activities on The Fairways project site.

In sum, the current proposal was developed following an analysis of a variety of site development options that would maximize groundwater recharge, and mitigate any post development increases in the rate of stormwater runoff. Furthermore, the analysis of potential impacts disclosed in the DGEIS also considered those potential impacts resulting from increased runoff and decreased recharge. Based upon the current low permeability of the on-site soils, existing rapid runoff from the site, and the mitigation measures that are incorporated in the revised design of the proposed action, no significant adverse impacts from post construction increases in runoff volume, or decreased recharge, are anticipated.

Comment 3.4-12 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): Lastly, the Applicant should clarify whether the proposed auto dealership at Gateway Summit (Lot 3) will have a service center and/or gasoline pump(s). If so, the FGEIS should discuss the potential impacts of spills and leaks from this facility along with proposed measures that would mitigate those impacts by preventing hydrocarbons from entering the water supply.

Response 3.4-12: *The Applicant is no longer proposing an auto dealership at Gateway Summit. The list of proposed uses is provided in Table 1-1 in Chapter 1.0 of this FGEIS. A restaurant and office building are currently proposed as part of the proposed action in the location of the previously proposed auto dealership (Lot 3).*

Comment 3.4-13 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): DEP has designated the Middle Branch and Croton Falls Reservoirs as phosphorus-restricted, meaning that phosphorus levels in these reservoirs do not comply with State guidelines and need to be reduced. Watershed Rules and Regulations Section 18-16 (79). In addition, DEC has determined that the reservoirs exceed their total maximum daily loads ("TMDL") for phosphorus, meaning that phosphorus loading from within the basins prevents the reservoirs from meeting water quality standards under current conditions. To reduce phosphorus loadings below the TMDL limit, DEC has concluded that existing nonpoint source loadings of phosphorus must be reduced and new nonpoint sources should not contribute additional phosphorus to the reservoir. As part of the regional effort to reduce phosphorus loads to the reservoirs, individual towns will have phosphorus load reduction targets for existing sources. Any increases in one area will need to be balanced by additional reductions in another part of the Town.

The DGEIS does not adequately discuss the facts that the reservoirs currently exceed their Phase II TMDL for total phosphorus and require significant reductions in nonpoint sources of phosphorus. The FGEIS must fully evaluate the impact of the increase in phosphorus loading from the Proposed Action, especially given the fact that Table 3.4-3 indicates a net increase of phosphorus loading under the Proposed Action. The basin-wide and town-wide impact of this potential increase should be evaluated in the EIS process. The FGEIS should also address the differences in phosphorus loading between the alternatives presented and the resulting impacts of each alternative on the Town of Carmel's TMDL goals. Moreover, the Town should require the Applicant to implement water quality improvement projects (i.e., stormwater filtration systems, stormwater treatment basins, and retrofits) either on-site or elsewhere within the basin as mitigation for the Proposed action's overall TMDL impact.

> ***Response 3.4-13:*** *The Applicant has developed, and significantly refined, the two SWPPPs for the proposed action, pursuant to the requirements of New York City's Watershed Regulations, and the New York State General Permits 93-06 and 02-01, that will prevent post construction increases in phosphorus loading in stormwater discharged from the developed sites. Using accepted phosphorus loading rates, it is expected that post construction annual phosphorus loading from the entire project area (both The Fairways and Gateway Summit) will not be substantially different than preconstruction loading. The SWPPPs have been designed to include redundant primary stormwater treatment practices in series, as well as use of stormwater treatment adjuncts. Based upon the designs of the measures in the SWPPPs, it is expected that pollutant removal rates will be at the high end of the accepted range, and that any increases in post construction phosphorous loading will be controlled to the fullest extent attainable.*

Comment 3.4-14 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): As noted earlier, in order to efficiently utilize resources and avoid duplication of effort, DEP determined that detailed review of potential local impacts of the Project, such as traffic, would be the responsibility of the Town of Carmel. As discussed above, however, DEP did review such local issues to evaluate the degree to which local impacts could have water quality implications, including their effect on induced growth and cumulative impacts.

> ***Response 3.4-14:*** *Comment noted.*

Comment 3.4-15 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection; Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates): DEP did not receive the site plans associated with the erosion and sediment control or stormwater pollution prevention plans. As such, DEP cannot fully evaluate the adequacy of these plans as proposed mitigation.

> ***Response 3.4-15:*** *The revised Erosion and Sediment Control Plan, components of the two SWPPPs, including narratives and construction sequencing, are attached to this FGEIS (Appendices D and E) and include narratives. The Applicant has forwarded NYCDEP Engineering staff the SWPPPs, including the Erosion and Sediment Control Plans, and has contacted NYCDEP staff to schedule a meeting to identify any necessary revisions to the plans.*

Comment 3.4-16 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): While phosphorus-restrictions in the Croton Falls Reservoir basin

are mentioned in the Executive Summary, there is no mention of the same designation for the Middle Branch Reservoir basin.

Response 3.4-16: *Comment noted. See response to Comment 3.4-9.*

Comment 3.4-17 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): SEQRA requires an EIS to include "...reasonably related short-term and long-term impacts, cumulative impacts and other associated environmental impacts..." 6 NYCRR §617.9(b)(5)(iii)(a). The Applicant has failed to satisfy this requirement because it has not evaluated the cumulative effects of the proposed development with respect to other developments of significant size in the area. The DGEIS does not include any discussion of recent development trends, nor likely future trends, in the context of water quality impacts. For example, the DGEIS should have considered issues such as wetland disturbance, stormwater management, and percent of impervious cover in the context of basin- and sub-basin-wide development. The Applicant should identify recently approved or pending development projects in the watershed basin or sub-basin to determine the potential for cumulative water quality impacts.

Response 3.4-17: *During preparation of the DGEIS, the Applicant assessed all potential impacts from the construction and operation of the proposed action relative to the adopted scope for the DGEIS, and the requirements of SEQRA. Moreover, other projects in the area have been identified in the transportation chapter of the Draft GEIS. As development occurs in the watershed, there may be a cumulative effect on various environmental issues including traffic, services, land and water resources. However, SEQRA does not contemplate that applicants will evaluate the cumulative impacts of multiple projects in the watershed at the same level of detail that they evaluate the actions that they sponsor.*

In the vicinity of the proposed Gateway Summit and Fairways project sites, the Carmel Centre project on Stoneleigh Avenue received final review from the NYCDEP and the Town of Carmel Planning Board. This project has received intense review by the NYCDEP and meets all requirements of the City regulations. Northwest of the site, on Route 52, the Hillcrest Commons project is similarly undergoing review by the NYCDEP. Like Gateway Summit, The Fairways and Carmel Centre, this project has been determined to present little or no potential for impacts to wetlands or wetland buffers except for those resulting from the required road access, and these impacts have been minimized as a result of agency review of the SEQRA documentation. On the 107-acre Hillcrest parcel, disturbance will be limited to less than 28 acres. Discussion with the involved agencies and revisions to the plans have taken place during the SEQRA process to ensure that potential impacts are mitigated.

Comment 3.4-18 (State of New York Office of the Attorney General, March 4, 2005): The DGEIS should provide a far more detailed description of the Project's location within a highly sensitive and already impaired source of drinking water. The proposed Project is located entirely within the New York City Watershed ("Watershed"), an area that comprises only 4.2% of New York State's lands yet serves as the source of drinking water for over 9 million residents. The area affected by the proposed Project is within the "Croton" portion of the Watershed, an area that presently serves as an unfiltered drinking water source for approximately 900,000 people on an average daily basis, and as the source of drinking water

for upwards of 2.5 million people during drought conditions. The only treatment this water currently receives from reservoir to faucet is disinfection through chlorination. Runoff from the proposed Project would drain into the Middle Branch and Croton Falls Reservoirs. There are two key water pollutants of concern when reviewing this proposed Project as it relates to the Watershed: phosphorus, and suspended sediment (also referred to as turbidity).

The New York State Department of Environmental Conservation ("DEC") has classified the Middle Branch Reservoir as a class "A" water body. Most of the Project site drains toward the Middle Branch, which then flows into the Croton Falls Reservoir. The Croton Falls Reservoir has been classified by DEC as a class "A/AA(T)" water body. Therefore, pursuant to their site classification, these reservoirs are to be maintained at a very high quality - one that allows them to serve as a source of drinking water. These reservoirs are also classified as "phosphorus restricted" basins by the New York City Department of Environmental Protection ("City DEP") and were listed as impaired by State DEC on its list of impaired water bodies pursuant to Section 303(d) of the Federal Clean Water Act, because these water bodies significantly violate the applicable New York State Water Quality Standard for phosphorus.

These reservoirs have been the subject of extraordinary and expensive efforts under the 1997 New York City Watershed Memorandum of Agreement to better control phosphorus and other pollutants, such as pathogens. Moreover, the Middle Branch and Croton Falls Reservoirs and the subject of heightened protection criteria for phosphorus that was developed pursuant to the Clean Water Act - known as the "total maximum daily load" ("TMDL") program. The U.S. Environmental Protection Agency ("EPA") has approved a TMDL for the Middle Branch Reservoir that demonstrated a need to reduce phosphorus pollutant loadings by at least 204 kg/yr and for the Croton Falls reservoir by 885 kg/yr. As the TMDL's have already taken into account the full upgrade of all sewage treatment plants, all of these reductions in phosphorus loadings must be obtained from "non-point" or stormwater runoff sources. Compliance with the TMDL requirements should be assured through an individual State DEC stormwater permitting process.

> ***Response 3.4-18:*** *The project site was described and graphically depicted in the DGEIS. Normally, the Croton system supplies approximately 10 percent of New York City's drinking water demand.*
>
> *The water quality parameter, Total Suspended Solids (TSS), includes suspended sediments and is specifically cited as a target pollutant in the two New York State General Permits (GP-93-06 and GP-02-01) with which the Applicant's SWPPPs must comply.*
>
> *NYSDEC has been assigned responsibility by the USEPA for implementing the TMDL program and achieving the necessary nonpoint reductions in phosphorus. NYSDEC will determine if an Individual Stormwater Permit is required. If so, the Applicant will apply for one. Otherwise, the Applicant will seek coverage under New York State's SPDES General Permit for Stormwater Discharges (GP-02-01) by filing a Notice of Intent (NOI), the SWPPPs in their final forms, and the required supporting documents. In any event, the elements of the required SWPPPs, and their goal of reducing post construction increases in pollutant loading to pre-construction levels (rather than reducing pre-construction phosphorous loads through retrofitting), are identical. The Applicant reiterates that an Individual Permit does not impose any greater demands on the performance of an SWPPP than does coverage under the General Permit 02-01.*

The refined SWPPPs will reduce post construction increases in phosphorous loading in stormwater from the Gateway Summit and The Fairways sites.

Comment 3.4-19 (State of New York Office of the Attorney General, March 4, 2005): The project proponent has presented many potentially useful erosion and stormwater pollution control concepts. These include: zero phosphorus fertilizers; limits on road salt use; rain barrels and rain gardens; pervious pavers; and low impact designs to help reduce levels of runoff. The plan proposed by the project sponsor, however, is not a fully designed and blueprinted plan as required by State DEC's General Permit. Many of the assumptions presented by the project sponsor, such as its estimate of phosphorus loadings under pre-development conditions are of questionable merit. The construction phasing to assure that no more than 5 acres of soils are unstabilized at any one time is not clearly presented. Many supporting calculations and assumptions are missing such that we are not able to verify numerous assertions. Importantly, moreover, there is no attempt by the project sponsor to assess the Clean Water Act "Total Maximum Daily Load" (TMDL") implications of the proposed Project with respect to phosphorus loadings to impaired drinking water reservoirs. We do find much here that would serve as the basis for reasonable discussions to resolve serious environmental concerns, and would like to pursue a cooperative approach with the project sponsor rather than hash all of these highly technical modeling and engineering issues out before the Planning Board, we propose that the Planning Board seek the expert assistance of State DEC in the form of a referral of the Project to DEC for an individual stormwater permit and the assessment of necessary controls to achieve compliance with the TMDL phosphorus budget for the Town of Carmel. Expert DEC staff would be in an excellent position to make technical evaluations, specify appropriate permit conditions, evaluate competing technical assertions, and even provide mitigation recommendations to the Town Planning Board. This type of inter-agency cooperation is specifically contemplated by SEQRA and its underlying regulations.

Response 3.4-19: *As previously stated, NYSDEC, not the Applicant, is required by the USEPA to implement the TMDL program by achieving reductions in existing nonpoint loads of phosphorous that enter certain waters of the State. Nonetheless, the Applicant has prepared SWPPPs that will, through proposed construction phasing and other means, reduce post construction increases in phosphorous loading in stormwater from the Gateway Summit and The Fairways sites. The proposed means of reducing post construction increases in phosphorous are included in the SWPPPs found in Appendices D and E of this FGEIS. To mitigate potential phosphorous loading associated with sedimentation during construction, the phasing plans limit disturbed areas to five acres within each of the two project sites in accordance with NYSDEC General Permits 02-01 and 93-06. The Applicant welcomes input from the State's technical experts, through the Town of Carmel's Planning Board, and will determine if an individual SPDES Permit is required for the stormwater discharge from the proposed action through ongoing discussions with NYSDEC.*

Comment 3.4-20 (Letter March 3, 2005, Christopher Wilde, Riverkeeper; Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates; Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection) While we commend the applicant for providing the stormwater pollution prevention plan together with the DEIS - sound practice too often ignored - even when detailed SPPPs are drafted and proposed erosion controls are in place, large construction sites on steep slopes can discharge catastrophic sediment loads to receiving waters. The DEIS is overly vague and noncommittal

regarding construction sequencing, stating only that the "actual timing and sequencing of construction activities cannot be projected with full certainty at the present time" but assures that it will be "logical and intended to adhere to" DEC and DEP requirements. See DEIS at 2-20-21. The DEIS goes on to say that Fairways site preparation and infrastructure installation will proceed "continuously" over a twelve month period, while that for Gateway Summit will occur "in five phases and take 12 months." DEIS at 2-21. It is unclear how much of the proposed 70+ developed acres will be disturbed during these five phases.

Given the serious potential for significant erosion and runoff problems from a project of this magnitude on a site this challenging, it is critical the applicant be required to limit concurrent disturbance of land to five acres, as called for in DEC General Permit GP-02-01.

The DEIS must consider construction phasing as mitigation for potential impacts to water resources.

> ***Response 3.4-20:*** *As noted, proposed construction phasing and sequencing for Gateway Summit and The Fairways is detailed in the attached Erosion and Sediment Control Plan components of the two SWPPPs, found in Appendices D and E. To further mitigate potential impacts on water quality from sedimentation during construction, the phasing plans limit disturbed areas to five acres within each of the two project sites in accordance with NYSDEC General Permits 93-06 (incorporated by reference in New York City's Watershed Regulations) and General Permit 02-01.*

Comment 3.4-21 (Letter March 3, 2005, Christopher Wilde, Riverkeeper): SEQRA requires than an EIS contain a detailed discussion of "the growth-inducing aspects of the proposed action, where applicable and significant." ECL § 8-0109(2)(g). See also 6 NYCRR § 617.9(b)(5)(iii). The limited discussion in this DEIS certainly does not satisfy that requirement.

As is a common deficiency in EISs, the DEIS here concludes in short order that there will be virtually no growth-inducing impacts of the proposed action; to the extent there is additional demand for services such demand can and will be satisfied by existing establishments. See DEIS at 7-1. It is difficult to imagine that the addition of a 150-room hotel and nearly 350 units of senior or assisted living housing will not present the potential for induced growth. Certainly such a conclusion cannot be made without providing some analysis or support. In order to properly assess the impacts of secondary growth potentially induced by the proposed project, the applicant should model build-out projections for developable portions of the surrounding community. Once build-out projections for these access communities are modeled, water quality impacts can be assessed and appropriate mitigation measures considered. These projections, water quality impacts, and mitigation measures then must be discussed and supported in great detail, rather than with mere conclusory statements.

> ***Response 3.4-21:*** *The evaluation of existing conditions, the proposed action, and the anticipated potential environmental impacts discussed in the DGEIS did not disclose any significant growth inducing aspects of the proposed action. Further, the project will not result in the development of new public infrastructure or the extension of public infrastructure (roads, water and sewer service) to lands not currently served by infrastructure. Proposed actions that do extend infrastructure such as roads, water and sewer service are those that would induce growth, as opposed to projects (such as Gateway Summit and the*

Fairways) that are proposed on lands already fully served by suburban infrastructure.

Commercial development of the type proposed by the Applicant usually occurs after a certain level of historic population growth has occurred, and responds to a market demand that already exists in the region. In this regard, the commentor's notion that the Gateway Summit and The Fairways projects would actually induce significant growth is unfounded.

While the issue as discussed in this comment relates to regional and watershed-wide planning, and growth inducing impacts of the proposed action have been evaluated, the regulatory approval process requires that individual projects be evaluated on their own merits. The implementation of the proposed action as designed will not result in any short, or long term significant adverse impacts to water quality. All other projects proposed in the area are likely to undergo the same intense scrutiny as the action under consideration. Like Gateway and Fairways, these projects are also expected to incorporate measures to mitigate long and short term adverse impacts.

Comment 3.4-22 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) Reports prepared by NYSDEC, NYCDEP and US EPA state that the principal phosphorus sources in the Middle Branch Watershed are Lake Carmel and urban land use. These documents clearly require that the phosphorus load should be reduced in the project area to meet water quality standards outlined in the TMDL, and not just maintained at pre-development levels.

The project proposed the conversion of large areas of undeveloped forest to urban areas [the principal phosphorus source in the Middle Branch Watershed]. The proposed stormwater management design is apparently proposing to increase the phosphorus loading to the reservoir instead of reducing this pollutant load. Therefore this proposal does not meet the minimum TMDL requirements established by the NYCDEP and NYSDEC. The projects must therefore be redesigned to meet these TMDL Phosphorus reduction requirements.

Response 3.4-22: *The United States Environmental Protection (USEPA) has mandated New York State to achieve the TMDL. The Applicant anticipates that the State will satisfy the mandate by requiring municipalities to implement programs to achieve the necessary nonpoint phosphorous reductions.*

In compliance with the federal mandate, the refined SWPPPs prepared by the Applicant provide for reductions in post construction increases in phosphorous, and other pollutants, pursuant to State and New York City requirements. These reductions are achieved with primary and secondary treatment of post construction stormwater runoff from both the Gateway Summit and Fairways project sites. Primary treatment, in the form of stormwater management basins in series, and secondary treatment with adjunct practices, are both provided for in the SWPPPs and will reduce post construction pollutant loads in stormwater to the maximum extent attainable. In recognition of the TMDL issue, the Applicant has committed to restricting the use of fertilizers containing phosphorous on the projects. The NYSDEC SPDES General Permits GP-02-01, and GP-93-06 which NYC DEP's watershed regulations incorporates by reference, indicate that ideally post-construction stormwater runoff will not be significantly altered from

pre-construction conditions. Accordingly, the SWPPPs for the projects have been designed in accordance with the design manuals referenced in the general permits, and address the qualitative and quantitative requirements of New York City and State. The analytical methodologies upon which the designs of the SWPPPs are based are set forth in the manuals cited in the NYSDEC GP 02-01 and those extrapolated from NYC DEP's Regulations and Applicant's Guide to Stormwater Pollution Prevention Plans. The SWPPP's for both the Gateway Summit and Fairways projects are designed to limit increases in post-development loads of phosphorous in stormwater from the projects to preconstruction levels.

Comment 3.4-23 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) The Erosion Control Plan was not included in the DGEIS. A detailed review must be conducted of the Erosion Control Plan to verify that appropriate mitigation measures have been specified in the project's design.

Response 3.4-23: *Sediment and Erosion Control Plans for each project are included in the SWPPPs for the proposed action. These plans, which include narratives, are appended to this FGEIS.*

Comment 3.4-24 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) The DGEIS asserts that "critical constraints have been identified on the plan." However, none of these referenced critical constraints have been identified on the plans.

Response 3.4-24: *Constraint maps, including those depicting steep slopes, wetlands, wetland buffers, soil types, and rock outcroppings, were included in the DGEIS. Site constraints were one of the most important factors considered during development of the project design, and were specifically considered in the siting of proposed roads, buildings, stormwater management practices and other elements of the project. Following the DGEIS review by Involved and Interested Agencies, the Watershed Inspector General, environmental and public interest organizations, and the public, and after the close of the public hearing, the Applicant made adjustments to the proposal to further avoid areas that were identified as being sensitive or constrained.*

Comment 3.4-25 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) Without detailed information on the proposed stormwater ponds it can not be determined whether the ponds meet the requirements set forth by the NYCDEP and the NYSDEC as water quality treatment structures. However, it can be determined from Sheet C-1300 (Sheet 20 of 43) -- "Overall Grading and Drainage Plan" -- that many of the ponds do not meet NYSDEC pond requirements per the NYSDEC *Design Manual."* For example, the discharge to each pond must be pre-treated with a sediment forebay prior to discharge to the main body of the pond. However, no sediment forebays are shown on this plan. The NYSDEC Pond design has many other requirements that must be met such as a landscaping plan for each pond, maintenance access, permanent pools, etc. Once the detailed design drawings for the stormwater ponds have been circulated, a detailed review must be conducted for each pond. . . . Each pond must meet all requirements set forth in the NYSDEC *Design Manual* and the NYCDEP requirements. For example, treatment of the Water Quality Volume (Wqv) must be provided through the use of a permanent pool and extended detention. This is a minimum

requirement of the necessary permits that has not been taken into considered in the proposed project's design.

The ponds were not labeled on the plans. Labels are needed to determine which pond is providing treatment in the analysis. The "series" of ponds could not be followed in order to verify the treatment. Additionally, the swales, overflow weirs, culverts, etc. connecting each of the ponds were not shown to indicate flow from one pond to another.

> ***Response 3.4-25:*** *The proposed stormwater management ponds, as set forth in the SWPPPs, are designed to meet the requirements of both the NYCDEP and the NYSDEC (as set forth in NYSDEC General Permits 93-06 and 02-01). The two entire SWPPPs for the proposed action have been submitted to both agencies for review and comment prior to the Applicant's submitting final plans for permit issuance.*

Comment 3.4-26 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) Regarding the SWPPP for The Fairways, the DGEIS refers to the "diverting of existing drainage and the capture and treatment of the road improvement only." Judging from the plans, it is unclear whether it is proposed to capture and treat runoff from all developed areas, which is a minimum requirement of the necessary NYCDEP and NYSDEC permits.

> ***Response 3.4-26:*** *Both GP-02-01, and GP-93-06 (incorporated by reference in New York City's watershed regulations) require treatment of stormwater runoff from all areas where the post construction imperviousness has changed from predevelopment conditions. The SWPPPs for Gateway Summit and The Fairways have been revised so that stormwater runoff from all such areas will be treated as required by NYCDEP and NYSDEC regulations.*

Comment 3.4-27 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) Calculations for the design of stormwater conveyance system was not found in the Appendix D, Stormwater Collection System Appendix. Without this basic information, it is not possible to perform a detailed review of the project proposal to verify design compliance with the necessary permit requirements.

> ***Response 3.4-27:*** *Calculations upon which fundamental elements of the SWPPPs were designed are included in this FGEIS. The Applicant has submitted the SWPPPs, including all supporting calculations, to both the NYSDEC and the NYCDEP for review to confirm that the plans comply with applicable regulations prior to submitting the SWPPPs to the agencies for permitting purposes. Supporting calculations are also provided in the FGEIS.*

Comment 3.4-28 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) Regarding the SWPPP for The Fairways, requirements for the Channel Protection Volume (CPv) must be met as per the NYSDEC *Design Manual.* This is accomplished by providing 24-hour extended detention of the 1-year, 24-hour storm. Additionally, a downstream analysis should be performed, considering the especially sensitive site setting, as per Section 4.7 of the NYSDEC *Design Manual.* It is recommended that this analysis be performed regardless of the CPv requirement. The analysis would be of significant value to the Town in determining if any adverse downstream conditions exist or will be created with regard to capacity and channel erosion.

Response 3.4-28: *The stormwater detention facilities set forth in the SWPPPs to provide primary treatment of stormwater from the proposed action provide attenuation of increases in the peak rate of stormwater discharge sufficient to prevent any channel erosion.*

In response to discussions with NYSDEC concerning specific State stormwater management design criteria, the two SWPPPs were refined again on March 31, 2006. The two SWPPPs have been refined in compliance with specific State stormwater routing and treatment pond design criteria.

Comment 3.4-29 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): The Applicant should be required to provide the technical staff of DEC, NYCDEP and the Attorney General's office with full site access to conduct inspections and to review the Applicant's self-monitoring reports. DEC Technical Staff must be provided with binding written authority to order the immediate halt of work should failure to adequately implement or maintain the SPPP occur.

Response 3.4-29: *The Applicant will engage the services of a Certified Professional in Stormwater Quality/Certified Professional Erosion and Sediment Control Specialist to oversee implementation of the SWPPP and coordinate the implementation with the appropriate State, municipal, and New York City officials, and to ensure compliance with any conditions of approvals. The certified professional engaged by the Applicant will be authorized to conduct site inspections with agency representatives.*

It is noted that New York State Department of Environmental Conservation (NYSDEC) staff will have the cited authority under the conditions of enforcement in GP-02-01.

Comment 3.4-30 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) Regarding the SWPPP, weekly inspections of the construction site are required as per Part III.D.3 of GP (General Permit) 02-01. These requirements must be identified in the SWPPP as a requirement of the permit.

Response 3.4-30: *The SWPPPs for the Gateway Summit and Fairways projects (see Appendices D and E) specify that weekly inspections are required per NYS SPDES General Permit GP-02-01. See Response 3.4-29*

Comment 3.4-31 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) The SWPPP should be signed by a responsible party in accordance with Part V.H of GP 02-01. These requirements should be identified and supported in the SWPPP. The SWPPP should contain a section identifying the signatory requirements for contractors as per Part III.E of GP 02-01.

Response 3.4-31: *The SWPPPs for both Gateway Summit and The Fairways have been revised to identify the signatory requirements as per requirements of New York State SPDES General Permit GP-02-01. They will be duely signed in accordance with the applicable requirements.*

Comment 3.4-32 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) In Appendix A the Time of Concentration path shown on Sheet DB-1 for the

pre-development condition does not match the TR-55 printout in Appendix A. Additionally, a maximum of 150 feet of sheet flow is required as per Section 4 of the DEC *Design Manual.* This maximum sheet flow length has been exceeded, as shown in the calculations. This is a significant error in the calculations that will require a re-design of the stormwater management facilities.

In Appendix B, the Time of Concentration and area summaries for several basins do not match the information shown on plan sheet WS-3. Most of the Time of Concentration paths are not delineated on the plan, making it impossible to review. Also, ponds and reaches are not labeled on the plan, making the drainage routing difficult, if not impossible, to follow.

> ***Response 3.4-32:*** *The time of concentrations utilized in the revised SWPPP's for both the Gateway Summit and Fairways projects are based on a maximum pre-development sheet flow of 150 feet and a maximum post-development sheet flow of 100 feet as required by the references cited in the NYSDEC General Permit. The time of concentrations were calculated and directly entered into HydroCAD Stormwater Modeling software.*

Comment 3.4-33 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) Regarding the SWPPP for The Fairways, due to the TMDL status of the project, a 60-day NOI (Notice of Intent) is automatically required for GP 02-01. During this mandatory review time period that commences after submittal to the NYSDEC, the NYSDEC may choose to review and provide additional comment on the SWPPP. Therefore, submittal of an NOI should not be mistaken for compliance with the permit requirements.

> ***Response 3.4-33:*** *Once the NYCDEP has deemed the SWPPP application complete, a "Notice of Intent" (NOI) will be submitted to the NYSDEC to initiate coverage under SPDES General Permit GP-02-01. Due to the fact that the project is located within the New York City Watershed, the SWPPP requires a 60-day mandatory review period prior to gaining coverage under GP-02-01. The Applicant will coordinate the review and approval of the SWPPPs at the direction of NYSDEC and NYCDEP.*

Comment 3.4-34 (Letter, March 3, 2005, David B. Clouser, PE, LS, David Clouser & Associates) In the SWPPP for Gateway Summit, the pollutant loading rates shown for post-development conditions show an increase of total phosphorus (TP) at Design Point 1, an increase in Total Nitrogen (TN) at Design Point 1 and an increase in Biological Oxygen Demand (BOD) at Design Points 1 and 2. As per the report, the project will result in an increase in phosphorus load (in a watershed basin that requires a reduction of the phosphors load), the increase in total Nitrogen load at one location, and a substantial increase in Biological Oxygen Demand. This proposal, in close proximity and tributary to a substantial drinking water supply, can by no means be considered to be in the best interest of the public health. These pollutants must be reduced, not increased, and especially the phosphorus load due to the TDML requirements. The report mentions that the analysis did not account for the water quality treatment provided under the proposed conditions by "swales, deep sumps, filters strips, etc.". To our knowledge, no credit is given by the NYCDEP for deep sumps. To receive credit for swales from the NYCDEP, they must have a low gradient and be designed in accordance with the "Reducing the Impacts" Manual. Similarly, the filter strip must be designed in accordance with the same manual. Calculations and details must be provided for each structure to receive

credit for water quality treatment, and such calculations are not provided in the information submitted in this DGEIS.

It should also be noted that the 2001 NYSDEC *Design Manual* gives no credit for water quality treatment for standard grass swales, deep sumps or filter strips (credit is given for "pretreatment" of sediments only). On a similar note, the complexity of this site merits a thorough and accurate pollutant load and export analysis that cannot be provided by the modeling means used in the project's DGEIS analysis. There are several more complex and acceptable modeling methodologies that could provide a more accurate representation of the pre- and post- site pollutant export levels which should be utilized for this particularly complex site and surrounding area setting.

> ***Response 3.4-34:*** *The proposed stormwater management plan and modeling have been revised since submission of the DGEIS. The analytical approach utilized to calculate pre- and post-pollutant loads is utilized in the NYCDEP permitting process to assess the relative impacts of pollutants and compliance with the Watershed Regulations. Based upon comments from NYCDEP and NYSDEC following their review of the SWPPPs, the Applicant will submit any additional information, or revisions, necessary to secure stormwater permits. Note that the basis for the design of the SWPPPs, and the estimated reductions in any increases in post construction pollutant loading, are the references cited in the two applicable NYSDEC General Permits, 93-06 and 02-01. Also, the NYSDEC Design Manual does not require a pre- and post-development pollutant assessment; rather, it requires a single stormwater treatment practice. The two SWPPPs will satisfy the requirements to reduce the post construction increases in pollutant loading from the projects by providing universally accepted primary and adjunct stormwater treatment practices subject to NYSDEC and NYCDEP review and approval.*

Comment 3.4-35 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space): In the last several years, far reaching changes have occurred in the federal and state regulations regarding stormwater impacts especially with regard to projects within the Croton Watershed (Croton). These regulatory changes have brought increased scrutiny upon project's within the Croton. The Croton is an irreplaceable resource serving 10%, and up to 30% during droughts, of the drinking water needs for 9 million New Yorkers. Like the groundwater aquifer beneath the Long Island Pine Barrens, the Croton has been the subject of extensive regulatory attempts to protect and reverse degraded waters.

> ***Response 3.4-35:*** *Comment noted. The Applicant will comply with all applicable federal, State, and municipal regulations.*

Comment 3.4-36 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) SEQRA requires that a lead agency examine whether the project creates "a material conflict with a community's current plans or goals as officially approved or adopted." (6 N.Y.C.R.R. §617.7(c)(1)(iv)). Moreover, "SEQRA compliance must include consideration by the lead agency of the conformity of the action with federal law," (Gerrard Treatise at §8.05 citing Town of Henrietta v. Department of Environmental Conservation, 76 A.D.2d 215 (4`h Dept. 1989)), which in this case involves the project's conformance with the Federal Clean Water Act (CWA §303(d)(1)(A)). The New York State Department of Environmental Conservation (DEC)

has sought to comply with the CWA §303(d) by prioritizing and implementing measures including the Total Maximum Daily Load ("TMDL") program to bring the reservoirs back into compliance with New York State's Water Quality Standards (WQS) at 6 N.Y.C.R.R. Part 700. The TMDL program is a tool for assessing compliance with water quality standards and integrating the management of point and nonpoint sources of pollution using a watershed approach. In January 1997, the EPA in partnership with the State of New York, the City of New York, Putnam County, Riverkeeper and other parties forged the New York City Watershed ("MOA") to protect and rehabilitate reservoirs within the Croton. The 1997 Memorandum of Agreement (MOA) initiated NYC Watershed protection and partnership programs and detailed other watershed protection provisions including establishing more stringent Watershed Rules and Regulations (WR&R). The Town of Carmel joined as a party to the MOA agreeing "to be bound by the terms and conditions thereto" and as a signatory agreed . . . among others things to:

A) Participate in the development of a Comprehensive Croton System Water Quality Protection Plan ("Croton Plan") pursuant to § 18-82 of the WR&R jointly with DEP and Putnam County, and;

B) Comply with the CWA by following EPA's TMDL developed by DEP and DEC requiring reductions in the phosphorus pollutant loadings of the Croton Falls reservoir.

. . . CWCWC's scope comments were clear in requesting the DEIS to include:

- Compliance with the "Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources" including TMDL ("Total Maximum Daily Loads") analysis for both the Middle Branch and Croton Falls reservoirs for each contaminant as required by DEP.

However, the DEIS does not conform with the above scope request [or those listed below in Comments 3.4-36 to 3.4-] nor with the law cited above. The Applicant did not test each of the watercourses onsite for orthophosphorus, total phosphorus, dissolved phosphorus, total kjeldahl nitrogen, nitrates, total suspended solids and total chloroform as recommended. The Applicant did not take samples at different times during the year to insure proper base line information. Similarly, the Applicant failed to analyze on-site stormwater flow during storms for each watercourse.

Of primary importance in designing an effective stormwater management system to maximize pollutant removals is developing an understanding of the local site conditions. This has not occurred. Such information would allow the public, DEP, the Watershed Inspector General and others substantive review of these parameters rather than the Applicant and the Planning Board relying on the "boilerplate" stormwater numbers provided in generic publications by the DEC. The DEC categories of chemical parameters from various land uses do not contain information on stormwater run-off from mountainous terrain covered with hardwood forests such as Pisgah Mountain.

It is not only reasonable and prudent under SEQRA, it is also mandated by Federal and State law that a lead agency require that a proposed project within the Croton Falls reservoir

basin clearly and accurately identify its pre-development contribution to the basins' phosphorus loads.

> ***Response 3.4-36:*** *Neither the adopted scope, nor any applicable federal, State, or municipal regulations, require a baseline analysis of existing pollutants or storm flows in the existing onsite watercourses. The SWPPP's, which have been revised, meet the requirements of the NYCDEP and NYSDEC (see Appendices D and E), and analyze pre and post construction loadings of the four pollutants specified in the two applicable NYSDEC General Permits for Stormwater Discharges (93-06 and 02-01). The Applicant is unaware of any instance in New York State where the type of testing and analytical work suggested by the commentor has been required or carried out. The stormwater analysis conducted for the SWPPP's are not "boilerplate," as suggested by the commentor, but rather rely on well established hydraulic principles, pollutant loading and reduction parameters, and associated calculations that are site-specific. They consider existing soils, ground cover, perviousness, drainage patterns, water quality, and topography, and any post construction changes in those parameters on the Gateway and Fairways sites.*

Comment 3.4-37 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space; Attorney General, Environmental Protection Bureau Letter, March 26, 2005) CWCWC's scope comments were clear in requesting the DEIS to include:

- Describe the BMPs and pollutant removal efficiency for the major pollutants that may be expected from the project's stormwater management system. Include stormwater management system design data in sufficient detail to assess its effectiveness (storage capacity, basin depth, detention time, etc.).

Operation and long term maintenance of stormwater collection and treatment systems also need to be described.

> ***Response 3.4-37:*** *The proposed stormwater basins' pollutant removal efficiencies, storage capacities, depths, detention times, and other necessary data required by New York State and New York City regulations are provided in the revised SWPPPs for the proposed action (see Appendices D and E). The long term maintenance requirements for all stormwater management facilities are also included in the revised SWPPPs, which include the revised plans.*

Comment 3.4-38 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) CWCWC's scope comments were clear in requesting the DEIS to include:

- Describe how stormwater runoff will be treated prior to discharge from the site, including anticipated pollutant removal efficiencies in comparison with predeveloped pollutant loadings.

> ***Response 3.4-38:*** *The revised SWPPPs describe how stormwater runoff will be treated prior to discharge from the site, include anticipated pollutant removal efficiency ranges, and describe how they effectively reduce increases in post construction pollutant loading.*

Comment 3.4-39 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) CWCWC's scope comments were clear in requesting the DEIS to include:

- Describe how "first flush" stormwater treatment will be achieved. Require that stormwater analysis be performed using 2, 10, 25, and 100 year 24-hour storm events in accordance with NYSDEC guidelines, especially as implemented on March 10, 2003.

Response 3.4-39: *The revised SWPPPs describe how the projects' stormwater management systems will treat both the 2 year, 24-hour storm as required by the NYCDEP, and water quality treatment volumes (WQV) as required by the NYSDEC. The reports also analyze the 10, 25 and 100 year, 24-hour design storms.*

Comment 3.4-40 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) CWCWC's scope comments were clear in requesting the DEIS to include:

- Describe pre-development and post-development runoff patterns and rates on the site, including pollutant loading rates.

Response 3.4-40: *This revised SWPPPs describe pre-development and post-development runoff patterns and rates, including pollutant loading.*

Comment 3.4-41 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) CWCWC's scope comments were clear in requesting the DEIS to include:

- Indicate the capacity of on-site and adjacent receiving waters to accommodate the additional stormwater volumes that will be generated by the project.

Response 3.4-41: *As stated previously, multiple ponds are proposed in series in order to treat stormwater runoff to the maximum extent attainable. Each pond in series will provide 24 hour detention of the 2 year, 24-hour design storm as well as extended detention for larger storms. The use of multiple ponds in series will control any increase in the peak rates of discharge to prevent any scour, or stream bed/bank erosion, in the receiving waters.*

Comment 3.4-42 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) CWCWC's scope comments were clear in requesting the DEIS to include:

- Require that the stormwater detention basins will not encroach on the pond/wetlands areas.

Response 3.4-42: *While there are no federal, State or municipal prohibitions on siting the stormwater management basins proximate to ponds/wetlands, the proposed stormwater management basins have been located outside of wetland buffers to the greatest extent attainable. In order to treat stormwater runoff from the proposed development, the basins must be located downhill of the proposed development. Furthermore, the NYSDEC and NYCDEP typically require that discharges from the stormwater treatment basins, such as the ones proposed,*

be conveyed to another basin, defined channel or waterbody. In this case, that requirement results in minor wetland buffer disturbance.

Comment 3.4-43 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) CWCWC's scope comments were clear in requesting the DEIS to include:

- Provide a visual depiction and written description of the watercourse and watershed into which stormwater will be discharged.

Response 3.4-43: *While the adopted scope did not require a visual depiction of the watercourse and watershed in which stormwater will be discharged, the revised SWPPP's found in Appendices D and E provide written descriptions of the receiving watercourse and watershed. The subbasins in which the proposed action is located are also depicted in the SWPPPs.*

Comment 3.4-44 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) CWCWC's scope comments were clear in requesting the DEIS to include:

- Rather than the TR-55 method use the SWMM or P-8 or equal methodology in the stormwater analysis.

Response 3.4-44: *The adopted scope for the subject project did not require the use of the SWMM or P8 methodologies for stormwater analysis.*

The United States Department of Agriculture, Natural Resource Conservation Service, Urban Hydrology for Small Watersheds, Technical Release 55 (TR-55) includes procedures to calculate storm runoff volume and has a different utility than the USEPA Stormwater Management Model (SWMM) and the Urban Catchment Model Program for Predicting, Polluting, Particle Passage thru Pits, Puddles, & Ponds (P8), which are used to estimate pre and post construction pollutant loading in stormwater. Notwithstanding, the SWPPP was developed utilizing the "HydroCAD Stormwater Modeling System by Applied Systems of Chocona, New Hampshire to estimate stormwater flows, and the pollutant loading coefficient method (from the NYS DEC's Reducing the Impacts of Stormwater From New Development) and Fundamentals of Urban Runoff Management: Technical and Institutional Issues (Terrene Institute). These methodologies are standard methods accepted by both the NYCDEP and NYSDEC.

Comment 3.4-45 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) CWCWC's scope comments were clear in requesting the DEIS to include:

- Evaluate how the proposed stormwater drainage systems complies with the NYC Watershed Agreement "Croton Plan" for the Town of Carmel.

Response 3.4-45: *Applicable to the proposed action, the goal of the Croton Plan is to identify and reduce sources of pollution of the New York City Drinking Water Supply System, specifically the Croton component of that system. To that end, the proposed action includes a SWPPP, and other elements, that identify potential pollutants that may result from the proposed action and measures to mitigate any potential impacts from increased*

pollutant loading. As specifically noted in the DGEIS, all components of the proposed action, including the SWPPPs comply with the New York City Watershed Agreement "Croton Plan" for the Town of Carmel based on the following:

• The analytical methodologies and assessments exceed the requirements of the Croton Plan.

• The proposed impervious surfaces have been reduced by approximately 15 percent. This has been accomplished through methods encouraged by the Croton Plan to reduce imperviousness, such as replacement of the townhouse flats with multi-family units with garages underneath (to limit site grading disturbance) and use of gravel overflow parking for the hotel banquet hall and a portion of the YMCA parking lot. The overall limits of disturbance have been reduced by 30 percent. The majority of this reduction has occurred in areas of sensitive land such as slopes greater than 25 percent and wetland buffer areas.

• The proposed SWPPPs have been designed as a component of the proposed site plan.

• The Stormwater Pollution Prevention Plans provide control, conveyance, collection and treatment of stormwater runoff as recommended by the Croton Plan (see Appendices D and E).

• Innovative techniques such as rain barrels are proposed to reduce contaminants.

Comment 3.4-46 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) CWCWC's scope comments were clear in requesting the DEIS to include:

- Complete a Stormwater Pollution Prevention Plan ("SPPP") as part of the DEIS which is acceptable to DEP.

Response 3.4-46: *The refined SWPPPs for both projects have been submitted to the NYCDEP for their review. The Applicant will meet with NYCDEP Engineering staff in connection with their review and approval of the plans. Modifications will be made as may be requisite to securing an approval. A similar meeting will be held with NYSDEC personnel in connection with their review of the SWPPPs.*

Comment 3.4-47 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) As SEQRA further requires that "to the maximum extent practicable" the lead agency "minimize or avoid adverse environmental effects" of a project, the lead agency must demonstrate that a project will not only maintain phosphorus pollutant loadings at pre-development levels, but actually reduce those levels pursuant to the TMDL program. Indeed, as a signatory to the MOA and subject to the WR&R and its own Croton Plan, the Town of Carmel has entered into a legally enforceable agreement with the United States, New York and Riverkeeper to significantly reduce phosphorus loadings to the Croton Falls reservoir. Equally important is that Carmel approve no project that will increase phosphorus levels by *any* amount. To meet State WQS, the Town of Carmel would be required to reduce annual phosphorus loadings to the Croton Falls reservoir by 1,658.8 pounds per year from non-point sources. (`Non-Point Source Implementation of the Phase II TMDLs" (April 2001, Table 4.1 pg. 15)). Consequently, the Board should insist that the Applicant comply with DEC's newly enacted regulations in conformance with the "2001 Stormwater Management Design

Manual (October 2001)" and its amendments which replaced DEC's 1993 "Stormwater Design Guidelines."

> ***Response 3.4-47:*** *By implementing the refined SWPPPs for the projects that were developed in accordance with specific New York State and City requirements, the Applicant will reduce post construction increases in pollutant loading in stormwater to pre-construction levels. The refined SWPPPs, which also comply with the NYSDEC August 2003 Stormwater Design Manual, will be subject to additional review by NYSDEC, NYCDEP, and the Stormwater Project Review Committee established under New York City's watershed regulations, prior to the two agencies issuing their approvals of the plans.*
>
> *Post construction increases in phosphorous loadings in stormwater will be reduced to the maximum extent attainable by primary and secondary treatment in the form of stormwater treatment basins, and adjunct practices, in series.*
>
> *Pursuant to SEQRA, the Applicant has mitigated potential adverse environmental impacts associated with stormwater "to the maximum extent practicable" by, in part, developing two project specific SWPPPs that will control post development increases in phosphorus from the projects. The Applicant is unaware of any provisions of SEQRA that require the lead agency to demonstrate that a project "will not only maintain phosphorus pollutant loadings at pre-development levels, but actually reduce those levels pursuant to the TMDL program."*
>
> *Further, no specific obligation is imposed on the Town of Carmel to significantly reduce phosphorous loading in the Croton Falls reservoir as a consequence of the Town being a signatory to the Watershed Memorandum of Agreement (MOA), and subject to the Watershed Rules and Regulations (WR&R) and its own, unadopted, Croton Plan (which has yet be adopted by the NYCDEP). No information disclosed during preparation of this EIS indicates that the Town of Carmel has been mandated, as of yet, by the NYSDEC (which has yet to comply with a federal mandate to implement the TMDL) to achieve phosphorous reductions pursuant to the TMDL.*
>
> *The Applicant believes that the Town of Carmel will condition any approvals it grants for the projects upon the Applicant receiving, and complying with, all applicable approvals from other environmental regulatory agencies, including the NYSDOT, the NYCDEP and the NYSDEC.*

Comment 3.4-48 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space) Rather than utilizing "the most conservative measures," according to David Clouser, P.E., the Applicant did not begin to comply with state and federal regulations. The Applicant's stormwater management design is based upon inaccurate methodologies and outdated modeling and must be redesigned to comply with the 2001 Design Manual and SPDES permit GP-02-01 and comply with utilizing the correct baseline figures for determining accurate predevelopment phosphorus loadings. Failure to accurately assess these impacts could lead to judicial remand. For example, in Matter of Kirk-Astor Drive Neighborhood Assn.. et al., v. Town Board of Pittsford

106 A.D.2d 868 (4th Dept. 1984), the Court annulled a lead agency's SEQRA determination as the Applicant:

> "failed to provide complete information relating to water table, soil, surface water runoff, plant and animal life and other aspects of the proposed development..."

Further, as identified by the Gerrard Treatise in Brookville Taxpayers Ass'n v. Town of Oyster Bay, N.Y.L.J., May 8, 1985, at 15, col. 3 (Sup. Ct. Nassau Co.), the Court determined an EIS was inadequate where the lead agency:

> "...failed to intelligently consider the Long Island Comprehensive Waste Water Treatment Management Plan prepared by the Long Island Regional Planning Board pursuant to the Clean Water Act section 208. That provision of the Clean Water Act requires areas identified by the Environmental Protection Agency and the states as being 'beset with substantial water quality control problems' to plan for area-wide wastewater treatment management." (Id. at [§8.05] citing 33 U.S.C. §1288(a)(2), (b)).

Here, the exact set of circumstances exist as in Brookville Taxpayers., supra, where regional protection plans and regulations such as the WR&R and TMDL program have been developed to comply with the CWA to protect a drinking water source.

However, more specifically and of greater consequence than Brookville Taxpayers, *supra,* the rehabilitation of the Croton:

1) concerns protection measures for a drinking water source for 9 million New Yorkers:

2) identifies the Croton Falls reservoir as "use impaired;"

3) pinpoints the amount of phosphorus that must be reduced; and

4) places that responsibility solely with the Town.

Consequently, the Board's failure to identify and engage this critical issue renders the Board's SEQRA review inadequate and void. Similarly, the DEIS's failure to contain adequate information to allow the lead agency to make findings concerning the project's impacts to stormwater and rare, threatened and endangered plant and animal species would render any subsequent SEQRA findings null and void.

> ***Response 3.4-48:*** *SEQRA obligates a Lead Agency to take a "hard look" at all environmental issues where potential adverse impacts may occur. To allow for this, SEQRA also requires that an EIS address "each part of the action at a level of detail sufficient for an adequate analysis of the significant adverse environmental impacts" and provides that the lead agency determine whether a proposed action may have a significant adverse impact on the environment. The impacts that may be reasonably expected to result from the proposed action must be compared by the lead agency against certain criteria, including any substantial adverse change in existing air quality, ground or surface water quality or quantity; a substantial increase in potential for erosion, flooding, leaching or drainage problems; the removal or destruction of large quantities of vegetation or fauna; substantial interference with the movement of any resident or migratory*

fish or wildlife species; impacts on a significant habitat area; substantial adverse impacts on a threatened or endangered species of animal or plant, or the habitat of such a species; or other significant adverse impacts to natural resources.

The Applicant's DGEIS, which includes analyses of existing stormwater characteristics and rare, threatened and endangered plant and animal species, fully evaluated existing conditions and disclosed all reasonably anticipated potential environmental impacts based upon detailed development plans, and refined SWPPPs for Gateway Summit and the Fairways. The plans subject to the analysis in the DGEIS were completed to a level of detail that far exceeds that required, or anticipated, by SEQRA.

A review of the SEQRA record confirms that the Applicant conducted a thorough review of the issues raised by the commentor with full public participation, including public scoping meetings, administrative review of the DGEIS to ascertain compliance with the adopted scope, completeness determination of the DGEIS, lengthy public review of the DGEIS, public hearing on the DGEIS and applications, and modification of the plan by the Applicant in response to comments and concerns offered by the public and various Involved and Interested agencies. As stated above, the Town of Carmel, and other agencies, will continue to review stormwater management issues with an eye toward fulfilling its legal obligation under all applicable regulations.

Comment 3.4-49 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection) Because the Lead Agency notification has been circulated without engineering drawings, construction details, technical reports or a comprehensive narrative fully describing the proposed action, DEP as an involved agency. cannot *properly assess* the extent of environmental impacts associated with the proposal. Moreover, it is impossible to determine whether the obvious impacts to the quality of the New York City Water Supply may be avoided or mitigated without the benefit of necessary descriptive materials Given the scale of the project and the inherent site constraints, the obvious impacts are those associated with watercourse and wetland disturbances; the significant loss of forested area; the creation of maintenance intensive impervious surfaces and landscaped areas; and the risk of erosion and sedimentation during construction. These impacts, if not avoided or fully mitigated. clearly threaten the viability of the already phosphorus-restricted Middle Branch and Croton Falls Reservoirs as sources of high quality drinking water.

Response 3.4-49: *The requested drawings and technical reports, including the refined SWPPPs included with this FGEIS, are at a level of detail exceeding that which is typical for a review under SEQRA . The refined materials have been developed in consultation with, and in response to, comments from representatives of the NYCDEP, and the Applicant believes that the materials provide information beyond that required to reach determination concerning the lack of potential impacts, and comply fully with watershed regulations. The Applicant recognizes that construction of the proposed action can not proceed until all necessary approvals from NYCDEP, and all other Involved Agencies, are procured.*

The Applicant notes that through various project design revisions, and refinements in the SWPPPs, potential adverse impacts on wetlands and

watercourses on the Gateway Summit and The Fairways sites have been fully mitigated.

Comment 3.4-50 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection) Given the phosphorus-restricted status of both the Middle Branch and Croton Falls Reservoirs. the required SPPP must include measures to capture and treat, at a minimum, runoff from the 2 year/24 hour storm event from all areas where perviousness has been altered from existing conditions. Upon presenting alternative site designs, the development limits placed on parcels A and B by environmental regulations such as the 2 year storm requirement. local steep slopes law and state wetland law, must be considered. Further, each alternative must include information such as topography and soils in detail sufficient to clearly assess the regulatory constraints and properly evaluate the alternatives.

For instance, the DEIS must ensure that stormwater management practices have been located to avoid further impacts, require minimal disturbance to construct, and are appropriate given the site constraints (e.g., soil type. slope, location within drainage area, proximity to watercourses/wetlands)- As a practical suggestion, the selection of stormwater management areas is best performed during the initial stages of planning so that design aspects such as, lot configuration and the layout of internal roads, are conceived in consideration of the above limitations. Given the scant details of the circulated materials, DEP will assume that the project sponsor has not yet factored the intricate task of properly managing stormwater on the site. It is pertinent that the DEIS demonstrate that stormwater management is a primary focus of the proposal, not an afterthought.

Response 3.4-50: *Recognizing the project's location in the phosphorous restricted Middle Branch and Croton Falls reservoir basins, the refined SWPPPs developed for the proposed action now include measures to capture and treat the required runoff volume, including the* 2 year/24 hour storm event, *from all areas where the post development perviousness has changed from pre construction conditions, as required by NYSDEC and NYCDEP.*

Developing effective SWPPPs for the two projects was a primary focus in the site plan development process. To mitigate potential adverse environmental impacts, the Applicant first identified sensitive environmental resources, such as wetlands, watercourses, and steep slopes during the site planning process, and then sited critical infrastructure like the stormwater treatment facilities, and the access and egress road, to avoid those resources and ensure the viability of all infrastructure. The project's compliance with federal, State, New York City, and Town of Carmel environmental and land use regulations was also an important consideration during development of the site plans.

The components of the two SWPPPs, and the site layouts, have been significantly refined to further mitigate any potential adverse environmental impacts and meet New York City and New York State stormwater treatment requirements. Multiple stormwater management basins have been designed in series in order to treat the post-development stormwater and reduce increases in pollutant loading to pre-development levels to the maximum extent attainable. See the SWPPPs provided in the attached appendices.

According to the Applicant, the two project SWPPPs have been significantly refined in response to comments from reviewers of the DGEIS, including NYSDEC and NYCDEP, and now provide further mitigation of potential adverse impacts. Upon closure of the SEQRA process, the SWPPPs will be subject to additional review and revisions as deemed necessary by NYSDEC and NYCDEP. The plans will also be subject to review by the Stormwater Project Review Committee established pursuant to the New York City Watershed Regulations. The Stormwater Project Review Committee is comprised of representatives from NYCDEP, Putnam County, the Town of Carmel, and the NYSDEC. Once NYCDEP deems the SWPPP application(s) complete, and notifies the Committee of its determination, the Committee may, at its discretion, review the applications and convene a meeting to discuss the SWPPPs.

Comment 3.4-51 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection) The discussion of water quality impacts must include the nature and extent of pollutant loading from landscaped areas as well as impervious surfaces.

Response 3.4-51: *The DGEIS, including the SWPPPs, for the proposed action, address the water quality impacts anticipated from increased pollutant loading from landscaped areas, impervious surfaces, and all other areas on the site for which post construction perviousness will change from preconstruction conditions.*

Comment 3.4-52 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection; Attorney General, Environmental Protection Bureau Letter, March 26, 2005): SMPs must be designed to mitigate the impacts of increased runoff from a qualitative standpoint in consideration of the 2 year/24 hour storm requirement.

Response 3.4-52: *The SWPPPs for the Gateway and Fairways projects have been designed to mitigate potential adverse water quality impacts through, in part, 24 hour detention of the 2 year, 24-hour design storm as required by NYCDEP .*

Comment 3.4-53 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection; Attorney General, Environmental Protection Bureau Letter, March 26, 2005): The DEIS must consider the impacts of meeting the requirements of the newly adopted New York State Stormwater SPDES General Permit (GP02-01).

Response 3.4-53: *GP-02-01 is not the General Permit cited in the Stormwater Pollution Prevention Plans provisions of the NYC Watershed Regulations, upon which SWPPP's subject to the City's jurisdiction must comply. The Applicant's plan, however, meets the requirements of the most recently adopted General Permit.*

Comment 3.4-54 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): Based on the information contained in the DGEIS, the Applicant will be required to obtain from DEP: 1) Approval of a Stormwater Pollution Prevention Plan ("SPPP") pursuant to Section 18-39(b)(3)(iv) of the Watershed Rules and Regulations, and 2) a

variance pursuant to Section 181-61 of the Watershed Rules and Regulations for impervious surfaces within 100 feet of a watercourse.

> ***Response 3.4-54:*** *The Gateway Summit and Fairways SWPPPs will require approval from the NYCDEP, and coverage under the NYSDEC GP-02-01. The Applicant proposes to cross the NYCDEP regulated watercourse that flows through the Gateway Summit site with the proposed access/egress road for the Gateway Summit and Fairways projects. The proposed crossing of the perennial stream will require permitting from the Town of Carmel Environmental Conservation Board. The crossing will therefore not require a permit from NYCDEP.*
>
> *The proposed impervious surfaces (roadway) are permitted pursuant to Section 18-39 (a) (6) (ii) of the NYCDEP regulations, which exempts the construction of an impervious surface for a new road necessary to provide an access road to two or more parcels from the prohibition on the construction of impervious surfaces within the limiting distance to a watercourse. The proposed road is necessary to access the proposed subdivision and two existing parcels -- one associated with the Gateway Summit project (tax parcel 55.-2-23.1), and the other associated with The Fairways project (tax parcel 44-2-1). The proposed condition clearly meets the provision of the above-cited section of the regulations, which permits impervious surfaces associated with the construction of a new road.*
>
> *The new road has been positioned to provide safe and adequate access to the subject parcels. Safety concerns related to Town requirements for road grades and the proposed US Route 6 intersection location dictate the proposed road alignment. Alternate road alignments were studied, but failed to meet important traffic and safety concerns, specifically the location of the proposed signalized intersection. Thus, the watercourse crossing is required to access the subject parcels and the subdivision.*

Comment 3.4-55 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): Section 3.4.2.4 of the DGEIS identifies beneficial stormwater low impact design techniques (rain gardens, pervious pavers, curbless internal roads) to minimize runoff impacts and promote infiltration of stormwater. DEP certainly encourages these practices to reduce post-construction stormwater impacts. However, to ensure that these techniques are ultimately employed, property deed restrictions specify their use should be imposed as part of the Project. Moreover, the FGEIS should indicate the extent to which these practices will be used (e.g. total area of porous pavers).

> ***Response 3.4-55:*** *The portions of the SWPPPs that address the senior housing components of The Fairways and Gateway Summit projects will incorporate low impact development (LID) designs in the form of rain barrels and rain gardens. The plan for the Gateway Summit project incorporates the use of pervious pavement in the proposed hotel and banquet facility parking lot. These LID elements will be incorporated into the proposal and will become part of the approved plans for the projects.*

Comment 3.4-56 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection; Attorney General, Environmental Protection Bureau Letter,

March 26, 2005): Section 3.4.2.4 of the DGEIS suggests that in order to limit pollutant loading on-site, fertilizers used at Gateway Summit and Fairways will be phosphorus-free." Similarly, the DGEIS indicates that practices will be employed to minimize the amounts of salt applied to roads during winter months. However, no specific information regarding these practices is provided with the circulated materials. Furthermore, there is no indication that these practices will actually be employed after construction as the Applicant will not retain ownership of or responsibility for the property once construction is complete.

For each alternative, there should be a complete description of a state-of-the-art program to limit use of and application of fertilizers and pesticides, including project staff training and re-training programs, identification of "no spray" areas including buffer zones for all waterways, dry weather chemical application programs, evaluation of use of organic fertilizers, and discussion of pesticide ingredients.

> ***Response 3.4-56:*** *The Applicant has committed to implementing an Integrated Pest Management (IPM) plan for the project. IPM is a holistic approach to pest control that employs a variety of methods and minimizes the potential for adverse effects on health and the environment. IPM strategies would be incorporated into every aspect of the grounds maintenance program at Gateway Summit and The Fairways. The proposed program will be designed as an ecological approach to landscape management through the use of cultural, biological and chemical controls based on a detailed monitoring plan. It is expected that an IPM will be developed and submitted to the Town as a condition of site plan approval.*

Comment 3.4-57 (Letter March 3, 2005, Christopher Wilde, Riverkeeper): In a brief section on road salt, the DEIS use of salt in winter would be "minimized" and no salt would be stored on site. To the extent the applicant will ultimately control winter maintenance practices (i.e. those areas beyond Town roads), it should employ the use of alternatives to traditional road salt on roads, parking lots, sidewalks, and the like.

The impact of traditional deicing salts is well-established. Those such as calcium chloride can enter surface waters in stormwater runoff and groundwater through soil percolation. Chloride concentrations in groundwater supplies have been found to rise proportionally with increases in the road salt application rate throughout the year. Chloride concentrations in soils, groundwater and surface water supplies can severely impact soil structure, vegetation, wildlife, aquatic communities, and infrastructure. Sand should also be abandoned as a deicing technique; sand is an abrasive and not a deicer, and under severe weather conditions some additional form of deicer would be required for motorist and pedestrian safety. Furthermore, sand scours from impervious surfaces during rain events, overloads sediment-trapping practices, and results in sediment loading of receiving waters.

Potassium acetate is a viable, environmentally benign road salt alternative. It is an effective deicer and also functions as an anti-icer when applied prior to or at the outset of snow events. No known significant health, environmental or infrastructure impact are associated with the use of this alternative.

> ***Response: 3.4-57:*** *The Applicant proposes to restrict use of anti-icing materials to potassium acetate on the residential portions of the site that are to be*

maintained by a Homeowners Association. A voluntary agreement for the same restriction will also be sought from the YMCA.

Comment 3.4-58 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): The Applicant should employ the guidance provided by New York State Stormwater Management Design Manual (October 2001) and New York Guidelines for Urban Erosion and Sediment Control (April 1997). The DEIS must consider the impacts of meeting the requirements of the newly adopted New York State Stormwater SPDES General Permit (GP02-01).

Response 3.4-58: *The revised SWPPP's provided with this FGEIS meet the requirements of GP-02-01, and have been designed in accordance with the New York State Stormwater Design Manual (August 2003) and the New York Guidelines for Erosion and Sediment Control (April 1997). During the permit process, the plans will be further revised, if necessary, to incorporate the recently published New York State Standards and Specifications for Erosion and Sediment Control (August 2005).*

Comment 3.4-59 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): The design of the SPPP must address the narrative water quality standards for turbidity and suspended solids (see 6 NYCRR Section 703.2). Existing baseline turbidity levels must be presented in the SPPP.

Response 3.4-59: *The SWPPPs developed for the proposed action have been designed to prevent erosion and sedimentation during construction and post development increases in the four pollutants identified in New York State's GP-93-03 (incorporated by reference in the Watershed Regulations) and 02-01, including Total Suspended Solids (TSS). To comply with the two General Permits, pre-development and post-development pollutant loads have been calculated within the SWPPP.*

Comment 3.4-60 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): Stormwater controls should be designed at minimum for the detention or retention of the 10 year 24 hour storm for the Armonk or Westchester County Airport area during construction and before full revegation. Specific engineering calculations are needed in the SPPP to demonstrate this.

Response 3.4-60: *The SWPPPs for the proposed action include Erosion and Sediment Control Plans that specify the use of temporary sediment basins to prevent erosion and off-site siltation during construction. The basins are designed to detain the 10 year 24 hour storm volume. Calculations upon which the designs are based will be included in the SWPPPs.*

Comment 3.4-61 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): Construction phasing should consider limiting unstabilized soils to three acres at any one time. Covering should be applied to all slopes over 8 percent, all soil piles, and loose fill areas.

Response 3.4-61: *The combination of the erosion control plans in the SWPPPs and detailed phasing/sequencing plans, which limit the area of disturbed soil on each site to five acres, meet and exceed the NYSDEC standards, and will successfully prevent off-site sedimentation. As stated previously, NYCDEP*

Watershed Regulations (which reference GP-93-06) require the Applicant to limit the area of exposed soil to five acres while GP-02-01 requires regular monitoring of a site during construction to ensure that the intent of the plan is met. All areas disturbed during construction will be temporarily, and permanently, stabilized in accordance with the applicable guidance and regulations.

Comment 3.4-62 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): Construction timing should be designed to avoid all excavation or clearing activities from October 1st to may 15th. Construction through the most sensitive areas of the site such as in areas of streams, wetlands and steep slopes should be limited to portions of the summer that are historically the driest.

Response 3.4-62: *The project designs and SWPPPs will fully comply with all applicable regulations concerning seasonal timing of construction. Further, they specify rapid stabilization of each five acre disturbed area on each site and will be effective in mitigating stormwater related impacts both during and following construction.*

Comment 3.4-63 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): Protection of water quality through deliberate implementation of stormwater controls must be a contractual priority in the Applicant's construction contract. There should be no fiscal incentives or other monetary benefits with respect to an expedited work schedule.

Response 3.4-63: *Comment noted. While incentives are often found to work effectively in completing a job on schedule, a primary contractual priority of the Applicant's is to ensure that erosion controls are properly installed and maintained throughout the construction period, and that regular monitoring of the site by a qualified professional continues until the site is stable.*

Comment 3.4-64 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): Post construction stormwater controls should include detailed site re-vegetation and stabilization to re-establish vegetation.

Response 3.4-64: *Comment noted. This provision is included in the Erosion and Sediment Control Plan components of the revised SWPPP's for the two projects.*

Comment 3.4-65 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): During all construction within the Watershed, an engineer or another on-site inspector that is a Certified Professional in Erosion and Sediment Control must monitor contractor adherence to the SPPP and provide weekly, certified inspection reports in conformity with the State DEC General Permit for Stormwater.

Stormwater controls during construction and before complete re-vegetation must be thoroughly inspected each week and after each rain in excess of 0.5 inches.

Response 3.4-65: *Comment noted. The Applicant will engage the services of a CPESC/CPSWQ to conduct he necessary inspections, oversee implementation of the SWPPPs, coordinate the SWPPP implementation with appropriate officials, and ensure compliance with all conditions of regulatory approvals.*

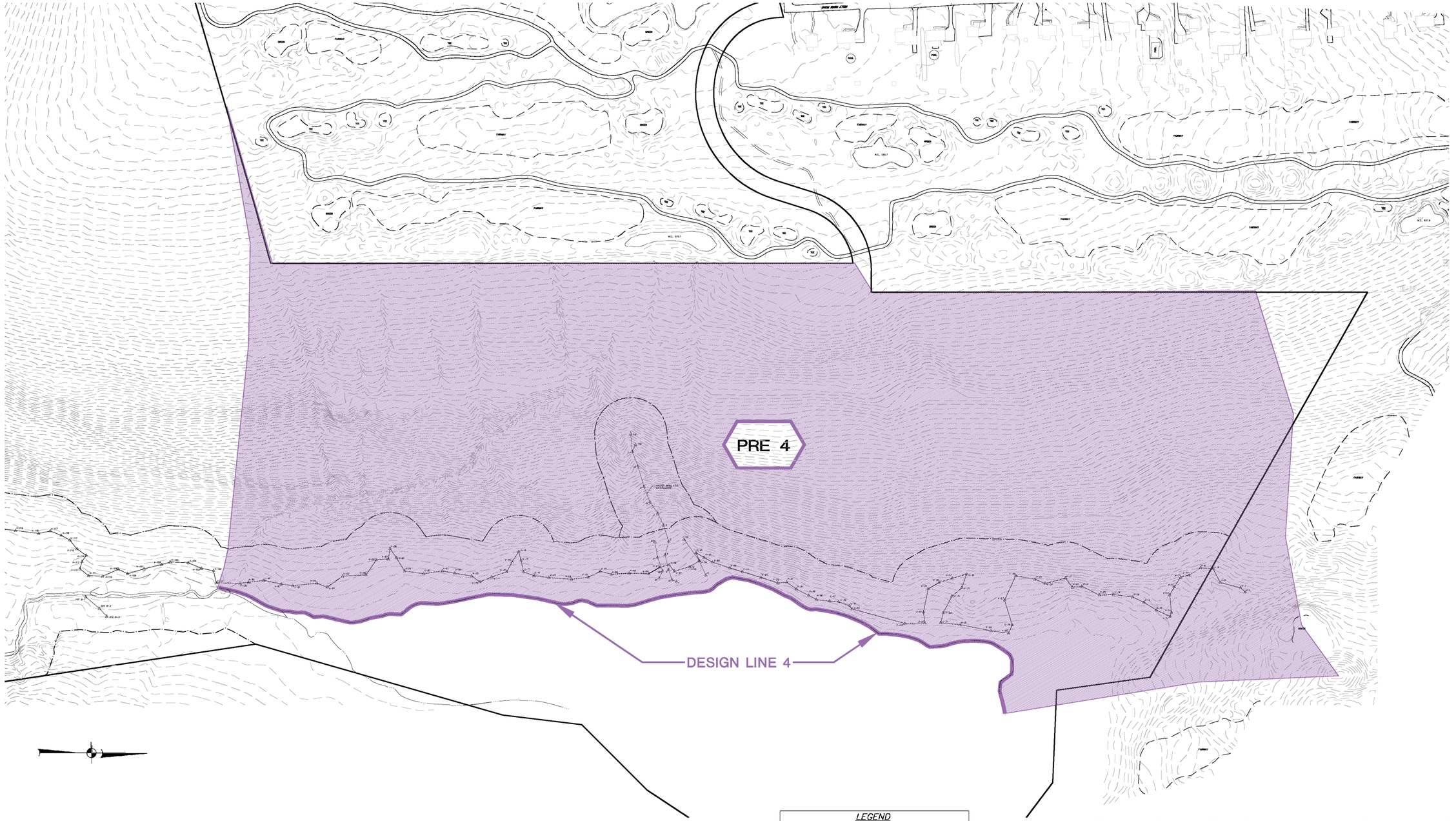

Figure 3.4-1: Pre-Development Drainage Areas - The Fairways
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 09/23/05, rev. 04/14/06
Scale: Graphic

File 02136 04/25/06
JS\02136

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

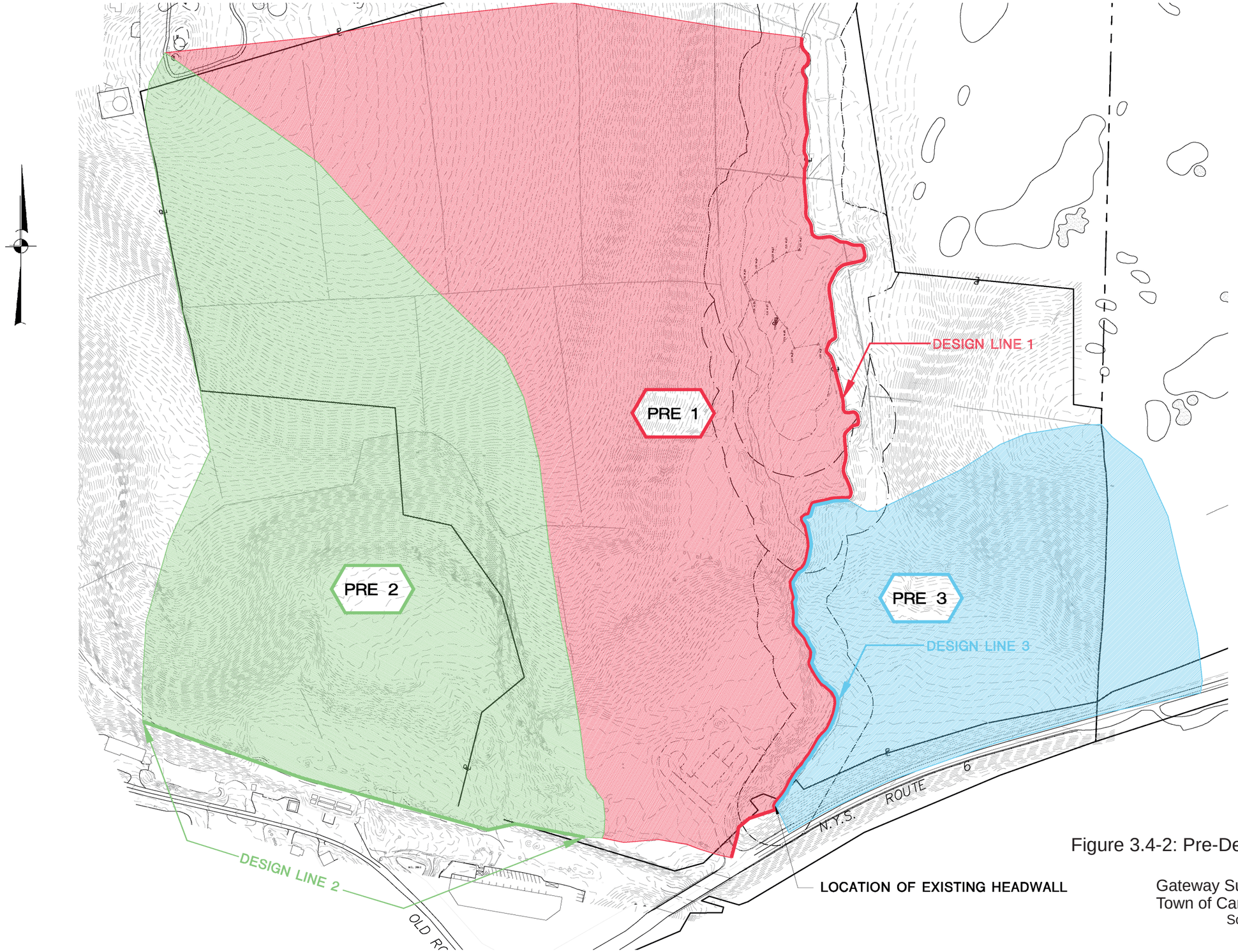

Figure 3.4-2: Pre-Development Drainage Areas - Gateway Summit

Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 09/23/05, rev. 04/14/06
Scale: Graphic

File 02136 04/24/06
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Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

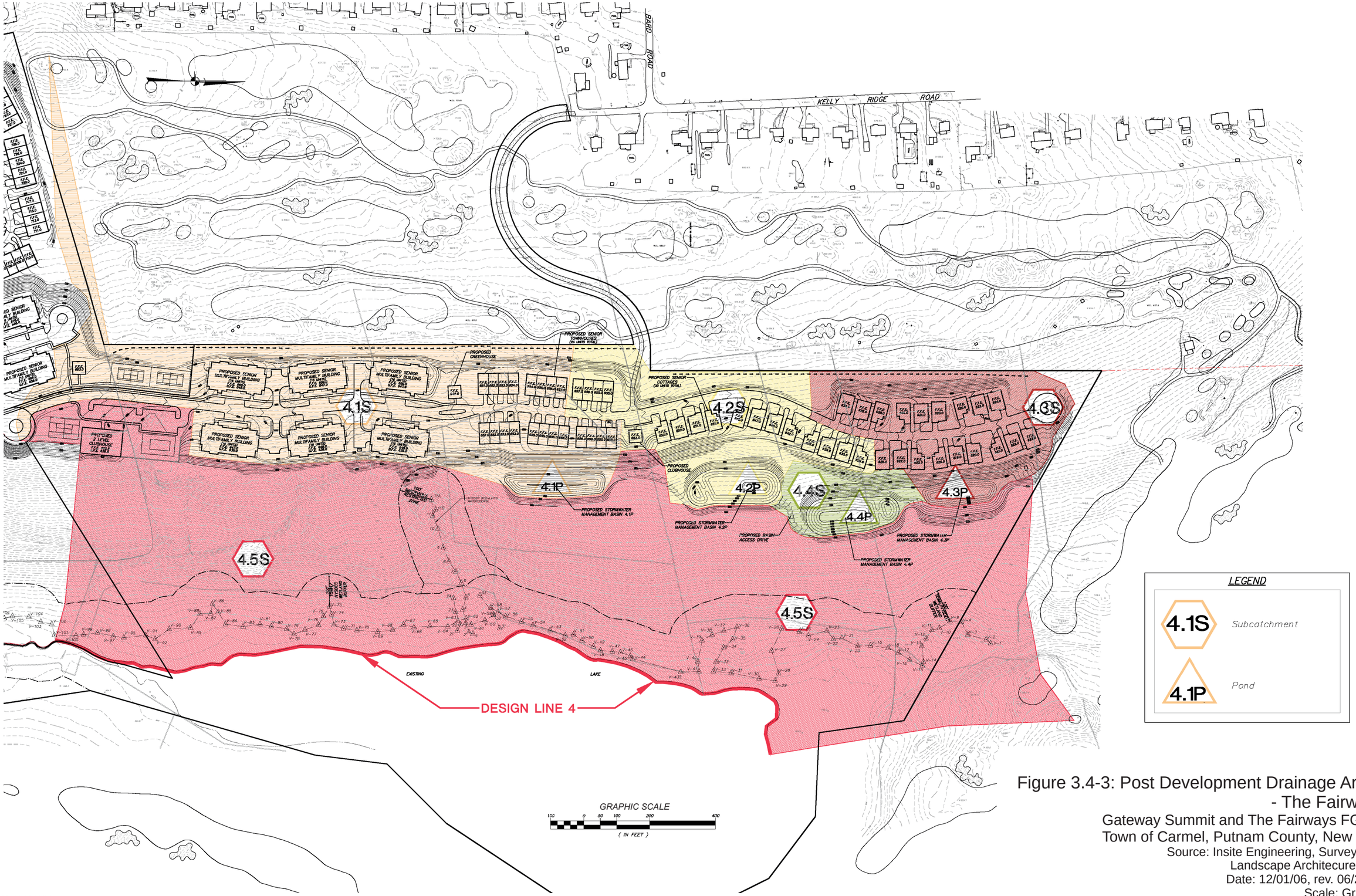

Figure 3.4-3: Post Development Drainage Areas - The Fairways

Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 12/01/06, rev. 06/23/06
Scale: Graphic

File 02136 06/29/06
JS\02136

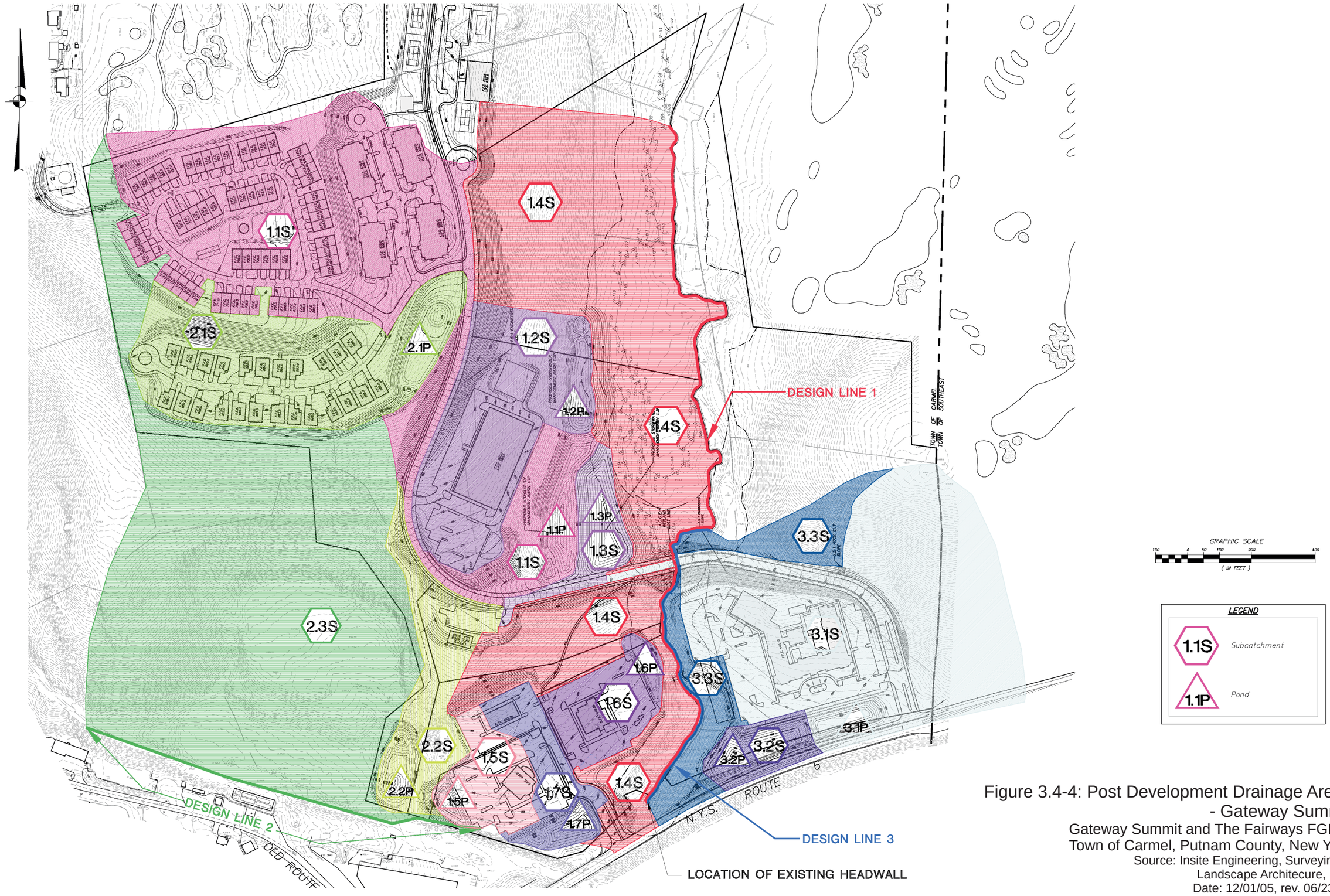

Figure 3.4-4: Post Development Drainage Areas - Gateway Summit

Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 12/01/05, rev. 06/23/06
Scale: 1" = 280'

File 02136 07/06/06
JS\02136

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

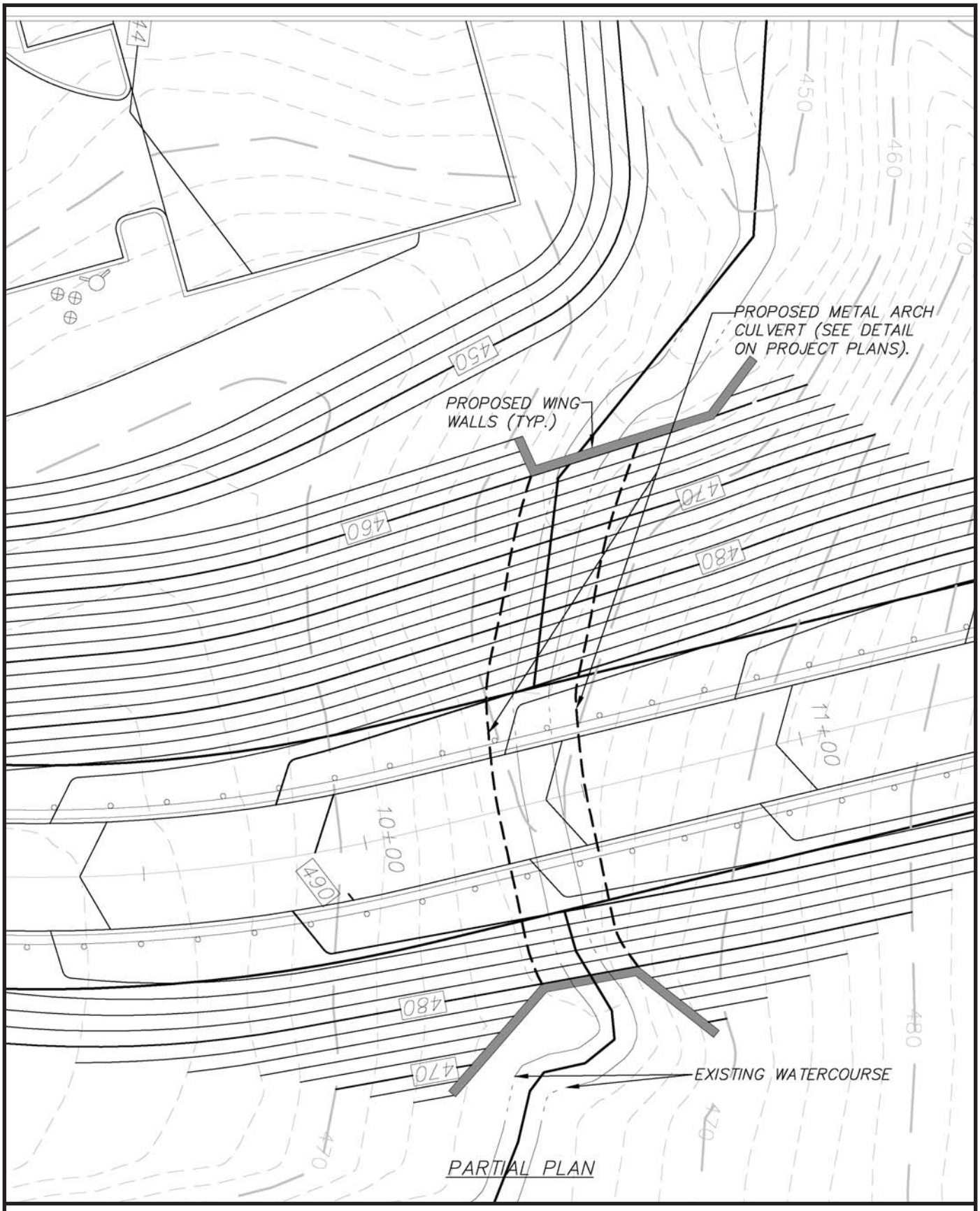

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Figure 3.4-5: Culvert Plan
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 05/03/06
Scale: 1" = 30'

File 02136 05/05/06
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Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

3.5 LAND USE AND ZONING COMMENTS AND RESPONSES

As identified in the January 3, 2005 DGEIS for Gateway Summit and The Fairways, no significant land use or zoning impacts are anticipated as a result of the proposed projects. Construction of Gateway Summit will replace vacant land and a vacant building with commercial development along Route 6 where existing and proposed zoning allows for such uses. Proposed senior housing uses on both sites are expected to be compatible from a land use standpoint with adjacent land uses, including residential development to the north, and the Centennial Golf Course.

Modifications to the two projects based on comments on the DGEIS have primarily been made in order to limit site disturbance, and impacts to steep slopes and wetlands. However, revisions to The Fairways address a number of land use concerns raised at the Public Hearing held in February 2005 related to effects on nearby residences and the adjacent golf course.

The Gateway Summit project has been scaled back with some changes in its proposed land uses that reduce the level of commercial development and ensuing traffic generation. These changes lower the density of the Gateway Summit project and its resulting land use effects.

Revisions to The Fairways include residential access from the south only, eliminating Fair Street access and added traffic. The layout continues to include emergency access to Kelly Ridge Road. A cul de sac is proposed near the northern end of the site at the Centennial Golf Course property line, which is approximately 1,500 feet south of Fair Street. This change avoids the need for residents to cross the Centennial Golf Course for Fair Street access. There is also additional separation between the proposed senior housing units and the western property line in comparison to the previously proposed layout, providing increased visual buffer.

As shown on the Landscape Plans accompanying this FGEIS and in Figure 1-5, landscaping is proposed along the western property line of The Fairways that will provide additional screening for Centennial Golf and existing residences to the west. In the Applicant's opinion, the additional visual screening of proposed buildings on the western side of the proposed cul de sac will enhance the project from a land use compatibility standpoint. With the proposed senior housing divided between three unit types in a more compact layout (96 senior multi-family units, 24 townhouse units and 30 cottage-style units), the plan revisions reduce site disturbance and impacts to steep slopes and wetland buffer, as described in Chapters 3.1 and 3.2 of this FGEIS.

Specific changes to the proposed mix of uses at Gateway Summit include a reduction in the proposed senior housing by 41 units, and replacement of the previously proposed 45,000-square foot auto dealership with a second 7,000-square foot restaurant and a 10,000-square foot office building. This provides a less dense and less intensive program of development for the site, with reduced wetland and steep slope impacts. Comments from the Public Hearing on the DGEIS related to the visibility of the project from residences to the west have been addressed through additional separation that is provided between proposed buildings and the western property boundary, and greater preservation of wooded areas between the proposed senior housing units and both Centennial Golf Course and the nearest residences located at the end of Everett Road.

The site boundary for the Gateway Summit project site has also been revised. The previously proposed Conservation Area on Lot 9 is proposed to be removed from the Gateway Summit

project and added to The Fairways project, with the on-site perennial stream to the south of the proposed Town road defining the location of a proposed common lot line between the two project sites. The reconfigured property line would extend north from the on-site roadway, shifting the previous Conservation Area on the Gateway Summit site to The Fairways. This would change the proposed subdivision layout but not the proposed use of the land area involved, which would still be open space protected by a conservation easement. In addition, proposed site boundaries for the Gateway Summit project site have also been reconfigured to include a stormwater basin relating specifically to the project.

Revisions to the proposed plans for Gateway Summit also respond to concerns regarding water supply. A Water Supply Easement is now proposed to be granted to the Town, located in the area to the east of the proposed YMCA. This easement will allow the Town to drill wells on the project site should the Town need additional water supply in the future. This easement will also define a specific area where the Town could potentially locate a booster station. The Water Supply easement will run through the Gateway Summit senior housing lot and The Fairways and will provide access through the YMCA lot.

Another plan revision that would not significantly change the anticipated land use effects of the projects relates to the location and amount of proposed senior housing recreational facilities. Under the DGEIS proposed actions, senior housing recreation areas for Gateway Summit and The Fairways were separate, and were centered within the two separate senior housing complexes. The plan revisions call for the sports courts, pools and clubhouse facilities to be combined for the future residents of Gateway Summit and The Fairways. These recreational amenities overlap the Gateway Summit and Fairways property boundaries and would be supported by Homeowner fees from both Gateway Summit and The Fairways. According to the Applicant, this provides a more efficient layout, both functionally and in terms of impacts on land and provides for greater pedestrian connectivity between the two sites. Under the revised plans for Gateway Summit, proposed Senior Housing is located on Lot 7A, while passive recreation open space for this Senior Housing is located on Lot 7B. As described in Chapter 1.0, the project has also been revised to incorporate a walkway/bikeway system to link the different sections of the proposed development, and a connection to the Putnam County Bikeway is proposed from the parking area serving the proposed restaurant on Lot 3 along with bike racks.

The plan revisions to The Fairways and Gateway Summit developments are illustrated in the schematic plans shown on Figures 1-1 to 1-2, and in the full size drawings included at the rear of this document. The following table indicates the proposed uses and intensities of the two projects.

Table 3.5-1: Gateway Summit and The Fairways Proposed Uses and Intensities	
Uses	Intensities
Lot 1: Hotel with Banquet Hall and Conference Center	150 rooms with 12,000-square foot Banquet Hall and Conference Center
Lot 2: Restaurant	7,600 SF
Lot 3: Restaurant	6,300 SF
Lot 4: Office	10,000 SF
Lot 5: Office with Convenience Retail	5,600 SF Office/400 SF Convenience Retail
Lot 6: YMCA	68,000 SF with Children's Playground
Lot 7A: Senior Housing (Gateway Summit)	64 senior housing multi-family units 62 senior housing townhouse units 24 senior housing cottages
Lot 7B: Senior Housing Passive Recreation Open Space	12.7 acres
Lot 8: Senior Housing (The Fairways)	96 senior housing multi-family units 24 senior housing townhouse units 30 senior housing cottages (includes a Conservation Area to the north of senior housing recreation area)
SF = square feet Source: Insite Engineering, Surveying & Landscape Architecture, P.C.	

Zoning Code Compliance

The Fairways

As described in the DGEIS, multi-family dwellings for the elderly is a Special Permit Use in the Residential District subject to approval by the Planning Board under certain conditions. The revised plans for The Fairways have been designed to conform with all applicable standards set forth in the Town Code. The proposed Fairways site now includes frontage on Route 6, and has an overall density of 1.5 units per acre. Tables 3.5-2 and 3.5-3 summarize the compliance of the project with the specific standards applicable to senior housing and the R zone.

Table 3.5-2 The Fairways Compliance with Conditions for Issuance of a Special Permit for Senior Housing		
Features	**Minimum Required**	**Proposed**
Lot Area	50,000 SF	4,432,306 SF
Frontage	125 feet	1,220 feet
Recreation Space	300 SF/DU	> 300 SF/DU
Building Setback from a Front Lot Line	40 feet	> 40 feet
Parking Spaces	1.1 spaces per DU	2.0 spaces per DU
Age	55 years of age or older	55 years of age or older
Maximum Building Height	40 feet/2 stories	< 40 feet/2 stories
Density	150 units per lot	150 units per lot
Source: Town of Carmel Zoning Code; Insite Engineering, Surveying & Landscape Architecture, P.C.		

Table 3.5-3 The Fairways Compliance with R Zone Requirements		
Features	**Minimum Required**	**Proposed**
Lot Area	120,000 SF	4,432,306 SF
Minimum Lot Width	200 feet	1,220 feet
Minimum Lot Depth	200 feet	4,111 feet
Minimum Front Yard Setback	40 feet	> 40 feet
Minimum Side Yard Setback	25 feet	> 25 feet
Minimum Rear Yard Setback	40 feet	> 40 feet
Maximum Building Height	35 feet	< 35 feet
Maximum Building Coverage	15 %	4.9 %
Source: Town of Carmel Zoning Code, Insite Engineering, Surveying & Landscape Architecture, P.C.		

Gateway Summit

A Local Law amendment has been adopted by the Town of Carmel that allows hotels up to five stories in height as a Conditional Use in the Commerce/Business Park District. This change to the Town's Zoning Code and the Applicant's proposed elimination of the auto dealership on Route 6 increase the compliance of the proposed project with the Town's zoning regulations. Tables 3.5-4 and 3.5-5 show the Commerce/Business Park district bulk and dimensional requirements for the Gateway Summit site, Special Permit requirements for senior housing, and the proposed bulk and dimensional features for Gateway Summit.

As indicated in the tables below, the proposed lots meet the applicable bulk and dimensional requirements, with the exception of Lot 4. As described in Chapter 1.0, the office building proposed for Lot 4 will require three area variances. Lot depth is defined per Town Code as a line from the mid-point of the front yard to the mid-point of the rear yard. By interpretation of the Zoning Enforcement Officer, that line needs to be contained within the project site. Therefore, because the Lot 4 lot depth line falls outside of the limits of the subject property, this lot would require an area variance for lot depth. Lot width measurement is based on the lot depth calculation. It is measured at the centerpoint of the lot depth line. Based on the fact that the lot depth line falls outside of the proposed property line, the lot width line also falls outside of the limits of the property and requires an area variance. For minimum lot frontage, the Town Code requires a minimum of 100 feet of frontage on a Town, County or State road. The proposed plan provides 62.8 feet of frontage for Lot 4. Therefore, a third area variance is required related to minimum lot frontage.

As described in Chapter 4.0 of this FGEIS, at the request of the Town's Planning Consultant the Applicant has prepared alternatives to the proposed restaurant/office complex component of the proposed action (see letter in Appendix). These alternatives (described in Chapter 4.0 as Option 1 and Option 2) provide a more pedestrian- and user-friendly complex, including a common pedestrian plaza for the restaurant/office complex. No area variance would be required for the Option 2 layout for this portion of the Gateway Summit project. While the Applicant is willing to implement either of these optional layouts should they be preferred by the Planning Board, he believes that Option 2 provides the best layout while addressing the Town

Planning Consultant's comments. These pedestrian-friendly improvements are also included in the Modified Road Configuration Alternative described in Chapter 4.0. Furthermore, a connection to the Putnam County Bikeway, which runs adjacent to the west side of the project site on an abandoned railroad right-of-way, has been added from the parking lot of the proposed restaurants on Route 6, where bike racks will also be provided (see Figure 1-2a: Proposed Pedestrian and Bicycle Facilities).

Table 3.5-4: Gateway Summit
Compliance with Conditions for Issuance of a Special Permit for Senior Housing

Features	Minimum Required	Proposed
Lot Area	50,000 SF	1,316,197 SF SF
Frontage	125 feet	2,131 feet
Recreation Space	300 SF/DU	> 300 SF/DU
Building Setback from a Front Lot Line	40 feet	> 40 feet
Parking Spaces	1.1 spaces per DU	1.8 spaces per DU
Age	55 years of age or older	55 years of age or older
Maximum Building Height	40 feet/2 stories	< 40 feet/2 stories
Source: Town of Carmel Zoning Code; Insite Engineering, Surveying & Landscape Architecture, P.C.		

Table 3.5-5 :
Gateway Summit and
Applicable Zoning Bulk and Dimensional Regulations

C/BP Zone		Proposed							
	Required	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 6	Lot 7A	Lot 7B
Min. lot area (acres)	3	7.76	3.80	3.00	3.18	3.49	13.23	30.22	12.69
Min. lot wIdth (ft.)	200	517	448	303	505	665	810	995	810
Min. lot depth (ft.)	200	658	447	469	771	336	807	1,813	82
Min. yard setbacks*									
Front (ft.)	50	> 50	> 50	> 50	> 50	> 50	> 50	> 50	> 50
Side (ft.)	40	> 40	> 40	> 40	> 40	> 40	> 40	> 40	> 40
Rear (ft.)	40	> 40	> 40	> 40	> 40	> 40	> 40	> 40	> 40
Max. Bldg. height (ft.)**	40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	NA
Min. floor area (s.f.)	5,000	43,300	7,600	6,300	10,000	6,000	65,000	239.22	NA
Max. lot coverage (%)	40%	12.8%	4.2%	4.5%	3.2%	1.8%	7.6%	12.7%	NA

*The 50-foot minimum front yard setback requirement does not apply to the senior housing.
**The maximum building height for hotels, office, computer research uses is 60 feet.
*** Area Variances required for Lot 4 lot width, lot frontage and lot depth.

Compliance With Subdivision Regulations and Comprehensive Plan

The proposed subdivision for the Gateway Summit and The Fairways projects is designed to meet the intent and conditions of the Town subdivision code. The proposed Gateway Summit road is engineered for future acceptance by the Town as a Town road, along with appurtenant drainage and utility structures and easements. All lots meet the minimum three-acre size

requirement. Lot geometry and frontage similarly meet zoning requirements. All appropriate grading, drainage and erosion control plans have been submitted with this package.

Both projects are consistent with the Town's 2000 Draft Comprehensive Plan. Specifically, the 2000 Draft Town of Carmel Comprehensive Plan recommends that the Gateway Summit site be developed for commerce/business park use and that The Fairways site be developed for residential use. The commerce/business park category is also intended to allow for assisted living facilities and day care centers. The Comprehensive Plan recommends that the Town pursue attracting certain regional uses, such as hotels and corporate offices, to designated campus commercial areas in order to strengthen the tax base and to provide convenient services to residents without adversely impacting the Town's hamlet business area and established residential neighborhoods. The proposed development is consistent with these policies. It would represent appropriate development in an area where infrastructure and roadway networks are capable of handling such development. By minimizing impacts to wetlands and steep slopes, and minimizing the amount of land disturbance necessary for the proposed projects, the Gateway Summit and The Fairways projects are also consistent with the Comprehensive Plan's recommendations related to environmental protection. Therefore, the proposed projects are expected to conform to policies of the Town's Land Use Plan and the 2000 Draft Comprehensive Plan.

Responses to comments on the DGEIS related to land use and zoning follow.

Comment 3.5-1 (Public Hearing, February 2, 2005, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc.; Letter, Matthew Bennett, January 4, 2005): The Gateway Summit project includes senior residences exceeding 150 units, contrary to the intent of the Town Code, with 143 units proposed on Lot 5 and 48 units proposed on Lot 6. It is not the intent of the Town Code to treat these as separate and distinct projects since these two parcels are immediately adjacent to each other and would share the same roadway network, stormwater detention pond and water and sewer infrastructure.

> ***Response 3.5-1:*** *In the Applicant's opinion, the proposed projects comply with the Town Code requirements. The Gateway Summit and the Fairways projects are separate projects on separate lots. The Applicant notes that there is local precedence on this issue that has been confirmed by the courts. The Carmel Town Board approved senior housing for the Carmel Corporate Center project pursuant to the same zoning provisions as apply to the Gateway Summit and The Fairways projects. The Town Code Enforcement Officer reviewed plans for that project on July 26, 2004 and determined that the proposed housing conformed with the Town Code with respect to its senior housing provisions and that as long as separate tax lots existed, each one was treated on its own merits. The New York State Supreme Court made a similar determination relative to the Carmel Code. The amount of proposed senior housing at Gateway Summit has also been reduced by 41 units, with a total of 150 units now proposed at Gateway Summit.*

Comment 3.5-2 (Letter, Matthew Bennett, January 4, 2005): Assisted Living is not a named -- and hence permitted -- use under the current zoning code. An interpretation from the Zoning Board of Appeals is needed.

Response 3.5-2: *The Assisted Living component has been removed from the proposed Gateway Summit project.*

Comment 3.5-3 (Letter March 3, 2005, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc.): There is no existing Town road that would allow the Applicant's proposed configuration as the Applicant's parcel does not have the existing frontage on a public road that is required by the Town's Zoning Code. Consequently, the project must be configured to comply with said Code.

Response 3.5-3: *The revised site plan depicts the road frontage for all proposed development parcels. Sufficient legal frontage is provided along Route 6 and the proposed Town road within the Gateway Summit and Fairways project vicinity. All proposed lots will have frontage on Route 6 or the new Town road.*

As described in Chapter 2.0 of the DGEIS, the Gateway Summit and The Fairways projects are two separate and distinct projects. Under the plan revisions, the Applicant proposes shared access from Route 6 only, rather than providing a second resident access to Fair Street. This plan revision has been made in response to comments regarding wetland impacts and effects on the Centennial Golf Course.

As stated above, the current plan revisions for Gateway Summit and The Fairways now show both sites as having frontage on Route 6, with a conservation easement on The Fairways connecting that project site to Route 6. It should also be noted that even without a physical connection to Route 6, The Fairways project would still comply with the access requirements of the Town's Senior Housing Law, since access to The Fairways is proposed from a new Town road that is proposed on the Gateway Summit site. The Fairways project site has direct frontage on the cul de sac of this new Town road.

Comment 3.5-4 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection) The DEIS must indicate that new impervious surfaces proposed by the applicant, such as internal roads and parking areas, are the minimum necessary to meet local zoning requirements. Where feasible, the applicant should attempt *to reduce* new impervious surfaces to levels below zoning requirements through the necessary variances. Minimal road-widths, multi-level parking structures, banking of parking spaces, and the use of porous alternatives to asphalt paving are among the alternatives to consider.

Response 3.5-4: *According to the Applicant, the hotel, two restaurants, and YMCA have had their sites designed for specific users. The parking provided for these four projects is in accordance with the requirements of these users. The hotel site has been designed with a gravel overflow parking to minimize impervious area. The two small office buildings have been designed with the minimal amount of parking required by the Town of Carmel Zoning Code. The senior housing portion of the Gateway Summit project has been designed to contain 64 units of senior housing in four senior multi-family unit buildings. These buildings each have underground parking on the lower level similar to that of The Fairways project. Parking has also been provided for the remaining 88 units in garages and in the unit driveways to minimize the amount of impervious surface.*

The revised Gateway Summit site plan has reduced the total parking from 867 to 766.

The project sponsor has revised the plans so that roadways and parking areas have been designed to minimize the area of impervious surface as much as practical, while adhering to the Town's requirements. Both the Gateway Summit main roadway, which is to be dedicated to the Town, and the internal roadway at The Fairways, which is to remain a private roadway, are proposed to be 24 feet wide. The plan revisions have resulted in a reduction in the total amount of impervious surface from the two projects of 3.2 acres.

Proposed Low Impact Development (LID) features will also limit effects of runoff, according to the project engineer. The senior housing portions of the projects will utilize rain barrels and rain gardens to the maximum extent practicable.

According to the Applicant, multi-level parking structures, while seemingly a mitigation to impervious surfaces, are extraordinarily expensive. Current real estate values make them cost prohibitive for most projects in the watershed. There are very few instances where they have been constructed outside of large urban environments such as New York City, Yonkers, White Plains or other southern Westchester cities and villages.

3.6 TRAFFIC AND TRANSPORTATION COMMENTS AND RESPONSES

Modifications to the Gateway Summit and Fairways projects have been made primarily in response to comments regarding physical impacts such as the degree of site disturbance and impacts to steep slopes, wetlands and water resources. The plan revisions address a number of concerns raised at the Public Hearing and in letters regarding the transportation network. Most significantly, the revisions to The Fairways provide residential access from the south only, eliminating the Fair Street access and the potential for through traffic (see Figure 3.6-1).

The layout continues to show emergency access to Kelly Ridge Road. A cul-de-sac is proposed near the northern end of the site at the Centennial Golf Course property line, which is approximately 1,500 feet south of Fair Street. This change avoids the need for residents to cross the Centennial Golf Course for Fair Street access. As a result, the Applicant no longer proposes traffic improvements to Hill & Dale Road at Fair Street.

In addition to the access change to The Fairways, the Gateway Summit project has been revised to reduce the level of commercial development, as indicated in Table 3.6-1 and the associated amount of traffic is less than the DEIS program as indicated in Table 3.6-2.

Specific changes to the proposed mix of uses at Gateway Summit include a reduction in the proposed amount of senior housing by 41 units. The 45,000 square foot auto dealership has been eliminated and the office space has been reduced by 1,600 square feet (with 400 square feet of convenience retail included in the office building on Lot 5).

A 6,300 square foot quality restaurant has been added to the plan, and the previously proposed restaurant has been increased in size by 600 square feet. Changes to the location and amount of proposed senior housing recreational facilities would not significantly change the anticipated traffic and transportation effects of the projects.

The plan revisions, with their complementary recreational areas and facilities, provide a more efficient layout for these uses, both functionally and in terms of impacts on land. The revised design of these facilities also provides for greater pedestrian connectivity between the two sites and between different sections of the development through a proposed walkway/bikeway system.

The plan revisions for The Fairways and Gateway Summit developments are illustrated in the schematic plans shown on Figures 1-1 to 1-2, and in the full size drawings included at the rear of this document. The following table indicates the proposed uses and intensities of the two projects. Trip Generation is presented in Table 3.6-2 with trips rates, passby trips, and internal trips shown in the Appendix K of this FGEIS.

Traffic volumes for all conditions and site generated volumes are shown in Figures 3.6-2 to 3.6-9, including analysis of the intersections of US Route 6/Old Route 6/Maple Road and NYS Route 52/NYS Route 301. Site generated trips are further detailed in Appendix J of this FGEIS. Levels of service are summarized in Table 3.6-3 and 3.6-4 for the Existing, No Build, and Build conditions. More detailed level of service tables and level of service worksheets are located in the FGEIS Appendices L and M for the rest of the network under Build and Potential Improvement conditions.

Mitigation Measures and Associated Thresholds

The applicant is proposing certain mitigation measures that will require implementation at various stages of development of the subject site. For example, a highway work permit will need to be procured before the subdivision road is installed at US Route 6 and any associated work in the right-of-way takes place or when any other curb cut on the State Highway is proposed. The NYS DOT may require additional minor measures as part of its permit. For example, NYSDOT may desire shoulder improvements near the hotel entrance, including milling to allow drainage to flow off of the roadway and relocation of the guardrail. Beyond those work permits, no other road improvements are warranted until overall development reaches a threshold that is projected to generate certain levels of traffic that may then require either a traffic signal and/or a left turn lane.

Construction activity may be initiated and buildings may be occupied so long as the approved uses generate fewer than 60 entering trips at the easternmost driveway.

If site development activity occurs or is proposed that will cumulatively generate more than 60 entering trips at the easternmost driveway, a left hand turn lane may be necessary, subject to approval by the NYS DOT. Accordingly, if a proposed development is projected to cause overall development to exceed the 60 entering trip threshold at the easternmost driveway, then the Applicant shall apply to the NYS DOT for a US Route 6 left turn lane and if the DOT grants that permit, the applicant shall install that left turn lane before being granted a certificate of occupancy (C.O.) for the site development activity that exceeds the aforementioned traffic threshold. For example, if the hotel and senior housing are under construction, a C.O. for one of those uses may be issued since neither generates more than the 60 entering trips threshold at the easternmost driveway, but a C.O. for the second one may not be issued unless an application for the left hand turning lane is made to NYS DOT and either: i) NYS DOT denies such left turn lane because it finds it is not required; or ii) NYS DOT grants such permit and the left hand turn lane is constructed.

Once site development activity occurs or is proposed that is projected to cumulatively exceed 100 exiting trips at the easternmost driveway, the Applicant shall apply to the NYS DOT for a US Route 6/subdivision road traffic signal. If the NYS DOT grants that permit, such signal shall be installed before a certificate of occupancy is granted for the site development activity that exceeds the aforementioned traffic threshold. It is understood that granting of these permits is at the discretion of the NYS DOT and the applicant's obligation is to implement the action associated with the approved permit.

It is noted that an alternative access scheme may be pursued (Modified Road Configuration Alternative) that has similar mitigation measures and thresholds as noted above. These are discussed in detail in Chapter 4.0.

Table 3.6-1:
Project Changes: Original and Revised Uses
Gateway Summit and The Fairways

Revised Uses	Original Uses	Change
Hotel with Banquet Hall and Conference Center 150 rooms with 12,000-square foot Banquet Hall and Conference Center	Hotel 150 rooms, Conference Center, and Banquet Facility	none
Quality Restaurant 7,600 square feet	Quality Restaurant 7,000 square feet	addition of 600 square feet of restaurant
Quality Restaurant 6,300 square feet	Auto Dealership 45,000 square feet	Remove auto dealership (45,000 square feet) with addition of restaurant (6,300 square feet)
Office 10,000 square feet	Office 10,000 square feet	none
6,000 square feet Office* (includes 400 square feet of Convenience Retail)	Corporate/ Professional Offices 7,600 square feet with 400 square feet of convenience retail	reduction of 1,600 square feet of Office
YMCA 68,000 square feet with Children's Playground	Recreational Community Center 68,000 square feet	none
Senior Housing (Gateway Summit) 64 senior housing multi-family units 62 senior housing townhouse units 24 senior housing cottages	Elderly Residences, 143 dwelling units Elderly Residences, 48 dwelling units	reduction of 41 units, changes in unit styles
Senior Housing (The Fairways) 96 senior housing multi-family units 24 senior housing townhouse units 30 senior housing cottages (includes a Conservation Area to the north of senior housing recreation area)	Elderly Residences, 150 dwelling units Conservation Area (Vacant)	Same number of units in differing unit styles

SF = square feet
Source: Insite Engineering, Surveying & Landscape Architecture, P.C.
*Convenience retail expected to primarily serve internal site, including senior housing, office workers and YMCA visitors.

Table 3.6-2
Revised Project Site Trip Generation Summary

Land Uses and Size (Potential Uses)	Trips								
	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour		
	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)
Gateway Summit									
Hotel 150 rooms, Conference Center, and Banquet Facility	41	26	67	47	42	89	60	48	108
Quality Restaurant 7,600 square feet	5	1	6	38	19	57	48	34	82
Quality Restaurant 6,300 square feet	4	1	5	32	16	48	40	28	68
Office 10,000 square feet	26	4	30	3	12	15	3	3	6
Elderly Residences, 150 dwelling units	18	22	40	28	18	46	23	23	46
Corporate/Professional Offices 6,000 square feet*	17	2	19	2	7	9	2	2	4
Recreational Community Center 68,000 square feet	67	43	110	32	79	111	43	44	87
The Fairways									
Elderly Residences, 150 dwelling units	18	22	40	28	18	46	23	23	46
Conservation Area (Vacant)	0	0	0	0	0	0	0	0	0
Revised Plan Total	**196**	**121**	**317**	**210**	**211**	**421**	**242**	**205**	**447**
Total from DGEIS	282	164	446	239	275	514	287	259	546
Percent Change	**-31%**	**-26%**	**-29%**	**-12%**	**-23%**	**-18%**	**-16%**	**-21%**	**-18%**

sf = gross leasable square feet.

Trip Generation, Institute of Transportation Engineers, 7th edition, Washington D.C., 2003.

*includes small convenience retail (trip generation based on office rates). The convenience retail use would primarily be expected to serve project site residents, employees and visitors (eg, hotel, senior housing, YMCA, and office).

Table 3.6-3
Level of Service Summary
US Route 6, Old Route 6, and Maple Road Signalized Intersection in the Town of Carmel

Intersection Roads	Lane Group (Approach Direction -Movement)	P.M. Weekday Peak Hour			Saturday Peak Hour		
		Volume to Capacity Ratio	Delay (seconds /vehicle)	Level of Service	Volume to Capacity Ratio	Delay (seconds /vehicle)	Level of Service
U.S. Route 6/Old Route 6/ Maple Road Existing Condition							
U.S. Route 6	EB - L, T, R	0.66	9.4	A	0.68	8.7	A
U.S. Route 6	WB - L, T, R	0.46	6.5	A	0.55	6.6	A
Maple Road	NB - L, T, R	0.65	28.8	C	0.48	25.1	C
Old Route 6	SB - L, T, R	0.42	22.7	C	0.24	28.0	C
	Overall		11.4	B		9.3	A
U.S. Route 6/Old Route 6/ Maple Road No Build Condition							
U.S. Route 6	EB - L, T, R	0.88	18.1	B*	0.88	16.8	B
U.S. Route 6	WB - L, T, R	0.66	9.4	A	0.75	10.4	B
Maple Road	NB - L, T, R	0.77	36.8	D*	0.64	30.5	C
Old Route 6	SB - L, T, R	0.42	22.6	C	0.33	23.6	C
	Overall		11.4	B		15.1	B
U.S. Route 6/Old Route 6/ Maple Road Build Condition							
U.S. Route 6	EB - L, T, R	0.96	28.7	C*	0.97	29.0	C*
U.S. Route 6	WB - L, T, R	0.80	13.7	B*	0.87	15.9	B
Maple Road	NB - L, T, R	0.84	45.5	D	0.73	36.4	D*
Old Route 6	SB - L, T, R	0.42	22.8	C	0.34	23.7	C
	Overall		24.2	C*		23.8	C*

Level-of-Service (see DGEIS Table 3.6-4 for level-of-service criteria).
NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound
L = left, R= right, T,R = through and right, (e.g. WB - L = Westbound left).
* Reduction in level of service from the No Build Condition.

Table 3.6-4
NYS Route 52/ NYS Route 301 Level of Service Summary
Signalized Intersection in the Town of Carmel

Intersection Roads	Lane Group (Approach Direction -Movement)	P.M. Weekday Peak Hour			Saturday Peak Hour		
		Volume to Capacity Ratio	Delay (seconds/ vehicle)	Level of Service	Volume to Capacity Ratio	Delay (seconds/ vehicle)	Level of Service
NYS Route 52/ NYS Route 301 Existing Condition							
NYS Route 301	EB - L	0.22	28.3	C	0.22	23.6	C
	EB - T, R	0.46	30.6	C	0.57	27.7	C
NYS Route 52	NB - L	0.36	6.2	A	0.36	7.3	A
	NB - T, R	0.78	12.7	B	0.68	10.9	B
NYS Route 52	SB - L, T, R	0.51	6.9	A	0.59	8.9	A
	Overall		12.0	B		12.3	B
NYS Route 52/ NYS Route 301 No Build Condition							
NYS Route 301	EB - L	0.26	28.7	C	0.26	23.9	C
	EB - T, R	0.59	33.5	C	0.72	33.0	C
NYS Route 52	NB - L	0.63	11.3	B*	0.60	11.9	B*
	NB - T, R	1.01	41.9	D*	0.89	21.2	C*
NYS Route 52	SB - L, T, R	0.69	9.7	A	0.76	12.5	B*
	Overall		26.8	C*		18.5	B
NYS Route 52/ NYS Route 301 Build Condition							
NYS Route 301	EB - L	0.26	28.7	C	0.26	23.9	C
	EB - T, R	0.66	35.8	D*	0.78	37.5	D*
NYS Route 52	NB - L	0.69	14.7	B	0.67	15.7	B
	NB - T, R	1.03	46.2	D	0.91	23.2	C
NYS Route 52	SB - L, T, R	0.71	10.1	B*	0.77	13.0	B
	Overall		29.3	C		20.3	C*

Level of Service (see DGEIS Table 3.6-4 for Level-of-service criteria).

NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound

L = Left, T = Through, R = Right, (e.g. WB - L = Westbound left).

* Decline in level of service from previous condition.

Comment 3.6-1 (Public Hearing, February 2, 2005, Matthew Bennett; Public Hearing, February 2, 2005 Commenter): Impacts to traffic will require extensive mitigation. Many intersections nearby will be degraded to level of service F. One potential mitigation measure -- making Route 6 four lanes to Route 312 -- would be costly. Will NYS DOT do it?

Response 3.6-1: *The NYS DOT's Transportation Improvement Program does not show a project widening US Route 6 to four lanes. Existing bridges present a major obstacle to making US Route 6 four lanes.*

The bridge to the east of John Simpson Road is currently under construction and could in the future accommodate four lanes of traffic. The bridge over the abandoned railroad bed west of the project site is expected to be replaced by a culvert for a bikeway. While design of the culvert has not been established, the future expansion of the culvert would be less costly than expanding the existing bridge.

At the main entrance to the project site, Route 6 is proposed to be widened to three lanes in order to accommodate the Gateway Summit and The Fairways projects. The proposed buildings, parking, and other structures associated with the Gateway site are set back sufficiently to allow for further widening.

Whether a widening to four lanes is programmed in the future by the New York State Department of Transportation to accommodate other area-wide traffic increases would depend on available funding, competing priorities, traffic demand, and input from the Towns.

Route 6 mitigation measures related to site access (proposed traffic light with entering and exiting left turn lanes at the main entrance and proposed exiting turning lane at the secondary entrance) are proposed to be funded by the Applicant. Other potential traffic mitigation measures discussed in the DGEIS related to Route 6 widening and other roadways improvements in the surrounding area that may be necessary as a result of other future growth in the area are not expected to be funded by the Applicant. With the exception of the potential traffic light at Hill and Dale Road/Fair Street, which would be funded by developments with direct or indirect access to either Fair Street or Hill and Dale Road, and the right turn lane on US Route 6 into Putnam Plaza proposed by Hannaford Supermarket, these future potential improvements are expected to be funded by NYS DOT.

Comment 3.6-2 (Public Hearing, February 2, 2005, Matthew Bennett; Public Hearing, February 2, 2005, Commenter; February 24, 2005 Letter, Sandor E. and Laura T. Kozma:): There will be additional traffic impacts to the Kelly Ridge Road area if the currently proposed emergency access to Kelly Ridge Road is converted to a primary access road in the future, which has been proposed in the past and could potentially result if permitting of wetland impacts for the proposed Fair Street main access turns out not to be feasible.

Response 3.6-2: *Access to Fair Street is no longer proposed. Kelly Ridge Road would remain an emergency access only. The Applicant does not anticipate that such access would ever be needed beyond the emergency access presently*

proposed. The emergency access would be chained at both ends or otherwise restricted for access and would be for authorized vehicles only.

Comment 3.6-3 (Public Hearing, February 2, 2005, Anne Fanizzi): I live off of Fair Street where there is an existing problem with accidents. Even with proposed traffic signals, the future levels of service with the project will be terrible.

Response 3.6-3: *The plan revisions for The Fairways removes the Fair Street access from the project. According to the Applicant, little site generated traffic is anticipated to use Fair Street.*

Comment 3.6-4 (Public Hearing, February 2, 2005, Anne Fanizzi; March 3, 2005 Letter, Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space): The level of service on Route 6 is terrible, and it will not be possible to have acceptable traffic conditions there in the future. Additional traffic signals will not change that. The extent of development proposed will be a problem given that traffic will be relying on Route 6, which only has one lane in each direction and already has traffic problems, as indicated by the enormous back-ups that resulted when the bridge was under repair.

Additionally, the situation will not be ameliorated by the applicant's request for an additional traffic light on Rte 6 (rated C) for the benefit of the hotel/conference center but will exacerbate the situation as it will be the only ingress and egress point to applicant's numerous other proposals for the area. Traffic volume will only exponentially increase due to this development and other development projects along Rte 6, i.e., the proposed YMCA, along with those developments in place. Additional trucks and possibly trailers must now be added to the mix as deliveries are made to furniture stores, restaurants, etc.

Response 3.6-4: *The bridge repairs are temporarily causing delays on US Route 6. However, the Applicant anticipates that conditions will improve when the construction is finished. The bridge project had been anticipated to be completed in December 2005.*

The additional traffic light at the proposed main site entrance on US Route 6 is intended to ensure that this site access intersection functions adequately. According to the Applicant, it is not intended to improve levels of service over the entire network. Regarding trucks, the furniture store is no longer proposed as part of the development. In general, deliveries to restaurants should be by single unit trucks.

Comment 3.6-5 (Public Hearing, February 2, 2005, Katherine O'Connor): You [the Planning Board] need to consider the cumulative effects of the proposed project, including on surrounding towns such as Southeast, Kent, Patterson and Putnam Valley. Everyone uses Route 6. You can't have this degree of impact without considering the needs of the town.

Response 3.6-5: *The DGEIS considered impacts of an additional 22 vacant, approved, or pending projects in the Towns of Carmel, Kent, and Southeast. The DGEIS evaluated the cumulative impacts of the projects and these additional projects. In addition, background growth was added to the future condition.*

According to the Applicant, most of the traffic generated by future projects in Patterson would be using I-84 and would not reach the study area. Most of the Putnam Valley traffic leaving the Town of Putnam Valley would be using the Taconic State Parkway and US Route 9 for north-south travel, and I-84 for east-west travel, rather than entering the study area.

Comment 3.6-6 .(Public Hearing, February 2, 2005, Lisa Aurello): I am a member of the Putnam Coalition for Open Space. My concerns are primarily the infrastructure, and displacement of wildlife. I sit in traffic daily. This particular stretch of Route 6 is untenable. The cumulative affect of this project and others coming along from both towns is going to be outrageous on our limited infrastructure. We have one road [Route 6]. As it is, cars trying to escape that road are using quiet country lanes and speeding by people's houses, children, and pets. The bridge expansion project is creating unimaginable traffic. Improvements to only one section of Route 6 will not alleviate its problems.

Response 3.6-6: *The bridge expansion is creating temporary traffic delays. The DGEIS discusses several improvements to US Route 6 besides the bridge expansion. No one project is intended to correct all of the area's traffic issues. Rather, a series of incremental improvements are described in the DGEIS.*

Most recent improvements have included streetscape work on NYS Route 52, the traffic signal at US Route 6/Old Route 6/Maple Avenue, improvements Fair Street, and improvements on Stoneleigh Avenue near the project entrance. Also, in April of 2005 work began on the signal for the John Simpson Road/Fair Street intersection.

Comment 3.6-7 (Public Hearing, February 2, 2005, Anne Fanizzi; February 24, 2005 Letter, Sandor E. and Laura T. Kozma): The proposed Patterson Crossing project will result in patrons of that project using John Simpson and Fair Street as a short cut to NYS Route 311. The impact of traffic generated by people going to the Patterson Crossing retail development should be taken into consideration.

Response 3.6-7: *The DEIS for Patterson Crossing was not submitted at the time of the Gateway Summit and Fairways DGEIS submission or Public Hearing. However, Patterson Crossing traffic using Fair Street is expected to be mostly local traffic already on the road shopping at other existing destinations, according to the Applicant, who is also the Applicant for the Patterson Crossing project.*

According to the Applicant, most Patterson Crossing traffic is expected to utilize I-84. The intersection of Terry Hill Road/Fair Street is being examined in the Patterson Crossing DEIS. The intersection of Fair Street and John Simpson Road is currently under reconstruction with a turning lane and a traffic signal being added. There will be no through street connecting to Fair Street created as a result of the currently proposed plan revisions.

Comment 3.6-8 (Letter January 5, 2005, Matthew Bennett): The Applicant proposes a road connecting Fair Street and Route 6. I am unclear how much of this is to be dedicated to the town and how much is to remain private. It seems likely, however, that the road will ultimately become a through road. The Applicant offers several schemes for preventing through traffic,

but they may not prove workable. The Applicant should provide an impacts analysis of his proposed road as a through street.

> ***Response 3.6-8:*** *Access to Fair Street is no longer proposed and thus there will be no through traffic associated with this project. The connection to Kelly Ridge Road is proposed by the Applicant for use by authorized emergency vehicles only.*

Comment 3.6-9 (March 1, 2005 Letter, John L. Lynch, Putnam County Division of Planning and Development): Does the proposed road to Fair Street envision an intersection with Hill and Dale Road and, if so, is a traffic light proposed?

> ***Response 3.6-9:*** *See response to 3.6-8.*

Comment 3.6-10 (March 1, 2005 Letter, John L. Lynch, Putnam County Division of Planning and Development): Table 3.6-2 4 notes that the bridge over the abandoned railroad on U.S. Route 6 should be removed. This bridge provides a grade separation between U.S. Route 6 and the Putnam County Bikeway. Grade separation must be maintained either by retaining the current bridge or providing a replacement structure that maintains grade separation at this location.

> ***Response 3.6-10:*** *Initially, the bikeway may go under the existing bridge, according to the Applicant. The bridge over the old railroad bed is anticipated to be replaced by a culvert of sufficient size for the bikeway under a separate NYS DOT project to be constructed starting in 2007.*

Comment 3.6-11 (Putnam Smart Growth Alliance, Letter, February 26, 2005): Tables 3.6-16 through 3.6-18 illustrate the 2008 'Build Condition Level of Service Summary' (without any mitigation). It was unclear if this scenario takes in the cumulative impact. And if so, does it take into account that the 'Carmel Centre' site now proposed and consisting almost entirely of Senior Housing may, in fact, revert to 'Carmel Corporate'. And this is an entirely different project (400,000+ square feet retail, 12,000 square feet office and 300 units of Senior Housing) that would have immense impact on traffic within Carmel and Southeast. Since 'Carmel Corporate' is also an approved project we ask the board to take this into account when looking at the traffic ramifications.

> ***Response 3.6-11:*** *The Town required a Generic EIS for a mixed-use development on the Carmel Corporate property and adopted findings and approved a subdivision that examined a large retail/commercial/mixed use development. Since that time, a site plan application has been filed for senior housing on the property that for all practical purposes ties up the land for that use for the long term. Traffic from the Carmel Centre senior housing project was considered as part of the future conditions in the Gateway Summit and The Fairways DGEIS. According to the Applicant, neighborhood residents have expressed their support for a senior housing project rather than development of the site as a commercial project.*

Comment 3.6-12 (Undated Letter, 1st Assistant Chief Robert Lipton, Sr., Carmel Fire Department; March 3, 2005 Letter, Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space): Traffic impacts may lead to car accidents and a slowdown in the Fire

Department's response time, including the ability of members to reach the Fire Department. Both Fair Street and Route 6 already have congestion problems, which the project will add to.

> ***Response 3.6-12:*** *The Fire Department has previously commented on its ability to respond along US Route 6. Emergency providers have lights or other signals on their vehicles that require on-street traffic to yield to the right-of-way. Moreover, peak hour conditions occur only a small percentage of the time. The Applicant notes that, for the most part, during 80 to 90 percent of the day traffic flows smoothly in the area, and under any conditions commutation traffic in the region results in some delays.*

Comment 3.6-13 (March 3, 2005 Letter, Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space): The traffic study is flawed. Although the applicant lists 10 residential and commercial projects in the Town of Carmel, excluding Gateway Summit/Fairways and a total of 11 in the Towns of Southeast and Kent impacting John Simpson Road, Fair St, Route 52, Route 311, Route 312, Hughson Rd, Stoneleigh, which severely stress infrastructure and riders, his solutions are left turning lanes and installation of traffic lights but no modification of his proposed plans (see Appendix P-1) to build furniture store, "quality" restaurants, office supply superstore, elderly residences in addition to the hotel/conference center. There appears to be a disconnect wherein the applicant is unable to associate his proposal as only making a bad traffic situation intolerable.

> ***Response 3.6-13:*** *The Applicant has scaled back the development plans so that they generate less overall traffic on the transportation network, especially on Fair Street where site access has been removed. The furniture store store has been removed, along with 41 senior residential units. No office supply superstore was proposed in the DGEIS, nor is one currently proposed under the Plan revision Alternative. See FGEIS Tables 3.6-1 and 3.6-2.*

Comment 3.6-14 (March 3, 2005 Letter, Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space): Peak weekday hours from 4:30pm to 5:30pm do not capture the true profile of traffic congestion. The study should have spanned the hours from 2:30pm when school buses, PART buses, trucks, trailers and cars attempt to navigate the corridor from Route 312 to the entire length of Route 6, cross the Middle Branch bridge and up to Lake Gleneida until at least 6:30pm when commuters join trucks and trailers on the roads.

> ***Response 3.6-14:*** *According to the Applicant, the traffic analysis is based on the peak fifteen minute flows within the peak hour. That is how traffic studies are done and it represents the worst case period projected over the day. Weekday traffic counts did extend to 6:30 p.m, and the peak period was examined, including with PART buses running during the p.m. weekday peak hours.*

Comment 3.6-15 (March 3, 2005 Letter, Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space): According to the applicant's own Collision Frequency Study (3.6-2), number of collisions in a three-year study ranged from a low of 11 on Route 6 and John Simpson to a high of 29 at the juncture of Route 6 and Rte 312. Need we have any further evidence that additional development will imperil lives and even property.

> ***Response 3.6-15:*** *The DGEIS provides historical information on collisions at area intersections and discusses how the improvements to the John Simpson*

Road/Fair Street intersection may reduce collisions there. The applicant has reduced the scope of his project to reduce traffic generated, as a means of mitigation.

Comment 3.6-16 (March 3, 2005 Letter, Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space): Efforts to widen the lane over the Middle Branch bridge to provide for a left turning lane onto John Simpson Road will not ameliorate the situation since widening does not extend the length of Route 6, remaining an essentially one lane east-west route.

Response 3.6-16: *The Applicant notes that lane widenings do improve the ability of an intersection to process traffic more efficiently. The bridge project is one link that would allow for the future potential widening of US Route 6. See Response 3.6-1.*

Comment 3.6-17 (March 3, 2005 Letter, Ann Fanizzi, Chair, Putnam County Coalition to Preserve Open Space): Idling and delay are costly to riders and worrisome mothers who must await children whose buses cannot navigate infrastructure never conceived and built for the intensive development underway. The Planning Board must consider this factor as even undermining the economic potential that is alleged to be garnered by the Town.

Response 3.6-17: *Delay data was evaluated and included in all level of service summary tables in this Draft and Final GEIS. In most cases, delays are less than a minute at intersections studied. The subject site is being built consistent with zoning and the Town's comprehensive plan. According to the Applicant, further development was considered in those documents, in the prior DGEIS for Carmel Corporate, and other traffic studies. The NYS DOT has also been reviewing traffic implications for major developments.*

Comment 3.6-18 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): Although they apparently were not included as part of the scope, based upon a review of the arrival and departure distributions, the following additional intersections should be addressed: US Route 6 and Old Route 6/Maple Road, and US Route 6 and NYS Route 301.

Response 3.6-18: *The intersections of US Route 6 and Old Route 6/Maple Road, and US Route 6 and NYS Route 301, have been added to volume diagrams and level of service calculations provided in the appendices of this Final EIS (Appendices J and M). Overall review of level of service is provided in FGEIS Tables 3.6-3 and 3.6-4 and Appendix L.*

Comment 3.6-19 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): The Applicant should confirm that the AM Peak Hour is less critical than the PM Peak Hour.

Response 3.6-19: *An analysis has been provided for the intersection of Route 52 and US Route 6 for the a.m. and p.m. peak periods. Also, the Trip Generation Table 3.6-2 provided in the introduction to the transportation section shows the Trip Generation for the weekday a.m. peak hour, weekday p.m. peak hour and Saturday peak hour for comparison. It indicates lower trip generation in the a.m. peak hour than the p.m. peak hour.*

The Applicant indicates that a.m. peak hour level of service calculations presented in the Carmel Corporate DGEIS (see Appendix L Table L-3) show that US Route 6 intersections at John Simpson, NYS Route 312, and at Stoneleigh Avenue operate at overall levels of service equal to, or up to two levels better than, the p.m. peak hour. The a.m. peak hour tends to have less commercial activity -- which is an important part of area traffic -- than the p.m. peak hour and Saturday peak hour.

Comment 3.6-20 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): The existing traffic volumes were based on 2003 counts, and based on more recent counts in the area, the traffic counts used appear to be representative of base year conditions.

Response 3.6-20: *Comment noted.*

Comment 3.6-21 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): The future No-Build Traffic Volume projections utilizes an appropriate background growth factor and includes traffic from other identified developments projects in the area.

Response 3.6-21: *Comment noted.*

Comment 3.6-22 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): The Gateway Summit project is proposed for a 9 lot subdivision with a mix of residential and commercial uses. As noted in the study, the project was evaluated as a generic development plan. The trip generation rates are appropriately based on ITE trip generation rates however, if the development mix changes with more retail uses or higher trip generation uses, the project trip generation could be significantly higher. For example, for Lot 3 an auto dealership is proposed (which requires a special use permit). If this lot were developed for a general retail use, the generation could be some 2 to 3 times higher than used in the evaluation. A sensitivity analysis should be considered to address the variability of this use.

Response 3.6-22: *The auto dealership has been removed as a proposed use.*

Comment 3.6-23 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): The Gateway Summit project is proposing two access points to US Route 6. The easterly is proposed to be signalized and with a separate left turn lane on US Route 6 (eastbound) for entering left turns and two exiting lanes. A separate right turn lane should also be considered. A separate entering left turn lane should also be considered for the westerly access, especially since Lots 2 and 3 could be developed for higher generation uses (see comment [3.6-22] above). In addition, the possibility of an internal connection from Lots 2 and 3 and the primary access (which is proposed to be signalized) should be explored.

Response 3.6-23: *The vehicular connection of lots 2, 3, and 4 to the primary access point was investigated by the Applicant and found to be impractical due to costs and environmental impacts associated with the grades in this portion of the project site. A ravine separates Lots 1 and 2 and steep grades separate Lot 5 from Lots 2, 3, and 4.*

A left turn lane was considered by the Applicant for the westerly access. Without planned NYS DOT improvements to the culvert over the bikeway, there is insufficient room to provide a left turn lane. As indicated in Response 3.6-1, the culvert replacement should be designed, according to the Applicant, to handle four or five lanes, allowing for striping of the left turn lane until such time as the other two through lanes are needed.

Comment 3.6-24 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): The traffic study assumes improvements to the Fair Street/John Simpson Road intersection. Are these improvements still planned and if so what is the status/timetable of these improvements?

Response 3.6-24: *These improvements are under construction and should be completed in 2005/2006. As stated previously, access to Fair Street has been eliminated.*

Comment 3.6-25 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): Based on the traffic volumes at the US Route 6/Church Street and US Route *6/NYS* Route 52 intersections, a traffic signal at the Church Street intersection should be considered and coordinated with the US Route 6/NYS 52 intersection to improve traffic flows through these two intersections.

Response 3.6-25: *Appendix M contains the analysis for signalizing the Church Street intersection. Table 3.6-5 below indicates that a signal alone would not operate properly in the p.m. peak hour. According to the Applicant, the diversion of traffic to Church Street from the northbound right turn lane on US Route 6 at NYS Route 52 would improve the Church Street intersection operation. The level of service shown below is based on all right turn traffic being diverted to Church Street. Also shown is the potential effect of full coordination of platooning into the southbound US Route 6 approach at Church Street. The final analysis shows the effect of a northbound left turn lane, even without coordination. The proximity of houses to the roadway is a concern related to providing a left turn lane at Church Street.*

Table 3.6-5
Evaluation of Build Condition with Potential Improvements: Level of Service Summary
US Route 6, Church Street Signalized Intersection in the Town of Carmel

Intersection Roads	Lane Group (Approach Direction -Movement)	P.M. Weekday Peak Hour			Saturday Peak Hour		
		Volume to Capacity Ratio	Delay (seconds /vehicle)	Level of Service	Volume to Capacity Ratio	Delay (seconds /vehicle)	Level of Service
U.S. Route 6/ Church Street With signal							
Church Street	EB - R	0.44	21.9	C	0.63	33.2	C
U.S. Route 6	NB - L, T	1.22	109.9	F	0.90	11.3	B
U.S. Route 6	SB - T, R	0.95	44.3	D	0.86	26.4	C
	Overall		77.6	E		20.7	C
U.S. Route 6/ Church Street With signal Full Diversion							
Church Street	EB - R	0.76	38.9	C	0.78	32.4	C
U.S. Route 6	NB - L, T	1.05	42.4	D	0.80	5.3	A
U.S. Route 6	SB - T, R	0.73	26.2	C	0.68	24.6	C
	Overall		35.7	D		17.6	B
U.S. Route 6/ Church Street With signal Coordination							
Church Street	EB - R	0.44	21.9	C	0.63	33.2	C
U.S. Route 6	NB - L, T	1.03	33.6	C	0.74	3.7	A
U.S. Route 6	SB - T, R	0.95	29.3	C	0.86	10.4	A
	Overall		30.7	C		10.8	B
U.S. Route 6/ Church Street With signal left turn lane							
Church Street	EB - R	0.58	31.8	C	0.63	31.2	C
U.S. Route 6	NB - L	0.37	7.2	A	0.24	5.8	A
	NB - T	0.62	1.9	A	0.47	1.1	A
U.S. Route 6	SB - T, R	0.78	21.9	C	0.86	26.4	C
	Overall		12.8	B		16.5	B

Level-of-Service (see DGEIS Table 3.6-4 for level-of-service criteria).
NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound
L = left, R= right, T, R = through and right, (e.g. WB -L = Westbound left).
* Reduction in level of service from the No Build Condition.

Comment 3.6-26 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): The capacity analysis for the US Route 6/Stoneleigh Avenue/Putnam Plaza intersection assumes a northbound right turn lane on US Route 6 as part of Putnam Plaza Funds. Is this a planned improvement and what is the status/timetable of this improvement? Even with this improvement, the intersection is projected to operate at capacity.

Response 3.6-26: *According to the Applicant, the Hannaford project has included a right turn lane and is currently in the site plan approval process. Thus, this lane may be constructed before the Gateway Summit project receives site plan approval.*

Comment 3.6-27 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): The study recommends that the US Route 6/John Simpson Road and US Route 6/NYS Route 312 intersections be retimed in the future to improve future operation. However, only a retiming under the *future Build* Condition is provided. A comparison of the future No-Build Condition to the future Build Condition with this retiming should be provided.

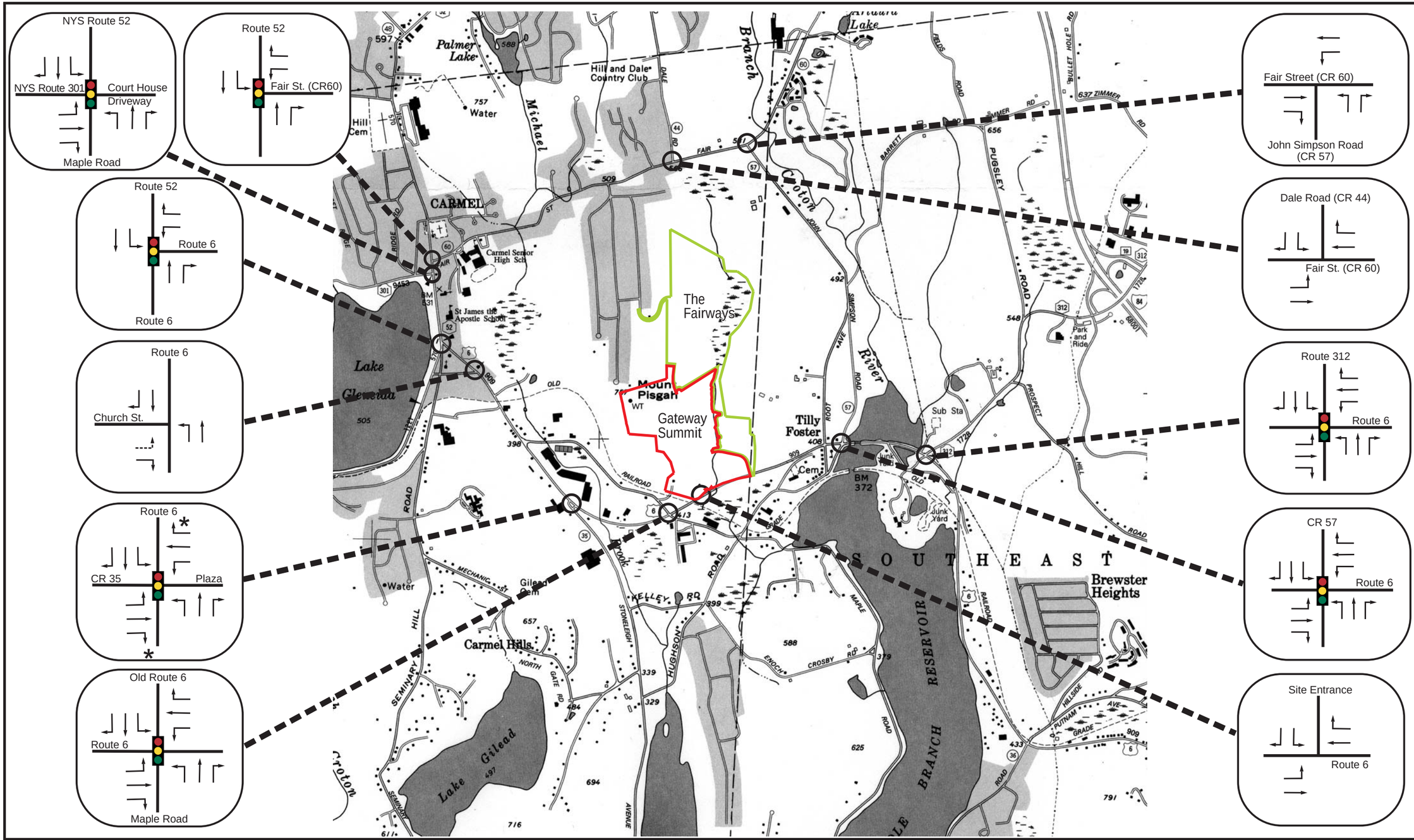
Response 3.6-27: *This analysis has been has been added and is shown in Appendix L Tables L-12 and L-13 with calculations provided in Appendix M.*

Comment 3.6-28 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): The Fair Street access should be reviewed for sight distance and any other access related improvements, such as turn lanes.

Response 3.6-28: *The Fair Street access has been eliminated. According to the Applicant, further review of sight distances and left turn lanes at Fair Street is unnecessary.*

Comment 3.6-29 (April 27, 2005 Letter, Philip J. Grealy, Ph.D., P.E., John Collins Engineers, P.C.): The Gateway Summit westerly access to US Route 6 is projected to operate at capacity. As previously discussed (item [3.6-23] above), consideration of a separate entering left turn lane and possibly an internal connection between Lots 2 and 3 to the primary access should be considered.

Response 3.6-29: *See Response 3.6-23. In addition, pedestrian access has been provided between Lots 1 and 2. This connection could be used by lots 3 and 4, according to the Applicant.*



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KEY

- Gateway Summit
- The Fairways
- Intersections Studied
- Traffic Signal Controlled
- * Stop or Yield Controlled Channel
- Illegal Left Turn

File 02136 6/28/06
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Figure 3.6-1: Transportation Network
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Base Map: NYSDOT Planimetric Map (Lake Carmel Quad)
Scale: 1" = 2000'

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

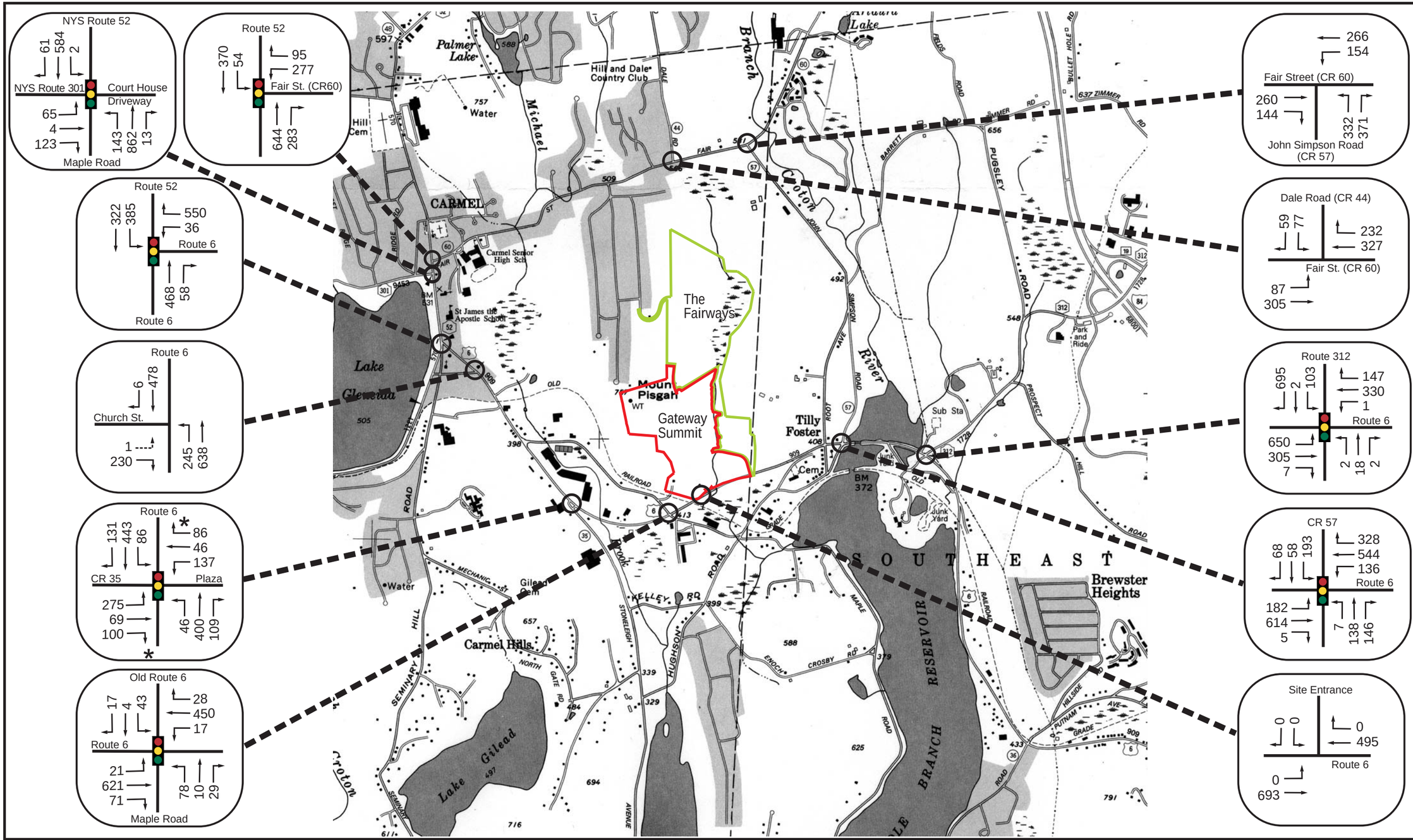

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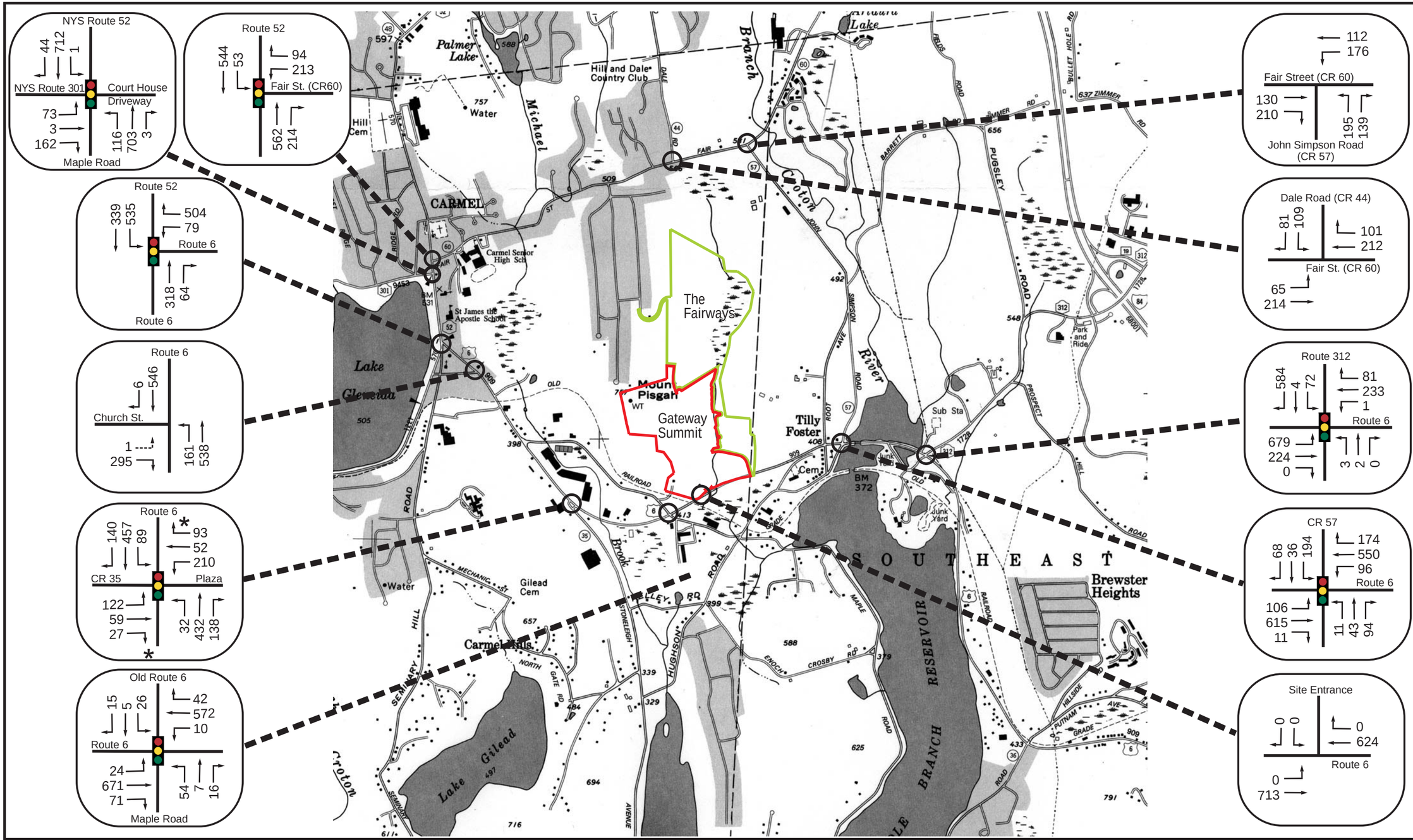
Figure 3.6-2: Existing PM Peak Hour Traffic
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Base Map: NYSDOT Planimetric Map (Lake Carmel Quad)
Scale: 1" = 2000'

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418



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- Gateway Summit
- The Fairways
- Intersections Studied
- Traffic Signal Controlled
- * Stop or Yield Controlled Channel
- Illegal Left Turn

File 02136 6/28/06
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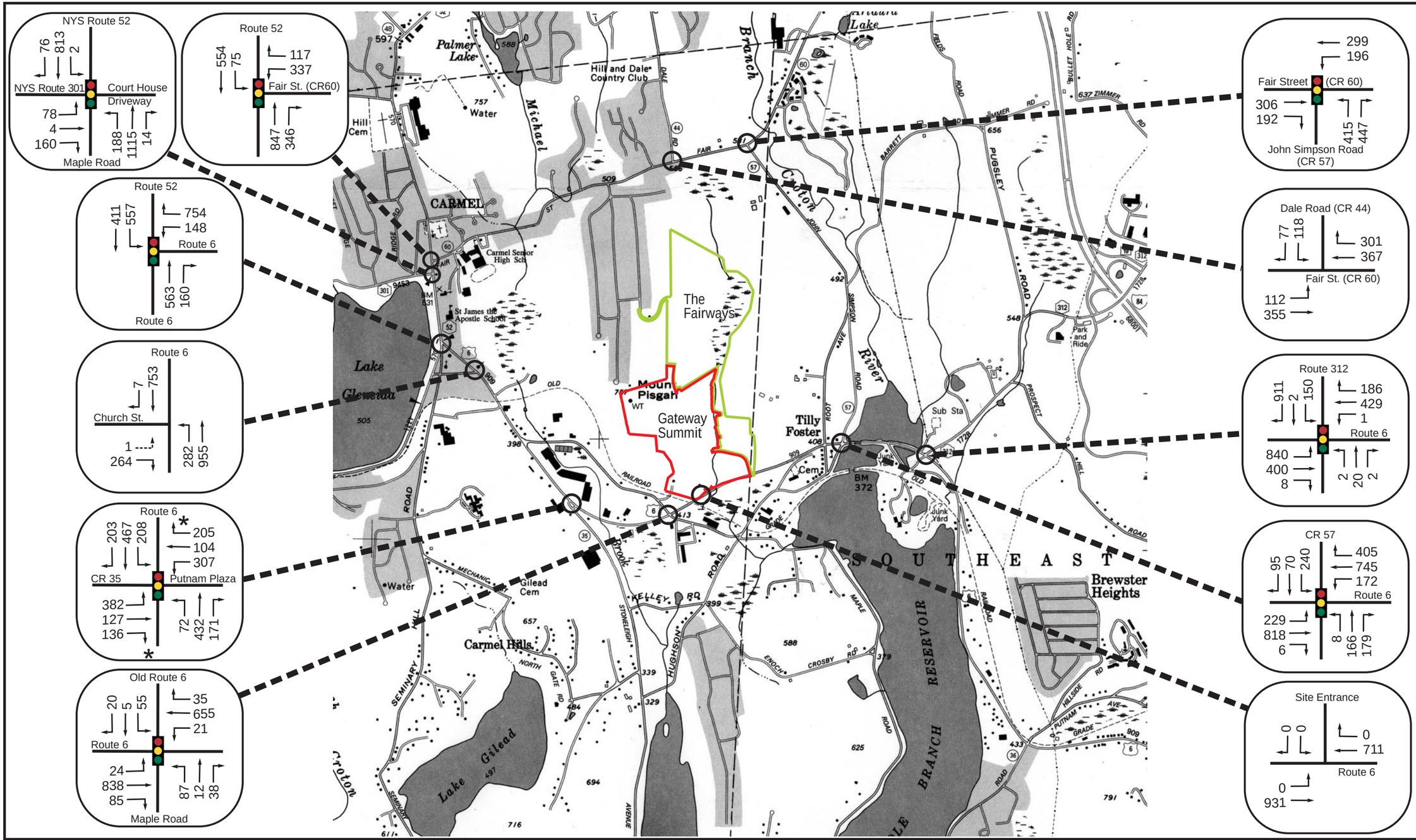
Figure 3.6-3: Existing Saturday Peak Hour Traffic

Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Base Map: NYSDOT Planimetric Map (Lake Carmel Quad)
Scale: 1" = 2000'



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- Gateway Summit
- The Fairways
- Intersections Studied
- Traffic Signal Controlled
- * Stop or Yield Controlled Channel
- Illegal Left Turn

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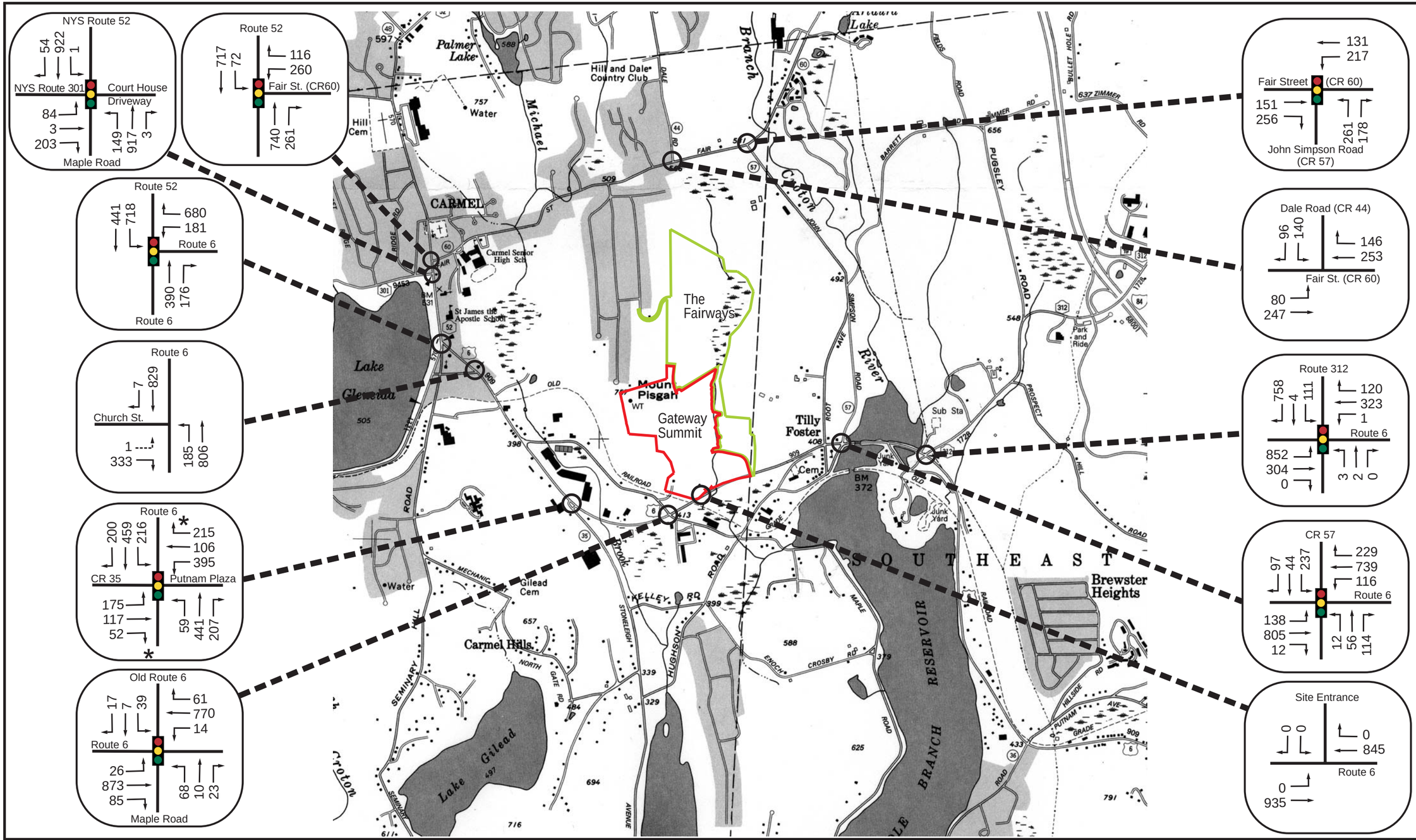
Figure 3.6-4: No Build PM Peak Hour Traffic

Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Base Map: NYSDOT Planimetric Map (Lake Carmel Quad)
Scale: 1" = 2000'



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- Gateway Summit
- The Fairways
- Intersections Studied
- Traffic Signal Controlled
- * Stop or Yield Controlled Channel
- Illegal Left Turn

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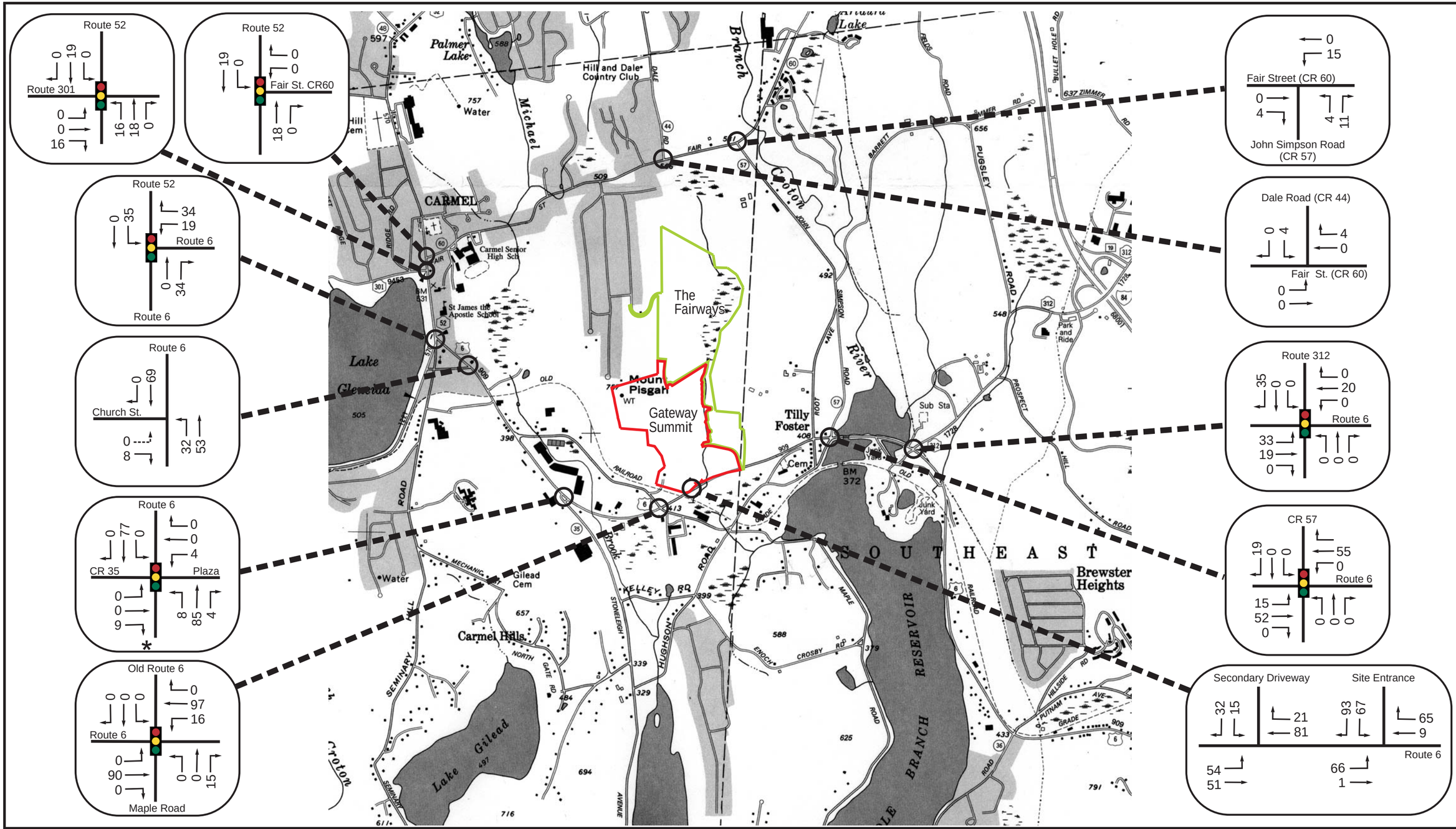
Figure 3.6-5: No Build Saturday Peak Hour Traffic
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Base Map: NYSDOT Planimetric Map (Lake Carmel Quad)
Scale: 1" = 2000'

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418



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- Gateway Summit
- The Fairways
- Intersections Studied
- Traffic Signal Controlled
- * Stop Controlled Channel
- Illegal Left Turn

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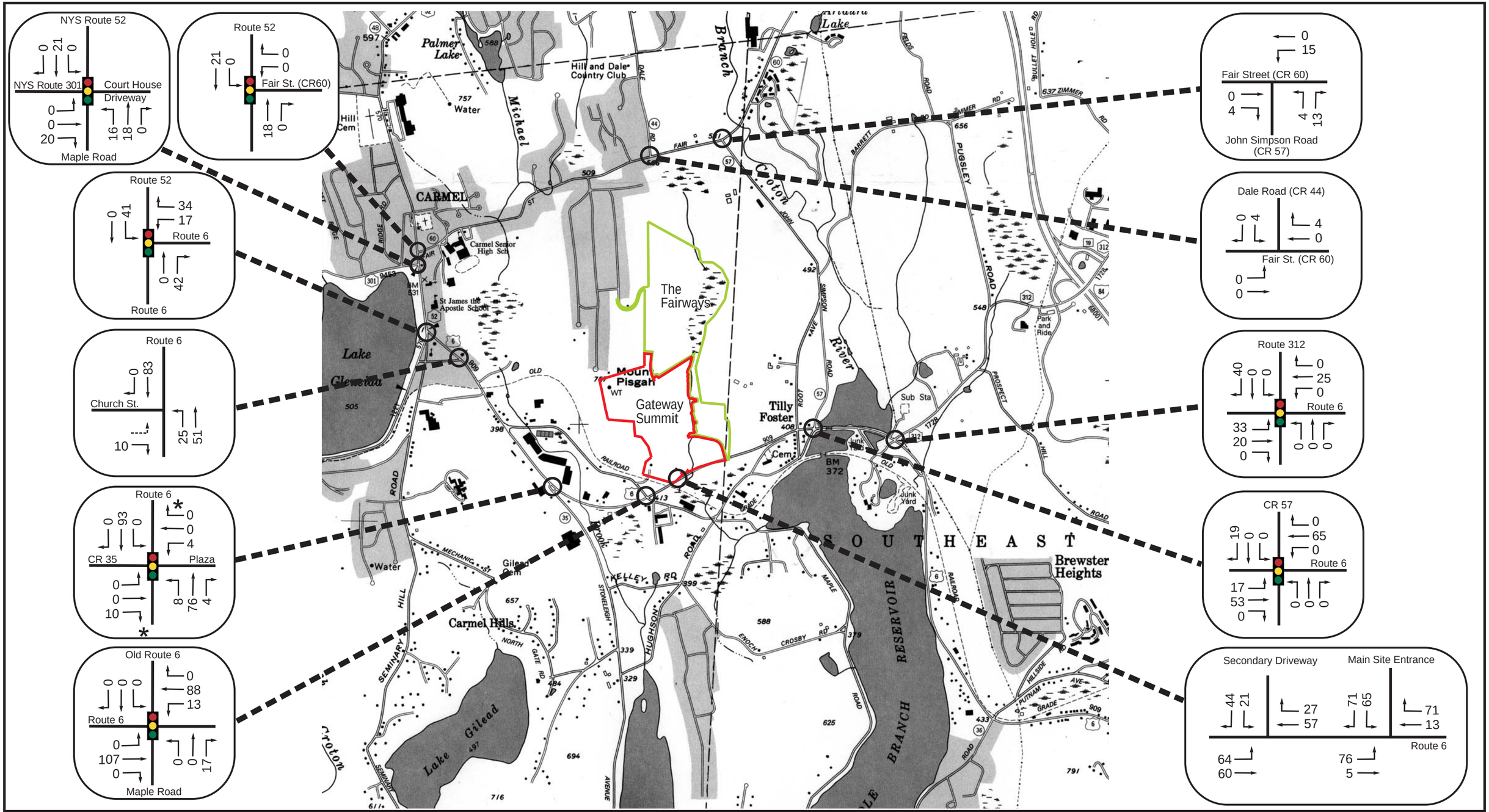
Figure 3.6-6: PM Site Generated Traffic

Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Base Map: NYSDOT Planimetric Map (Lake Carmel Quad)
Scale: 1" = 2000'



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- The Fairways
- Intersections Studied
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- Illegal Left Turn

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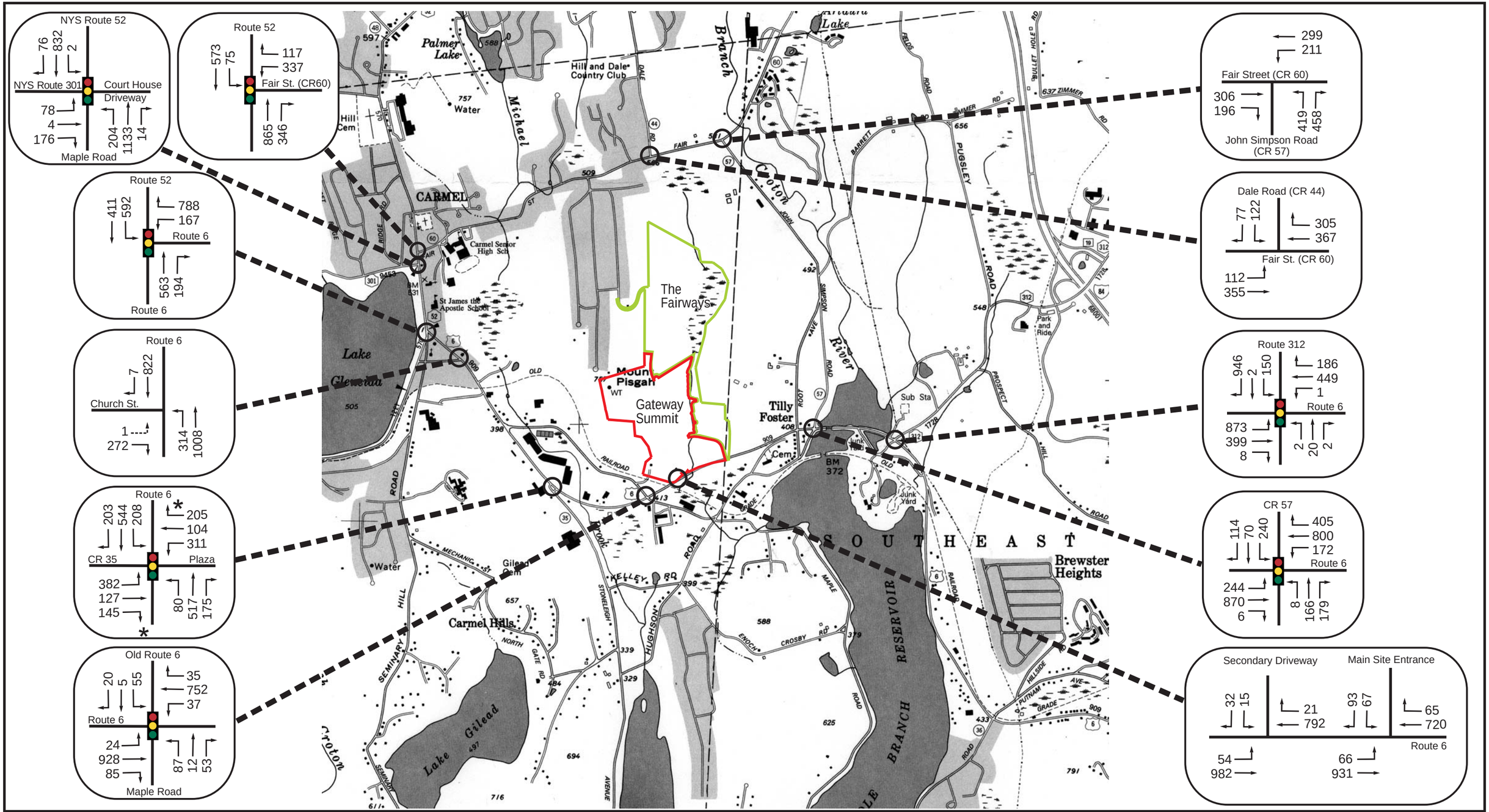
Figure 3.6-7: Saturday Site Generated Peak Hour Traffic
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Base Map: NYSDOT Planimetric Map (Lake Carmel Quad)
Scale: 1" = 2000'



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- Gateway Summit
- The Fairways
- Intersections Studied
- Traffic Signal Controlled
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- Illegal Left Turn

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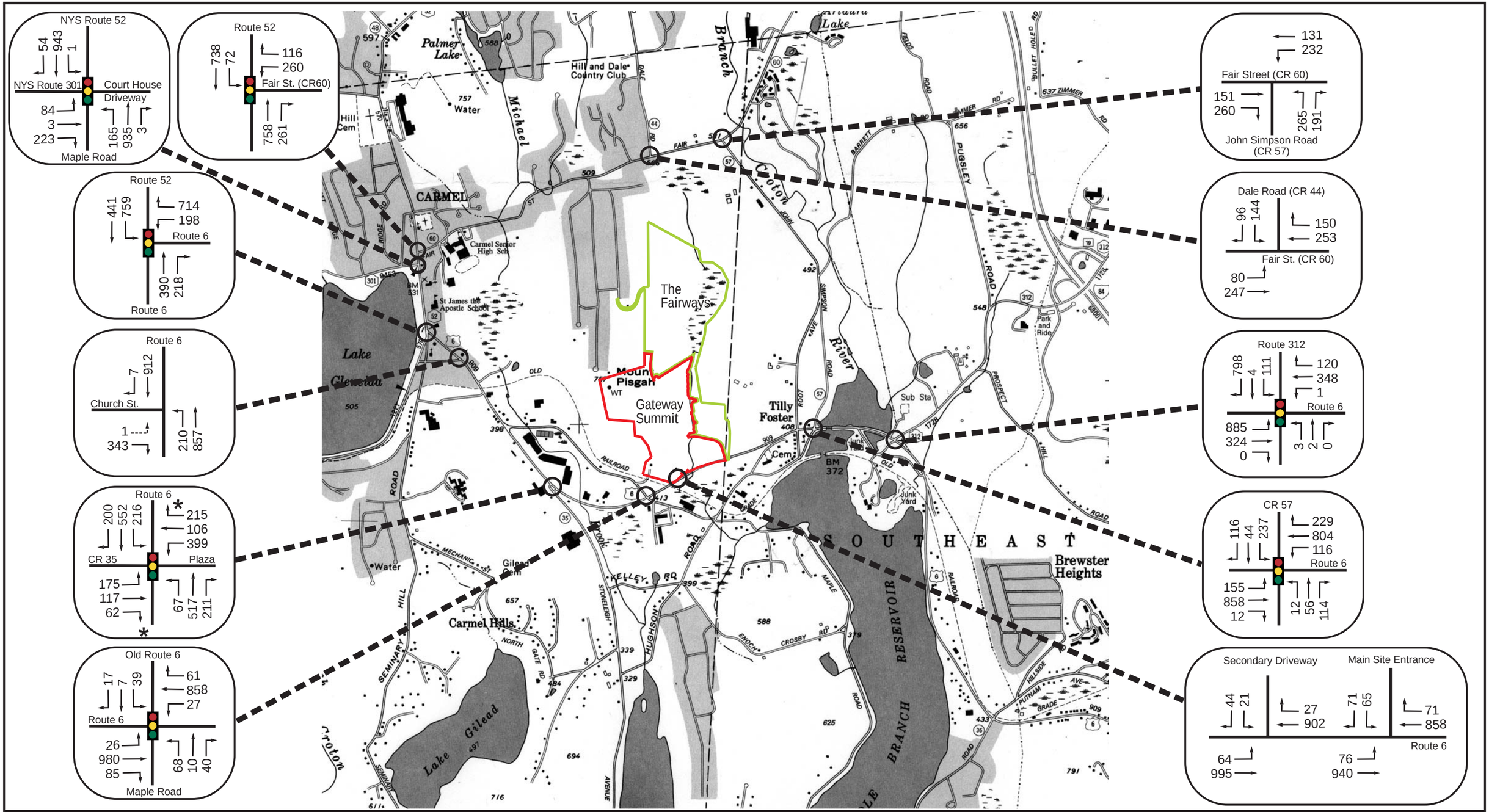
Figure 3.6-8: Build PM
Peak Hour Traffic
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Base Map: NYSDOT Planimetric Map (Lake Carmel Quad)
Scale: 1" = 2000'



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- Gateway Summit
- The Fairways
- Intersections Studied
- Traffic Signal Controlled
- * Stop or Yield Controlled Channel
- Illegal Left Turn

File 02136 6/28/06
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Figure 3.6-9: Build Saturday Peak Hour Traffic
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Base Map: NYSDOT Planimetric Map (Lake Carmel Quad)
Scale: 1" = 2000'

3.7 TAX BASE AND COMMUNITY SERVICES COMMENTS AND RESPONSES

Projections of future taxes provided by the Applicant and detailed in this chapter indicate that the revised projects would be expected to generate over $2 million annually in tax revenues to the various taxing jurisdictions in which the project sites are located. More than half of this amount will go to local school districts, with no significant associated costs to the local schools. The distribution of projected future taxes from the revised plans for the two projects has changed to a minor extent in comparison to the previous project plans with the shift in the lot area of previous Lot 8 (Conservation Area) on the Gateway Summit site to The Fairways, slightly increasing projected tax revenues from The Fairways. Therefore, according to the Applicant, with lower levels of both commercial and senior housing development in comparison to the projects described in the DGEIS the revised plans for Gateway Summit and The Fairways would result in lower demands on area community service providers and utilities, including demand for emergency services.

Utilities Plans for the revised plans for Gateway Summit and The Fairways are shown in the following Figures 3.7-1 and 3.7-2. Revised Water Engineering Reports have been prepared for both The Fairways and Gateway Summit. These reports, found in Appendices H and I, indicate that the Carmel Water District #2 has sufficient existing capacity to serve the proposed projects and other proposed projects in the District listed in the DGEIS. Furthermore, to alleviate an existing water pressure problem on nearby Everett Road and Kelly Ridge Road, the revised plan for the Gateway Summit project proposes a high pressure service zone for the proposed Gateway Summit senior units. As part of this project, the high elevation residences along Everett Road and Kelly Ridge Road will be connected to this system in order to resolve their existing pressure problems.

The Wastewater Engineering Reports for the projects have also been revised to assess the capacity of the sewer system (see Appendices F and G). These revised reports indicate that the buildout of Gateway Summit and The Fairways and other significant projects currently proposed in Town of Carmel will still leave a reserve capacity for the Carmel Sewer District #2 of approximately of 0.10 million gallons per day (mgd).

The Fairways

The revised plans for The Fairways provide the same number of senior housing units as the proposed action examined in the January 3, 2005 DGEIS and would not be expected to differ significantly in the amount of taxes that it would generate for the Town, County, and other taxing jurisdictions. However, according to the Applicant, information obtained from the Town of Southeast Tax Receiver's office indicates that The Fairways tax parcel falls within the Brewster Central School District, and not the Carmel Central School District as was indicated in the DGEIS. Projected School District taxes have been recalculated, along with revenues to all other taxing jurisdictions based on 2005 tax rates.

According to the Applicant, as indicated in Table 3.7-1 below, The Fairways would be expected to generate a total of $770,118 per year in additional tax revenues in comparison to the existing tax revenues generated by the property. The Brewster Central School District would be expected to receive approximately $515,165 in annual School District revenues, an increase of $499,571 over existing School District revenues.

Table 3.7-1
Property Taxes Generated Before and After Site Development
The Fairways

Taxing Jurisdiction	**Current Assessed Value***	**Future Assessed Value**	**2005** *Rate***	**Taxes Generated** *Before Development*	**Taxes Generated** *Post Development*	**Net Increase**
Putnam County	$510,929	$22,153,176	$2.76	$1,410	$61,143	$59,733
Carmel Town	$510,929	$22,153,176	$4.51	$2,304	$99,911	$97,607
Brewster Central School	$510,929	$22,153,176	$30.52	$15,594	$515,165*	$499,571
Carmel Ambulance	$510,929	$22,153,176	$0.45	$230	$9,969	$9,739
Fire Protection No. 3	$510,929	$22,153,176	$1.36	$695	$30,128	$29,433
Carmel Water #2	$510,929	$22,153,176	$1.30	$664	$28,799	$28,135
Carmel Sewer #2 O&M***	$510,929	$22,153,176	$180.00	0	$45,900	$45,900
Carmel Sewer #2A CAP***	$510,929	$22,153,176	$1,000.00	$44,640	$44,640	$0
Total				**$65,537**	**$835,655**	**$770,118**

Source: Town of Carmel Assessor, Tax Receiver
* A basic STAR deduction in the amount of $1,073 per dwelling unit applies to 2005-2006 school taxes.
**Rates have been rounded to the nearest cent.
***Rates are per unit. Taxes paid to sewer districts are based on formulas derived from the Sewer District's Capital Charge Ordinance and Use Charge Ordinance.

Gateway Summit

According to the Applicant, the revised Gateway Summit project will result in slightly lower increases in tax revenues for the Town, County, School Districts and other taxing jurisdictions in comparison to the proposed action for Gateway Summit described in the DGEIS due to the change in the proposed uses, with fewer residential units and less commercial space now proposed. However, projected fiscal benefits would still be considerable, with a total increase in tax revenues of approximately $1,231,635 projected, as opposed to $1,544,682 in tax revenues projected for the previously proposed version of the project analyzed in the January 3, 2005 DGEIS.

The Applicant's calculation of projected School District tax revenues from the Gateway Summit project has also been revised, based on updated School District tax rates for the Brewster School District, and by assigning only the Hotel/Conference Center parcel to the Brewster School District. For School District tax revenues, the previous analysis of the January 3, 2005 DGEIS divided total project value approximately evenly between the Carmel and Brewster

Central School Districts, assuming that the Districts' boundaries would likely be adjusted in the future upon completion of the project.

The Applicant indicates that total projected revenues from the revised Gateway Summit project represent an increase in revenues of over 16 times the revenues currently generated by the property. The following Table 3.7-2 indicates the amount of tax revenues that would be expected to be generated by Gateway Summit for its various taxing jurisdictions based on 2005 tax rates.

Table 3.7-2
Property Taxes Generated Before and After Site Development
Gateway Summit

Taxing Jurisdiction	Current Taxable Assessed Value*	Future Assessed Value	2005	Taxes Generated		Tax Increase
			*Rate***	*Existing*	*Post Development*	
Putnam County	$483,400	$30,318,005	$2.76	$1,334	$83,678	$82,344
Carmel Town	$483,400	$30,318,005	$4.51	$2,180	$136,734	$134,554
Carmel Central School	$278,800	$25,757,057	$31.55	$8,796	$673,885*	$665,089
Brewster Central School	$204,600	$4,560,948	$30.52	$6,244	$112,375*	$106,131
Carmel Ambulance	$483,400	$30,318,005	$0.45	$218	$13,643	$13,425
Fire Protection No. 3	$483,400	$30,318,005	$1.36	$657	$41,232	$40,575
Carmel Water No. 2	$483,400	$30,318,005	$1.30	$628	$39,413	$38,785
Sewer 2A CAP & 2A Ext CAP***	$483,400	$30,318,005	$1,000.00	$60,219	$82,125	$21,906
Sewer O & M***	$483,400	$30,318,005	$180.00	0	$128,826	$128,826
Total				$80,276	$1,311,911	$1,231,635

Source: Town of Carmel Assessor, Tax Receiver. Town of Southeast Tax Receiver, Putnam County Finance Department
*A basic STAR deduction applies to school taxes in the amount of $1,110 per dwelling unit for the Carmel Central School District and $1,073 per dwelling unit for the Brewster Central School District (2005-2006) school year. **Rates have been rounded to the nearest cent.
*** Rates are per unit. Taxes paid to sewer districts are based on formulas derived from the Sewer District's Capital Charge Ordinance and Use Charge Ordinance .

Impacts to community service providers from the revised plan would be lower than the previously analyzed proposal due to the smaller magnitude of development proposed and its lower demands on Police, Fire and Emergency Medical Services. Employment benefits would not decrease significantly. The auto dealership was projected to provide approximately 43 jobs in the DGEIS proposed action. The Applicant indicates that the proposed restaurant in the revised plans would be expected to employ 52 workers.

Comment 3.7-1 (Public Hearing, February 2, 2005, Matthew Bennett; February 24, 2005 Letter, Sandor E. and Laura T. Kozma): The cumulative impacts of the Gateway Summit and The Fairways project and other planned projects will impact Carmel Water District #2, and will result in a cumulative demand for water supply of 1.23 million gallons per day. Expansion of the

District #2 plant as well as additional sources of water -- including the potential need to run a pipe to the West Branch Reservoir -- need to be considered.

Response 3.7-1: *Engineering studies indicate that the Carmel Water District #2 has sufficient existing capacity to serve the proposed projects and other proposed projects in the District listed in the DGEIS. Revised Water Engineering Reports have been prepared for both The Fairways and Gateway Summit projects. These reports evaluate the capacity of the existing water system to supply the subject project. As demonstrated in the reports found in the Appendix of this FGEIS, there is adequate capacity at the existing water treatment facility to supply the projects.*

The capacity of Carmel Water District #2 is rated at 1.5 million gallons per day (mgd). Based on the 2004 average daily usage of 0.85 mgd and the anticipated use of the subject projects and other significant projects in the Town, there will be a demand of approximately 1.12 million mgd, thereby maintaining a reserve capacity of approximately 0.38 mgd.

The Applicant indicates that the New York City Department of Environmental Protection (NYCDEP) is expected to be examining a proposed connection between the West Branch Reservoir and Water District #2 at some point in the future. Such a connection would provide additional capacity to the District beyond the District's current capacity, which is considered to be sufficient to accommodate the proposed projects. However, the Gateway Summit and The Fairways projects are not expected to require additional water supply from the West Branch Reservoir.

The Applicant also notes that he has already been paying taxes to Water District #2 without receiving the benefits of its service, and that revenues received by the Water District from the Applicant in the past and the projected increases in revenues from the proposed projects can potentially be applied to funding future improvements needed to accommodate other proposed projects, if necessary.

Following is a summary of mitigation measures proposed relative to the water and sewer systems:

- *All project buildings will be protected by an automatic fire sprinkler system so as not to increase Carmel Water District #2 (CWD #2) fire protection needs. Each building system will be operational prior to issuance of the Certificate of Occupancy (C.O.) for such building.*

- *50± acres of easement area in favor of CWD #2 will be provided over the Gateway Senior Housing poject and the Fairways Senior Housing project to allow CWD #2 the right to develop, construct, and maintain a groundwater supply, if ever desired. This easement will be shown on the subdivision plat, and easement documents will be filed with the County at the time the subdivision plat is filed.*

- *The Gateway Senior Housing project's high pressure water system will be designed and constructed to include a new pump station and the extension*

of the high pressure distribution system to service the existing homes on Kelly Ridge Road, Everett Drive and Bard Road above elevation 660 (approximately 3,500 linear feet of new water main will be installed to service existing homes). This system will be online prior to the first C.O. being issued for the Gateway Senior Housing project.

- *The Gateway Senior Housing Project and The Fairways Senior Housing Project should include the installation of a new 135,000 gallon water storage tank (average daily project design flow) adjacent to the existing tank at the end of Everett Drive. This tank will be online prior to the first C.O. being issued for the Gateway Senior Housing project or Fairways Senior Housing project.*

- *The applicant will make a monetary contribution of $30,000.00 to the Sewer District to assist the District with the ongoing investigation and reduction of inflow and infiltration in the sewer system. The applicant will contribute $5,000.00 within 21 days of the acceptance of the Findings Statement. The remaining $25,000.00 contribution will be made prior to the Planning Board's signature of the first project site plan.*

- *The deeds for each project will include restrictive covenants prohibiting the use of the municipal water system for irrigation purposes. Restrictive covenant documents addressing this restriction will be filed with the County at the time the subdivision plat is filed.*

Comment 3.7-2 (Public Hearing, February 2, 2005, Matthew Bennett; February 24, 2005 Letter, Sandor E. and Laura T. Kozma): The cumulative impacts of the Gateway Summit and The Fairways project and other planned projects will seriously impact the Carmel Sewer District #2. With other planned projects, 1.1 million gallons per day would be generated, while the Sewage District plant has a capacity of 1.1 million gallons per day. The plant cannot be expanded and no additional development within the Sewer District would be possible after these projects.

Response 3.7-2: *The Wastewater Engineering Reports for the projects have been revised to assess the capacity of the sewer system. The existing plant has a capacity of 1.1 mgd. The 2005 average daily flow was approximately 0.76 mgd, which leaves a reserve of approximately 0.34 mgd (see Table 3.7-3 below). The buildout of the significant projects currently proposed in Town will leave a reserve of approximately of 0.10 mgd as shown on the revised Wastewater Reports. The Applicant notes that the fact that these projects will use much of the remaining capacity in the District suggests that past planning for the sewer district effectively matched the infrastructure's capacity with the projected buildout of the sewer district.*[1]

As with the Water District, the Applicant notes that he has been paying taxes to the Sewer District without receiving sewer service, and that revenues received

[1] Recent flow data (following meter calibration) for the wastewater treatment plant indicates that flows are well below those previously presented indicating little or no inflow. The February 2006 to June 2006 average flow was 697,000 gpd. The June average flow was 646,000 gpd during a period with 8.5 inches of rainfall.

by the Sewer District from the Applicant in the past and the projected increases in revenues from the proposed projects can potentially be applied to funding future improvements needed to accommodate other proposed projects, if necessary.

Table 3.7-3
Carmel Sewer District #2 Sewer Flows 2005-2006

Year	Average Daily Flows in million gallons per day (mgd)
2005	*0.76 mgd
2006	*0.70 mgd

Source: Town of Carmel
* The average daily flows are based on the Wastewater Facility Operation and Reports for the treatment plant. Review of the reports as well as discussions with the Town Engineer indicate that there was a problem with the meter during December 2005 and January 2006 such that the recorded flow increased daily and consistently throughout December 2005 and January 2006.

Comment 3.7-3 (Public Hearing, February 2, 2005, Matthew Bennett; March 1, 2005 Letter, John L. Lynch, Putnam County Division of Planning and Development; February 24, 2005 Letter, Sandor E. and Laura T. Kozma): There may be increased school district enrollment if the proposed senior housing units are occupied by town residents and these local seniors then sell their homes to out-of-town households with school age children. Vacated, larger single family homes would be available for younger families with school aged children. Total expenses from school impacts would total $4.2 million based on an assumption that Town of Carmel seniors moving to these units would sell their homes to out-of-town households, each with two school age children (with $12,000 per pupil school costs and a net cost of $14,000 per year for every person who lives in the Carmel District who moves into one of the proposed units, assuming that they sell their homes to out-of-town households with two children each).

Response 3.7-3: *According to the Applicant, the proportion of local seniors who may purchase proposed senior housing units at Gateway Summit and The Fairways versus seniors moving to these units from other towns can not be determined at this time. However, given the large number of seniors currently residing in the Town of Carmel and the financial resources available to the Town's senior population, it is reasonable to project that a significant number of purchasing households will come from the Town of Carmel.*

As noted in the DGEIS, the U.S. Census and other demographic data demonstrate that in 2008 the Town of Carmel will have some 4,951 senior households, which will be 41 percent of all households (12,085) in the town. These households are expected to possess high levels of home equity, and over two thirds are projected to have $50,000 or more in annual income.

According to the Applicant, the number of out-of-town households with school age children moving into homes in the Town of Carmel that are vacated by future senior residents moving to Gateway Summit and The Fairways from the Town of Carmel also can not be determined at this time. However, as noted by the

Applicant, it can be assumed that seniors living in Carmel today will eventually either move to housing that requires less care, move in with relatives, or move into assisted living or a nursing home as they age, irrespective of whether the proposed projects are constructed, just as all single family housing in the town eventually turns over to someone else.

The Applicant adds that some of these households may move from within the Town and School District, with their children already attending local schools. More importantly, according to the Applicant, the existing homes of seniors moving to Gateway Summit and The Fairways would potentially be reoccupied by non-senior households with school-age children even without construction of the proposed projects, since these seniors would eventually move to other more appropriate housing elsewhere or would pass away. School impacts from the future turnover of existing homes occupied by seniors to younger families are therefore not considered by the Applicant to be related to the proposed projects as they would be occurring with or without the proposed Gateway Summit and The Fairways projects. Therefore, according to the Applicant, the secondary impacts to school enrollment referenced in this comment are not considered to be significant and were not calculated in the DGEIS fiscal analyses. The Applicant also notes that as each senior vacates an existing single family home the assessment of the home is adjusted based on the recorded sale. This is likely to add to the tax base of the town.

The net increase between the total current school tax revenues for the Brewster Schools currently generated by The Fairways parcel and the total future project-generated school tax revenues from The Fairways is projected by the Applicant to be approximately $499,571. The net increase between the total current school tax revenues for the Carmel and Brewster Schools generated by the Gateway Summit parcel and the total future project-generated school tax revenues generated by Gateway Summit is estimated by the Applicant to be approximately $665,089 and $106,131, respectively. (See full breakdown of projected tax revenues at the beginning of this chapter.)

Despite the fact that growth to the local schools may occur when seniors leave their homes (with or without purchasing units at the proposed projects), the commentor's reference to multipliers for school children generation per household is not supported by standard demographic multipliers typically utilized to estimate future enrollment, according to the Applicant. Per dwelling multipliers for school age children found in the Urban Land Institute's Impact Assessment Handbook include 0.1985 school age children per two-bedroom single family home and 0.7792 school age children per three-bedroom single family home. Regardless of what factor is used to calculate school age children per household, the proposed projects are not expected to impact enrollment in the Brewster or Carmel School Districts.

School costs associated with the replacement of local senior households with younger families with children are not considered to directly result from the proposed projects and would be incurred over time even without construction of the proposed projects, according to the Applicant.

Comment 3.7-4 (Public Hearing, February 2, 2005, Matthew Bennett): The amount of tax benefit per town resident is minimal and does not outweigh costs to residents -- for instance in terms of traffic effects -- or to service providers. Other economic benefits stated in the DEIS would also not outweigh costs. Fiscal benefits to the Town of $262,000 a year in Town property tax revenues would come with increased costs related to maintenance of the dedicated road and 30 detention ponds. Would the $70,000 a year in tax payments for the Fire Department cover the cost of a new pumper truck that would be needed, per Fire Department comments? Would an additional ambulance be required to accommodate the six percent projected increase in calls per year?

Response 3.7-4: *The Applicant anticipates that tax revenues from the proposed projects will be sufficient to fund payments necessary for the procurement of a new pumper truck for the Fire Department, if necessary. The $262,000 in annual Town revenues estimated in the DGEIS would be expected to cover maintenance costs of the dedicated Town road. Fire equipment such as a pumper truck is typically financed over a long-term period and the anticipated approximately $70,000 per year in Fire District #3 revenues is expected to be sufficient to cover the downpayment on a new pumper truck, assuming a cost of such equipment of approximately $250,000,[2] according to the Applicant.*

A revised projection of the fiscal impacts of the proposed projects has been prepared by the Applicant based on the revised plans described in Chapter 2.0. Tables 3.7-1 and 3.7-2 indicate the projected tax revenues for each of the taxing jurisdictions of the Gateway Summit and The Fairways projects. The revised tax projections indicate that the Gateway Summit project will generate a total of $1,231,635 in tax revenue, including $134,554 for the Town of Carmel, $665,089 in tax revenue for the Carmel Central School District, $106,131 in tax revenue for the Brewster Central School District, and $40,575 for Fire District No. 3, among other districts. The revised tax projections indicate that The Fairways project will generate a total of $770,118 in tax revenues, including $97,607 for the Town of Carmel, $499,571 for the Brewster School District, and $29,433 for the Fire District, among other districts.

As indicated by the Applicant, revenues to the School District would be received without any significant associated costs to the School District as a result of the proposed projects. The homes of any seniors in the Town of Carmel that would be purchasing units at Gateway Summit and The Fairways would be reoccupied by families potentially having school age children, whether they move to Gateway Summit and The Fairways or any other alternative housing.

Comment 3.7-5 (Public Hearing, February 2, 2005, Matthew Bennett; March 1, 2005 Letter, John L. Lynch, Putnam County Division of Planning and Development): The 352 projected jobs would not be high paying jobs needed by local residents, and these workers would require affordable housing. Lower income workers would increase Medicare costs. Aside from construction jobs, what types of occupations would the projects generate and what would be the estimated salary ranges of these jobs?

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[2] A review of pumper truck purchases by Fire Departments in the New York Metro region indicates a $220,000 truck purchased in part by Staten Island, New York's Richmond Engine Co. #1 (*Staten Island Advance,* "Volunteer Firefighter Unit Received $220G Grant to Buy New Pumper Truck, August 19, 2004, by Terence J. Kivlan).

Response 3.7-5: *According to the Applicant, while the location of residence and specific salary ranges of workers at the proposed development can not be determined at this time, all of the 352 projected jobs at the proposed commercial uses described in the DGEIS would have a positive economic effect, and would include a mix of salary ranges. These potentially include higher income white collar workers at the proposed office buildings and in managerial positions at the proposed restaurants and hotel; moderate income administrative positions; and lower paying full time jobs including restaurant workers, janitorial staff, and hotel housekeeping staff. Part time jobs such as some restaurant positions would likewise provide an employment benefit, including for youth that often seek part time employment only.*

The U.S. Department of Labor Bureau of Labor Statistics indicates that nonsupervisory retail industry workers earned an average of $12.26 per hour in February 2005. For the leisure and hospitality industry, the average hourly wage was $9.03, while non-supervisory professional workers (office workers) made on average $17.77 in February 2005.[3]

According to the Applicant, workers at Gateway Summit would be expected to come from either the Town of Carmel or surrounding Towns in Putnam County or immediately adjacent counties. Lower income workers would be expected to reside in affordable housing within these areas, or would otherwise be expected to travel from outside areas where a larger supply of suitable available housing exists, such as the Village of Brewster, or Danbury, Connecticut.

The Applicant notes that the increase in Medicare expenses referenced in this comment has been an ongoing trend affecting municipalities across the country, and not just Putnam County. As County Executive Robert Bondi noted in his 2005 Budget Message, "Medicare and Education for Preschool Handicapped Program mandates have been "budget busters" to all County Governments for years, and will remain so into the foreseeable future."[4] *The increase in lower income workers that might be drawn to Putnam County to serve businesses at the proposed Gateway Summit development may result in a minor increase in the County's Medicare burden, continuing an already established trend and not significantly changing the already high levels of Medicare costs experienced by Putnam County.*

To address the issue of increasing local Medicaid costs, New York State passed legislation in 2005 that institutes a cap on local Medicaid spending. This will provide financial relief to counties and will require that the State itself be financially responsible for an increasingly larger share of Medicaid cost growth. The development of senior housing will not increase Medicaid spending by Putnam County.

Comment 3.7-6 (Public Hearing, February 2, 2005, John Butler; February 24, 2005 Letter, Sandor E. and Laura T. Kozma): The municipal water supply in the Kelly Ridge Road area is

[3] U.S. Department of Labor, Bureau of Labor Statistics website, March 4, 2005.
[4] 2005 Budget Message, "We Can Do It: Creative Solutions for Challenging Times," September 8, 2004,Robert Bondi, County Executive, 2005, Putnam County Website.

already affected by unacceptable conditions including chronic outages, discoloration of water, and chronically low water pressure. The DEIS inadequately addresses insufficient water capacity and the potentially insufficient capacity of the water treatment facility to handle the proposed usage. The DEIS's analysis of the water pressure issue uses an incomplete methodology and is insufficient to accurately represent the genuine condition of the system. . . . What solutions are being reviewed to correct the situation for the current Kelly Ridge Road residents?

Response 3.7-6: *The project engineer notes that there are existing pressure problems in the Kelly Ridge Road and Everett Road areas due to the elevations of existing homes. Therefore, the revised plans for the Gateway Summit project proposes a high pressure service zone for the senior units proposed. As part of this project, the high elevation residences along Everett Road and Kelly Ridge Road will be connected to this system in order to resolve existing pressure problems.*

With this solution, domestic water supply for the proposed project will be supplied by two separate distribution systems, a "low" system and a "high" system. According to the project engineer, the low system will connect to existing Carmel Water District #2 (CWD#2) facilities in three locations. The first connection will be to the water main feeding from the Everett Road storage tank. This proposed main will serve the hotel, office space, clubhouse, and restaurants. The main will be connected at the southern end of the site to the existing 8" main under Old Route 6. The low system will also serve the proposed Fairways project adjacent to the north. A connection to the 6" main in Kelly Ridge Road will be made through The Fairways project. These connections will form a loop through the two projects, allowing continuous service to most of the site, even when one portion of the line is shut down for repairs. Looping also allows for supply from two directions for fire flows.

The project engineer indicates that the high system will utilize booster pumps to supply adequate pressure to the proposed dwellings on Lot 7 of Gateway Summit, some of which are at roughly the same elevation as the Everett Road storage tank. This system will draw from a connection to the low system near the storage tank, and will be looped around the access road to the dwellings. The high system will be designed to supply the sprinkler systems in its service area.

As described by the project engineer, the high system will be also be used to alleviate the low pressures that currently occur near the end of Kelly Ridge and Everett Road. The upper portions of the mains servicing dwellings on Everett and Kelly Ridge Road, and the main in Bard Road will be disconnected from the existing distribution system and connected to the high system via a line from the end of Everett Road to the proposed booster pump station. The lower portion of the existing remaining main in Everett Road and the main to St. Michael's Terrace will be reconnected to the storage tank by a new gravity main. The lower portion of the existing main in Kelly Ridge Road will be looped by a connection to the low system in the proposed Fairways project. Figure 1 at the end of the Water Engineering Report in Appendix I provides a schematic diagram of this arrangement. Fire protection flow will be provided to the dwellings at the end of Everett Road by new hydrants on the new gravity main to the storage tank. Fire

protection to the dwellings at the end of Kelly Ridge Road will continue to be provided by the hydrants on the remaining existing main.

The high system will serve the upper portion of the proposed Gateway Summit project, as well as the upper dwellings on Kelly Ridge, Everett, and Bard Road. Elevations in the proposed service area range from 720' to 650'. The high system will be composed of booster pumps to build pressure for distribution to the site, as well as a hydropneumatic tank to cycle the pumps.

According to the project engineer, an alternative to using booster pumps to increase pressures in the high zone would be to construct a higher storage tank. The new storage tank at the end of Everett Road would need to be approximately 80' high, or two and a half times the height of the existing tank in order to provide adequate pressure throughout the drawdown of the equalization volume. A higher tank would eliminate the additional operational and maintenance costs that would be incurred by the booster pump option, but doing so would have other impacts on the distribution system as a whole. A higher tank would cause issues with its interaction with the other two tanks in the system, possibly further increase the already high pressures in the southern portion of the system, impact the pumping capacity of the treatment plant, and have aesthetic impacts on the area. The booster pump option allows pressures to be raised locally without affecting the system as a whole.

Additional details are provided in the Water Engineering Report found in Appendices H and I and on the project plans that accompany this FGEIS.

Comment 3.7-7 (Public Hearing, February 2, 2005, John Butler): The affect on Lake Gleneida resulting from the proposed massive consumption of water for water and sewage is not addressed in the DEIS. Given the declining condition of the lake, the failure to address these points in not considered to be reasonable.

Response 3.7-7: *Revised Water Engineering Reports have been prepared for both The Fairways and Gateway Summit projects (See Appendices H and I). These reports assess the capacity of the existing water system to supply the subject projects. As demonstrated in the reports, there is adequate capacity at the existing water treatment facility to supply the projects. See Response 3.7-6 above related to water pressure issues.*

Regarding Lake Gleneida, based on review of Town of Carmel Engineer's water supply reports dated July 28, 1997 and July 21, 1998, the project engineer indicates that there is adequate water available in Lake Gleneida to service the subject projects proposed in Carmel Water District No. 2. The following summarizes the key issues in the reports, according to the project engineer:

1. *Based on the limited drainage area to Lake Gleneida, it is only partially fed by surface water. Therefore it is primarily fed by springs.*

2. *The NYCDEP has said that, based on their monitoring studies, Lake Gleneida is primarily groundwater fed and the lake level has remained relatively constant.*

3. *The Town has been monitoring the lake level and, based on their monitoring, they do not see any significant fluctuation in the levels of Lake Gleneida, which supports the two points above.*

4. *The infrastructure -- in terms of pumping, filtration, distribution and storage -- has a capacity of close to 1.6 million gallons per day.*

5. *The Town has a right to draw water from the West Branch Reservoir to supplement the Lake Gleneida water source should it ever be needed.*

According to the project engineer, based on the above, no impacts to the water supply of Lake Gleneida are anticipated.

Comment 3.7-8 (February 10, 2005 Letter, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc., Letter March 3, 2005, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space): A cumulative impact analysis of community service impacts is needed due to the proximity of the proposed project sites to another project under the same developer's ownership located near Mechanic Avenue, where 380 senior units are proposed (currently in approval process).

Response 3.7-8: *The DGEIS analyzes the cumulative impacts of development of the Gateway Summit and The Fairways projects and other proposed projects in the area, including the senior housing proposal mentioned in the comment above (see DGEIS pp. 3.7-21 to 3.7-23). According to the Applicant, cumulative development would not be expected to overwhelm the Town's ability to adequately provide services to its residents. Property taxes generated by other proposed projects would presumably be available to offset costs to community services providers generated by those other proposed projects.*

The cumulative impacts to the water and sewer systems associated with the subject projects and a separate senior housing project of the Applicant with 381 units that is currently in the approval process are assessed in the revised Water and Sewer Engineering Reports found in the Appendices.

Comment 3.7-9 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): The DGEIS states that the Project will add a projected 319 persons to the population of the Town of Carmel and increase long-term demand for goods and services that will have a steady multiplier effect in the Project area. The DGEIS then concludes that the increase in resident and worker population resulting from the Proposed Action is not expected to induce further growth in the area. This conclusion, however, is not supported by the DGEIS. For example, it is anticipated that the Proposed Action will create 352 new jobs. Given that Putnam County's unemployment rate is relatively low (approximately 3.3%) and that the surrounding housing stock is low, it is unclear how these new jobs will be filled unless there is further residential development in the area. The DGEIS has thus not adequately addressed the growth-inducing impact of the Proposed Action.

Response* 3.7-9*: *The Applicant notes that there are an estimated 2,000 unemployed persons currently residing within Putnam County, according to the New York State Department of Labor. These unemployed residents and some of the new residents moving to Putnam County -- with a five percent increase in*

population between 2000 and 2004 estimated by the Census Bureau -- would potentially be available to fill jobs at Gateway Summit.

New jobs not filled by local residents would be expected to be filled by residents of nearby counties, according to the Applicant. As stated above, low income workers would be expected to reside in affordable housing within these areas, or would otherwise be expected to travel from outside areas where a larger supply of suitable available housing exists, such as the Village of Brewster, or Danbury, Connecticut. The area is served by PART bus lines for potential use by future site residents and workers without cars.

Future growth inducement as a result of the project, such as development of new neighborhood service establishments, would be expected to be limited in nature according to the Applicant, given the availability of existing stores nearby on Route 6, including a supermarket. The proposed Gateway Summit project also includes new retail uses that would serve the new population. (See Chapter 6.0 for additional analyses of the growth inducing aspects of the two projects.)

The Applicant also notes that the revised plans for Gateway Summit described in Chapter 2.0 no longer include development of 48 units of either senior or assisted living housing, further reducing the potential for growth inducement, with a resulting reduction in projected future site population of 62 persons.

Comment 3.7-10 (March 1, 2005 Letter, John L. Lynch, Putnam County Division of Planning and Development): The report notes public needs and benefits. However, in helping to assess and place the benefits in perspective, it would be helpful for decision-makers to know the costs in more than a generic sense. Therefore, in Section 3.7 it would be useful to quantify the costs of improvements needed for such things as infrastructure, fire prevention, police protection, EMS providers, public transportation services, etc. By providing a dollar cost assessment over time, alongside dollar revenue projections, a clear evaluation of the benefits vs. Costs to the community over time becomes possible.

Response 3.7-10: *As indicated in Response 3.7-4, the approximately $70,000 per year in Fire District #3 revenues anticipated by the Applicant are expected to be sufficient to cover the financing for purchase of a new pumper truck if necessary, assuming a cost of such equipment of approximately $250,000.*[5]

Other anticipated costs related to community services described in the DGEIS include the potential need for the addition of one or two police officers as a result of the proposed projects, according to Chief Johnson (for the DGEIS proposed action with greater amounts of senior housing and commercial development). According to workforce and industry data provided by the New York State Department of Labor,[6] *the median annual wage of police patrol officers in the Hudson Valley (adjusted to 2005 wages) is $61,160, with the median annual entry level wage for police patrol officers being $42,310. Together, the two*

[5] A review of pumper truck purchases by Fire Departments in the New York Metro region indicates a $220,000 truck purchased in part by Staten Island, New York's Richmond Engine Co. #1 (*Staten Island Advance,* "Volunteer Firefighter Unit Received $220G Grant to Buy New Pumper Truck, August 19, 2004, by Terence J. Kivlan).

[6] New York State Department of Labor, "Workforce New York," Workforce and Industry Data, (http://www.labor.state.ny.us/workforceindustrydata/apps.asp?reg=hud&app=wages), 2005.

projects are expected by the Applicant to generate over $130,000 in Town of Carmel tax revenues, which would cover the cost of hiring two additional police officers if needed. The Applicant also notes that, as announced during Summer 2005, the Town of Carmel Police Department will receive $150,000 in federal funding to hire two new full-time police officers from a federal grant through the Community Oriented Policing Services (COPS) Universal Hiring Program.

Comment 3.7-11 (March 1, 2005 Letter, John L. Lynch, Putnam County Division of Planning and Development): It should also be noted that senior households do require services that are paid for by taxes. For example, paratransit bus services have been increasing with the advent of senior living facilities in the county. There is a demand for more trips by more people. This requires more vehicles and a larger county transit budget to cover operational and capital costs.

Response 3-7.11: *Comment noted. Most of the future senior residents of the proposed housing at Gateway Summit and The Fairways would be expected to own cars, although there would likely be some residents that would take advantage of available transit service on Route 6 provided through Putnam Area Rapid Transit (PART). PART Paratransit would be available to those disabled persons living within three quarters of a mile of a PART route (US Route 6).*

However, as noted by the Applicant, for those seniors moving to Gateway Summit and The Fairways from other parts of the Town and County, the projects would concentrate seniors in one location and make it more efficient to provide mass transit to them. Use of area buses by these seniors would not generally be expected to coincide with rush hour travel periods, lessening the impacts to public transit from those future site residents that may not own, or wish to use, private automobiles. Transit subsidies are partially based on revenue miles and passengers, so increasing the efficiency of the system is important to maintaining the system. Putnam County has a generally low population density and from 1990 to 2000 had a 20.8 percent increase in persons 65 and older. Centralizing growth in senior housing for a county with a low population density is important for transit efficiency.

In other similar communities of this magnitude, homeowners associations (HOA) have decided to fund private transportation in the form of a minibus to transport residents within their developments and to offsite services and shopping. To mitigate potential impacts to paratransit bus services, an internal and external shuttle will be provided and funded through the Homeowners Associations for Gateway Summit and The Fairways. Such shuttle service will be available for future site residents to access destinations such as shopping, doctor's offices, and the Metro-North Railroad Brewster Station.

Each of these projects would generate significant amounts of additional tax revenues to the County according to the Applicant ($59,733 in County property taxes from The Fairways and $82,344 in additional County property taxes from Gateway Summit). These County tax revenues would be available for improvements to the County's PART system if needed.

Comment 3.7-12 (Putnam Smart Growth Alliance, Letter, February 26, 2005): If all the projects in Table 3.7-8 (page 3.7-22) are within Sewer District #2 and 8 there will be an extremely small reserve left to handle any excess wastewater treatment. And bear in mind that the applicant is using the 'Design Flow with 20% Credit' leaving even less margin for error.

It appears that presently there's approximately 390,000 gallons per day available in excess capacity. If the build-out in Table 3.7-8 occurs this will bring the reserve figure down to approximately 30,000 gallons per day. Is this an adequate reserve? Are the residents of Sewer District #2 at risk if future expansion is needed? Aside from the cost will the DEP even allow further expansion? We believe that at the very least the applicant should provide answers and a cumulative table as the 'Sewage Disposal' was handled in a cursory manner at best.

> ***Response 3-7.12:*** *The Wastewater Engineering Reports for the projects found in the Appendices of this FGEIS assess the capacity of the sewer system. The existing plant has a capacity of 1.1 mgd. The 2004 average daily flow was approximately 0.71 mgd, which leaves a reserve of approximately 0.39 mgd. The buildout of the significant projects currently proposed in Town will leave a reserve of approximately of 0.14 mgd, as shown in the Wastewater Reports. Project engineers Insite Engineering, Surveying and Landscape Architecture, P.C., has reviewed a copy of the August 1988 facility report for the expanded Carmel Sewer District #2. Using the assumptions from the facility report, they have calculated the sewer flows allocated to the subject parcels as well as surrounding areas.*
>
> *The area examined as part of the project engineer's review was once primarily made up of the Duke Benedict property and now consists of Centennial Golf Course, as well as the proposed Gateway Summit and The Fairways projects. The area is generally bounded to the north by Fair Street, to the east by the Carmel/Southeast Town line, to the south by Route 6, and Old Route 6, and to the west by the existing residential development along Everett Ridge and Kelly Roads. Future sewer flows were allocated based on the remaining buildable area and by zone type. Based on this data, Insite Engineering, Surveying and Landscape Architecture, P.C. has calculated the allocated sewer flows for the area described above to be approximately 133,000 gallons per day (gpd). The proposed daily sewer flows for the Gateway Summit and The Fairways projects is approximately 116,920 gpd. Review of water billing records from 2001-2005 indicates that the average daily sewer flow from Centennial Golf Course from March to September is approximately 2,000 gpd. The combined sewer flow from the area in question would then be approximately 118,920 gpd, or 14,080 gpd less than the allocated flows, confirming that there is adequate reserve capacity.*

Comment 3.7-13 (February 24, 2005 Letter, Sandor E. and Laura T. Kozma): If any upgrades for the Water or Sewer Districts are required for the new development, who will pay for these improvements?

> ***Response 3.7-13:*** *See responses 3.7-1 and 3.7-2. The property owner notes that he has been paying taxes to the Water and Sewer Districts without receiving the benefits of their service and that revenues received by these Districts from the Applicant in the past and the projected increases in revenues from the*

proposed projects can potentially be applied to funding future improvements needed to accommodate other proposed projects, if necessary.

Comment 3.7-14 (February 24, 2005 Letter, Sandor E. and Laura T. Kozma): Why does the Carmel Fire Department need a substation for these additional housing units? How will the low pressure affect the Department's ability to fight fires, both for the current residents of Kelly Ridge Road and for the proposed development. Who will pay for new fire trucks or ambulances needed to serve the proposed development.

Response 3.7-14: *As indicated in the DGEIS, the Fire Department stated the following in a letter dated June 5, 2003 regarding their ability to provide fire protection services to the proposed projects:*

> *"The Fire Department does not have enough pumpers, nor does it have the pump capacity to protect these proposed buildings and a development of this size in the community. To protect a hotel/conference center, along with a YMCA and retail space, the Fire Department will need assistance in pursuing a substation and an additional pumper along the Route 6 corridor."*

An evaluation of existing water storage capacities has been added to the revised Water Engineering Reports found in the Appendix of this FGEIS. According to the project engineer, as shown in the analysis, there is adequate water to provide necessary fire flows.

As indicated in the introduction to this chapter and in Response 3.7-4, the approximately $70,000 in annual tax revenues to the Fire Department anticipated by the Applicant as a result of the combined Gateway Summit and The Fairways projects could potentially be used to finance a new fire truck.

Comment 3.7-15 (Letter January 24, 2005, Putnam County Department of Health): Appendix D, the Engineer's Report for the Fairways, states that individual booster pumps will be required for certain dwelling, which is unacceptable. Individual booster pumps are not allowed on water service connections.

Response 3.7-15: *Individual booster pumps are no longer proposed for individual water service connections.*

Comment 3.7-16 (Undated Letter, 1st Assistant Chief Robert Lipton, Sr., Carmel Fire Department): We recommend that the water supply system be looped. The dead end system now in place will not be adequate for fire protection.

Response 3.7-16: *These comments were received from the Fire Department in a letter dated June 5, 2003 and were addressed in the DGEIS. A looped system of water supply has been proposed.*

Comment 3.7-17 (Undated Letter, 1st Assistant Chief Robert Lipton, Sr., Carmel Fire Department): The Department is concerned over whether the three water towers have adequate supply storage to serve a project of this magnitude. The Town Engineer should review the situation and certify that the water supply and pressure are adequate.

Response 3.7-17: *These comments were also received from the Fire Department in a letter dated June 5, 2003, and were addressed in the DGEIS. An evaluation of the existing water storage capacities has been added to the revised Water Engineering Reports. As shown in the analysis conducted by the project engineer, there is adequate water to provide necessary fire flows.*

Comment 3.7-18 (Undated Letter, 1st Assistant Chief Robert Lipton, Sr., Carmel Fire Department; Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space): The Department does not have enough pumpers nor do we have the pump capacity to protect the proposed buildings and a development of this size in our community. To protect a hotel/conference center, along with a YMCA and retail space, the Fire Department will need assistance in pursuing a substation and an additional pumper along the Route 6 corridor.

. . . This project presents extraordinary challenges for the Town's fire and rescue services. These impacts have not been quantified. Additionally, the Applicant must obtain further information from these service providers as to their ability to meet increased demands that will be placed upon them by the Applicant's neighboring project on Stoneleigh Avenue where the Applicant currently plans to build a total of 388 senior housing units. In fact, for the Stoneleigh Avenue housing developments, the Carmel Fire District Board of Fire Commissioners requested that the Board consider the fact that the Applicant's change of plans from a commercial project to senior housing placed a larger burden upon the emergency services of the Town. (Also see Carmel Fire Department correspondence of June 5, 2003).

Response 3.7-18: *These comments were received from the Fire Department in a letter dated June 5, 2003. Additional revenue provided to the Fire Department via the property tax could, in the Applicant's opinion, be used to improve the facilities of the Department, and/or increase staff, if necessary. Emergency access for the Fire Department between Route 6 and local roads to the north of the project site would be improved as a result of the proposed projects through the proposed emergency access connection to Kelly Ridge Road from The Fairways.*

Comment 3.7-19 (Undated Letter, 1st Assistant Chief Robert Lipton, Sr., Carmel Fire Department): The Fairways senior housing project will be given tax exempt status most likely from the Town and County. Senior Housing taxes our services with additional calls. We can not afford to further tax our fire protection systems without revenue.

Response 3.7-19: *These comments were received from the Fire Department in a letter dated June 5, 2003. The senior housing units are not expected to be exempt from property taxes. As indicated in the introduction to this chapter and in Response 3.7-4, the Applicant expects that the combined projects will generate approximately $70,000 in annual tax revenues to the Fire Department.*

Comment 3.7-20 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): The DEIS must provide an accurate estimate of expected sewage flow rates, specify the municipal sewage treatment facility to receive flows, and provide confirmation that the facility possesses adequate capacity to accommodate those flows. In any case, the DEIS must address the impacts of increased flows to the designated

sewage treatment facility and must present a sewerage collection system that has been designed and located to minimize disturbance and limit the potential impacts of exfiltration.

> ***Response 3.7-20:*** *The revised Wastewater Engineering Reports found in the Appendix provide estimated sewage flow rates and analysis of the existing treatment plant capacities. The proposed sewage collection system is proposed to be constructed with PVC pipe with bell and spigot gasket joints, which limit the potential for exfiltration.*

Comment 3.7-21 (Letter January 24, 2005, Putnam County Department of Health): Pages 1-20 and 2-4 of the DGEIS should be revised to specify that the water distribution system connection will require the approval of the Putnam County Department of Health.

> ***Response: 3.7-21:*** *Comment noted.*

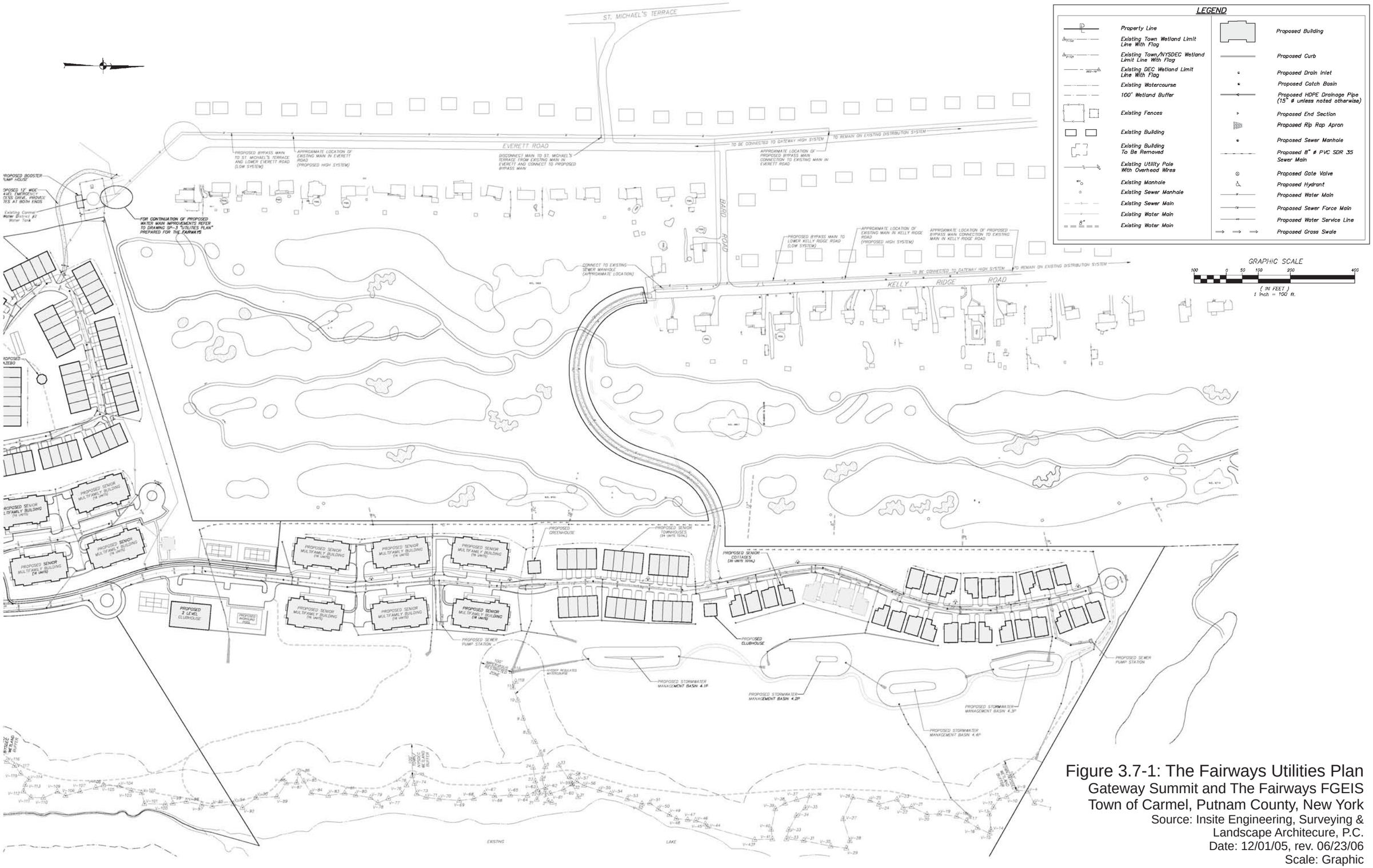
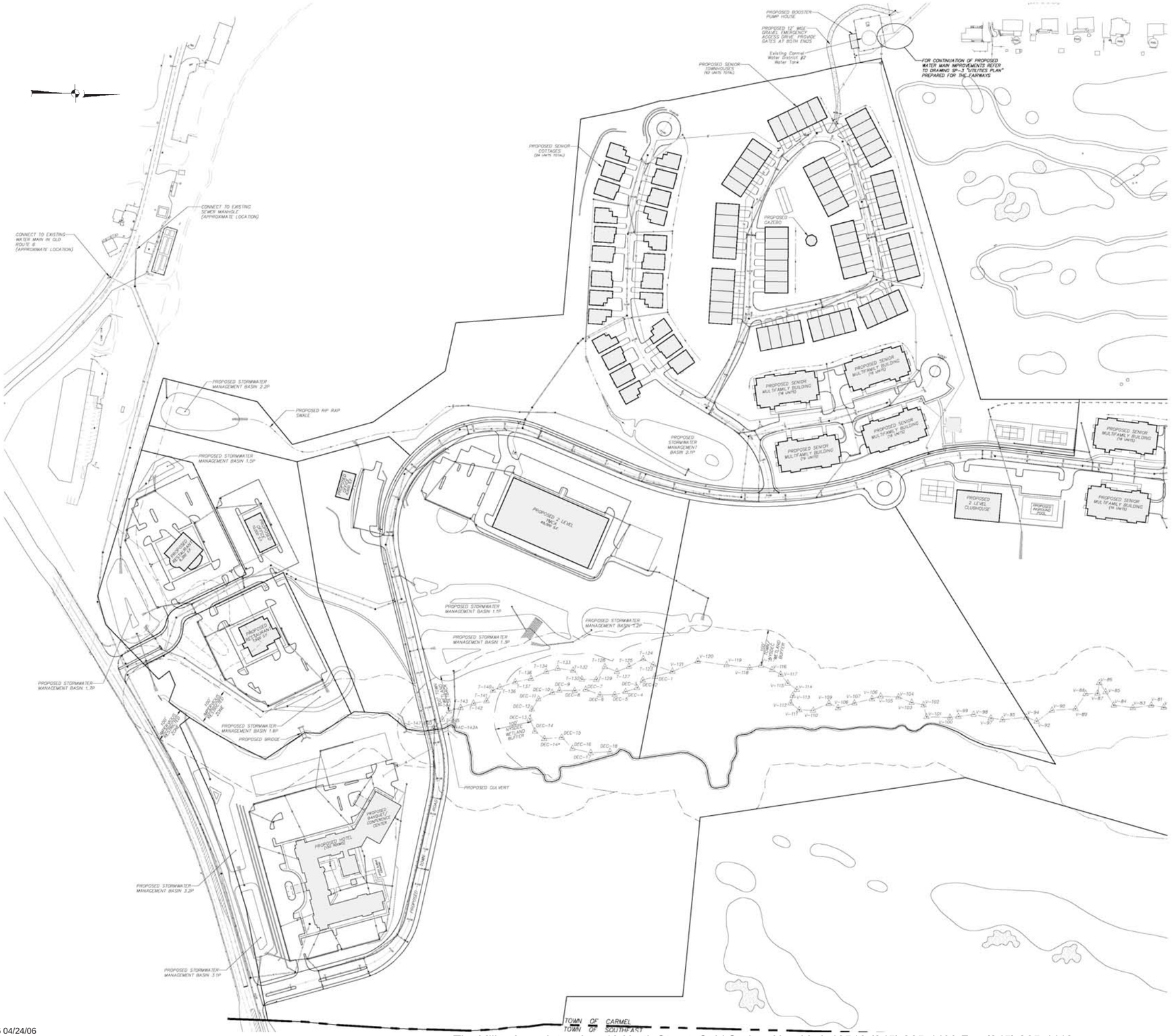


Figure 3.7-1: The Fairways Utilities Plan
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 12/01/05, rev. 06/23/06
Scale: Graphic



LEGEND

Property Line	Proposed Building
Existing Town Wetland Limit Line With Flag	Proposed Curb
Existing Town/NYSDEC Wetland Limit Line With Flag	Proposed Drain Inlet
Existing DEC Wetland Limit Line With Flag	Proposed Catch Basin
Existing Watercourse	Proposed HDPE Drainage Pipe (15" ø unless noted otherwise)
100' Wetland Buffer	Proposed End Section
Existing Fences	Proposed Rip Rap Apron
Existing Building	Proposed Sewer Manhole
Existing Building To Be Removed	Proposed 8" ø PVC SDR 35 Sewer Main
Existing Utility Pole With Overhead Wires	Proposed Gate Valve
Existing Manhole	Proposed Hydrant
Existing Sewer Manhole	Proposed Water Main
Existing Sewer Main	Proposed Sewer Force Main
Existing Water Main	Proposed Water Service Line
Existing Water Main	Proposed Grass Swale

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

Figure 3.7-2: Gateway Summit Utilities Plan

Gateway Summit and The Fairways FGEIS

Town of Carmel, Putnam County, New York

Source: Insite Engineering, Surveying & Landscape Architecure, P.C.

Date: 12/01/05, rev. 06/23/06

Scale: 1" = 280'

File 02136 04/24/06
JS\02136

3.8 CULTURAL RESOURCES COMMENTS AND RESPONSES

Comment 3.8-1 (Public Hearing, February 2, 2005, John Butler; March 1, 2005 Letter, John L. Lynch, Putnam County Division of Planning and Development; February 24, 2005 Letter, Sandor E. and Laura T. Kozma): In view of the fact that The Fairways site is positioned immediately adjacent to existing Centennial Golf Course holes and that building the access road through to Fair Street would require shortening two existing holes of the course, the statement that the operation of the golf course will not be disrupted is, on the basis of logic and common sense, inaccurate. No input from the Golf Course owner was solicited and the failure to do so renders that portion of the DEIS essentially invalid. The project would financially endanger the financial viability of the golf course, which is a prominent business in the Town. Views from the Golf Course would be impacted. . . It does not appear to be a wise move to construct a road to Fair Street through such a local scenic and recreational amenity. Perhaps the necessity for this road should be carefully reviewed. . . . What is the impact on the Fairways if the Centennial Golf Course goes out of business?

> ***Response 3.8-1:*** *According to the Applicant, there is an existing easement agreement with Centennial Golf Course that allows the Applicant to use a designated portion of the Golf Course for site access to The Fairways site. Proposed access impacts of the project with Fair Street access, as described in the January 3, 2005 DGEIS, are unavoidable and are within this specified area, according to the Applicant.*
>
> *However, as described in Chapter 3.5, the revised plans for The Fairways remove the Fair Street access point from the proposed layout. Residential access is now only proposed from the south, through the Gateway Summit project site. No impacts to the configuration of golf holes at Centennial Golf Course would occur under this alternative, according to the Applicant, and the financial viability of the Centennial Golf Course is not expected to be affected by the proposed project, either under the originally proposed layout for The Fairways, or under the currently proposed plan that does not utilize the existing easement on the Golf Course.*

Comment 3.8-2 (Public Hearing, February 2, 2005, John Butler): There will be negative visual impacts to homeowners on Kelly Ridge Road and Hillside Place. Views of the project will be more than "limited" as stated in the DEIS.

> ***Response 3.8-2:*** *The revised plan eliminates the Fair Street access drive from the proposed layout. According to the Applicant, no adverse visual effects are anticipated on homeowners residing on Hillside Place or Kelly Ridge Road. Under the revised plans, proposed improvements on The Fairways project site that are located closest to Kelly Ridge Road (proposed homes and onsite roadway) have been shifted to the east, further away from Kelly Ridge Road, in comparison to the layout described in the January 3, 2005 DGEIS. This change will result in greater open space and visual buffer separation between the western property line and proposed site improvements, decreasing visual effects of the project from residences located on Kelly Ridge Road.*
>
> *Furthermore, according to the Applicant, the proposed grading plans prepared for the projects depict the senior housing units sitting well below the adjacent*

boundary of the property. An existing vegetative buffer will remain between the proposed development and the residences on Kelly Ridge Road and Hillside Place. The existing vegetative buffer to remain is proposed to be supplemented with evergreen plantings at the top of the graded slope to provide further buffering between the proposed development and adjoining properties.

Comment 3.8-3 (Public Hearing, February 2, 2005, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc., Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space): A Phase I archeological study is needed and possibly the same type of archeological analysis completed for the Carmel Corporate Park Center project, which is in an area that is highly sensitive with many findings of arrowheads and stone tools from paleontological times. The project site, being located on a ridge that is the next ridge over from the Carmel Corporate park Center site, separated from it by Michael's Brook and the wetlands, appears to be a good candidate for such an archeological study. . . . This is especially important as the ridge directly to the west where the Applicant also proposes to build senior housing was found to has significant archaeological evidence which required a Phase I and Phase II study. No less should occur on this site as Mount Pisgah is approximately 150 higher in elevation (750+ ft.) and would provide a more commanding view of the area.

Response 3.8-3: *Phase 1 and Phase 2 Cultural Resource Surveys have been completed for the project sites by a certified archaeology firm, Columbia Heritage LTD (see Appendix N and Appendix O).*

The Phase 1A Site Assessment Study evaluated the potential for proposed construction to cause impact to standing or buried Native and/or European American era cultural resources.

According to the surveys, based on known settlement patterns associated with these two occupations, the nature and quantity of documented cultural resources in the immediate vicinity of the parcels, their physiographic character, and a walkover of the property, the flatter portions of these properties were considered to have above-average potential for containing buried Native American cultural remains. The study areas are seen as unlikely to contain structural remains and cultural features related to the early European American era occupation of the area.

Standing structures adjacent to and within view of the study area were evaluated with regard to meeting minimum age requirements for inclusion on the State and National Register of Historic Places. No such structures were identified.

Based on these findings, a Phase 1B Site Identification Survey was recommended and conducted. This survey consists of systematic subsurface archaeological sampling in the areas determined to have an above average potential for Native American cultural remains.

Three major sampling subareas, referred to as Areas A, B and C, were delineated and test holes measuring approximately 24 inches in diameter and laid out in a grid pattern approximately 50 feet apart were executed using hand tools. Evaluation of material from these test holes identified items associated

with the Native American era of occupation in two subareas. Additional test holes were dug near locations where Native American cultural remains were found. Finds consisted of quartz tools, reduction flakes and culturally modified fragments, as well as a chert projectile point. The range of cultural items recovered implies that focused cultural activity involving at least the production of stone implements took place at these locations.

As a result of the Phase IB subsurface archaeological sampling, additional archaeological investigation was recommended as part of a Phase II site evaluation. The Phase II study was prepared following standard protocol for cases of this type. The Phase II study better defines the archaeological deposits in order to provide sufficient information so that OPRHP reviewers can determine whether any of the identified cultural resources meets the requirements under Criterion D for listing on the State and National Register of Historic Places.

As part of the Phase II study, more intensive archaeological sampling was carried out in the two subareas where positive test holes were grouped around isolated find spots to determine the spatial extent of the cultural deposits. Little additional cultural material was recovered around the isolated locations. Since density of cultural material is considered one indicator of the likely presence of cultural features such as fire and storage pits and remains of structures, locations where Phase II shovel testing indicated the presence of a relative concentration of cultural material were further investigated by means of standard archaeological excavation units measuring 40 inches (one meter) on each side. Four such units were dug in the area of cultural activity in the southern portion of the development parcel designated Site 1, and two units were executed in the central portion of the property where identified cultural material was designated Site 2.

Phase II units failed to produce concentrations of cultural material and confirmed the impression of the intensive shovel testing that distribution of cultural material on both sites is sparse and consists largely of quartz debitage. No cultural features were encountered in any of the excavation units. Based on the findings of the Phase II study, even the subareas with the greatest relative density of cultural items may be considered unlikely to contain potentially significant cultural information. Proposed construction may therefore be seen to have no effect on potentially significant cultural resources and no further investigation is recommended by the certified archaeology firm that conducted the Phase I and Phase II studies for the project sites.

Comment 3.8-4 (February 24, 2005 Letter, Sandor E. and Laura T. Kozma): Is the golf course being considered as "open space" for these developments?

Response 3.8-4: *With Fair Street access eliminated under the revised plans for The Fairways, the golf course is no longer proposed to be traversed by an access drive, although emergency access is provided. The golf course is not considered to be open space associated with these projects, according to the Applicant.*

4.0 ALTERNATIVES COMMENTS AND RESPONSES

The DGEIS evaluated five alternatives for the proposed Gateway Summit and The Fairways projects (see DGEIS Chapter 4.0). Certain alternatives were refined based on comments received during and after the Public Hearing on the DGEIS held on February 2, 2005. Layouts for both the Route 6 restaurant/office complex and the main Gateway Summit roadway were refined, while generally maintaining the same amount of development that is included in the proposed action. The modified layouts of Route 6 commercial buildings increase pedestrian connectivity and group the Route 6 commercial buildings around a central pedestrian plaza (see Option 1 and Option 2 described below). The Modified Road Configuration Alternative for Gateway Summit described below is a variation on DGEIS Alternative 2 (Alternative Road Configuration Alternative for Gateway Summit Site).

Modified Layout of Route 6 Commercial Buildings

Following its receipt of public comments concerning the DGEIS, the Town of Carmel Planning Board received a March 21, 2006 memorandum from its planning consultant, Edward Buroughs, suggesting among other things that the Applicant modify the proposed Restuarant/Office complex component of the proposed action (see letter in Appendix). Specifically, Mr. Buroughs requested consideration of changes to provide a more pedestrian- and user-friendly complex. The Applicant has prepared two options for this portion of Gateway Summit that are described below.

Option 1

The first of the modified layouts examined for the Restuarant/Office complex component of the proposed action (see Figure 4-1) provides a common pedestrian courtyard between the two restaurant buildings. The courtyard has been centered on the access drive to the complex. The proposed office building has also been designed along this central access drive to provide a visual enclosure for the pedestrian courtyard. Under this optional layout, parking for the restaurants surrounds the restaurant and courtyard, with parking for the proposed office building located to its east and west. A pedestrian connection along the front portions of the restaurant buildings connects the pedestrian plaza, the walkway, and the hotel and banquet facility. Like the proposed action, this optional layout would require area variances for Lot 4 related to lot width, lot frontage and lot depth. In addition, an area variance would be needed for Lot 2 related to minimum lot area.

Option 2

The second modified layout (see Figure 4-2) also provides a common pedestrian plaza linking the two restaurants. This common plaza has been centered along the central access drive to the complex. In this alternative, however, the office building is located to the west of the proposed restaurants, with a pedestrian linkage provided from the office building to the restaurants and a common pedestrian courtyard. A pedestrian connection is also provided to the hotel and banquet facility. This Optional layout eliminates the need for any area variances.

The Applicant has indicated that it is willing to implement either of these optional layouts for this portion of the Gateway Summit project should these be preferred by the Planning Board.

Modified Road Configuration Alternative for Gateway Summit

In furtherance to its comments on the DGEIS, and following the Public Hearing, NYCDEP indicated to the Applicant that the Gateway Summit roadway will require a NYCDEP variance to allow impervious surface within the 100-foot limiting distance to a watercourse. As described in

Chapter 1.0, the Applicant is pursuing this variance. As described in Chapter 3.0, the Applicant has proposed mitigation measures for impacts related to the watercourse crossing and seeks to demonstrate to NYCDEP that the need for the variance is not self imposed, that the proposed mitigation measures are at least as protective of the water supply as the provison(s) of New York City's watershed regulations from which the variance is sought, and that the variance is the minimum necessary to afford relief from the regulations.

A description of the Modified Road Configuration Alternative for Gateway Summit that would not require a variance from NYCDEP follows. This alternative provides more direct access from Route 6 to the upper portions of the Gateway Summit project site and eliminates the currently proposed watercourse crossing by shifting the main entrance to the west. Environmental impacts of this new alternative are described below for each of the subject areas evaluated in the DGEIS. Proposed uses for this alternative are listed in Table 4-1 below. The uses are similar to those of the proposed action with the exception of the elimination of a 10,000-square foot office building.

Two optional layouts for the Modified Road Configuration Alternative for Gateway Summit that replace one of the restaurants (6,300 square feet) with either a 30,000-square foot office building, or a 15-000-square foot pharmacy with a drive-through are shown in Figures 4-10 and 4-11. Under both of these optional layouts for the Modified Road Configuration Alternative for Gateway Summit the replacement buildings for the restaurant are located in approximately the same location as the restaurant, and do not increase the area of disturbance. These options would have generally similar environmental impacts as those described below with the exception of traffic impacts.

Table 4-1
Modified Road Configuration Alternative
Proposed Uses

Lot	Proposed Use	Size/Features
1	Hotel with full Conference Center and Spa	150 rooms and 12,000 SF banquet/conference center
2	Restaurant	7,600 SF
3	Restaurant	6,300 SF
4	Office*	6,000 SF
5	Recreational Community Center with children's playground (YMCA)	68,000 SF
6A	Senior Housing and Recreation Area	150 Units
6B	Senior Housing Recreation Lot	12.69 acres
7	Senior Housing and Recreation Area	150 Cottage-style units

SOURCE: Insite Engineering, Surveying and Landscape Architecture, P.C., 2006.
*includes small convenience retail (trip generation based on office rates). The convenience retail use would primarily be expected to serve project site residents, employees and visitors (eg, hotel, senior housing, YMCA, and office).

Land Use, Zoning and Public Policy: The Modified Road Configuration Alternative for Gateway Summit eliminates a watercourse crossing of the main access roadway. It does this by converting Gateway Summit's primary easterly access road to a driveway for the proposed hotel only, and extending the current project's secondary westerly access road from Route 6 to all other uses via a connection to the current location of the primary easterly access road on the westerly side of the subject watercourse. This alternative also decreases development and environmental impacts by eliminating a 10,000-square foot office and another approximately 500 linear feet of impervious roadway.

This alternative provides a more compact layout for the office/restaurant complex facing US Route 6. The main entrance would be located in closer proximity to the US Route 6/Old Route 6 intersection that has been recently signalized. With its slightly lower amount of proposed development, this alternative would not be expected to increase land use effects in comparison to the proposed action. The proposed commercial uses would still be located along an existing commercial corridor and there would be no change to the proposed senior housing, YMCA, or proposed conservation area.

The other options for this alternative shown in Figure 4-10 and Figure 4-11 would not have significantly different land use effects than the primary option described above, other than the change in one of the proposed uses from a 6,300-square foot restaurant to either a 30,000-square foot office building or a 15,000-square foot pharmacy. These options would

result in slightly less commercial activity on the Gateway Summit site during evenings and weekends with the replacement of a proposed restaurant with either an office building or a pharmacy.

While this alternative would be beneficial from the perspective of NYC DEP since it does not require a watercourse crossing variance, it is noted that the New York State Department of Transportation (NYS DOT) expressed preference for the easternmost driveway serving as the "major" driveway into the project sites, since it provides the most separation from the traffic signal at US Route 6, Maple and Old Route 6. The NYSDOT did, however, indicate that both the easterly and westerly driveways from Route 6 are adequate from an access standpoint. Moreover, the NYS DOT subsequently indicated its desire to coordinate its planned replacement of the existing bridge on Route 6 over the railroad tracks to the west with this project and the County Bike Path Project. As discussed below herein, this coordination would call for the westerly driveway serving as the major driveway into the project sites.

The bridge improvements allowing the bike path to continue, and the pedestrian trailway system through the project sites and its connection to the bike path, are positive elements of the Modified Road Configuration Alternative that make it beneficial from a public policy perspective.

Geology. Soils and Topography: The Modified Road Configuration Alternative involves a more direct route for the main access road into the project site from US Route 6. This alternative would result in slightly greater overall grading and site disturbance impacts, and slightly less impacts to steep slopes, or slopes greater than 15 percent. According to calculations provided by the project engineer, the Modified Road Configuration Alternative would result in disturbance of approximately 55.48 total acres, compared to 55.32 acres for the Proposed Action for the Gateway Summit project. The Modified Road Configuration Alternative would result in impacts to 25.07 acres of steep slopes greater than 15 percent. The proposed action would result in impacts to 24.93 acres of steep slopes greater than 15 percent.

The soils proposed to be disturbed within this alternative action are Udorthents, smoothed (Ub) and Paxton fine sandy loam, 8-15 percent slopes (PnC). Both soil types are considered well drained. The construction limitations of Ub are not specific, since the composition of this soil type is characterized as variable according to the Soil Survey of Putnam and Westchester Counties. This soil unit is primarily located adjacent to roadways, urban areas, and borrow areas. It can be made up of soil material in alternating layers ranging from sand to silty loam. It is common to find the fill layer to be more than 20 inches thick with rock fragments. The construction limitation for this soil type will be site specific and variable.

As described in the DGEIS, test pits were excavated in the area of the Modified Road Configuration Alternative site entrance. The test pits indicate a relatively thick (6 to 11 feet) layer of silty sand or sand and gravel in the southern portion of the area mapped as udorthents. The thickness of sand and gravel is less on the hillside north of the Town Highway building that faces Route 6. It appears that the topsoil and upper soil layers of loam were removed and the lower sand and gravel layers were retained and remain near the surface. Well drained silty sand or sand and gravel would provide favorable soil conditions for road construction.

According to the Soil Survey, Paxton soils have moderate local roadway construction limitations due to the wetness of the subsurface, the degree of slope, and the potential for frost action due to soil moisture. These construction limitations can be overcome using proper engineering techniques, such as an adequate sub-base and proper drainage.

A site specific Partial Sediment and Erosion Control Plan (see Figure 4-6) and a Partial Construction Phasing Plan (see Figure 4-7) have been prepared for the Modified Road Layout Alternative. The plans provide details for the installation and maintenance of the soil erosion and sediment control features including: silt fencing, grass swales, check dams and stormwater management basins. The Sediment and Erosion Control Plan and the Phasing Plan provide measures to minimize the potential for soil erosion during construction of the Modified Road Configuration Alternative.

Traffic: In the Modified Road Configuration Alternative, the 10,000-square foot office building has been removed, leaving the proposed uses as indicated in Table 4-1. This reduces the traffic in comparison to the DGEIS proposed action by 159 vehicles in the weekday a.m. peak hour, 108 vehicles in the weekday p.m. peak hour, and 105 vehicles in the Saturday peak hour (see Table 4-2 below).

Table 4-2
Modified Road Configuration Alternative
Project Site Trip Generation Summary

Land Uses and Size (Potential Uses)	Trips								
	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour		
	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)
Gateway Summit									
Hotel 150 rooms, Conference Center, and Banquet Facility	41	26	67	47	42	89	60	48	108
Quality Restaurant 7,600 square feet	5	1	6	38	19	57	48	34	82
Quality Restaurant 6,300 square feet	4	1	5	32	16	48	40	28	68
Elderly Residences, 150 dwelling units	18	22	40	28	18	46	23	23	46
Corporate/Professional Offices 6,000 square feet *	17	2	19	2	7	9	2	2	4
Recreational Community Center 68,000 square feet	67	43	110	32	79	111	43	44	87
The Fairways									
Elderly Residences, 150 dwelling units	18	22	40	28	18	46	23	23	46
Conservation Area (Vacant)	0	0	0	0	0	0	0	0	0
Total from Modified Road Configuration Alternative	**170**	**117**	**287**	**207**	**199**	**406**	**239**	**202**	**441**
Total from DGEIS Proposed Action	282	164	446	239	275	514	287	259	546
Percent Change	**-40%**	**-29%**	**-36%**	**-13%**	**-28%**	**-21%**	**-17%**	**-22%**	**-19%**

sf = gross leasable square feet.

Trip Generation, Institute of Transportation Engineers, 7th edition, Washington D.C., 2003.

*includes small convenience retail (trip generation based on office rates). The convenience retail use would primarily be expected to serve project site residents, employees and visitors (eg, hotel, senior housing, YMCA, and office).

Tables 4-3 and 4-4 below provide a level of service comparison of the DGEIS proposed action site accesses, the current FGEIS proposed action site accesses, and the Modified Road Configuration Alternative with its western primary access, both with and without the eastbound left turn lane under the Build Condition. As stated above, the Modified Road Access Alternative shifts the primary access from the west to the east and shifts the secondary access from east to west. Table 4-3 compares level of service for the secondary accesses. Table 4-4 compares level of service for the primary accesses.

Table 4-3
Modified Road Configuration Alternative
Build Condition Level of Service Summary
Unsignalized Intersections

Intersection Road	Lane Group Approach Direction-Movement	P.M. Weekday Peak Hour Volume to Capacity Ratio	P.M. Weekday Peak Hour Delay (seconds /vehicle)	P.M. Weekday Peak Hour Level of Service	Saturday Peak Hour Volume to Capacity Ratio	Saturday Peak Hour Delay (seconds /vehicle)	Saturday Peak Hour Level of Service
U.S. Route 6/Secondary Western Site Access (DGEIS Proposed Action)							
U.S. Route 6	*EB-L, T*	*0.09*	*10.7*	*B*	*0.13*	*11.2*	*B*
Site Access Lot 2 and 3	*SB-L, R*	*0.90*	*148.4*	*F*	*1.10*	*208.4*	*F*
U.S. Route 6/Secondary Western Site Access (FGEIS Proposed Action)							
U.S. Route 6	*EB-L, T*	*0.08*	*10.0*	*A*	*0.10*	*10.9*	*B*
Site Access Lot 2 and 3	*SB-L, R*	*0.36*	*47.1*	*E*	*0.67*	*94.4*	*F*
U.S. Route 6/Secondary Eastern Site Hotel Access Modified Roadway Configuration Alternative							
U.S. Route 6	*EB-L, T*	*0.03*	*9.5*	*A*	*0.04*	*10.6*	*B*
Site Access Hotel	*SB-L, R*	*0.40*	*58.0*	*F*	*0.56*	*88.1*	*F*

Level of Service (see Table 3.6-3 for level of service criteria).
NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound
L = left, R= right, TR = through and right, (e.g. WB-L = Westbound left).
Unsignalized intersections are in *italics*.

Table 4-4
Modified Road Configuration Alternative Build Condition Level of Service Summary
Primary Site Access

Intersection Roads	Lane Group (Approach Direction -Movement)	P.M. Weekday Peak Hour			Saturday Peak Hour		
		Volume to Capacity Ratio	Delay (seconds/ vehicle)	Level of Service	Volume to Capacity Ratio	Delay (seconds /vehicle)	Level of Service
U.S. Route 6 Primary Site Access East from DGEIS Proposed Action							
U.S. Route 6	EB - L	0.23	4.3	A	0.28	4.6	A
	EB - T	0.91	18.4	B	0.78	10.1	B
U.S. Route 6	WB - T, R	0.75	9.3	A	0.80	10.9	B
Primary Access	SB - L	0.24	22.1	C	0.22	22.0	C
	SB - R	0.41	23.4	C	0.29	22.5	C
	Overall		14.7	B		11.0	B
U.S. Route 6 Primary Site Access East from FGEIS Proposed Action							
U.S. Route 6	EB - L	0.19	4.1	A	0.26	4.5	A
	EB - T	0.82	12.1	B	0.78	9.4	A**
U.S. Route 6	WB - T, R	0.66	7.3	A	0.80	10.8	B
Primary Access	SB - L	0.24	22.1	C	0.23	22.0	C
	SB - R	0.36	23.0	C	0.28	22.4	C
	Overall		10.8	B		10.7	B
U.S. Route 6 Primary Site Access West without eastbound left turn lane Modified Road Config. Alt.							
U.S. Route 6	EB - L, T	0.95	23.4	C*	0.96	25.9	C*
U.S. Route 6	WB - T, R	0.59	4.5	A	0.72	6.5	A**
Primary Access	SB - L	0.33	26.2	C	0.54	29.0	C
	SB - R	0.63	33.6	C	0.39	26.8	C
	Overall		16.7	C*		17.5	B
U.S. Route 6 Primary Site Access West with eastbound left turn lane Modified Road Config. Alt.							
U.S. Route 6	EB - L	0.23	2.8	A	0.37	5.2	A
	EB - T	0.75	7.2	A**	0.76	9.6	A**
U.S. Route 6	WB - T, R	0.59	4.5	A	0.79	10.4	B
Primary Access	SB - L	0.33	26.2	C	0.32	22.6	C
	SB - R	0.63	33.6	C	0.23	22.1	C
	Overall		7.8	A**		10.6	B

NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound
L = left, R= right, T, R = through and right, (e.g. WB - L = Westbound left).
* Reduction in level of service from the DGEIS Build Condition.
**Improvement in level of service from the DGEIS Build Condition.

The two options for this alternative, with either a 30,000-square foot office or a 15,000-square foot pharmacy replacing one of the two proposed restaurants, would have differing effects on traffic than either the primary option with two restaurants, or the proposed action. Each of these uses would generate more traffic than the 6,300-square foot restaurant that they would replace. The Modified Road Configuration Alternative Pharmacy Option can be expected to have both 10 percent internal site traffic and 25 percent pass-by traffic. The Modified Road Configuration Alternative Office Option was analyzed assuming no internal trips and no pass-by trips. Both the Pharmacy and Office uses were assumed to have the same trip distribution as other nonresidential and non-hotel uses. The pharmacy has higher volumes than the 6,300-square foot restaurant in both the p.m. weekday peak hour and the Saturday peak hour. The 30,000-square foot office has a higher p.m. exiting traffic. However the entering p.m. weekday traffic and Saturday traffic is lower for the 30,000-square foot office than the restaurant that it replaces.

Table 4-5
Modified Road Configuration Alternative Pharmacy Option
Project Site Trip Generation Summary

Land Uses and Size (Potential Uses)	Trips								
	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour		
	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)
Gateway Summit									
Hotel 150 rooms, Conference Center, and Banquet Facility	41	26	67	47	42	89	60	48	108
Quality Restaurant 7,600 square feet	5	1	6	38	19	57	48	34	82
15,000 square foot Pharmacy with Drive through	23	17	40	63	66	129	59	59	118
Elderly Residences, 150 dwelling units	18	22	40	28	18	46	23	23	46
Corporate/Professional Offices 6,000 square feet *	17	2	19	2	7	9	2	2	4
Recreational Community Center 68,000 square feet	67	43	110	32	79	111	43	44	87
The Fairways									
Elderly Residences, 150 dwelling units	18	22	40	28	18	46	23	23	46
Conservation Area (Vacant)	0	0	0	0	0	0	0	0	0
Alternative Plan Total	**189**	**133**	**322**	**238**	**249**	**487**	**258**	**233**	**491**
Total from DEIS	282	164	446	239	275	514	287	259	546
Percent Change	**-33%**	**-19%**	**-28%**	**-4%**	**-9%**	**-5%**	**-10%**	**-10%**	**-10%**

sf = gross leasable square feet.

Trip Generation, Institute of Transportation Engineers, 7th edition, Washington D.C., 2003.

*includes small convenience retail (trip generation based on office rates). The convenience retail use would primarily be expected to serve project site residents, employees and visitors (eg, hotel, senior housing, YMCA, and office).

Table 4-6
Modified Road Configuration Alternative Office Option
Project Site Trip Generation Summary

Land Uses and Size (Potential Uses)	Trips								
	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour		
	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)	IN (Trips)	OUT (Trips)	Total (Trips)
Gateway Summit									
Hotel 150 rooms, Conference Center, and Banquet Facility	41	26	67	47	42	89	60	48	108
Quality Restaurant 7,600 square feet	5	1	6	38	19	57	48	34	82
Office 30,000 square feet	63	9	72	19	93	112	12	12	24
Elderly Residences, 150 dwelling units	18	22	40	28	18	46	23	23	46
Corporate/Professional Offices 6,000 square feet	17	2	19	2	7	9	2	2	4
Recreational Community Center 68,000 square feet*	67	43	110	32	79	111	43	44	87
The Fairways									
Elderly Residences, 150 dwelling units	18	22	40	28	18	46	23	23	46
Conservation Area (Vacant)	0	0	0	0	0	0	0	0	0
Alternative Plan Total	**229**	**125**	**354**	**194**	**276**	**470**	**211**	**186**	**397**
Total from DEIS	282	164	446	239	275	514	287	259	546
Percent Change	**-19%**	**-24%**	**-21%**	**-19%**	**+0%**	**-9%**	**-26%**	**-28%**	**-27%**

sf = gross leasable square feet.

Trip Generation, Institute of Transportation Engineers, 7th edition, Washington D.C., 2003.

*includes small convenience retail (trip generation based on office rates). The convenience retail use would primarily be expected to serve project site residents, employees and visitors (eg, hotel, senior housing, YMCA, and office).

Levels of service based on the Pharmacy Option and 30,000-square foot Office Option, both with the modified road configuration access, are shown in Tables 4-7 and 4-8. Although the western access continues to have an acceptable level of service with these optional layouts, it is one grade worse (C to D) for the Pharmacy and Office Options in the p.m. peak hour. This assumes modifications to signal timing. A longer green phase for the site access at this traffic light would be needed. Other than the signal timing, there would be no difference in the access configuration. Since the site volumes from Table 4-5 and 4-6 are lower than those of the DGEIS site access, it is expected the levels of service at area intersections in the network would be as good or better than those of the proposed action from the DGEIS.

Table 4-9 summarizes the anticipated phasing of traffic improvements in the NYS right-of-way.

Mitigation Measures and Thresholds Associated with the Modified Road Configuration Alternative

Alternative thresholds have been established relative to the generation of site traffic and timing of mitigation measures for the Modified Road Configuration Alternative, as noted below.

As with the proposed project, no road improvements other than a highway work permit for the subdivision road or access drive and any associated work in the US Route 6 right of way are warranted until overall development reaches a threshold that is projected to generate certain levels of traffic that will then require either a traffic signal and/or a left turn lane.

Under the Modified Road Configuration Alternative, construction activity may be initiated and buildings may be occupied with no road improvements on Route 6 if the development is projected to generate fewer than 90 exiting trips or 60 entering trips during peak hour periods at the westernmost driveway. For example, all the Gateway residential housing is expected to generate 28 peak hour entering trips, and therefore can be built without any major road improvements on US Route 6.

If site development activity occurs or is proposed under the Modified Road Configuration Alternative that will cumulatively generate more than 90 exiting trips or 60 entering trips during peak hour periods at the westernmost driveway, a traffic signal may be necessary, subject to approval by the NYS DOT. Accordingly, if the development is projected to exceed this threshold, the Applicant shall apply to the NYS DOT for a US Route 6 traffic signal at that location and if the DOT grants that permit, such traffic signal shall be installed before being granted a certificate of occupancy for the site development activity that exceeds the aforementioned traffic threshold. For example, if the two restaurants are under construction, a C.O. for either one alone may be issued since each one individually generates less than the 90 exiting trips or 60 entering trips threshold, but a C.O. for a second restaurant may not be issued until an application for the traffic signal is made to NYS DOT and either: i) NYS DOT denies the signal because it finds it is not necessary; or ii) NYS DOT grants a permit and the applicant installs the traffic signal.

When additional site development activity subsequently is proposed that is projected to generate 70 or more additional entering trips, for a cumulative total of more than 130 trips at the westernmost driveway, the Applicant shall apply to the NYS DOT for a left turn lane at that location. Certificates of occupancy for uses that will generate 70 or more additional entering trips at the westernmost driveway shall not be granted until: i) NYS DOT approves a permit for the left hand turn land and it is installed, or ii) the NYS DOT finds such improvement is not required, and denies such application.

Relative to the left hand turn lane, the Applicant reported that it recently met with the NYS DOT to determine its plans to remove and replace the Route 6 bridge west of the site access drive, which is included in the NYS DOT list of planned roadway improvements. NYS DOT now wishes to coordinate this bridge project with Putnam County's plan to extend the bike path further north along the former railroad bed and under the subject bridge (The "Putnam County Bike Path Project"). Putnam County is entering stage three of the eight stages of its rails-to-trails program, and expects to construct the bike path under the subject bridge by the end of the summer of 2007. Considering this, NYS DOT has agreed to hold to its previously planned schedule to complete this bridge improvement project in 2007, so that it can be coordinated with the Putnam County Bike Path Project.

The Applicant has met with representatives of the NYS DOT and Putnam County to coordinate the bridge project and Putnam County Bike Path Project, and discussed expanding the bridge project to add a left hand turn lane and sidewalk. All three entities would enter into a formal agreement to complete the bridge improvement project, including adding a left hand turn lane and sidewalk into the project, under NYS DOT's Reverse Betterment Program. Under the agreement, the Applicant will pay its incremental share of the additional project costs and the NYS DOT would pay for the costs of the bridge improvements it had already slated for completion. This agreement will allow the NYS DOT bridge project to be coordinated with the Putnam County Bike Path Project, and provide a left hand turn lane and sidewalk over the bridge into the project site at no additional cost to NYS DOT and no cost to the County. The new bike path and sidewalk improvements will provide significant pedestrian connections to the Gateway Summit and The Fairways projects.

Through the bridge improvement program, the existing bridge would be removed and replaced with a new structure that would be wide enough to accommodate the left hand turn lane. The bridge removal and reconstruction would be staged so that two lanes of traffic can be kept open during construction. It is noted that the Putnam County Bike Path Project (a totally independent project being advanced by Putnam County) will include a disturbance to federally regulated wetlands. Putnam County will provide a wetland mitigation area in conformance with U.S. Army Corps of Engineers standards. The bridge removal and replacement project would not adversely impact wetlands.

Table 4-7

Modified Road Configuration Alternative Pharmacy Option
Build Condition Level of Service Summary

Unsignalized Intersections

Intersection Road	Lane Group Approach Direction-Movement	P.M. Weekday Peak Hour Volume to Capacity Ratio	P.M. Weekday Peak Hour Delay (seconds /vehicle)	P.M. Weekday Peak Hour Level of Service	Saturday Peak Hour Volume to Capacity Ratio	Saturday Peak Hour Delay (seconds /vehicle)	Saturday Peak Hour Level of Service
Optional 15,000-square foot Pharmacy with drive through U.S. Route 6 Primary Site Access West with eastbound left turn lane Modified Road Config. Alternative							
U.S. Route 6	*EB - L, T*	*0.03*	*9.6*	*A*	*0.04*	*10.6*	*B*
Site Access Hotel	*SB - L, R*	*0.41*	*59.6*	*E*	*0.57*	*89.8*	*F*
Optional 30,000-square foot Office U.S. Route 6/Secondary Eastern Site Hotel Access Modified Roadway Configuration Alternative							
U.S. Route 6	*EB - L, T*	*0.03*	*9.6*	*A*	*0.04*	*10.5*	*B*
Site Access Hotel	*SB - L, R*	*0.41*	*60.4*	*F*	*0.56*	*88.1*	*F*

Level of Service (see Table 3.6-3 for level of service criteria).
NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound
L = left, R= right, TR = through and right, (e.g. WB-L = Westbound left).
Unsignalized intersections are in *italics*.
Level of service unchanged from Alternative Access Configuration.

Table 4-8
Modified Road Configuration Alternative Uses Build Condition Level of Service Summary
Primary Site Access in the Town of Carmel

Intersection Roads	Lane Group (Approach Direction -Movement)	P.M. Weekday Peak Hour			Saturday Peak Hour		
		Volume to Capacity Ratio	Delay (seconds/ vehicle)	Level of Service	Volume to Capacity Ratio	Delay (seconds /vehicle)	Level of Service
Optional 15,000-square foot Pharmacy with drive through U.S. Route 6 Primary Site Access West with eastbound left turn lane Modified Road Config. Alternative							
U.S. Route 6	EB - L	0.28	3.4	A	0.40	5.4	A
	EB - T	0.77	8.1	B	0.76	9.5	A
U.S. Route 6	WB - T, R	0.61	5.1	A	0.79	10.5	B
Primary Access	SB - L	0.35	25.4	C	0.38	23.1	C
	SB - R	0.72	38.0	D*	0.25	22.2	C
	Overall		9.2	A		10.8	B
Optional 30,000-square foot Office U.S. Route 6 Primary Site Access West with eastbound left turn lane Modified Road Config. Alternative							
U.S. Route 6	EB - L	0.27	3.7	A	0.31	4.8	A
	EB - T	0.79	9.5	A**	0.76	9.6	A
U.S. Route 6	WB - T, R	0.62	5.7	A	0.78	10.2	B
Primary Access	SB - L	0.32	24.3	C	0.19	21.8	C
	SB - R	0.76	40.0	D*	0.32	22.7	C
	Overall		10.6	B*		10.5	B

NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound
L = left, R= right, T, R = through and right, (e.g. WB - L = Westbound left).
* Reduction in level of service from the FGEIS Proposed Build Condition for eastern access.
**Improvement in level of service from the FGEIS Proposed Build Condition for eastern access.

Community Resources: With no major change in the program of development in comparison to the proposed action, effects of this alternative and its two options on community resources would be similar to the proposed action. No increase in impacts to police, ambulance or fire protection services would be anticipated in comparison to the proposed action and no significant adverse impacts to these community resources would be anticipated.

Water/Natural Resources/Vegetation and Wildlife: A significant benefit of the Modified Road Configuration Alternative is the avoidance of any direct wetland/watercourse impacts. With the shifting of the road access to the west, crossing of the existing watercourse could be avoided, leaving an uninterrupted riparian corridor for wildlife movement and the preservation of buffering vegetation on both sides of the stream channel. Existing wooded areas to the north of the hotel site would be preserved, resulting in the use of more of the open meadow area of the site. The area where the roadway would extend through in this alternative was previously

disturbed by soil mining and Town activities, and has less functional value than the wooded areas on Lot 1.

Tree removal would thus be less for this alternative, while earth movement and site disturbance would be similar for both actions. Elimination of the portion of the road behind the hotel site would also maintain the wildlife corridor from the lower reaches of the stream corridor to the undisturbed lands to the north and east. These lands will be preserved as conservation land following development, and represent significant woody habitat with rocky substrate at the higher elevations.

Elimination of the proposed crossing would also mitigate possible concerns about treatment of runoff from the crossing surfaces and the impervious areas within 100 feet of the crossing on either side, and thus decrease potential impacts to water quality. No variances from the DEP would be required under this action. With the shortening of the road and other necessary adjustments to the site plan, this modified road proposal results in a decrease in impervious surfaces of approximately 1.6 acres.

Demographics/Fiscal Conditions: The Modified Road Configuration Alternative would result in the same increase in residential population as the proposed action, and would have similar benefits in terms of addressing the Town's growing senior population by providing seniors with opportunities to move into more appropriate housing. Elimination of one of the office buildings that is included in the proposed action would result in a slight decrease in the amount of anticipated tax revenues from the Gateway Summit project, though the net effect of the project would still be tax positive, with substantial revenues to the School District without accompanying School District costs. The level of construction jobs generated by the Gateway Summit project would be slightly lower in comparison to the proposed action. No significant adverse demographic or fiscal impacts would be anticipated with either the primary option for this alternative, or the options with either an office building or pharmacy replacing one of the restaurants.

Noise: With the slight reduction in proposed development near Route 6, this alternative would have slightly lower noise impacts in comparison to the proposed action.

Air Quality: The reduction in traffic under the Modified Road Configuration Alternative would result in decreased emissions and air quality impacts. As with the proposed action, no significant air quality impacts would be expected.

Visual Resources: Under this alternative, views into the site from Route 6 would be generally similar to those of the proposed action. The office building from the proposed action that is not included in this alternative would be located to the rear of one of the proposed restaurants. Therefore, eliminating this use from the program of development would not significantly reduce views of the proposed development from Route 6.

The restaurants under this alternative would be grouped slightly closer to one another to allow for modified roadway connection to the upper portions of the site. This would provide greater separation from the proposed hotel. The main onsite roadway would extend through this central portion of the site, replacing the alignment of the proposed action that has its onsite roadway extending to the rear of the proposed hotel. The land that the modified road layout would traverse has already been partly cleared of vegetation in the past for the extraction of soil used

for the nearby landfill, and construction of the onsite roadway through this central portion of the site near Route 6 would not be expected to result in significant adverse visual impacts.

The area behind the proposed hotel where the main roadway of the proposed action begins is currently wooded, meaning the Modified Road Configuration Alternative would also avoid tree clearing for construction of the roadway to the rear of the proposed hotel, decreasing visual effects in that portion of the Gateway Summit site. Switching the easterly primary entrance to the site (at the hotel) with the location of the secondary entrance to the west, with its associated traffic light and turning lanes, would not be expected to significantly impact visual quality on Route 6 in the vicinity of the project site.

The two options for this alternative shown in Figures 4-10 and 4-11 would replace one of the proposed restaurants with either an office building or a pharmacy. These optional uses would be located in the same location as the proposed restaurant that would be replaced. The first option, providing a 30,000-square foot office building, would have a larger building size than the restaurant that it replaces, with a larger building footprint and an increase in height from one to two stories. According to the Applicant, no scenic views or other significant visual resources would be affected by this change in building size and building height. The second option with a 15,000-square foot pharmacy replacing a restaurant would similarly entail a larger building footprint, although this change would not be expected to significantly alter visual conditions compared to the proposed action. Both of these options continue to have the US Route 6 frontage of the Gateway Summit property developed with commercial uses that would be compatible with the general character of Route 6, according to the Applicant.

Construction: There would be slightly less short-term construction effects compared to the proposed action due to the decrease in proposed development on the Gateway Summit project site. The amount of site disturbance would be generally similar to that of the proposed action.

Overview: Table 4-10 provides an comparison between all the alternatives presented.

Table 4-9
Gateway Summit Site: Alternative Impact Comparisons

Area of Concern	*No Action*	*DGEIS Proposed Action*	*DGEIS Alt. 1: Reduced Environmental Impact Alternative*	*DGEIS Alt. 2: Alternate Road Configuration*	*DGEIS Alt. 3: Maximum Buildout Plan*	*FGEIS Proposed Action*	*FGEIS Modified Road Configuration Alt.*
Developed Area							
Residential Units	0	191	0	98	156	150	150
Impervious Surfaces (acres)	0.9	24.5	9.1	25.6	26.2	21.6	20.03
Lawn/ Landscaping (acres)	0	42.8	10.1	48.0	49.7	30.9	32.01
Water Quality Basins	0	6.3	0.0	0.0	0.0	4.39	4.39
Open Space Resources (acres)							
Wetlands (acres)	1.5	1.5	1.5	1.5	1.3	0.04	0
Woods (uplands)	75.3	13.7	63.8	11.2	11.6	8.6	8.73
Meadows (acres)	12.5	1.4	3.8	2.0	1.4	1.84	1.35
Natural Resource Impacts (acres)							
Total Construction Disturbance (acres)	0	73.6	20.2	73.6	75.7	55.32	55.50
Total Woodland Disturbance (acres)	0	61.6	11.5	62.2	63.7	49.76	49.63
Wetland Disturbance (acres)	0	0.0	0.0	0.0	0.2	0.04	0
Wetland Buffer Disturbance (acres)	0	0.9	0.0	0.7	1.2	3.54	3.00
Disturbance to slopes > 15 percent (acres)	0.0	38.6	8.4	41.6	41.9	24.93	25.07
Traffic							
Traffic Generation [1] (Total PM Peak Hour Trips/ Total Saturday Peak Hour Trips)	0/0	514/546	271/365	1403/1811	801/942	421/447	406/441 (487/491 for Pharmacy Option; 470/397 for Office Option)

Source: Tim Miller Associates, Inc., Putnam Engineering, PLLC., Insite Engineering, Surveying and Landscape Architecture, P.C.
[1] Includes trips from The Fairways. See also Tables 4-2 , 4-5 and 4-6 for Trip Generation.

Following are comments and responses on the DGEIS alternatives:

Comment 4-1 (Public Hearing, February 2, 2005, Matthew Bennett): An additional alternative is needed that entails the Gateway Summit project without the residential component. There seems to be consensus that the commercial component would be a very good thing for the Town but, nonetheless, there is substantial mitigation that would be difficult for the Town.

> ***Response 4-1:*** *The Applicant has already examined an alternative with no residential component (Alternative 1: Reduced Environmental Impact Alternative for Gateway Summit Site). This alternative does not include a YMCA, hotel, office use or dedicated open space.*
>
> *An alternative with all of the non-residential uses of the proposed action but with no senior residential component would also not meet the objectives of the Applicant or the Town, which include expanding the range of housing options available to seniors in the Town of Carmel.*
>
> *In the opinion of the Applicant, the proposed senior residential components are consistent with current zoning subject to obtaining a Special Use Permit, and the project site is considered to be an appropriate location for senior housing. No significant, unmitigated adverse impacts have been identified related to the senior housing aspect of the project that would warrant its elimination from the project.*
>
> *The Applicant also notes that the residential component for the Gateway Summit site has been reduced by 41 units under the revised plans.*

Comment 4-2 (Public Hearing, February 2, 2005, Christopher Wilde, Riverkeeper): We [Riverkeeper] urge the Board to give consideration to alternatives with less overall disturbance.

> ***Response 4-2:*** *Since the DGEIS was submitted in 2004, the Applicant has prepared revised plans for Gateway Summit and The Fairways (see Figures 1-1 and 1-2) that would result in lower levels of site disturbance to both sites.*
>
> *The DGEIS's original Alternative 1 (Reduced Environmental Impact Alternative for Gateway Summit Site), Alternative 4 (Conventional Subdivision) and Alternative 5 (Reduced Environmental Impact Alternative for The Fairways Site) do not meet the objectives of either the Applicant or the Town for the creation of much needed senior housing and other public uses including the YMCA and dedicated open space.*
>
> *While its potential physical impacts may be lower, the Conventional Subdivision Alternative for The Fairways site (Alternative 4) results in only 17 single family homes. As a stated in the DGEIS, the Applicant believes that this level of development would not be economically feasible due to the small number of lots that would be created relative to the amount of roadway that would need to be constructed and the cost of land, taxes and other carrying costs associated with the site. This alternative would not meet the objectives of the project sponsor in terms of return on investment. It would also not result in the construction of much needed senior housing in the Town of Carmel. At the same time, it would result*

in impacts to the school district that would not otherwise occur with the proposed action. In the opinion of the Applicant, the layout of the homes under this alternative would not represent an efficient use of the project site, particularly compared to the compact layout of the senior housing included in the proposed action.

The final lower environmental impacting alternative analyzed in the DGEIS (Alternative 5: Reduced Environmental Impact Alternative for The Fairways Site) would not reduce the amount of proposed senior units, but would result in less site disturbance due to the more compact layout. This alternative has been developed further and now constitutes the proposed action for The Fairways.

The overall disturbance currently proposed has been reduced from 73.6 acres to 55.32 acres on the Gateway Summit project site, and from 41.8 acres to 25.90 acres on The Fairways project site, in comparison to the previously proposed layouts for the projects. The revised projects have also reduced disturbance to steep slopes of greater than 15 percent on the Gateway Summit project site from 38.6 acres to 24.93 acres, and on The Fairways project site from 26.1 acres to 14.83 acres. The amount of impervious surface has been reduced from 12.8 acres to 9.5 acres for The Fairways. According to the Applicant, potential impacts relating to the area of site disturbance have been mitigated through prudent site planning and the development of the SWPPPs for the two projects.

Comment 4-3 (Matthew Bennett, Letter, January 5, 2005): The Applicant's Alternatives are not particularly useful. The first Alternative would be much more interesting if the YMCA were included. The second merely shows how not to design a project. The third, with its two hotels, is implausible to say the least. The fact that the fourth alternative would not meet the Applicant's goal of financial return is not the Planning Board's problem. The Applicant's claim in the fifth alternative that attached single family homes comply with the Zoning Code's definition of multiple family senior housing is open to debate. . . Why is the YMCA removed from Alternative 1? Alternative 1 has the beneficial impact of removing residential development from the hillside of Lot 3, while providing commercial/retail projects that could truly enhance the tax base.

Response 4-3: *The State Environmental Quality Review Act (SEQR) requires that the Applicant evaluate reasonable alternatives to the action that are feasible. The DGEIS states that the level of development resulting from the fourth alternative studied -- a conventional subdivision on The Fairways site with 17 single family homes -- would not be economically feasible due to the small number of lots that would be created relative to the amount of roadway that would need to be constructed.*

In the Applicant's opinion, this rationale is consistent with SEQR regulations found in NYCRR Part 617.9, which require evaluation of a "reasonable range of alternative to the action that are feasible, considering the objectives and capabilities of the project sponsor."

Part 617 also requires that a "suitable balance of social, economic and environmental factors be incorporated into the planning and decision-making processes of state, regional and local agencies" (6 NYCRR Part 617.1).

Alternative 1 is provided to illustrate an alternative with reduced environmental impacts on the Gateway Summit site. Similar to constructing a 17-lot single family subdivision at The Fairways, the limited construction proposed under Alternative 1 would not be considered to be feasible by the Applicant if a YMCA were to be substituted for one of the proposed retail uses now proposed in this alternative. According to the Applicant, the intention of this alternative is to avoid construction on much of the Gateway Summit project site.

Development on the limited Route 6 frontage of the site would need to be maximized in order to make this alternative economically feasible from an infrastructure cost perspective. It should be noted that this alternative, with three commercial sites only at Gateway Summit, does not meet the objectives of the Applicant even without the substitution of a YMCA for one of the three proposed commercial/retail uses.

The comment regarding Alternative 2 is noted. The Applicant was requested to evaluate an Alternative Road Alignment alternative for Gateway Summit and does not propose to construct this alternative. While it includes the same overall level of disturbance to the Gateway Summit project site with approximately half the proposed number of residences, this alternative would increase impacts to steep slopes in comparison to the proposed action, along with impacts to traffic. Impacts to wooded areas of the site would decrease by 2.5 acres.

Comment 4-4 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): SEQRA requires an EIS to include "a description and evaluation of the range of reasonable alternatives to the action that are feasible, considering the objectives and capabilities of the project sponsor." 6 NYCRR §617.9(B)(5)(v). The range of alternatives may include variations based on technology, scale, magnitude, design, timing, use, and types of actions as appropriate. The DGEIS fails to explore the full range of these alternatives, in particular alternatives that would avoid and mitigate water quality impacts. As such, the FGEIS should be supplemented with a more thorough examination of project alternatives.

Response 4-4: *As stated previously, the Applicant has developed revised plans for both Gateway Summit and The Fairways that reduce the amount of proposed development at Gateway Summit, and that substantially reduce impacts to steep slopes and wetlands. The currently proposed action was developed with input from the New York State Attorney General's office and the group Riverkeeper. According to the Applicant, with less impervious surface and redesigned SWPPPs, the amended action represents a significant reduction in potential water quality impacts compared to the proposed action for the two projects described in the DGEIS.*

Comment 4-5 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection; Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): The disturbance of steep slopes (>15%) accounts for more that 50 percent of the total earthwork on Gateway Summit and more than 60 percent of all earthwork on the Fairways project. Construction in these areas poses the threat of significant soil loss and sedimentation of the site's surface water features. Properly designed erosion and sediment control plans including strict sequencing and phasing requirements can serve to mitigate the potential impacts of steep slope disturbance. However, no such plans are

included in the DGEIS. Section 4 of the DGEIS offers only one alternative to limit steep slope impacts on Gateway Summit (Alternative No. 1) and one alternative to minimize slope impacts on Fairways (Alternative No. 4).

The DEIS must demonstrate that the project sponsor has considered alternatives that avoid earthwork on slopes in excess of 20% thus avoiding the potential adverse impacts associated with erosion and sedimentation during and after construction.

> ***Response 4-5:*** *According to the Applicant, due to the topography of the project sites, impacts to slopes with grades of 20 percent or more are unavoidable. However, the current proposal was prepared largely in response to concerns over impacts to slopes.*
>
> *In meetings held between the Applicant, the New York State Attorney General's office and the Riverkeeper, a conceptual approach to protection of slopes was agreed to, with an understanding that disturbance to slopes over 15 percent for all practical purposes, was unavoidable on the project sites. The agreed upon approach related to slope impacts is reflected in the revised action. An emphasis was placed on minimizing disturbance on slopes of 20 percent or more, and reducing disturbance even further on slopes with grades of 25 percent or more.*
>
> *As stated above, the revised projects have reduced disturbance to slopes of greater than 15 percent on the Gateway Summit project site from 38.6 acres to 24.93 acres, and on The Fairways project site from 26.1 acres to 14.83 acres in comparison to the previously proposed layouts for the projects.*
>
> *The project engineer redesigned the two projects to specifically avoid disturbance to areas of steep slope. As a result, the revised plans for Gateway Summit shift the proposed development further to the west, reducing the impacts to steeper slopes in the northeastern corner of the site. The revised plans for The Fairways shift the proposed residential development further to the west, reducing disturbance to the steeper slopes above the pond.*
>
> *As indicated above, properly designed erosion and sediment control plans in the SWPPPs will mitigate the potential impacts associated with steep slope disturbance, according to the Applicant. Site specific Erosion and Sediment Control Plans have been developed for the two projects and are included in the attached SWPPPs as Drawing SP-4 Gateway Summit Sediment and Erosion Control Plan and Drawing SP-4 Fairways Sediment and Erosion Control Plan.*

Comment 4-6 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection; March 1, 2005 Letter, John L. Lynch, Putnam County Division of Planning and Development): Alternative No. 1 proposes commercial development of the Gateway Summit project with "reduced environmental impacts." This alternative appropriately limits development to the predisturbed areas of the site, eliminates the roadway and pedestrian stream crossing and wetland buffer disturbances, and avoids areas of steep slopes to the maximum extent practicable.

> ***Response 4-6:*** *Comment noted. According to the Applicant, the potential environmental impacts anticipated from the amended proposal currently*

proposed have been mitigated through site planning and the development of the two SWPPPs for the proposed action.

Comment 4-7 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): The alternate road alignment through Gateway proposed in Alternative No. 2 would largely avoid disturbance of steep slopes for road construction, and would eliminate the roadway stream crossing. However, the DGEIS fails to provide a direct comparison of potential impacts between this alternative and the Proposed Action, because Alternative 2 also includes further subdivision of the property, elimination of the senior housing component, addition of retail uses, and development of the "conservation lot #9."

Response 4-7: *According to the Applicant, the revisions to the now proposed Gateway Summit project greatly reduce disturbance of steep slopes, as described in Chapter 1.0 and 3.1, while including development of senior housing within the project, and reduced commercial uses on Route 6. The conservation area has been eliminated from the project site, with its land area added to The Fairways project site, though with no development proposed in that location. According to the Applicant, the potential environmental impacts anticipated from the construction and operation of the action currently proposed have been mitigated.*

Comment 4-8 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): Alternative No. 4 (Conventional Subdivision on Fairways") significantly reduces overall disturbance, steep slope activity, impervious surface, and sewage generation, eliminates the LC-26 wetland buffer incursion, and precludes the need for a Special Use Permit. However, the DGEIS suggests, without substantiation, that the required roadway construction would not be "economically feasible due to the small number of lots that would be created."

Response 4-8: *Alternative 4 includes construction of approximately 4,200 linear feet of roadway to access a total of 17 new single family homes. The Applicant estimates that based on an estimated roadway cost of $250 per linear foot roadway construction for The Fairways under this alternative would total over $1 million, which in combination with land costs and carrying expenses, is considered by the Applicant to be excessive for the return on investment expected from only 17 homes.*

It is further noted by the Applicant that the currently proposed plan for The Fairways significantly reduces overall disturbance, steep slope activity, and impervious surfaces on the site.

Comment 4-9 (Letter, March 4, 2005, James Benson, New York City Department of Environmental Protection): Based upon its review of the Proposed Action, and the alternatives included in the DGEIS, DEP believes that yet to be identified alternatives to the Proposed Action exist that would pose less potential for harmful environmental impacts. As such, DEP recommends that the FGEIS include a more thorough examination of project alternatives.

Response 4-9: *The Applicant indicates that this comment has been addressed through the replacement of the proposed actions analyzed in the DGEIS with the*

revised plans that constitute the currently proposed actions (see Chapter 1.0 and 2.0 for a description of the revised plans and Chapter 3.0 for evaluation of their environmental impacts).

Comment 4-10 (Attorney General, Environmental Protection Bureau Letter, March 4, 2005): Alternative 1 for the Gateway Summit portion of the Project is superior from an environmental and water quality standpoint - allowing for the development of the least sensitive, least sloped, land in an area directly off of Route 6 that is most likely to have the most commercial advantages. This alternative would allow for the commercial development of parcels #1, #2, and #3. There would be no reason to remove the proposed hotel/conference center from the mix of potential businesses on these parcels. This alternative would reduce construction disturbances by approximately 66 percent and avoid construction cuts on almost all slopes over 15 percent that are mostly contained on parcels #4 to #9. The stream crossing necessitated by the access road would be eliminated. Connections to adjacent utilities along Route 6 would be shorter, more direct and less costly. Stormwater pollution prevention measures would be vastly simplified. The level of impervious surfaces, a key factor in the protection of water quality, would be reduced from 24.5 acres to 9.1 acres for the Gateway portion of the Project. Total construction disturbance on this portion of the Project would be reduced from 73.6 acres to 20.2 acres. (DGEIS Table 4-4). The larger build alternative advocated by the proponent would generate so much traffic that the Project sponsor finds a need to propose the potential widening of Route 6 to four lanes. (DGEIS at 1-14). Selection of Alternative 4 would greatly reduce the need for such a costly, environmentally harmful and disruptive roadway project.

Response 4-10: *In addition to greatly reducing physical impacts to the project sites, the currently proposed action has reduced the level of traffic generated by the Gateway Summit project and have eliminated the connection to Fair Street for The Fairways.*

According to the Applicant (as described in Chapters 2.0 and 3.0), the revisions to the projects achieve the environmental objectives described in this comment, with the exception of the crossing of the stream by the proposed Gateway Summit roadway, which is necessary to access the proposed subdivision and the two existing parcels. See Response 3.4-6.

Even with the project changes now proposed, a crossing of the perennial stream will be required, according to the Applicant. The proposed crossing of the perennial stream, which has been designed to avoid all potential water quality impacts, will require permitting from the Town of Carmel Environmental Conservation Board. This crossing will therefore require no additional permitting from NYCDEP, according to the Applicant

The proposed impervious surfaces (roadway) are permitted pursuant to Section 18-39 (a) (6) (ii) of the NYCDEP regulations, which permits the construction of an impervious surface for a new road necessary to provide an access road to two or more parcels. The subject new road is necessary to access two existing parcels -- one associated with the Gateway Summit project (tax parcel 55.-2-23.1), and the other associated with The Fairways project (tax parcel 44-2-1). According to the Applicant, the proposed condition clearly meets the provision of the above cited section of the regulations, which permits the

impervious surface associated with the construction of a new road. See Response 3.4-54.

The currently proposed action reduces overall disturbance from 73.6 acres to 55.32 acres on the Gateway Summit project site, and from 41.8 acres to 25.90 acres on The Fairways project site. The revised projects have also reduced disturbance to steep slopes of greater than 15 percent on the Gateway Summit project site from 38.6 acres to 24.93 acres, and on The Fairways project site from 26.1 acres to 14.83 acres. The amount of impervious surface has been reduced from 12.8 acres to 9.5 acres for The Fairways.

Comment 4-11 (Attorney General, Environmental Protection Bureau Letter, March 4, 2005): We note that project proponent's claim that this Alternative would not provide an adequate return on investment is completely unsupported. SEQRA requires the selection of alternatives that mitigate or avoid adverse environmental impacts to the maximum extent practicable. An unsupported statement of financial necessity is not a sufficient basis to countermand this fundamental legal requirement of SEQRA. This claim by the project proponent appears to be unreasonable in light of the exploding commercial and real estate land values in Putnam County that would most likely result in a more than reasonable return on investment. We also note that the proposed location for the YMCA building and parking lot (parcel #8, DGEIS Figure 2-6) contains an extensive amount of very steep slopes over 25 percent. (DGEIS Figure 3.1-9). This parcel, as offered by the project proponent, is so steeply sloped as to normally be considered unbuildable.

Response 4-11: *As stated above, the current proposal reduces disturbance to steep slopes of greater than 15 percent on the Gateway Summit project site from 38.6 acres to 24.93 acres, and on The Fairways project site from 26.1 acres to 14.83 acres in comparison to the previous versions of the projects evaluated in the DGEIS.*

See Response 4-8 above regarding the economic feasibility of project alternatives analyzed in the DGEIS.

Comment 4-12 (Attorney General, Environmental Protection Bureau Letter, March 4, 2005): Alternative 4 for The Fairways portion of Project makes sense from an environmental standpoint. Total construction disturbance would be reduced from 41.7 acres to 24 acres. The level of impervious surfaces would be reduced from 12.8 acres to 4.9 acres. (DGEIS at 4-11, Table 4-5). Many of the same benefits, including reduced traffic and roadway expansion impacts, would result from the construction of 17 homes under regular zoning, as opposed to 150 senior housing units. As with Alternative 1, claims by the project proponent that this alternative would not be economically feasible are completely unsupported, as they must be before a claim of economic hardship can trump SEQRA's directive to choose the least environmentally harmful alternative.

Response 4-12: *The revised proposal reduces overall disturbance from 73.6 acres to 55.32 acres on the Gateway Summit project site, and from 41.8 acres to 25.90 acres on The Fairways project site. The amount of impervious surface has been reduced from 12.8 acres to 9.5 acres for The Fairways.*

See Response 4-8 above regarding the economic feasibility of project alternatives analyzed in the DGEIS. Construction of 17 homes at The Fairways would not achieve the benefits of the proposed action in terms of addressing demand for much needed senior housing on a site that has existing available infrastructure to support the proposed level of new senior housing, according to the Applicant.

Comment 4-13 (Attorney General, Environmental Protection Bureau Letter, March 4, 2005): As another option, The Fairway proposal could limit clustered senior housing to those areas with slopes below 15 percent and extend the roadway onto parcel #5 of the Gateway Summit proposal (see DGEIS Figures 2-6, 3.1-8, and 3.1-9). Parcel #5 contains a significant area of land with slopes below 15 percent that also could be used for clustered senior housing. Id. Access to parcel #5 via The Fairways would eliminate the need for the construction of a costly access roadway from Route 6 through steeply sloped areas of the Gateway Summit parcel. This option, in conjunction with Alternative 1 discussed above, is a sensible one that should be evaluated in the FGEIS.

Response 4-13: *In response to this comment and discussions between the Applicant and the Attorney General's Office, the design for The Fairways has been revised to now utilize a more compact layout and shift development away from steep slopes in comparison to the previously proposed layout. This new proposed action for The Fairways includes six multi-family senior units containing 96 of the total proposed 150 units in order to limit impacts to steep slopes and overall site disturbance. The current plans have reduced disturbance to steep slopes of greater than 15 percent on the Gateway Summit project site from 38.6 acres to 24.93 acres, and on The Fairways project site from 26.1 acres to 14.83 acres in comparison to the previous versions of the projects evaluated in the DGEIS.*

According to the Applicant, the commercial uses that are proposed with access from Route 6 would not be economically viable if placed at the far end of a dead end road leading from a local street, as suggested in this comment. Access and visibility requirements of future tenants require the Route 6 entry point.

Comment 4-14 (Letter March 3, 2005, Christopher Wilde, Riverkeeper): The necessary balancing of costs and benefits cannot be performed here, because the DEIS does not provide the lead agency with reasonable options to the proposed action that both reduce impact and provide at least some of the arguably beneficial and currently 'underavailable' elements of the project. As presented, the range of alternatives for Gateway Summit - a reduced impact alternative without the most critical elements, and two others with the same or more environmental impacts - together serve to steer the lead agency directly to the applicant's preferred project. Indeed, it practically provides no real choice at all.

Therefore, the applicant must be required to present at least one lower-impact alternative that includes a YMCA, hotel, and senior housing, or at a bare minimum some mix of these elements. If some of the more profitable elements need to be eliminated or scaled down to achieve this, SEQRA requires no less

Response 4-14: *The Applicant met with the group Riverkeeper following the Public Hearing on the DGEIS and has revised the projects in response to these discussions, Comment 4-14, and other similar comments.*

The currently proposed action reduces impacts to steep slopes, wetlands and other site features, and eliminates elements of the project in order to further mitigate potential impacts, including those on traffic. The number of senior housing units has been reduced by over 20 percent on the Gateway Summit site (from 191 to 150) and the amount of commercial development facing Route 6 has been reduced from 52,000 square feet with a hotel and 12,000-square foot banquet hall/conference center to 13,900 square feet with a hotel and 12,000-square foot banquet hall/conference center. The amount of proposed office space has also been reduced from 18,000 square feet (including associated convenience retail) to 16,000 square feet.

As stated previously, the current proposal reduces overall disturbance from 73.6 acres to 55.32 acres on the Gateway Summit project site, and from 41.8 acres to 25.90 acres on The Fairways project site. The revised projects have also reduced disturbance to steep slopes of greater than 15 percent on the Gateway Summit project site from 38.6 acres to 24.93 acres, and on The Fairways project site from 26.1 acres to 14.83 acres. The amount of impervious surface has been reduced from 12.8 acres to 9.5 acres for The Fairways.

Comment 4-15 (Letter March 3, 2005, Christopher Wilde, Riverkeeper): As for the Fairways portion of the site, the applicant presents two alternatives to the proposed action in addition to the 'no action' alternative; a conventional subdivision, and a so-called 'lower impact' alternative. Though not as egregious as the deficiencies in the alternatives presentation for Gateway Summit, here again the applicant has not provided the Planning Board with anything but a road map to the preferred project.

For example, the conventional subdivision, while imposing less physical impact on the property, does not fulfill the purported need for senior housing in Carmel and Putnam County, nor, in the applicant's opinion, is it economically feasible. See DEIS at 4-10-11. The 'lower impact' alternative, which would satisfy the demand for senior housing, in fact is merely a different mix of housing formats and includes only negligible differences in environmental impact. See DEIS at 4-12-14. Together, these provide no meaningful comparison to the proposed action.

Response 4-15: *The alternatives analyzed in the DGEIS were defined in the Scoping Document for the DGEIS. In response to comments from groups, including Riverkeeper, the action has been redesigned to significantly reduce the level of proposed development and anticipated environmental impacts, as quantified above in Response 4-14.*

Comment 4-16 (Letter March 3, 2005, Christopher Wilde, Riverkeeper): In fact, for purposes of the alternatives analysis the applicant should not fully treat Fairways and Gateway Summit as wholly separate projects. For each of the alternatives presented for Fairways the DEIS states that proposed uses would remain unchanged on Gateway Summit. Surely the amount and type of senior housing proposed in total, for example, could be modified on a whole-site basis, rather than keeping one static for the comparison.

Response 4-16: *As stated above, the amount of senior housing currently proposed under the revised plan for Gateway Summit has been reduced by approximately 20 percent. The DGEIS evaluated a conventional subdivision on the Fairways site alone, consistent with the alternatives identified in the Scoping Document.*

Comment 4-17 (Letter March 3, 2005, James Bryan Bacon, for Croton Watershed Clean Water Coalition, Inc., and Putnam County Coalition to Preserve Open Space): SEQRA provides:

> "The lead agency may require a supplemental EIS, limited to the specific significant adverse environmental impacts not addressed or inadequately addressed in the EIS that arise from:
>
> (`a') changes proposed for the project; or
> (`b') newly discovered information; or
> ('c') a change in circumstances related to the project." (6 N.Y.C.R.R. 617.9(a)(7(i)).

As stated by the Gerrard Treatise, cited by many Courts in their determinations, the objective of the SEIS is:

> "to provide involved agencies and the public with information about potentially significant environmental effects of an action that were *omitted from discussion in the earlier EIS."* (Emphasis added; and see: VLG Real Estate Developers v Gold, Index No. 170227 (Sup. CT. Rensselaer County, December 19, 1989))." (Id. at §3.13[1]).

Indeed, if the lead agency learns of important new issues about significant adverse environmental effects regarding the proposed action in the course of receiving public comments or issues that were omitted or not adequately addressed in the DEIS, the lead agency must require the preparation of the SEIS in order to solicit additional public comment on the new issues. (6 N.Y.C.R.R. §617.9(a)(7)).

Here, the lead agency was apprised of a wide range of information indicating the DEIS was deficient in addressing scoping requirements concerning impacts to taxes, community services, stormwater, steep slopes, wetlands (impacted by erosion and stormwater), wildlife, traffic and other impacts.

The cure entails the lead agency preparing a new scoping document requesting not only compliance with all environmental regulations but also requesting a reasonable range of alternatives that will "minimize to the maximum extent practicable" impacts to the environment. (ECL §8-0109[2](f)).

Regarding alternative designs, the Board would be within reason to request a reduced scale alternative that does not impact wetlands, does not cross watercourses, and does not impact steep slopes.

Response 4-17: *The Planning Board, in its capacity as the Lead Agency, paid considerable attention to the scope, when reviewing the submitted Draft GEIS and after review by its own professional planner and engineer, and comparing the administrative Draft GEIS to the adopted scope, required the applicant to*

update the document to provide information required by the scope. After the DGEIS was revised, and after due diligence and deliberations, the Planning Board adopted the DGEIS as complete with respect to scope and adequacy. The evaluations provided by the Applicant herein indicate that the revised plans decrease environmental impacts in comparison to the previous versions of the plans, as a result of reductions in impervious area, steep slope disturbance and grading, and elimination of the Fair Street access. Therefore, a supplemental EIS is not considered by the Applicant to be necessary.

The revised plan now proposed has been developed to address comments made in response to the DGEIS. However, this alternative does not represent a significant change to the project in terms of its use concept, according to the Applicant. The project continues to include a hotel, a YMCA, minor office space and senior housing, but at a significantly lower intensity and density than analyzed in the DGEIS.

The revised proposal that has been prepared in response to this and other comments significantly reduce site disturbance and will "minimize to the maximum extent practicable" potential environmental impacts, according to the Applicant. The plan revisions have relocated the majority of the site improvements and stormwater basins outside of the 100-foot adjacent area to onsite wetlands. A portion of the stormwater treatment basins located on the Gateway Summit project site (YMCA parcel) are located within the 100-foot adjacent area. Wetland mitigation plans will be prepared for this specific area in order to mitigate any potential adverse impacts associated with construction, and operation, of the basins.

The newly designed culvert on the Gateway Summit site will minimize disturbance, and mitigate potential adverse impacts, according to the project engineer. The current proposal for the watercourse crossing for the Gateway Summit access drive entails construction of a three-sided culvert with an open bottom so as to minimize disturbance to the existing stream bed on the project sites. While minor temporary impacts adjacent to the banks of the watercourse in the vicinity of the culvert will take place during construction, potential impacts on water quality will be mitigated through careful construction sequencing and dewatering practices.

The roadway is permitted pursuant to Section 18-39 (a) (6) (ii) of the NYCDEP regulations, which permits the construction of an impervious surface for a new road necessary to provide an access road to two or more parcels. The subject new road is necessary to access two existing parcels -- one associated with the Gateway Summit project (tax parcel 55.-2-23.1), and the other associated with The Fairways project (tax parcel 44-2-1). According to the Applicant, the proposed condition meets the provision of the above cited section of the regulations, which permits the construction of impervious surface associated with the construction of a new road.

As described in detail in Chapter 3.1, disturbance to steep slopes of greater than 15 percent has been reduced on the Gateway Summit project site from 38.6 acres to 24.93 acres, and on The Fairways project site from 26.1 acres to 14.83

acres, in comparison to the previously proposed projects evaluated in the DGEIS.

Comment 4-18 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): The project sponsor must consider alternatives that locate site improvements. including SMPs, outside the standard 100 foot adjacent area to on-site wetlands thus avoiding the loss or impairment of valuable buffer areas.

Response 4-18: *See Response 4-17.*

Comment 4-19 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): The DEIS must demonstrate that the project sponsor has considered alternatives that preserve and protect existing forested areas rather than revegetating or reclaiming as landscaped areas.

Response 4-19: *According to the Applicant, removal of trees is not viewed as a potential significant adverse impact. Overall disturbance proposed in the revised action in comparison to the previous layouts (which includes forested areas) is reduced from 73.6 acres to 55.32 acres on the Gateway Summit project site, and from 41.8 acres to 25.90 acres on The Fairways project site.*

Comment 4-20 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): The DEIS must consider a site layout that is designed to maximize groundwater recharge through conserved forested areas, limited site disturbance. limited and disconnected impervious surfaces, and stormwater runoff directed to infiltration practices where feasible.

Response 4-20: *According to the Applicant, the currently proposed action accomplishes the objectives described in the comment above, as quantified in previous responses. With regard to the revised SWPPPs, stormwater runoff from both the Gateway Summit and Fairways project sites will be treated by two and three stormwater management basins in series. These stormwater basins will treat the proposed stormwater runoff to the maximum extent attainable, as further detailed in Chapter 3.4.*

The impervious surfaces are proposed on Paxton Soils that are characterized by rapid runoff and low permeability. Because of that, construction of impervious surfaces on top of these soils is not expected to significantly impact existing recharge.

Comment 4-21 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): The analysis of access road alternatives to Parcel A must be fully explored and should include a comparison of the adverse environmental impacts posed by each alternative. The DEIS must consider a layout of internal roads that limits adverse impacts and has been designed in consideration of any potential conflicts between DEP's impervious surface restrictions and the Town of Carmel public/private road design requirements.

Response 4-21: *The previously proposed impervious road connection to Fair Street has been eliminated from the proposed layout for The Fairways under the*

revised action, fully mitigating potential wetland impacts in that location. The comment regarding the proposed crossing of the perennial stream on the Gateway Summit site by the on-site roadway -- which has been designed in conformance with Town standards -- is addressed in Responses 3.4-6, 3.4-54 and 4-17.

Comment 4-22 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): The DEIS must include a full build-out analysis for Parcel A under the current zoning designation (R 170) without the benefit of a special use permit to allow senior housing and, a full build-out analysis for Parcel B under the I-L zoning designation. The analyses should include conceptual drawings that consider site limitations and are of detail adequate to allow for comparison of the environmental impacts posed by each alternative.

Response 4-22: *The DGEIS evaluated a buildout of a conventional subdivision at The Fairways pursuant to existing zoning (see Alternative 4 in DGEIS Chapter 4.0). Alternative 3, also evaluated in the DGEIS, entails the maximum buildout of the Gateway Summit portion of the project site pursuant to zoning. The DGEIS provides drawings showing existing site limitations in Chapter 3.0 and provides site impact data in Chapter 4.0 to compare the environmental impacts from these alternatives to those of the proposed action. According to the Applicant, the level of detail provided on the impacts of these and other project alternatives is sufficient to permit a comparative assessment of these alternatives, and the potential environmental impacts anticipated from them, consistent with SEQRA requirements.*

Comment 4-23 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): Each site design alternative must include an accurate assessment of the requisite mitigation including, the extent of stormwater management measures necessary to achieve no increase in peak rates of runoff and no increase in pollutant loading over existing conditions.

Response 4-23: *Each of the alternatives is evaluated generally in Chapter 4.0 of the DGEIS with respect to potential impacts on water resources. As stated above, these descriptions are considered to be sufficient to permit a comparative assessment of these alternatives, consistent with SEQRA requirements. Detailed SWPPPs have been prepared for the currently proposed action and are found in the Appendix of this FGEIS. Potential impacts to surface waters of the two proposed projects, and their respective proposed mitigation measures, are described in detail in Chapter 3.0 of this FGEIS.*

Comment 4-24 (Letter February 28, 2003, Matthew Giannetta, New York City Department of Environmental Protection): The project sponsor must consider alternatives that locate site improvements. including SMPs, outside the standard 100 foot limiting distance to watercourses thus avoiding the loss or impairment of valuable riparian buffers.

Response 4-24: *Under the revised proposal, the stormwater management basins have been located outside of wetland buffers to the greatest extent possible. According to the project engineer, in order to treat stormwater runoff from the proposed development areas, the basins must be located downhill of the proposed development. In addition, to properly treat the stormwater, multiple*

basins are proposed, which requires additional area and elevation differentials. Lastly, the NYSDEC and NYCDEP typically require that discharge from the basins be conveyed to another basin, defined channel or waterbody, which requires some wetland buffer disturbance.

Under the revised action, direct impacts to wetlands are limited to 0.04 acres on the Gateway Summit site, with disturbance of wetland buffer area totaling 3.54 acres at Gateway Summit and 0.14 acres at The Fairways. These impacts and proposed mitigation measures are discussed in detail in chapter 3.2 of this FGEIS.

Comment 4-24 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): Additional details are needed for the alternatives. All alternatives should be developed to an extent that apples-to-apples comparisons with the proposed action can be made. The volume and content (e.g., sediments and contaminants) of runoff for the proposed action should be calculated and compared to each studied alternative.

Response 4-24: *See Response 4-23.*

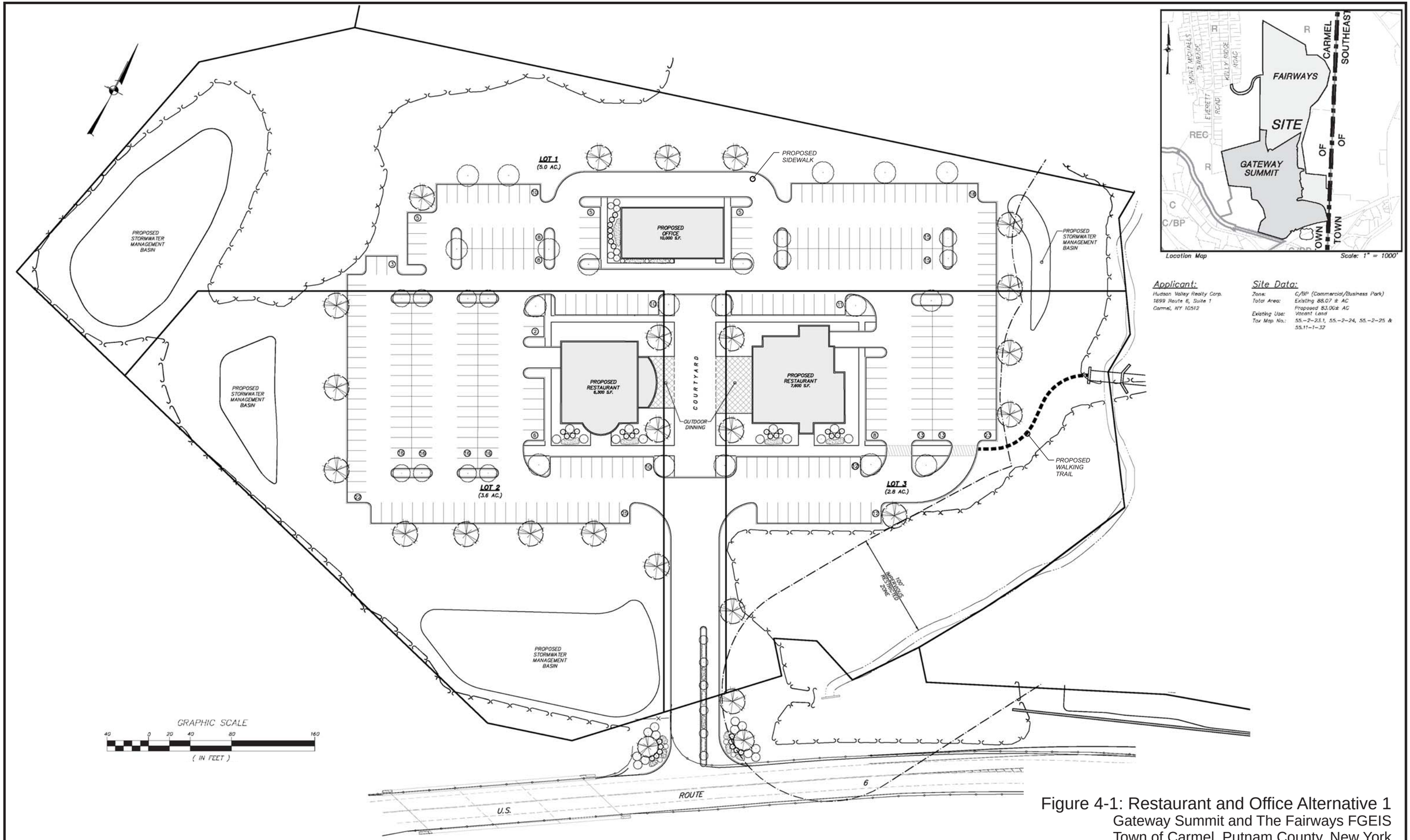
Comment 4-25 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): The project sponsor should be required to develop in detail an alternative that reduces impervious surfaces by 60 percent and that keeps all development off of slopes that exceed 15 percent, and that avoid all wetlands and their associated buffers.

Response 4-25: *As stated previously, the revised action reduces disturbance to steep slopes of greater than 15 percent on the Gateway Summit project site from 38.6 acres to 24.93 acres, and on The Fairways project site from 26.1 acres to 14.83 acres in comparison to the previously proposed layouts. The amount of impervious surface has been reduced from 12.8 acres to 9.5 acres for The Fairways. The current proposal, its anticipated impacts and proposed mitigation measures, are described in this FGEIS at the same level of detail as the previously proposed layouts in the DGEIS.*

Direct impacts to wetlands associated with the previously proposed Fair Street connection for The Fairways have been eliminated. See Response 4-24 regarding wetland and wetland buffer disturbance.

Comment 4-26 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): The applicant should focus on reducing impervious area by presenting alternatives in the DEIS that are designed to eliminate problems related to stormwater volume, including stacked parking and multi-story buildings.

Response 4-26: *The Applicant has revised the plans for both Gateway Summit and The Fairways to include multi-family senior housing units that have parking located below the proposed buildings in order to limit the amount of impervious surface on the two sites. The amount of impervious surface has been reduced from 12.8 acres to 9.5 acres for The Fairways.*



Location Map — Scale: 1" = 1000'

Applicant:
Hudson Valley Realty Corp.
1899 Route 6, Suite 1
Carmel, NY 10512

Site Data:

Zone:	C/BP (Commercial/Business Park)
Total Area:	Existing 88.07 ± AC Proposed 83.00± AC
Existing Use:	Vacant Land
Tax Map No.:	55.-2-23.1, 55.-2-24, 55.-2-25 & 55.11-1-32

Figure 4-1: Restaurant and Office Alternative 1

Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 04/11/06
Scale: Graphic

File 02136 07/11/06
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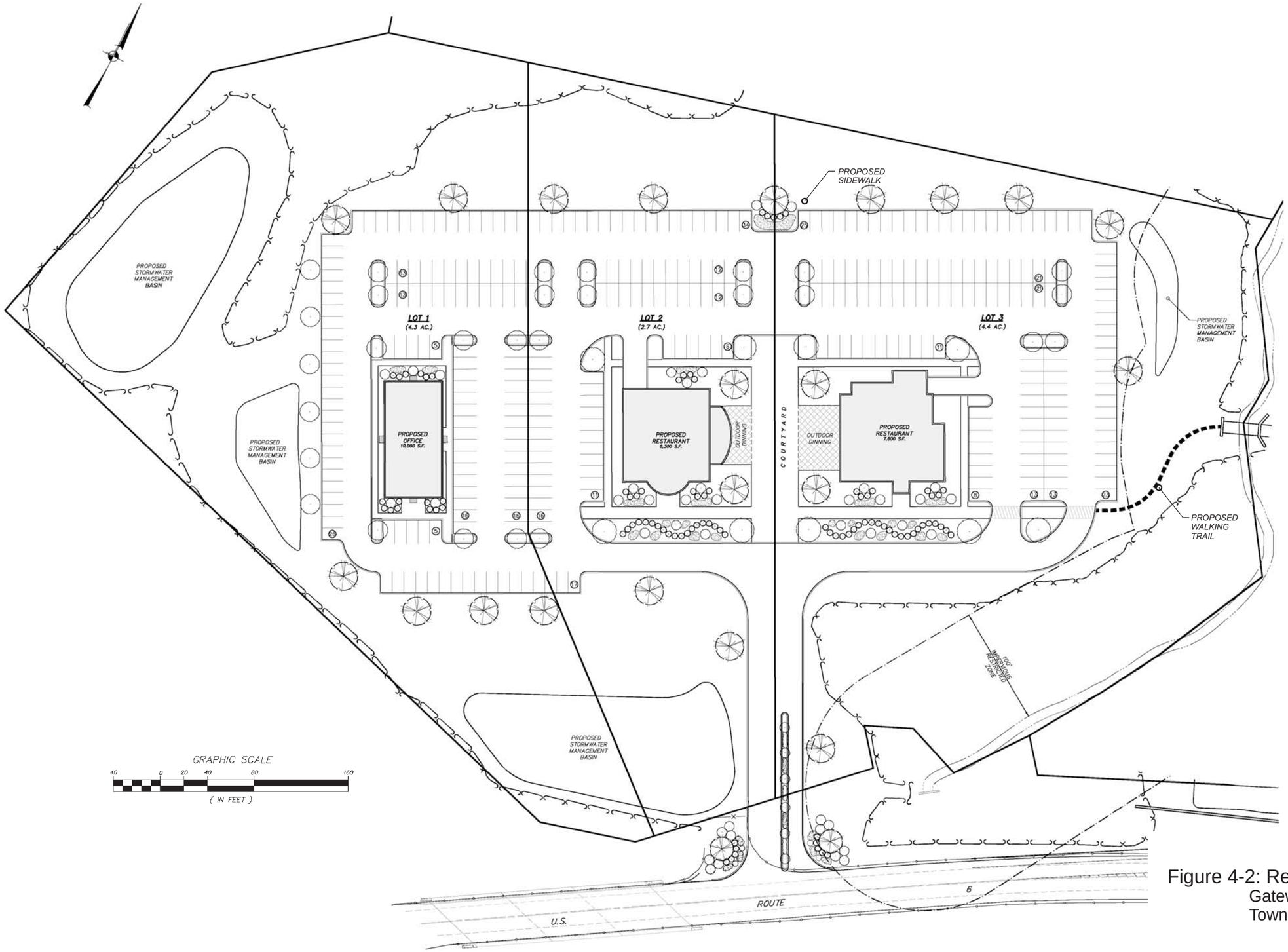

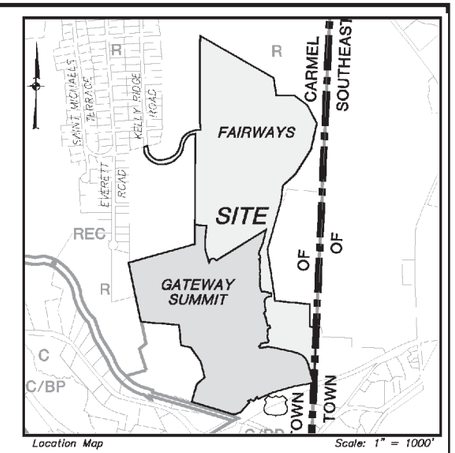

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Figure 4-2: Restaurant and Office Alternative 2
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 04/11/06
Scale: Graphic

File 02136 07/11/06
JS\02136

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

1. The existing conditions, property boundaries and topography shown hereon was taken from a survey prepared by Terry Bergendorff Collins dated May 17, 2005.

2. The subject application requires special exception use permit in accordance with Local Law 9 of 1998. The project conforms to the requirements of said law as follows:

   a) The subject property is situated in an C/BP Zone, and is contiguous to a residential zone.

   b) The site exceeds the minimum frontage of one hundred twenty-five (125) feet on a town road.

   c) The site exceeds the minimum area of fifty thousand (50,000) square feet.

   d) The site is served by municipal water and municipal sewer.

   e) The project density is 3.2 dwelling units/acre, which is less than the permitted maximum of forty (40) dwelling units/acre.

   f) The project is comprised of 150 dwelling units, which is equal to the permitted one hundred fifty (150) dwelling units and coverage of the lot by buildings is less than thirty-five percent (35%).

   g) All buildings are set back a minimum of forty (40) feet from the property lines.

   h) No buildings exceed forty (40) feet in height or two (2) stories above ground.

   i) All multi-level buildings shall contain an elevator.

   j) All buildings shall contain a fire suppression system.

   k) The project exceeds the minimum of three hundred (300) square feet of recreation space per unit which includes a community room.

   l) A limit of one point one (1.1) on site parking spaces is provided for each dwelling unit, including appropriate handicap parking.

   m) All units shall be occupied exclusively by persons of fifty-five (55) years of age or older and the spouse of any such person.

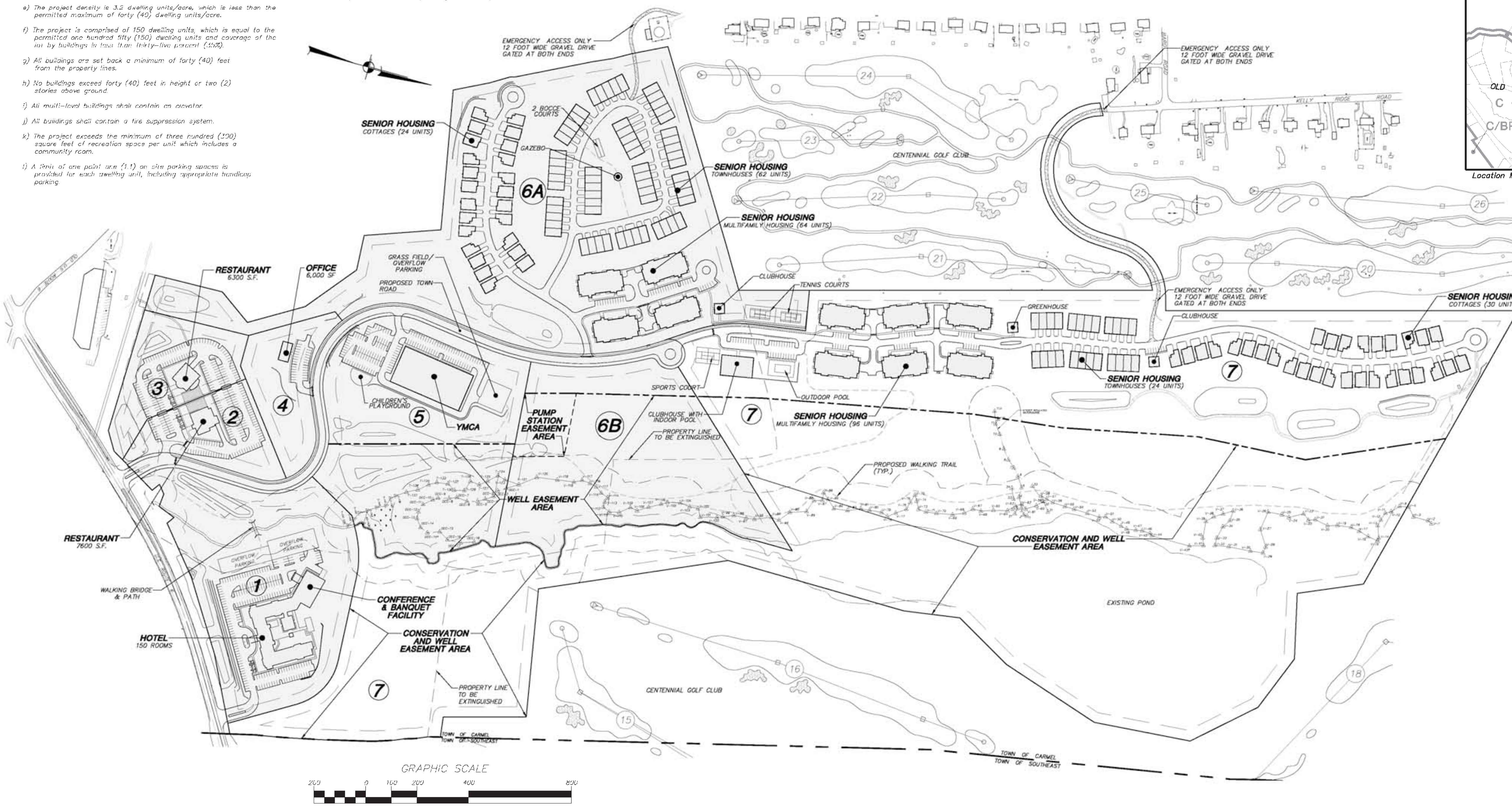
   n) the apartment sizes exceed the minimum of six hundred (600) square feet for one bedroom apartments.

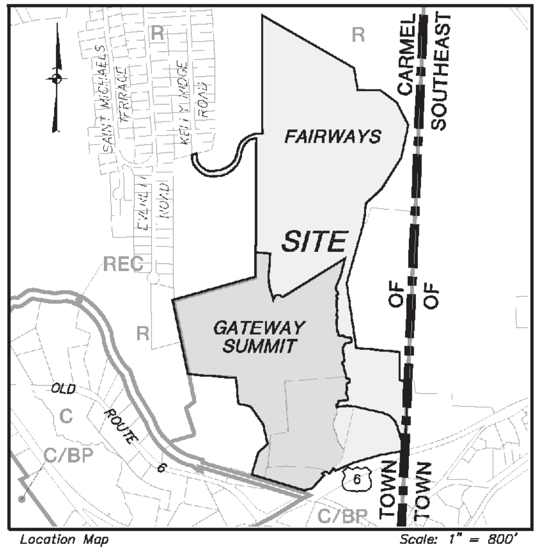
   o) The site is on a road that has a public bus route.

   p) The site is within 2500 feet of retail and service establishments.

   q) Washing machines and clothing dryers shall be located in either a common laundry room in each building or in each individual unit.

   r) All requirements of the New York State Fire and Building Code and all applicable state, county and town regulations shall be met. In addition the design and construction of all units shall provide all items required by section II(r) of the Town Code.





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Hudson Valley Realty Corp.
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Total Area:	Existing 88.07± AC Proposed 83.00± AC
Existing Use:	Vacant Land
Tax Map No.:	55.-2-23.1, 55.-2-24, 55.-2-25 & 55.11-1-32

	Require		Lot 2	Lot 3	Lot 4	Lot 5	Lot 6A	Lot 6B (Gateway Summit Senior Housing Recreation Lot)
Min. Lot Area:	3 AC (130,680 SF)	11.89 AC (518,096 SF ±)	3.01 AC (131,043 SF ±)	3.62 AC (157,626 SF ±)	2.99 AC (130,076 SF ±)	13.64 AC (594,384 SF ±)	30.17 AC (1,314,286 SF ±)	12.69 AC (552,798 SF ±)
Min. Lot Width:	200'	745'±	374'±	265'±	441'±	827'±	995'±	810'±
Min. Lot Depth:	200'	800'±	350'±	580'±	235'±	940'±	1813'±	621'±
Min. Yard Setbacks:								
Front:	50'	> 50'	> 50'	> 50'	> 50'	> 50'	> 50'	> 50'
Side:	40'	> 40'	> 40'	> 40'	> 40'	> 40'	> 40'	> 40'
Rear:	40'	> 40'	> 40'	> 40'	> 40'	> 40'	> 40'	> 40'
Max. Building Height:	40'/60'*	< 60'*	< 40'	< 40'	< 40'	< 40'	< 40'	N/A
Min. Building Floor Area	5,000 sf	43,300 sf ±	7,600 sf ±	6,300 sf ±	6,000 sf ±	43,500 sf	230,220 sf ±	N/A
Max. Building Coverage:	40%	8.4%	5.8%	4.0%	3.3%	7.3%	12.7%	N/A

* 60' height permitted for hotel in C/BP Zone

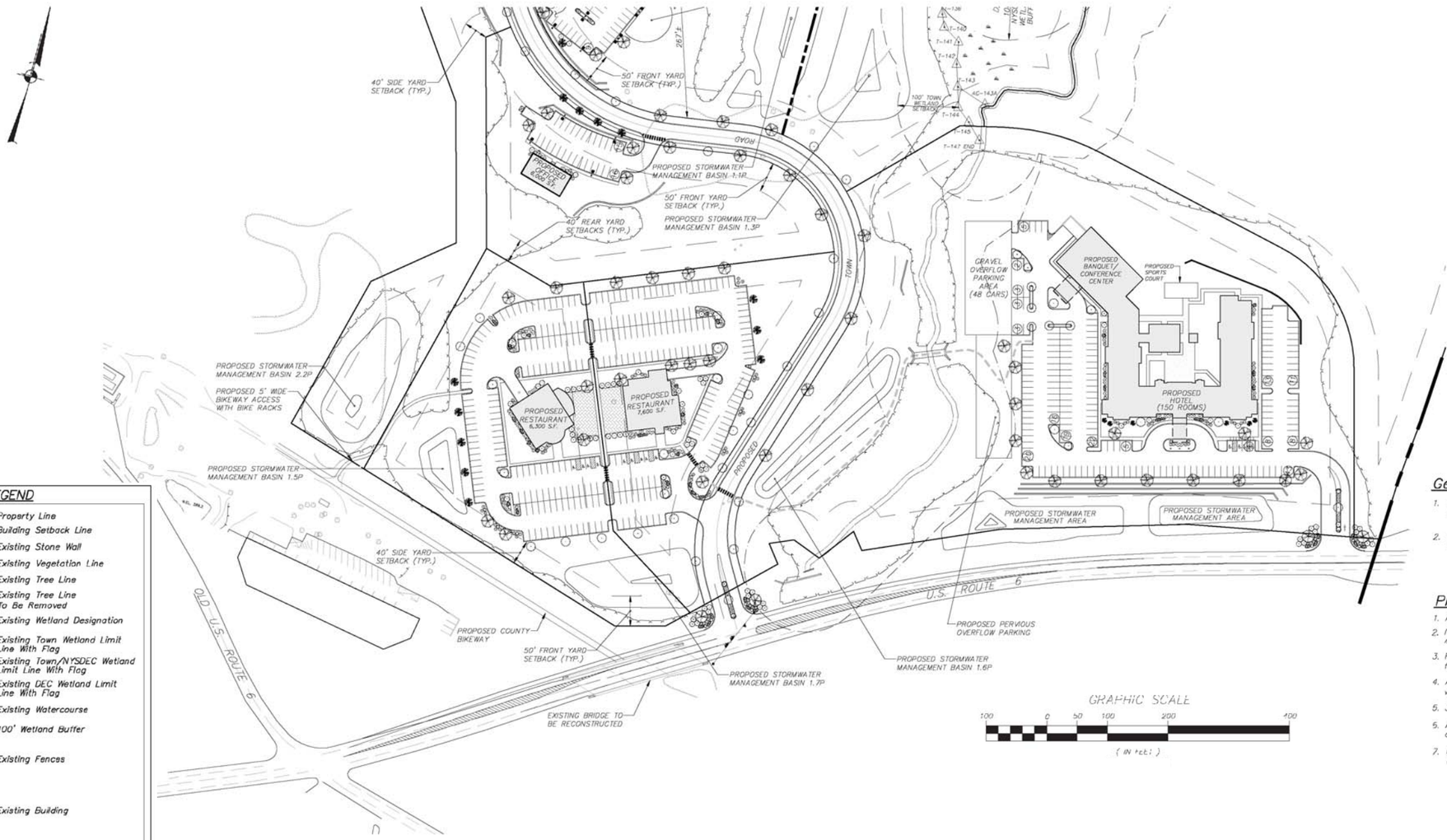
Multi-Family Dwellings for Elderly Requirements (Lots 6A & 6B):

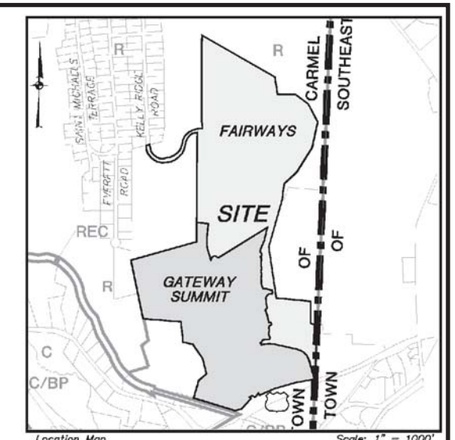
	Required:	Provided: Lot 6A
Min. Lot Area:	50,000 SF	1,314,286 SF ±
Min. Road Frontage:	125'	2,131' ±
Max. Density:	40 units / acre	4.96 units / acre
Min. Building Setback:	40'	> 40'
Max. Building Height:	40' / 2 stories	< 40' / 2 stories
Min. Outdoor Recreation Area:	300 sf / unit	> 300 sf / unit ±
Min. Parking Spaces:	1.1 spaces / unit	1.8 spaces / unit

Figure 4-3: Modified Road Configuration
Alternative Overall Development Plan
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 06/23/06
Scale: Graphic

File 02136 07/07/06
JS\02136

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418





Location Map — Scale: 1" = 1000'

Applicant:

Hudson Valley Realty Corp.
1699 Route 6, Suite 1
Carmel, NY 10512

Site Data:

Zone:	C/BP (Commercial/Business Park)
Total Area:	Existing 88.07± AC Proposed 85.00± AC
Existing Use:	Vacant Land
Tax Map No.:	55.-2-23.1, 55.-2-24, 55.-2-25 & 56.11-1-52

LEGEND

- Property Line
- Building Setback Line
- Existing Stone Wall
- Existing Vegetation Line
- Existing Tree Line
- Existing Tree Line To Be Removed
- Existing Wetland Designation
- Existing Town Wetland Limit Line With Flag
- Existing Town/NYSDEC Wetland Limit Line With Flag
- Existing DEC Wetland Limit Line With Flag
- Existing Watercourse
- 100' Wetland Buffer
- Existing Fences
- Existing Building
- Proposed Building
- Proposed Parking Spaces
- Proposed Curb
- Proposed Landscaping
- Proposed Tree Line
- Proposed Pole Mounted Light
- Proposed Building Mounted Light
- Proposed Refuse Enclosure
- Proposed Guiderail

General Notes:

1. Boundary, existing conditions and topographic information for subject property based on surveys by Terri Bernadorf Collins.
2. The wetland boundaries shown hereon were delineated by Tim Miller Associates and survey located by Terri Bernadorf Collins.

Planting Notes:

1. All plant materials to be nursery grown.
2. Plants shall conform with the American Association of Nurserymen Standards in all ways including dimensions.
3. Plants shall be planted in all locations designated on the plan or as staked in the field.
4. All plants shall be hardy under climate conditions similar to those in the locality which they are to be planted.
5. 3" of Pine Bark Mulch shall be spread over all planting beds areas.
5. All proposed seeded areas to receive 4" min. depth of topsoil; all proposed landscaped areas to receive 12" min. depth of topsoil.
7. Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in combination with suitable mulch as follows:

   -Fertilizer applied at the rate of 14 lbs./1000 sf using 10-6-4 or equivalent.

   -Seed mixture: to be planted between April 1 and May 15, or between August 15 and October 15 or as directed by Project Representative at a rate of 50 lbs./acre in the following proportions:

Kentucky Bluegrass	20%
Creeping Red Fescue	40%
Perennial Ryegrass	20%
Annual Ryegrass	20%

   -Mulch: Salt Hay or Small Grain Straw applied at a rate of 90 lbs./1000 sf or 2 tons/acre, to be applied and anchored according to New York - Guidelines for Urban Erosion & Sediment Control, latest Edition.

   -If the season prevents the establishment of a permanent vegetation cover, the disturbed areas will be mulched with straw or equivalent.

Figure 4-4: Modified Road Configuration Alternative Partial Schematic Plan
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 06/23/06
Scale: Graphic

File 02136 07/07/06
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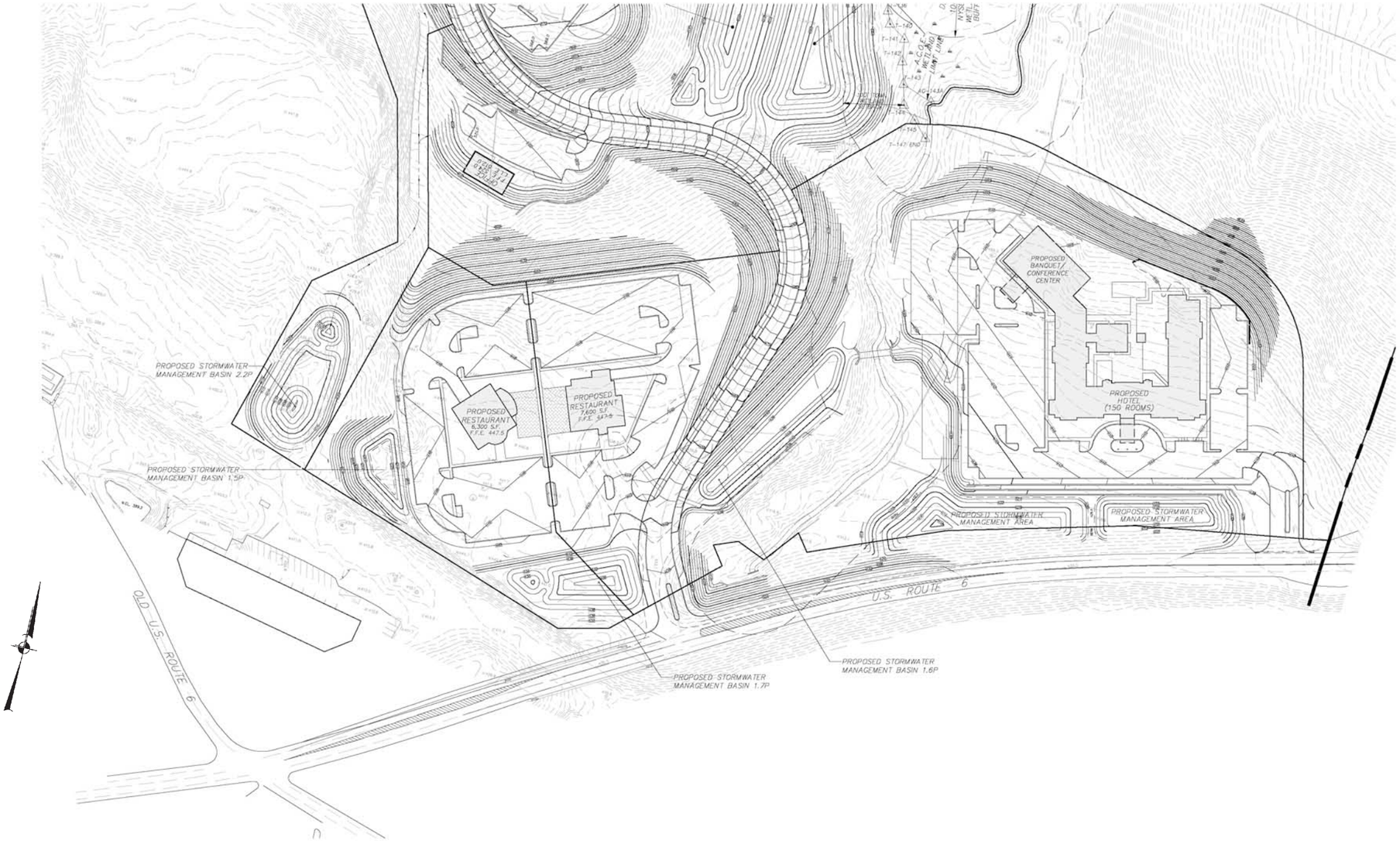

LEGEND

- Property Line
- 498 — Existing 2' Contour
- 500 — Existing 10' Contour
- 446 — Proposed 2' Contour
- 500 — Proposed 10' Contour
- T-141 — Existing Town Wetland Limit Line With Flag
- T-121 — Existing Town/NYSDEC Wetland Limit Line With Flag
- DEC-18 — Existing DEC Wetland Limit Line With Flag
- Existing Watercourse
- 100' Wetland Buffer
- Existing Building
- Existing Building To Be Removed
- Proposed Building
- Proposed Curb
- Proposed Grass Swale

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

Figure 4-5: Modified Road Configuration Alternative Partial Grading Plan

Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 06/23/06
Scale: Graphic

File 02136 07/07/06
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Sediment and Erosion Control Notes:

1. All construction activities involving the removal or disposition of soil, are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum erosion and sediment control measures shall be implemented as shown on these plans and shall be constructed in accordance with the New York Guidelines for Urban Erosion and Sediment Control.

2. Prior to the start of construction, stabilized construction entrances, silt fence, and other approved sediment control measures shall be in place as shown on these plans and at other locations where deemed necessary. After the stabilized construction entrance and silt fence are installed, the sediment basins shall be constructed. (See construction sequence.)

3. Wherever feasible, natural vegetation shall be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil should be exposed at any one time.

4. All topsoil and subsoil to be stripped from the areas being developed shall be stockpiled and seeded within 24 hours with a mixture of 50% Annual Ryegrass and 50% Perennial Ryegrass @ 30 lbs./acre or 0.7 lbs./1000 s.f. Temporary Sediment Basins shall be seeded with this mixture.

5. Any graded areas not subject to further disturbance or construction traffic shall, within 14 days of final grading, receive permanent vegetation cover in combination with a suitable mulch. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched as follows:
   a. Seed mixture to be planted between March 21 and May 20, or between August 15 and October 15, or as directed by project representative.
   b. Permanent stormwater basins shall be planted in accordance with the Typical Extended Detention Basin Planting Details.
   c. All other graded areas shall be seeded at a rate of 50 pounds per acre in the following proportions:

Kentucky Bluegrass	20%
Creeping Red Fescue	40%
Perennial Ryegrass	20%
Annual Ryegrass	20%

   d. Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored with netting to hold it in place, as needed, according to "New York-Guidelines for Urban Erosion & Sediment Control," latest edition.
   e. Irrigation: Should seed mixtures be applied between May 15 and August 15, adequate moisture should be provided.

6. Grass seed mix may be applied by either mechanical or hydroseeding methods. Hydroseeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1".

7. Temporary seedings should be inspected every 30 days and after major storm events. Damaged or unvegetated areas should be reseeded immediately.

8. All temporary erosion and sediment controls shall remain in place and maintained regularly in properly functioning condition until all areas exposed during site construction have been suitably stabilized with pavement, permanent structures and/or final vegetative cover.

9. Cut and fill slopes shall not be steeper than 3:1 unless stabilized in accordance with #5 above. Cut and fill slopes steeper than 2:1 shall also be stabilized with North American Green P.300 Erosion Control Blanket, or approved equal. Slopes stabilized with P.300 Erosion Blanket shall be seeded with ERNST Conservation Seeds Crownvetch Seeding Mix, or approved equal, in lieu of #5c above.

10. Erosion control blankets and/or seeding as outlined in #5 and #9 above shall be provided to prevent surface water from damaging the cut face of excavation or the sloping surfaces of fills.

11. Fill shall be placed and compacted in 6" lifts so as to minimize sliding or erosion of the soil, and to prevent settlement.

12. The site shall, at all times, be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control devices.

13. All stormwater drainage outlets shall be stabilized, as required, before the discharge points become operational.

14. Stormwater from disturbed areas must be passed through an approved sediment barrier before discharge beyond disturbed areas.

15. Sedimentation and erosion control measures shall be inspected and maintained on a weekly basis and after each storm event by the owner's field representative (O.F.R.) to insure that channels, drain inlets, pipes and the sediment basins are clear of debris, that embankments and berms have not been breached and that all silt fence is intact. Sediment shall be removed from the temporary sediment basins when the depth of the sediment has reached the top of the vertical riser pipes. Any failure of sediment and erosion control measures shall be immediately repaired by the contractor and inspected for approval by the O.F.R. and/or site engineer.

16. Dust shall be controlled by sprinkling or other approved methods, as necessary, or as directed by the O.F.R.

17. Pavement must be kept clean at all times.

18. The O.F.R. shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.

19. As warranted by field conditions, special additional sedimentation and erosion control measures, as specified by the site engineer, the Town Engineer, The Town Environmental Inspector and/or New York City Department of Environmental Protection, shall be installed by the contractor.

20. The owner/operator of this project will be responsible for the implementation of sediment and erosion control measures on this site prior to the start of construction and the maintenance of the sediment and erosion control measures until the disturbed areas have been stabilized.

21. Each spring the paved areas should be cleaned to remove the winter's accumulation of traction sand. After this is completed, all drain inlet sumps should be cleaned, as required. During the cleaning process, the drain inlets and pipes should be inspected for structural integrity and overall condition. Repairs and/or replacement should be made as required.

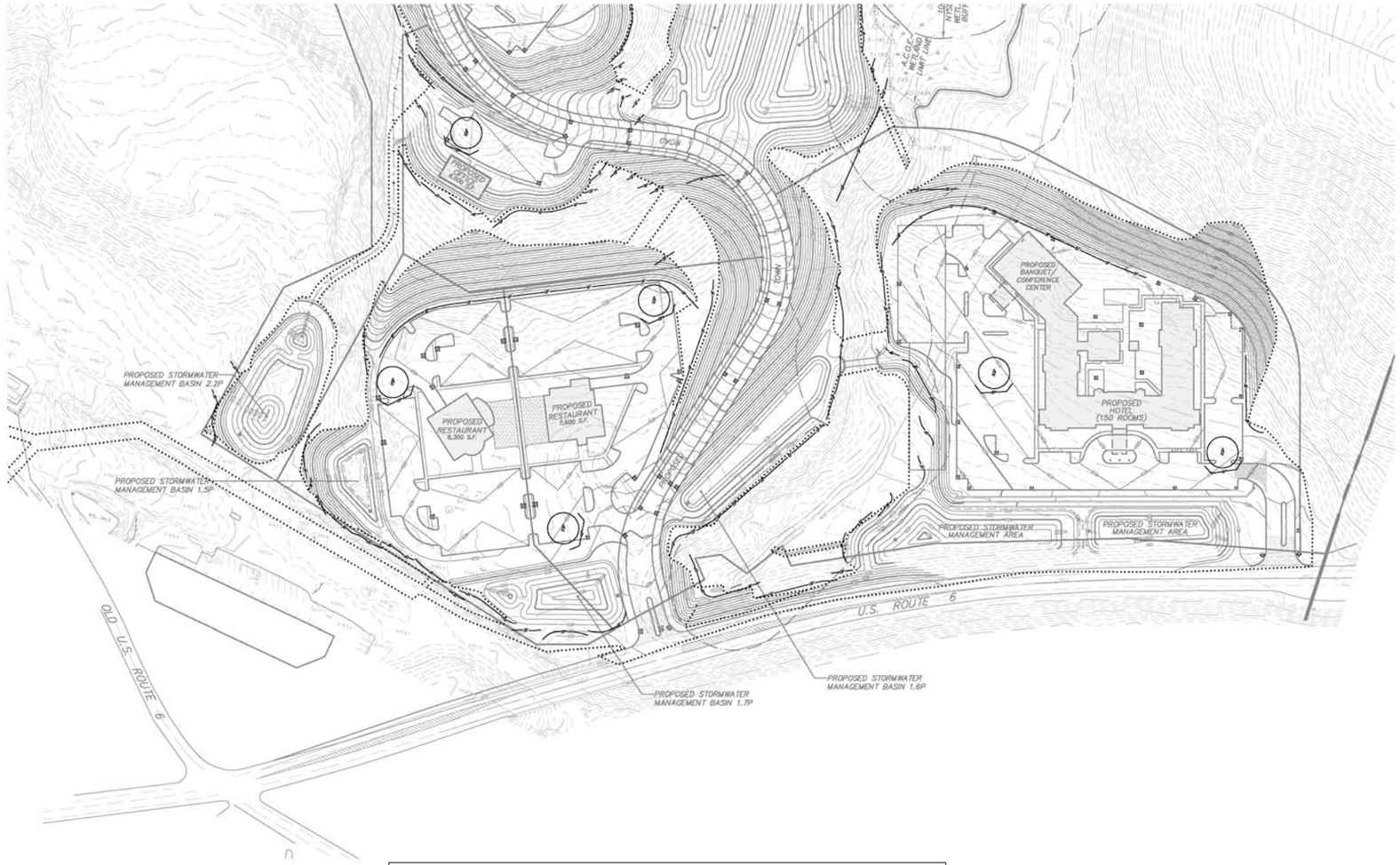
22. Once the desired vegetative cover is established in the basins, only limited maintenance is required. The basins and outlet structures should be inspected after major storm events and semi-annually. During the inspections, the following should be checked:
   -Evidence of clogging of outlet structures.
   -Erosion at the flow path through the detention basin.
   -Subsidence, erosion, cracking or tree growth on the embankments/berms.
   -Condition of the emergency spillway.
   -Accumulation of sediment around the outlet structure.
   -Adequacy of upstream/downstream channel erosion control measures.
   -Erosion of the basin beds and banks.
   -Sources of erosion in the contributory drainage, which should be stabilized.

23. Erosion control measures shall remain in place until all soil disturbing activities have been completed and all disturbed areas are suitably stabilized with a uniform perennial vegetative cover with a density of 70% on all unpaved areas or areas not covered by permanent structures.

24. Site inspections shall be conducted by a qualified soil erosion control professional at least every seven (7) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

25. Periodic inspection of the ponds should be performed throughout the year and after large storm events. These inspections should, at a minimum, check the outlet pipe for blockage and the general overall integrity of the basin and appurtenances.

26. Maintain basin vegetation including removal of trees and replacement of vegetation that should die. Remove any litter which accumulates as necessary. Typically, the accumulated silt will be required to be removed every 10 to 20 years.



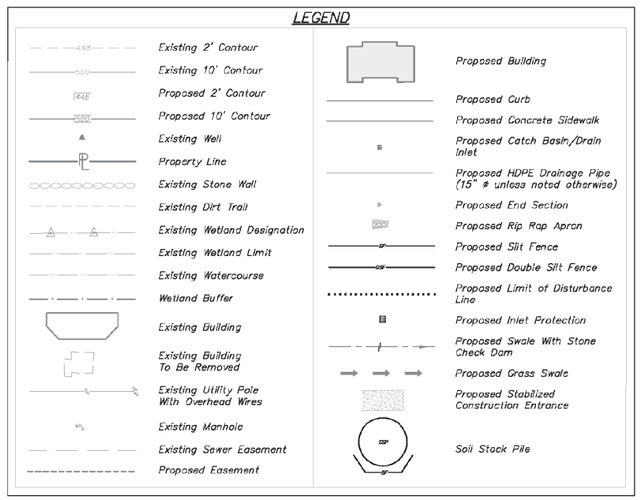


Figure 4-6: Modified Road Configuration Alternative Partial Sediment and Erosion Control Plan
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 06/23/06
Scale: Graphic

CONSTRUCTION SEQUENCE NOTES:

1. For erosion control notes, see Drawing ASP-4
2. Each phase of work implies that all sediment and erosion control measures will be installed in accordance with best management practices and prior to any clearing and grubbing operations.
3. Each phase of work implies the removal of existing trees and grubbing of all tree root systems.
4. All topsoil is to be stripped and stockpiled in appropiate locations for future use on the site. All stockpiled soil areas are to be appropiately stabilized and protected.
5. All finished slopes greater than 3:1 are to be immediately stabilized.
6. Modifications to phasing may be made during construction upon written approval by the approving authorities.
7. Each phase of work shall have the upstream clean water diverted around construction activities.

LEGEND

- Property Line
- Existing 2' Contour
- Existing 10' Contour
- Proposed 2' Contour
- Proposed 10' Contour
- Existing Town Wetland Limit Line With Flag
- Existing Town/NYSDEC Wetland Limit Line With Flag
- Existing DEC Wetland Limit Line With Flag
- Existing Watercourse
- 100' Wetland Buffer
- Existing Building
- Existing Building To Be Removed
- Proposed Building
- Proposed Curb
- Proposed Phasing Line
- (3) Proposed Construction Phase

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

Figure 4-7: Modified Road Configuration Alternative
Partial Phasing Plan
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 06/23/06
Scale: Graphic

File 02136 07/07/06
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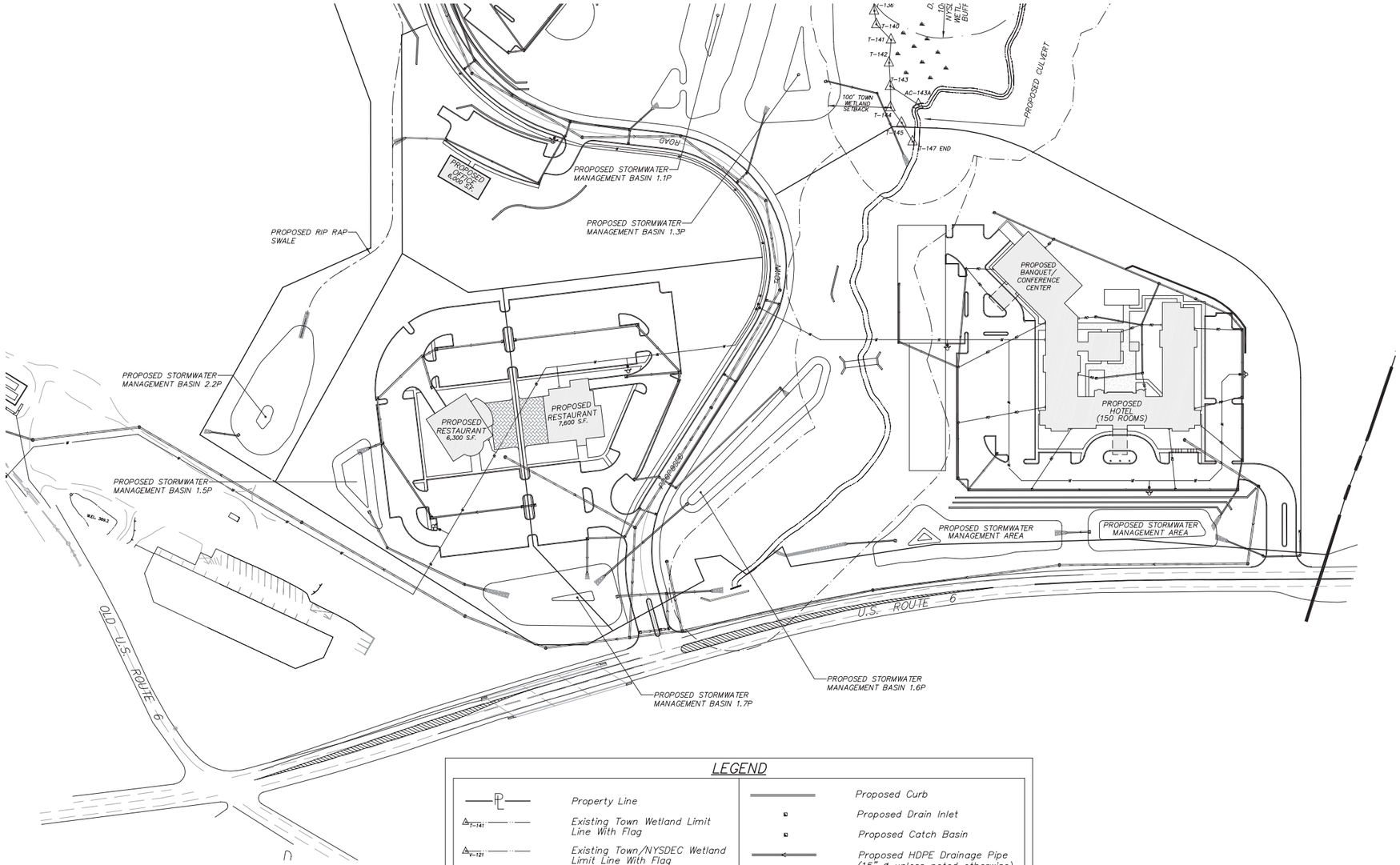

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

LEGEND

- Property Line
- Existing Town Wetland Limit Line With Flag
- Existing Town/NYSDEC Wetland Limit Line With Flag
- Existing DEC Wetland Limit Line With Flag
- Existing Watercourse
- 100' Wetland Buffer
- Existing Building
- Existing Utility Pole With Overhead Wires
- Existing Manhole
- Existing Sewer Manhole
- Existing Sewer Main
- Existing Water Main
- Existing Water Main
- Proposed Building
- Proposed Curb
- Proposed Drain Inlet
- Proposed Catch Basin
- Proposed HDPE Drainage Pipe (15" ø unless noted otherwise)
- Proposed End Section
- Proposed Rip Rap Apron
- Proposed Sewer Manhole
- Proposed 8" ø PVC SDR 35 Sewer Main
- Proposed Gate Valve
- Proposed Hydrant
- Proposed Water Main
- Proposed Sewer Force Main
- Proposed Water Service Line
- Proposed Grass Swale

Figure 4-8: Modified Road Configuration Alternative Partial Utilities Plan

Gateway Summit and The Fairways FGEIS

Town of Carmel, Putnam County, New York

Source: Insite Engineering, Surveying & Landscape Architecure, P.C.

Date: 06/23/06

Scale: Graphic

File 02136 07/07/06
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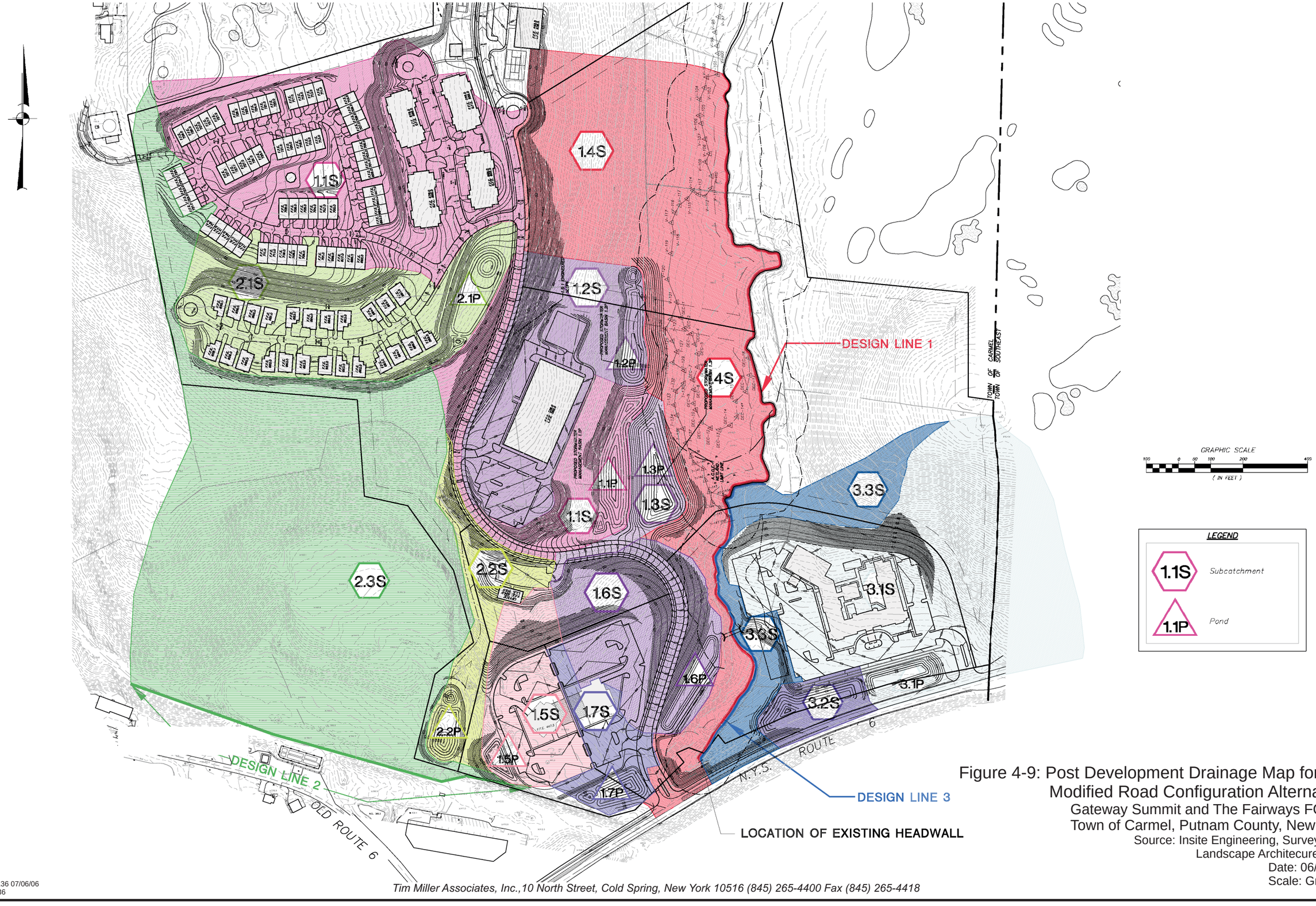

Figure 4-9: Post Development Drainage Map for the Modified Road Configuration Alternative
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 06/30/06
Scale: Graphic

File 02136 07/06/06
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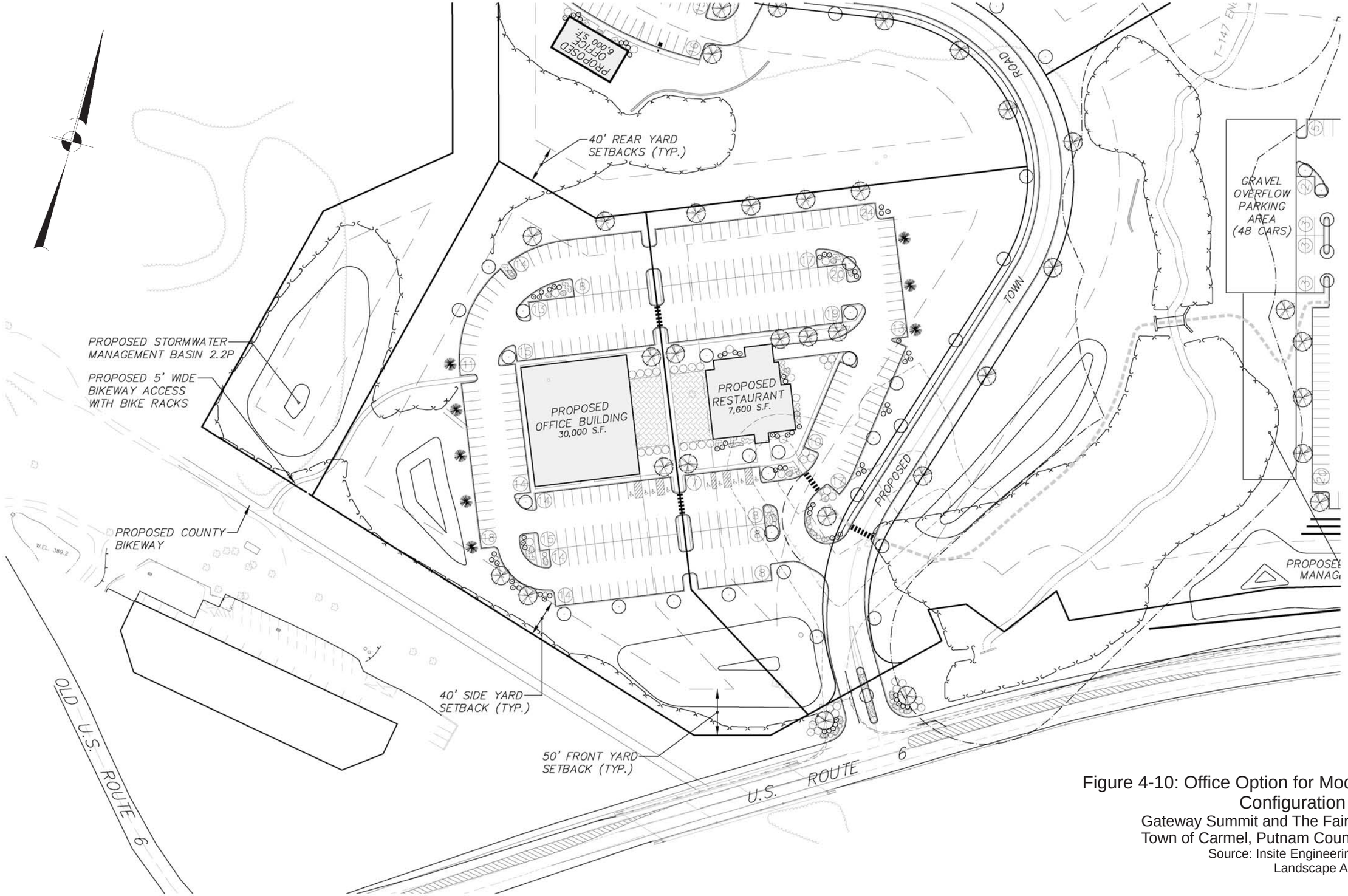

Figure 4-10: Office Option for Modified Road Configuration Alternative

Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 06/23/06
Scale: Graphic

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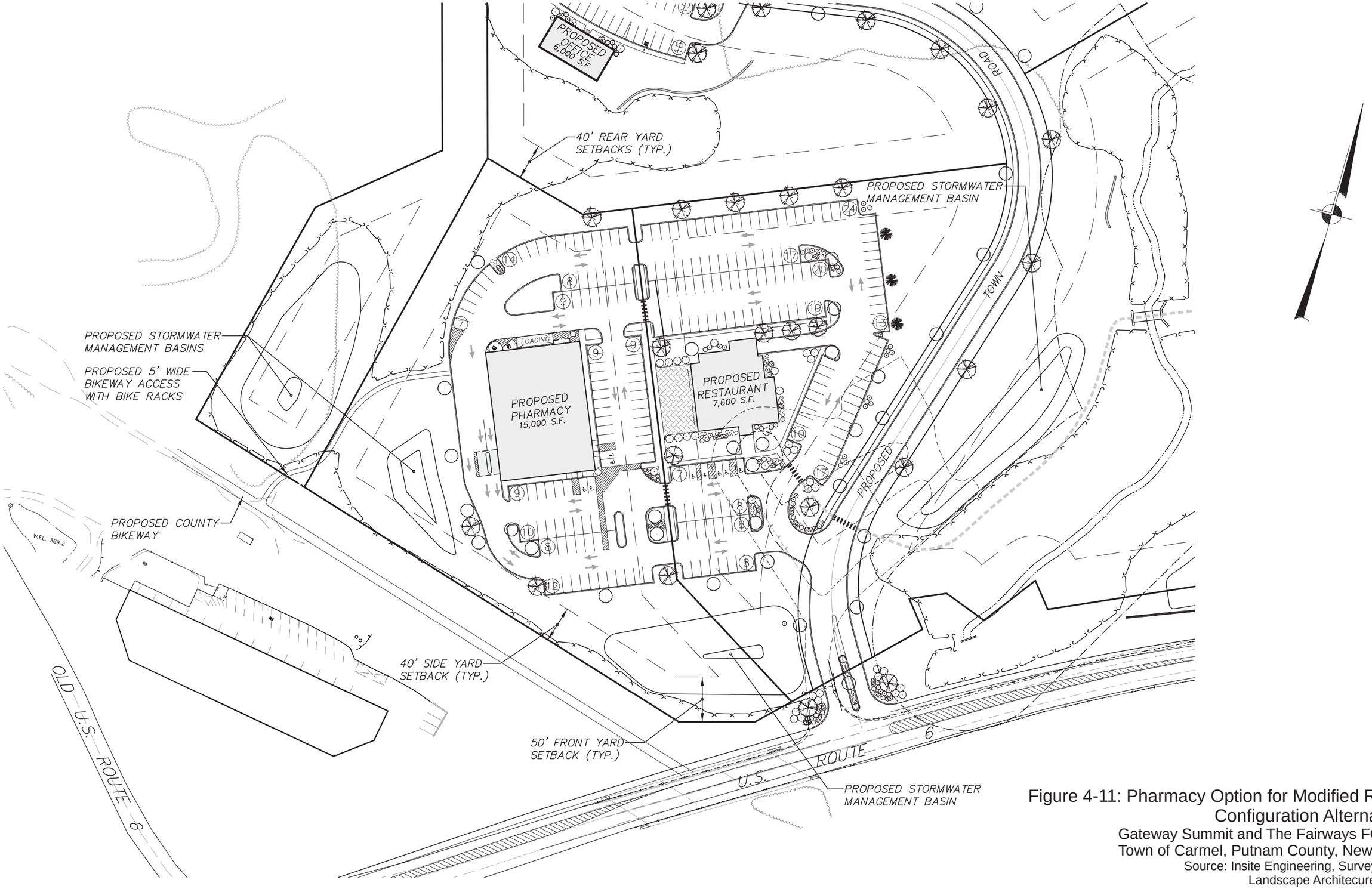

Figure 4-11: Pharmacy Option for Modified Road Configuration Alternative

Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecure, P.C.
Date: 07/05/06
Scale: 1" = 100'

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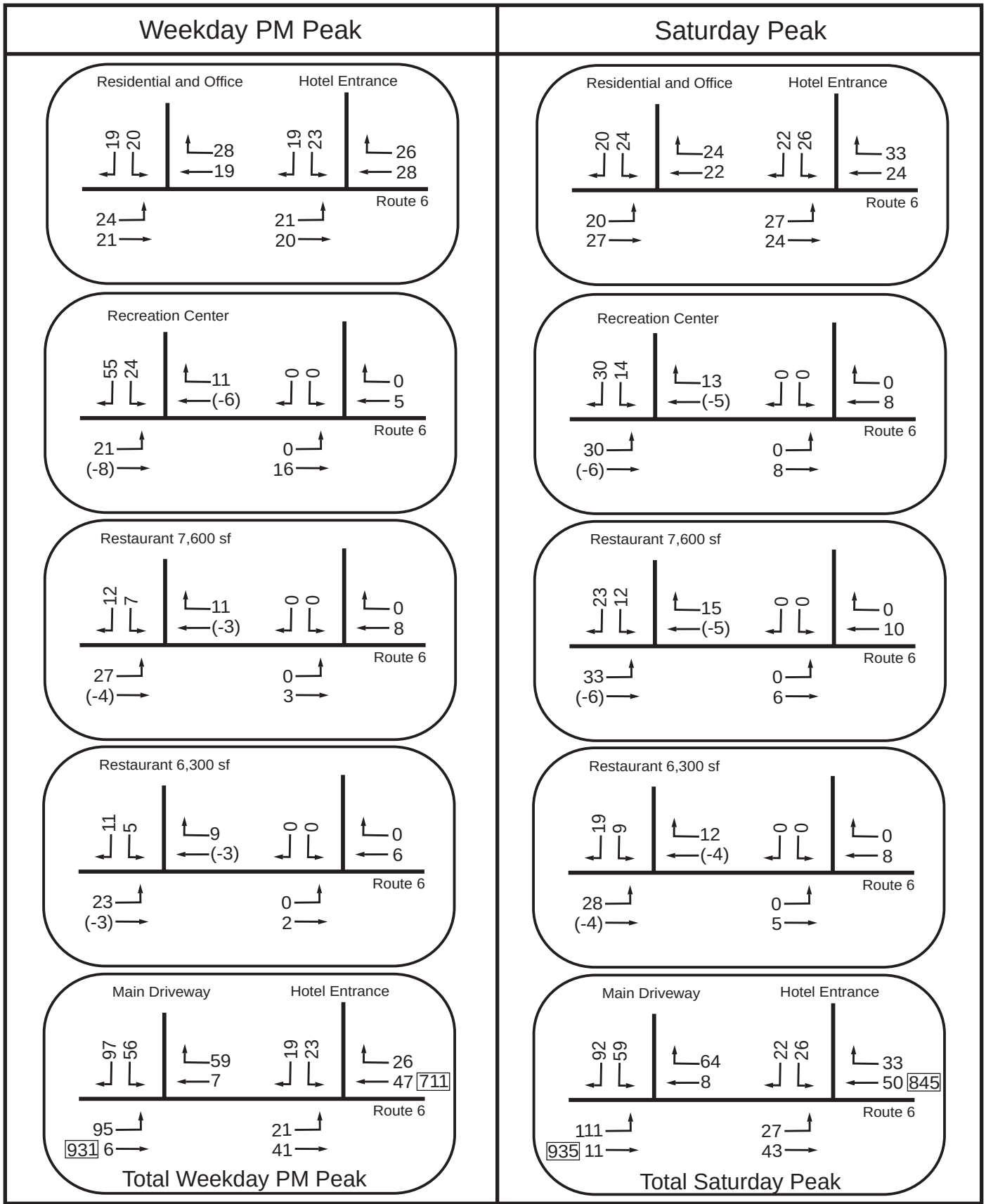

Figure 4-12: Modified Road Configuration
Alternative Site Generated Traffic
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York
Source: TMA

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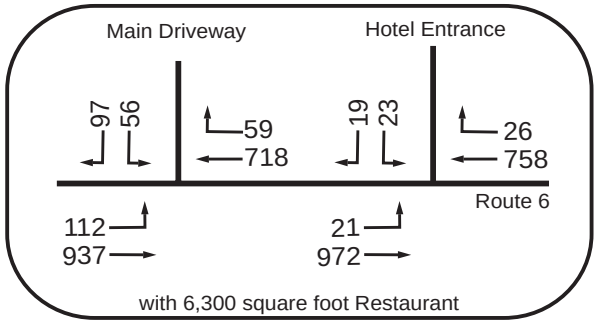
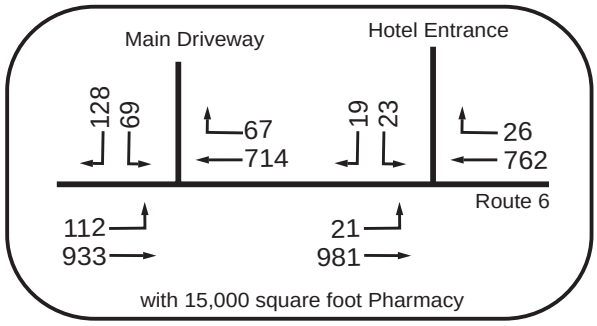
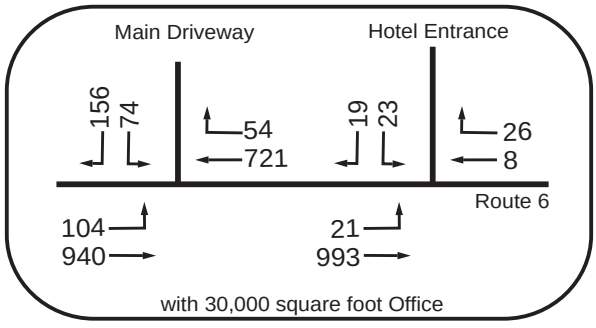
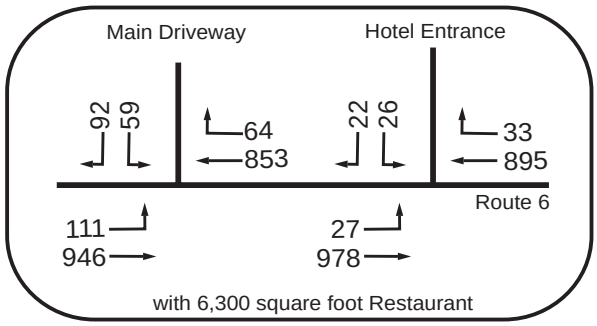
Weekday PM Peak

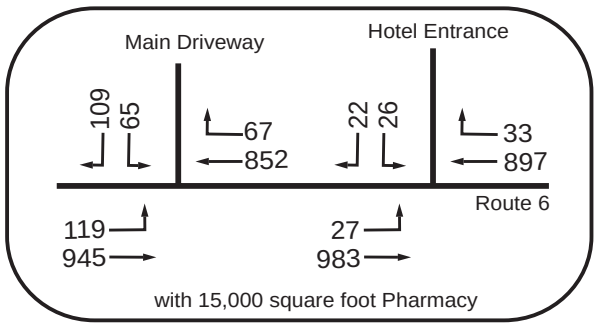






Saturday Peak





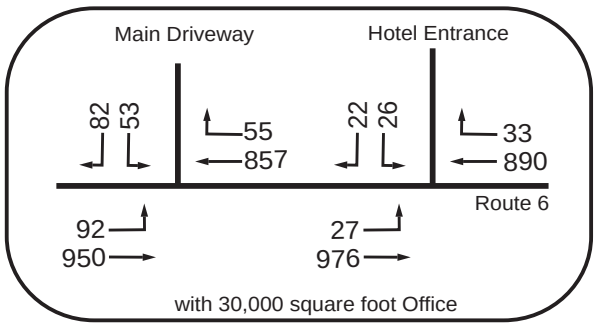


Figure 4-13: Pharmacy and Office Option
Build Condition Traffic Comparison
Gateway Summit and The Fairways FGEIS
Town of Carmel, Putnam County, New York

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

5.0 ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

Comment 5-1 (Letter February 28, 2003, Mathew Giannetta, New York City Department of Environmental Protection): The DEIS must identify all impacts, even those not directly mitigated by adherence to current, applicable environmental regulations. For instance, a post-development increase or decrease in the volume of stormwater runoff may have a significant effect on receiving wetlands, streams and reservoirs. The impacts associated with a change in runoff volume are not, however, specifically addressed by current stormwater regulations but they are among the potentially significant adverse impacts posed by this project. The considerable decrease in groundwater recharge resulting from the conversion of forested land to impervious surfaces and areas of compacted soils may or may not be avoided under the current proposal. Nonetheless, the adverse impacts must be adequately mitigated. The fact that the impacts of decreased groundwater recharge do not require mitigation under a Stormwater Pollution Prevention Plan or any other regulatory permit for that matter, does not relieve the project sponsor of the task of avoiding/mitigating those impacts. SEQR law requires avoidance and/or mitigation for all identified adverse impacts and as such, avoidance and/or mitigation that may not be achieved via the mechanisms of the required regulatory approvals, must be pursued through, amongst others, innovative site *design, project* alternatives, and reduced scale.

Response 5-1: *According to the project engineer, the proposed projects will cause an increase in stormwater runoff volume. However this increase in runoff volume will be discharged at a low rate of ±1 cubic foot per second (CFS) after attenuation by the multiple detention ponds proposed in series. This strategy, which results in the post development increase in runoff volume being discharged over several days, will mitigate any potential adverse impacts on the receiving waters and will help maintain the base flow to the receiving wetlands and watercourses. The pre-development and post-development hydrographs included in the SWPPPs confirm that the increase in the peak rates of discharge under post-development conditions has been reduced to equal or less than the pre-development peak rates.*

The majority of the proposed development, including the areas where the proposed stormwater management practices are sited, is located on Hydrologic Group C soils, as designated by the United States Department of Agriculture, Soil Survey of Putnam and Westchester Counties. These soils are Paxton fine sandy loam (PnB, PnC), which are characterized in the survey as having rapid runoff and very slow permeability. These characteristics do not meet the criteria for infiltration practices set forth in stormwater practices design manuals incorporated by reference into the 1993 and 2002 New York State General Permits. Furthermore, because these soils are characterized by poor permeability and rapid runoff, existing recharge within such areas is limited, and the anticipated post construction reduction in regional groundwater recharge is not anticipated to be significant, according to the project engineer.

According to the Survey, the permeability of the soil's substratum is very slow

(< 0.2 inches per hour), which makes the use of infiltration practices impractical.

The project engineer indicates that the current proposal was developed following an analysis of a variety of site development options that would maximize

groundwater recharge and mitigate any post development increases in the volume of stormwater runoff. Furthermore, the analysis of potential impacts disclosed in the DGEIS also considered those potential impacts resulting from increased runoff and decreased recharge. Based upon the current low permeability of the on-site soils, existing rapid runoff from the site, and the mitigation measures that are incorporated in the revised design of the proposed action, no significant adverse impacts from post construction increases in runoff volume, or decreased recharge, are anticipated, according to the project engineer.

6.0 GROWTH INDUCING IMPACTS OF THE PROPOSED ACTION

Comment 6-1 (Attorney General, Environmental Protection Bureau Letter, March 26, 2005): Induced growth or secondary impacts should be thoroughly evaluated. There will be an increase in traffic, impervious surfaces, stormwater flows, construction, and waste water associated with induced growth. These impacts must be fully assessed and quantitatively presented for each alternative.

Response 6-1: *According to the Applicant, with a total of 300 proposed senior housing units at the combined projects, total future site population as a result of the Gateway Summit and The Fairways projects would be expected to total 540 persons, assuming 1.8 persons per household. The DGEIS indicates that proposed non-residential development would be expected to generate approximately 352 new jobs. Total employment generated by the Mitigation Alternative for Gateway Summit would not be expected to differ significantly from the previously proposed project evaluated in the DGEIS.*

The level of induced growth that is expected from 540 senior residents and 352 new employees is not expected by the Applicant to result in significant amounts of new construction. Workers at Gateway Summit would be expected to come from either the Town of Carmel or surrounding Towns in Putnam County or immediately adjacent counties. Workers would be expected to reside in housing within these areas, or would otherwise be expected to travel from outside areas where a larger supply of suitable available housing exists, such as the Village of Brewster, or Danbury, Connecticut.

The Applicant's analysis of future demand for food sales based on estimated disposable income of the future site residents and annual sales volume for supermarkets demonstrates that the magnitude of retail development necessary to support 540 new residents would not be so great that significant new construction would be anticipated. Much of the new demand would be likely to be met through increased sales at local establishments, and re-occupancy of vacant commercial space, according to the Applicant.

The level of spending from senior households for items such as food and apparel can be calculated using estimates of personal expenditures available from the U.S. Department of Labor. The following Table 6.1 from the Department's Bureau of Labor Statistics indicates the proportion of total annual personal expenditures for various consumer expenditure categories.

Table 6-1 **Proportion of Total Annual Consumer Expenditures by Category**	
Expenditure Category	Percentage of Total Expenditures
Entertainment	5.0
Other expenditures	10.1
Transportation	18.6
Food	14.0
Food away from home	5.3
Food at home	8.7
Personal insurance and pensions	9.2
Apparel and services	5.3
Health care	5.4
Housing	32.4
Source: US Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey.	

Assuming average household incomes of future site residents at Gateway Summit and The Fairways of approximately $67,000, average annual food expenditures of $2,814,000 would be expected from the total of 300 households, with average annual apparel and service expenditures expected to total $1,065,300.

According to Dollars and Cents of Shopping Centers: 1997 published by the Urban Land Institute, the median annual sales volume for supermarkets range between $321.39 per square foot and $371.79 (in neighborhood and community shopping centers) in the United States during 1997. Therefore, according to the Applicant, based on the estimate of food expenditures indicated above the additional induced sales in food at home and food away from home from future residents of Gateway Summit and The Fairways could potentially generate the need for up to approximately 9,000 square feet of retail floor area related to food sales.

The Town of Carmel and nearby areas are served by a variety of retail and service uses, although big box retail uses have only recently been introduced to Putnam County in general. With facilities such as Carmel Shoprite Center, and other supermarkets on Route 6, the Applicant estimates that there is likely to be adequate access to retail services in this area to meet the demand for food shopping indicated above. In addition, the proposed Gateway Summit project includes two restaurants that would likely support some of the demand for restaurant food sales generated by future site residents. Demand for apparel and services would similarly be expected to be met by existing retail facilities in the area, with minimal induced growth expected that would result in new construction of stores. Demand for retail services from future employees at Gateway Summit would be expected to be lower than the demand generated by residents.

With regard to the specific environmental impacts of such growth, the minor levels of new construction that would be expected to be generated by induced growth as a result of the two projects would be subject to future environmental review and permitting procedures and requirements. These procedures would be expected to limit effects on stormwater flows, for example. Effects on community services would need to be assessed during the review process for such new development, although the water and sewer districts are likely to have adequate capacity to serve these facilities based on the magnitude of induced growth that is expected, and the conclusions of the revised water supply and wastewater reports found in the Appendix of this FGEIS. According to the Applicant, specific effects from traffic generated by induced growth can not be determined at this time since the locations of such new construction are not known.

The Applicant also notes that the project will not result in the development of new infrastructure or the extension of infrastructure (roads, water and sewer service) to lands not currently served by infrastructure. Development actions that do extend roads, water and sewer service are those that would be most likely to induce growth, as opposed to projects (such as Gateway Summit and the Fairways) that are proposed on lands already fully served by suburban infrastructure.

7.0 APPENDICES COMMENTS AND RESPONSES

Comment 7-1 (Public Hearing, February 2, 2005, James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc.): The 13 pages of scoping comments from the Croton Watershed Clean Water Coalition should have been included in the DEIS Appendix.

> ***Response 7-1:*** *Scoping comments of the Croton Watershed Clean Water Coalition are included in the Appendix of this FEIS.*

Comment 7-2 (James Bryan Bacon, Croton Watershed Clean Water Coalition, Inc., Letter, February 22, 2005): In examining the Gateway Summit and The Fairways DGEIS, our engineer, David Clouser and Associates, has made the following request for information missing from the DGEIS that they deem necessary to complete the review of Gateway Summit and The Fairways projects.

The plan set (sheets 1-15) received as part of the DGEIS is meant to be conceptual in nature and does not contain the level of detail needed to complete our review. It appears that the original plan set for The Fairways is 43 sheets. The original set for Gateway Summit is 19 sheets. In order to avoid copying of the entire set, we suggest that the Drawing Index (many times showing on the title sheet of the set) be faxed or mailed to us so that we can choose which drawings will be necessary to compete our portion of work. These drawings should contain detailed stormwater and erosion control design information we will need.

The following Stormwater Management & Pollution Prevention Plans for The fairways are missing:

- Appendix D - “Stormwater Conveyance Structures Calculations”

- Appendix F - “Temporary Sediment Basin and Silt Trap Sizing”

- Appendix G - “Construction Sequence”

- Appendix I - “Application Checklist for SPPP”

- Appendix J - “Soil Test Results”

- Appendix K - “Basin Sizing, Outlet Structure Design and Routing Summary”

The following Stormwater Management & Pollution Prevention Plans for Gateway Summit are missing:

- Appendix D - “Stormwater Conveyance Structures Calculations”

- Appendix F - “Temporary Sediment Basin and Silt Trap Sizing”

- Appendix G - “Sequence of Construction”

- Appendix H - “Maps”

- Appendix I - “Related Documents”

- Appendix J - "Soil Test Results"

- Appendix K - "Basin Sizing, Outlet Structure Design and Routing Summary"

Response 7-2: *As noted throughout the responses in this FGEIS, the proposed development plans have been refined in response to comments received during the SEQR review of the project, consistent with the intent of SEQR to "incorporate the consideration of environmental factors into the existing planning, review and decision-making processes." The project engineer revised the SWPPPs to reflect these plan revisions. The two entire SWPPPs for both The Fairways and Gateway Summit have been submitted to the NYC DEP and NYS DEC, and are included in Appendices D and E. The revised proposed SWPPPs are designed to meet the requirements of both the NYC DEP and the NYS DEC, and include features to treat storm water quality and quantity, such as water quality detention basins. These features and other environmental engineering measures associated with the project will accommodate post development changes to storm water runoff from the site, resulting in storm water discharges on the receiving waterways that are expected to be at or below the existing peak rate of flow on these waterways. Under the revised proposed SWPPPs, there will be no increase in the rate of overland flow from the project site onto adjoining lands, according to the project engineer.*

Comment 7-3 (New York City DEP, Letter, March 4, 2005): NYCDEP Lead Agency and Scoping comments issued in a letter dated February 28, 2003 are absent from Appendix D and must be included in the FEIS.

Response 7-3: *The letter referred to above has been included in Appendix B of this FGEIS and its comments are addressed in the preceding FGEIS responses.*