October 16, 2003

Final Generic Environmental Impact Statement (GEIS)

Luther Forest Technology Campus

Towns of Malta & Stillwater
Saratoga County, New York

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FINAL GENERIC ENVIRONMENTAL IMPACT STATEMENT
Luther Forest Technology Campus
Towns of Malta & Stillwater, Saratoga County, New York

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1.0 EXECUTIVE SUMMARY

1.1 Summary

As required by the SEQR law, this Final GEIS discusses the potentially significant adverse environmental impacts and benefits of the proposed action: the development of the Luther Forest Technology Campus (LFTC or the "Campus") for semiconductor and related 'nanotech' manufacturing uses.

This Final GEIS includes the Draft GEIS issued by the SEQR "lead agency" Town of Malta in January 2003 and the responses to public and involved/interested agency comments received during the public comment period on the Draft GEIS, which responses are set forth, by topic, in Sections 2.1 through 2.36 of this Final GEIS.

The Proposed Action

The proposed action is the development, construction and operation of the LFTC through a zoning change creating uniform Planned Development Districts (PDDs) under the Zoning Laws of the Towns of Malta and Stillwater allowing nanotech manufacturing uses and approving a long-range conceptual PDD Master Plan for the 1,350-acre project site. The LFTC site is located approximately 77% in the Town of Malta and 23% in the Town of Stillwater, Saratoga County, New York. Approval of the proposed LFTC by the Town Boards will authorize nanotechnology manufacturing facilities and ancillary uses (i.e., support businesses and offices), including some commercial uses and a limited amount of single-family housing, subject to future local site plan approval procedures as set forth in Town Law Section 274-a and the proposed LFTC PDD regulations. Long-range development of the LFTC will occur in four (4) phases of development over an anticipated 15- to 25-year build-out period, correlating to the four (4) Fabs of the anchor nanotechnology manufacturing company, as prescribed by the proposed Planned Development District (PDD) Regulations and Master Plan. The proposed action includes two "steps" of off-site road mitigation measures and utility improvements, including water, sewer, electric power, telecommunications, and natural gas.

There are eleven development pods proposed in the LFTC. The anchor Fab tenant will be located in Pod 1 which can accommodate a four (4) Fab layout. Pods 6, 7 and 8 comprise the Campus Center which will contain office and retail convenience and similar uses which do not compete with general business areas of the Towns, but provide goods and services primarily to tenants and employees at the Campus. Pods 2, 3, 4, 5, and 9 will contain the so-called ancillary uses, which are manufacturing, R&D, services, wholesale and similar uses which are often developed to serve the business of the anchor Fabs. Pod 10 will contain up to 50 detached building lots for single-family

residential homes (~10,000 square feet lots). This residential subdivision is physically separated from the interior of the LFTC by a ravine and will have no direct Campus access. It is not functionally related to the proposed nanotechnology manufacturing development within the Campus. Pod 11 is an additional Campus Commercial area, planned to be a conference center.

Saratoga Economic Development Corporation (SEDC) is the Applicant for the proposed LFTC. The Applicant's stated purpose is to develop the LFTC as a world-class, high-tech nanotechnology manufacturing center, in a sustainable development fashion, to support and implement regional economic development plans and create thousands of stable, high-salary jobs for the Towns of Malta and Stillwater, Saratoga County and Capital Region residents.

The 1,350-acre project site is currently privately owned by the Wright Malta Corporation and the Luther Forest Corporation. SEDC has options on the property and a one-mile "safety easement". Most of the project site is a managed second-growth forest with planted rows of trees having a network of interconnected logging roads. This large tract of undeveloped land represents a relic of the Cold War. At the end of World War II the U.S. Army operated a top-secret testing facility on the Wright-Malta portion of the project site to duplicate the technological advances of German scientists in rocket technology, and deny such military technology to the Soviet Union. During this time, a one-mile "safety easement" was established over portions of the Luther Forest Corporation's property to provide a safety buffer for experimental rocket testing and ordinance firing. This safety easement covers approximately 1,800 acres of a circular area and prohibits human habitation. This safety easement will be discontinued by operation of law when the Wright-Malta and surrounding Luther Forest "safety easement" parcels are merged into the LFTC parcel prior to construction and operation of the LFTC.

The project site is located close to major land, air, and water transportation modes, most importantly Route 9, Interstate Route 87, and the Albany International Airport. The project site is dominated by uplands comprised of sandy soils with a deep depth to bedrock. Protected species are absent, seismic activity is low, and significant sources of vibration are absent. The project site contains a "brownfield" site, the Malta Rocket Fuel Area (MRFA), which will be productively reused by implementation of the proposed action. The region has a high quality of life with a trained workforce that is close to existing research institutions that perform R&D in nanoelectronics.

The PDD Master Plan for the LFTC consists of the proposed uniform PDD zoning Regulations (Appendix K), the Site Master Plan Maps (Figures 2.1.1 and 2.1.2), and the narrative in Section 2.3 of the Draft GEIS, as modified by this Final GEIS. Proposed Master Plan elements are consistent with good, long-range land planning and development principles, and in conformance with the purposes and goals of local

Illustrative Master Plan revised for FGEIS

Town of Malta - Town of Stillwater

GRAPHIC SCALE

(IN FEET)
1 inch = 1400 ft.

Site Statistics

Site Size:	± 1,350 ac.
Open Space:	± 60%
Pedestrian Trails:	over 8 miles
Wooded Areas to Remain	± 618 ac.

Presented By : SEDC Saratoga Economic Development Corporation

Prepared By : The LA Group Landscape Architecture and Engineering, P.C. www.thelagroup.com

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Figure 2.1.1

P.D.D. Standards

Setbacks

Nanotechnology Manufacturing Facilities (Pod 1)

- 700' minimum from primary arterial boulevards to buildings
- 100' minimum for entry ways and parking lots
- 400' minimum from residential neighborhoods

Support businesses, campus commercial and offices (Pods 2-9, 11)

- 100' minimum setback from all arterial roads
- 100' minimum between buildings
- 50' minimum from all parking areas to arterial roads

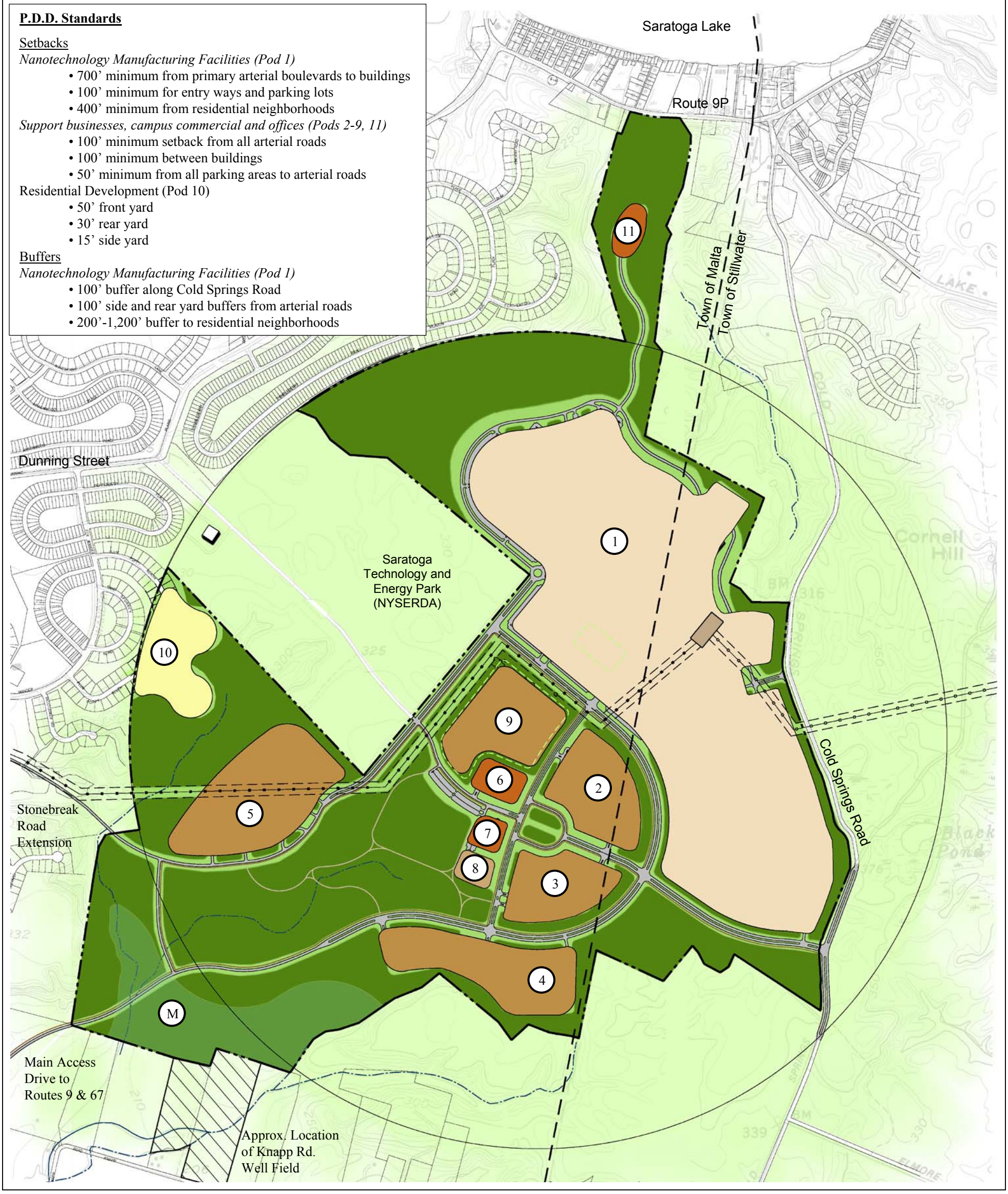
Residential Development (Pod 10)

- 50' front yard
- 30' rear yard
- 15' side yard

Buffers

Nanotechnology Manufacturing Facilities (Pod 1)

- 100' buffer along Cold Springs Road
- 100' side and rear yard buffers from arterial roads
- 200'-1,200' buffer to residential neighborhoods



PDD Development Master Plan revised for FGEIS

Town of Malta - Town of Stillwater

GRAPHIC SCALE

(IN FEET)
1 inch = 1400 ft.

Development Legend	Acres		Acres
1 - Nanotechnology Manufacturing Facilities, Support Businesses, Offices	± 325 ac.	7 - Campus Commercial & Community Uses	± 5 ac.
2 - Nanotechnology Manufacturing Facilities, Support Businesses & Offices	± 30 ac.	8 - Campus Commercial & Community Uses	± 5 ac.
3 - Nanotechnology Manufacturing Facilities, Support Businesses & Offices	± 25 ac.	9 - Nanotechnology Manufacturing Facilities, Support Businesses & Offices	± 30 ac.
4 - Nanotechnology Manufacturing Facilities, Support Businesses & Offices	± 35 ac.	10 - Single Family Residential	± 25 ac.
5 - Nanotechnology Manufacturing Facilities, Support Businesses & Offices	± 50 ac.	11 – Conference center	± 5 ac.
6 - Campus Commercial & Offices	± 5 ac.	M - Potential Wetland Mitigation Area	

Presented By : SEDC Saratoga Economic Development Corporation

Prepared By : The LA Group Landscape Architecture and Engineering, P.C. www.thelagroup.com

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Figure 2.1.2

zoning ordinances and comprehensive master plans. They provide a well-designed development scheme for a 'campus-like' high-technology manufacturing complex, with ample green space and buffers from surrounding land uses. A tightly-focused set of allowable land uses concentrated in semiconductor manufacturing and nanotechnology (i.e., nanoelectronics) are described in the PDD Regulations. This 'industry cluster' focus for desired development within the Campus seeks to maximize the highest and best use of the LFTC project site for economic development and job creation. The PDD Regulations include criteria for 'Guiding Principles of Development' to ensure sustainable development within the Campus consistent with surrounding land uses. Also included in the PDD Regulations are uniform Architectural, Landscaping and Lighting Standards. Amongst other criteria, there will be a minimum of 400 feet of separation setback from the Luther Forest residential neighborhoods (actual building setbacks range from ~100 to 700 feet), and more than 50% green space on the project site.

There will be a total of four (4) site access driveways into the project site—two (2) from State roads (i.e., Route 9/67) and two (2) off of Cold Springs Road, and two (2) stages or 'steps' of off-site transportation improvements. Step 1 transportation improvements required for the first phase of Fab development include construction of an access road around the Village of Round Lake, connecting Exit 11 to Route 9/67, consistent with local planning efforts. Step 2 transportation improvements required for the third phase of Fab development include construction of a new Exit on I-87 during subsequent phases of Campus development. Neither of these two steps of transportation improvements involves the use of Dunning Street, other than for the purpose of emergency response access.

Water for the LFTC will be derived from the Hudson River. Municipal sewer service will be accommodated by the Saratoga County Sewer District No. 1 (SCSD#1). Niagara Mohawk, A National Grid Company (Niagara Mohawk) will provide electrical power service via four (4) circuits on two (2) new 115 kV transmission line right-of-ways and a substation on the project site, and natural gas from its existing distribution system. Telecommunication facilities will be provided by Verizon New York Inc. (Verizon). As part of the first phase of Fab development, it will be necessary to connect these utilities to the project site.

Environmental Impacts and Mitigation

The proposed LFTC is a large project that will have some environmental impacts as presented in this FGEIS and the DGEIS. It is important to note however that all potentially significant "adverse" environmental impacts are planned to either be

avoided, minimized to nominal (i.e., minor) levels, or appropriately mitigated such that they do not constitute a significant adverse impact, either jointly or cumulatively.

Geology: The regional setting of the project area will be unchanged and topography will not be significantly altered by taking a balanced cut-fill approach during development. There will not be any significant removal of earth materials from the project area. Best Management Practices (BMPs) will be implemented during construction and operation to stabilize soils and control erosion and sedimentation. Blasting, if required, will be done using controlled blasting techniques. Off-site improvements will restore pre-construction contours to the maximum extent practicable.

Air Resources: Prior to commencing construction, each facility will be required to obtain an air permit from the NYSDEC and USEPA, as necessary. Pollution abatement equipment mandated by the Clean Air Act (CAA) will be required subject to permitting by NYSDEC. Facilities locating within the LFTC will be constructed with state-of-the-art air emission control technologies which are expected to go beyond the minimum regulatory requirements. Development is not expected to produce any measurable changes in local or regional climate with the above-mentioned measures in place. Therefore, a significant adverse air impact is not anticipated by the proposed construction, operation, or related transportation improvements.

Terrestrial and Aquatic Ecology: Loss of some forest cover is an unavoidable development impact. However, approximately 50 percent of the project site will be preserved as green space and designated buffer areas will be maintained in perpetuity as forest cover. There will not be any impacts to protected species (i.e., threatened or endangered species or their habitats) as identified by the U.S. Fish and Wildlife Service and the NYSDEC Natural Heritage Program, or any Critical Environmental Area (CEA). The loss of forest cover is an unavoidable adverse impact. This loss is not considered to be a "significant" adverse impact based on the amount of similar habitat in the surrounding area, as well as the amount of similar habitat located in the vicinity of the project site.

Transportation: The potential traffic impacts were analyzed over a 23-year period for a proposed land use that includes construction of up to four (4) nanotechnology manufacturing facilities and approximately two (2) million square feet of ancillary development. Each of the four (4) phases includes one (1) nanotechnology manufacturing facility and approximately 500,000 square feet of ancillary development, inclusive of the Saratoga Technology Energy Park (STEP). Proposed transportation mitigation includes the Step 1 and 2 access improvements, as well as improvements to affected study area intersections in the project area.

Based on the results of the traffic impact study, adequate levels of service in the project area can be provided through the full build-out of the Campus with the appropriate

recommended improvements, some of which would be warranted in the absence of the proposed action. Completion of the Step 1 and Step 2 improvements will minimize the impacts to study area intersections. These improvements will reduce the volume of traffic traveling through the Village of Round Lake.

The Step 1 access road and Step 2 new exit on I-87 are proposed as mitigation for potential quality of life impacts that might result from increased traffic through the Village of Round Lake and project area generated by the Fabs. The project sponsor has committed to constructing the access road prior to the granting of a certificate of occupancy for the first Fab within LFTC, and the new I-87 exit prior to the granting of a certificate of occupancy for the third Fab. Use of Dunning Street will be restricted to emergency access only and no additional road connections to the existing Luther Forest community are proposed. As development progresses, traffic counts will be monitored during the peak hours of adjacent street traffic at the four access points to identify when the trip thresholds are met and to determine what improvements are required before a certificate of occupancy can be issued for the next building.

Construction vehicles generated by LFTC will be instructed not to travel through the Village of Round Lake or on local roads. Prior to the completion of the access road, construction traffic generated by LFTC will be directed to use Exit 12 and Exit 10. Construction traffic is expected to be an insignificant component of the traffic volumes in the study area, and is not expected to have any significant impact on the level of service drivers will experience at the time of construction at potentially affected intersections and roadways within the GEIS study area.

The proposed mitigation for potential quality of life impacts to the residents of the Village of Round Lake in the form of the access road and the proposed future Exit 11A as well as other intersection improvements with the study area, as indicated in the Traffic Impact Study (Appendix F of the DGEIS) and Section 2.2 of this FGEIS, are adequate mitigation measures for the proposed impacts.

Water Resources: The proposed water source for the project is the Hudson River and no groundwater resources will be used for either permanent or interim water supply sources. It is anticipated that total water usage will be an estimated 6 to 15 MGD. The first phase estimated water usage is 3.0 to 4.0 MGD. Low profile water storage tanks will be required, as may be necessary for Pod development. There will be one (1), 5± million gallon tank installed on the south portion of the project site, having a height of 70 to 80± feet.

Stormwater management measures will be required on a "pod-by-pod" basis to detain surface water flow and allow groundwater infiltration. Companies locating in the Campus will be required to develop and implement stormwater pollution prevention plans (SWPPP) in accordance with NYSDEC and USEPA Phase II stormwater regulations.

The storage of chemicals and petroleum will be done in strict accordance with State and federal regulations, as well as the requirements of this GEIS. Off-site improvements and proposed development within the project site will continue to be designed with Best Management Practices (BMPs) to avoid and minimize impacts to streams and other waters of the U.S. to the maximum extent practicable.

The proposed action will have no adverse impact to Plum Brook watershed, Cold Springs Road wells, or Knapp Road well field.

No work will be allowed within 100 feet of Knapp Road well field.

Impacts to surface water, wetlands, or other waters of the U.S. will be first avoided and then minimized to the maximum extent practicable considering the project objectives. The proposed action will impact approximately five (5) acres of wetlands.

All work in the streams will be conducted in one continuous operation in compliance with U.S. Army Corps of Engineers and NYSDEC permits.

The maintenance of utility right-of-ways will be conducted using Integrative Vegetation Management (IVM) techniques.

Mitigation for the proposed impacts, would be the creation of approximately six (6) acres of wetlands that would be constructed in the southwest corner of the project site. The above outlined mitigation measures will be reviewed and monitored through the site plan review process to ensure conformance with the findings of the FGEIS.

Sewer: Wastewater flows can be accommodated without compromising the operation or wastewater quality of Saratoga County Sewer District No. 1's (SCSD#1) treatment plant. Specific wastewater loads will be identified during the site plan review process and pretreatment measures implemented, if required by the SCSD#1. It is anticipated that the Dunning Street alternative (4 MGD) will be constructed to service the first phase. As warranted to support future phases beyond phase one, the new trunk sewer (10 MGD) will be installed along Cold Springs Road to the main trunk sewer line. Total sewer usage estimated at 4 to 10 MGD. The first phase estimated sewer usage is 2.5 MGD. Correspondence from the SCSD# 1 indicates that the District has the ability to expand the current wastewater treatment plant facility without acquiring additional property, should it be necessary.

Electric Power: Full build-out electric power need is estimated at 140± MW, with 60± MW required for the first phase. Fabs require steady state power without interruption provided by a minimum of two (2) separate transmission supplies. As proposed, there will be 150-feet wide electric power line right-of-ways with pole heights ranging from 80 to 115 feet. Substation work and extensions of two (2) interconnection facilities (115 kV) are required for the first phase of LFTC Fab development, and include

a 2.5 mile double circuit line from the existing Malta substation, and the 5.5 mile line from the Mulberry substation in Stillwater to the project site. Additionally, temporary electric service of up to 7 MW using existing distribution lines along highway right-of-way is required for the first phase of Fab construction.

As noted within Appendix O, the extension of the transmission lines will potentially result in visual impacts to the surrounding communities of Malta and Stillwater. The proposed transmission lines are not visible from any of the local, State or federal visual resources identified within Appendix O. Although the LFTC may not be visible from listed resources, it may be visible from other locations within the communities. Mitigation for these potential impacts will consist of crossing roadways at perpendicular angles, expanding existing rights-of-way when possible, and providing vegetative buffering at all roadway crossings.

Natural Gas: Full build-out load of 360,000 cubic feet per hour (cfh). The first phase load is 200,000 cfh. There are two phases of natural gas upgrades proposed to meet the full build-out load. As identified within correspondence from Niagara Mohawk Gas, the upgrades will mitigate the potential proposed impacts that this project will have on the existing gas supply system and will occur within existing public rights-of-way.

Telecommunications: All construction to the project site will take place within existing public rights-of-way. Correspondence from Verizon indicates that there is adequate capacity within the existing system to accommodate the proposed project, therefore no additional mitigation measures are proposed.

Land Use and Zoning: Implementation of the proposed action will incrementally alter the pattern of existing land uses, transforming primarily vacant land, formerly protected by the safety easement, into a modern Campus manufacturing center. Current zoning and permitted uses on the project site will be modified by creating a PDD within the Towns of Malta and Stillwater.

The creation of the proposed PDD is consistent with the existing and permitted uses of the project site, however, the intensity of the uses, as proposed, was not envisioned within the original Luther Forest Master Plan. Significant impacts to either the agricultural district or watershed protection special overlay areas in Stillwater are not anticipated.

At the present time, there is no joint development agreement in place between LFTC and STEP. Applicant SEDC has and will continue to pursue mutually beneficial joint site access agreements with NYSERDA and the Town of Malta, in conjunction with site planners.

Implementation of the proposed action will provide funding to allow each Town to secure additional planning guidance that will serve to assist the Town's further

definition, refinement, and implementation of the Town's vision as well as identify and potentially preserve other areas within the Towns. This funding of the future master planning efforts is considered adequate mitigation for the increased intensity of the proposed uses.

Construction Impacts: Construction impacts will not occur continuously over a 25-year period, but rather intermittently over portions of this period, with most outside construction taking place during non-winter periods. BMPs will implemented during construction, including the uses of strobe back-up lights during nighttime construction. Nighttime construction is a required component of the proposed action. Required outdoor lighting will be limited to the period before the exterior shell of the buildings are completed. Outside construction lighting will illuminate a work area and face downward. Copies of the proposed construction lighting schedule will be available for residents prior to the start of nighttime construction.

Emergency Services: The Fabs will have their own security, fire/chemical, and spill/emergency response personnel and will be required to coordinate their emergency planning and response functions with the local providers, and fund the additional training for local emergency responders, as necessary. All buildings will be required to meet the applicable State and local building codes. Fabs will be subject to the EPCRA "Community Right-to Know" reporting requirements. Increased revenues associated with the increased tax base within the project site will offset any increased costs for emergency services. The proposed action will not have a significant impact on any emergency services, including police, fire protection, or local emergency medical services (EMS) services.

Waste Management: The LFTC will operate within the 'free-market' waste management system of Saratoga County. All wastes will be managed off the project site in permitted facilities. There will not be any adverse impact on either existing waste management plans or existing facilities.

Education: Educational facilities in the project area will benefit financially from the development of the LFTC properties by increased assessed valuations far in excess of any potential concomitant loss in State education aid or enrollment of additional students into the districts. Public schools in the project area can also be expected to benefit further by private industry initiatives. In addition, the presence of a high-tech nanotechnology manufacturing cluster in Saratoga County will serve to reinforce and compliment the initiatives of higher education institutions in the Capital Region. The proposed action will have no adverse impact on any education facilities during construction or operation.

Recreation and Open Space: Approximately 650 acres of existing forested lands will be lost as a result of the proposed project. As mitigation for this potential loss, as well as the potential increased pressure existing recreation facilities may face, the proposed

action will create an 18-acre public access area, a network of public use trails within a 100± acre park and public multi-use trails in association with logging roads inside the project site. The continued forestry management of wooded areas on the project site will require a network of trails in these areas, similar to the existing trails. Trails will be developed and maintained by the development entity, and paid for by the companies located in the LFTC. Further consideration will be given to linking the LFTC trails with the possible trails inside the STEP project. At the discretion of the Towns, the current plan for recreational resources could be modified to more appropriately address their specific recreational needs. The Zim Smith Trail and old trolley line will not be blocked, except for short durations during construction. The proposed concept of interconnection with existing facilities is consistent with the recently adopted Linkage Study.

Full build-out of the proposed LFTC will preserve approximately 50% green space and more than 60% open space on the project site, consistent with the Town's guidelines. Implementation of the proposed action will avoid or mitigate the adverse impacts of induced growth by providing funds for open space preservation initiatives and recreational planning efforts.

There are not expected to be any adverse impacts from the proposed action to existing public recreational or open space assets in the Towns and the Village of Round Lake.

Visual Impacts: Development of the project site as proposed will be visible in only a few off-site areas, as identified within the Visual Impact Assessment in Appendix O of the DGEIS. The potential impacts on the listed resources will be minimal due to the distance from the resources, the amount of the potential structures that will be visible and the lack of contrast in form, line and texture with the surrounding visual environment. Mitigation measures to reduce the potential visual impacts include a maximum building height of 110 feet in Pod 1 and 75 feet in all other non-residential Pods, prohibiting clear cuts for the purpose of creating views, using low profile water storage tanks, use of appropriate exterior finishes, and establishing standards to promote homogeneous lighting and building exteriors throughout the Campus.

Further refinement in the position of the electrical transmission line structures that reduces visual intrusion will take place during final design.

The proposed water treatment plant at the lower Hudson River site is planned to be a two-story building.

The Fab's cooling equipment will be ground mounted while the air treatment equipment (scrubbers) may be either ground mounted or within the roof system of buildings. Neutral colors will be used on at least the upper portion of the Fab's building façade, roof top lighting will be limited or eliminated, and the selected roof color will minimize structure visibility.

Implementation of the above listed mitigation measures will minimize the potential visual impacts. Therefore, no significant adverse visual impacts will result from the proposed action.

Noise: All operations will be subject to a property line threshold of 55 dB(A) during the day, and 45 dB(A) at night. During construction and operation, any noise complaints by neighbors will be addressed in an environmentally responsible fashion and appropriate mitigation measures will be implemented to address valid complaints. A community participation program will be required to be implemented by companies seeking to locate within the LFTC. This program will include response mechanisms and mitigation measures in the event that a noise complaint were received. Proper design and screening will be required for the Step 1 transportation improvements (near monitoring location #6) and Driveway 1 (near monitoring location #1). Noise mitigation BMPs include: public outreach including complaint/response mechanisms, noise walls, earth berms, 'depressed' roadway construction, vegetative barriers, speed limits, time use restrictions, requiring mufflers, prohibiting certain construction practices, and construction staging. Potential noise impacts will be mitigated by project design and mitigation, such that there is not a significant adverse impact to off-site receptors.

Socioeconomic Impacts: There will be no abatement of local property taxes or school taxes under the Empire Zone program. The construction and operation of the LFTC and the creation of upwards of 10,000 new, high-salary manufacturing jobs could be expected to have a substantial positive effect on local and regional socioeconomic indicators such as educational levels and per capita personal and household incomes, compared to the existing, baseline demographic statistics and trends.

Implementation of the proposed action has the potential to improve the local and regional demography. By creating quality jobs focused on high-technology manufacturing and ancillary development, the exodus of young college graduates from the Capital Region can be reduced or reversed, serving to stabilize the demographic distribution, and retaining the intellectual capital produced locally.

Historic and Archeological Resources: Additional historic and archeological investigations, including correspondence from OPRHP providing "clearance" for the proposed development will be provided to the respective Towns as part of the site plan approval application process. The proposed action is not expected to result in any adverse impact to historic or archeological resources.

Quality of Life: The proposed action will provide quality, intellect-based manufacturing jobs located within a campus setting, having ample amounts of green and open spaces, excellent accessibility, and substantial fiscal benefits to the hosting localities, including mitigation for open space preservation with the hosting localities, and funding for future amendments to Town zoning. Additionally, it anticipated that a

community relations committee consisting of residents, town officials and future tenants of the LFTC will be formed to ensure that the quality of life issues that arise over the course of the project's development can be effectively and adequately addressed.

Semiconductor Industry: Based on existing available data, a minimum presence of 25± years should be expected for Fab companies locating in the LFTC. Fabs will be engineered using modular design elements. The primary reuse of old Fab structures is to be refurbished into new Fabs using the latest technologies, however this type of modular building design would allow for other uses such as a call center.

Health and Safety: The nanotechnology industry includes a broad spectrum of manufacturing activities, each with its own unique requirements for process chemistry, and therefore, each using a variety of chemicals. However, each facility will tend to utilize similar categories of chemicals and maintain similar management practices. The storage of chemicals at the project site will be regulated by NYSDEC Chemical Bulk Storage regulations (6 NYCRR Parts 595-599). The leaders of the nanotechnology industry are pioneering new process chemistries and technologies in efforts to reduce the quantity of chemicals used per unit of production, as well as the toxicity of the chemicals utilized. Such innovation reduces cost, decreases potential impacts associated with chemical use, and allows facilities to more easily comply with State and federal health, safety and environmental requirements. As a result of such industry efforts, the nanotechnology/semiconductor manufacturing industry has achieved an excellent health and safety record.

The potential for an accidental release of chemicals will controlled and minimized through the application of various State and federal regulations, including the NYSDEC Chemical Bulk Storage regulations, OSHA Process Safety Management, USEPA Risk Management Plan, petroleum bulk storage programs, and hazardous waste Contingency Plans. Companies will have integrated contingency plans which include a well organized response procedure for any incident experienced at the facility. Fabs will be subject to the NYSDEC Hazardous Waste Regulations (6 NYCRR Parts 370-375).

Malta Rocket Fuel Area (MRFA): Groundwater and surface water monitoring will continue to be done at the MRFA and will be the responsibility of the General Electric Company. Any modification to the MRFA's monitoring plan triggered by the proposed action will require USEPA approval. Work inside the MRFA will require the preparation of Health and Safety and Work Plans subject to NYSDEC and USEPA approval. In the vicinity of the subsurface groundwater contaminant plume, an additional goal of the stormwater management measures is to maintain "equivalent" pre-development infiltration rates into the lacustrine sand.

General and Miscellaneous: The proposed action will not significantly adversely impact residential neighbors in Luther Forest from potential traffic, nuisance (noise, light) and safety impacts.

No improvements or infrastructure will be built "on spec".

If property or easements are required, the Applicant or a successor development entity will offer a landowner fair market value based on a certified appraisal of any such property required.

Alternatives

The following alternatives and the potential environmental impacts of each are assessed in Section 6.0 of the DGEIS: No Action, Alternative Site Access, Alternative PDD Configurations, Alternative Building Designs, Alternative "High-Technology" Facilities, Alternative Phasing, Alternative Sites, Alternative Construction/Operation Schedule, Alternative Land Use, Alternative Water Sources, Alternative Sewer Connections, and Alternative Electric Power Transmission Corridors.

If the start or progression of the anchor Fab is not as rapid as predicted, an alternative phasing plan is possible and likely. This alternative development scenario would be a scaled-down development approach which would not require the substantial investment in water and power infrastructure, site access and internal roadways. The purpose of this development would be to preserve the overall project site for the planned nanotech development while allowing compatible, smaller-scale development in several pods to allow the project sponsor to maintain site control and pay the continuing carrying costs of project development, such as option payments, property taxes and development soft costs.

Irreversible and Irretrievable Commitment of Resources

Implementation of the proposed action will result in the loss of natural habitat, consisting primarily of second-growth, managed forest lands.

The planning and undertaking of the LFTC will require the irreversible and irretrievable commitment of building materials and other man-made resources, including the consumption of raw materials such as lumber, concrete, sand, gravel, oil, iron ore and other minerals. Resources, such as water, electricity, petroleum products and a variety of other natural resources, would be required for operation. All of these actions involve irreversible and irretrievable commitment of resources.

Growth Inducing Aspects

The proposed action has the potential to induce regional growth in both population and business activity within a large geographic area. Some level of such induced growth has been anticipated by the overall design of the PDD and will be accommodated within the Campus. Other growth resulting from the proposed action will occur in the project area and Saratoga County, as well as in appropriately zoned areas in Albany, Rensselaer, Schenectady, Warren, and Washington Counties, within the constraints of existing infrastructure. Such growth will occur on a voluntary basis, subject to local environmental review and approval. Localities that do not desire such growth related to the proposed action will have the ability to limit future growth consistent with their comprehensive master planning efforts, whereas those localities that desire such growth can take appropriate steps to authorize site plan applications allowing construction to proceed.

All such induced growth related to the proposed action is anticipated to be consistent with applicable local zoning and community's comprehensive master planning efforts. Independent environmental reviews in accordance with SEQR will be done for each individual project outside the purview of the proposed action.

Implementation of the proposed action will avoid or mitigate the adverse impacts of induced growth by providing funds for updating local comprehensive master plans and open space preservation initiatives.

Cumulative Impacts

Development of up to two million square feet of ancillary development for the proposed action is inclusive of applicable development on the adjacent NYSERDA site.

Effects on Use and Conservation of Energy

The proposed action is estimated to use approximately 140 MW of electricity, and up to 360,000 cfh of natural gas at 20 to 25 psi. Energy conservation will be achieved throughout the Campus by using high-efficiency and cost-effective equipment and lighting. Buildings will be designed and constructed incorporating design and selection of equipment and systems to achieve energy conservation, in compliance with the applicable provisions set forth in the New York State Energy Conservation Construction Code (NYSECCC).

1.2 Description of the FGEIS

This document is a Final Generic Environmental Impact Statement (FGEIS) for the LFTC prepared pursuant to the State Environmental Quality Review Act (SEQRA), Article 8 of the Environmental Conservation Law, and its implementing regulations at 6 NYCRR Part 617, relating to the proposed action described below. The FGEIS consists of this three (3) volume report together with the Draft Generic Environmental Impact Statement (DGEIS) dated January 16, 2003, which is incorporated into this FGEIS by reference.

This Generic Environmental Impact Statement (GEIS)[1] has been prepared to assess the potential impacts of the proposed long-range development of the Campus in four (4) phases of development over a 15- to 25-year build out period, correlating to the four (4) Fabs of the anchor nanotechnology manufacturing company, as prescribed by the proposed Planned Development District (PDD) Regulations and Master Plan. The proposed action is a conceptual, multi-phased action on a large tract of land that comprises 1,350 acres. Because site-specific projects have yet to be proposed or designed, the GEIS is the most appropriate vehicle for assessing potential environmental impacts in a conceptual and programmatic manner at the earliest possible time.

As future site-specific privately sponsored projects are proposed, they will be required to comply with the PDD Regulations and Master Plan and obtain all necessary approvals under the code as well as any other State or federal laws that may apply. This FGEIS together with the DGEIS and SEQRA Findings Statement sets forth specific conditions under which future actions (i.e., site-specific projects) associated with the proposed action can be undertaken, including requirements for any subsequent SEQRA compliance.

No further SEQRA review will be necessary if a future action associated with the Campus is undertaken in conformance with the baseline conditions and thresholds established in this GEIS or the lead agency's Findings Statement.

In instances where a future action associated with implementation of the Campus is not in conformance with the conditions <u>and</u> generic thresholds established in this GEIS (see Table 2.36.7), an environmental assessment form (EAF) will be completed to assist the lead agency or other involved agency in the evaluation of conformance with the GEIS and Findings Statement, as well as potential adverse impacts related to such action. Thereafter, one of the following SEQRA compliance steps will be carried out by the lead agency or other involved agency:

[1] GEIS collectively refers to both the DGEIS and FGEIS.

1. Amended Findings Statement: If the future action was found to be adequately addressed in the GEIS, but was not addressed or inadequately addressed in the Findings Statement, an amended Findings Statement will be prepared;

or

2. Negative Declaration: If the future action was not addressed or was not adequately addressed in the GEIS and the subsequent action will not result in any significant environmental impacts, a negative declaration will be prepared;

or

3. Supplemental EIS: If the future action was not addressed or was not adequately addressed in the GEIS, and such action may have one or more significant adverse environmental impact, a Supplemental EIS will be prepared.

1.3 Project Review History

On June 3, 2002, the Saratoga Economic Development Corporation (SEDC or the "Applicant") filed a uniform PDD Application for the Luther Forest Technology Campus with the Malta and Stillwater Town Boards. The Town of Malta Town Board (the Board) subsequently assumed SEQRA "Lead Agency" status for the environmental review of the proposed action by consent through a cooperative agreement with the Town of Stillwater. Based upon the information contained in the Environmental Assessment Form (EAF), and in accordance with 6 NYCRR Section 617.12, the Board issued a Positive Declaration having determined that the proposed action may have a significant effect on the environment and required the preparation of a Draft Generic Environmental Impact Statement (Draft GEIS). Interested and involved agencies include, among others, the Stillwater Town and Planning Boards, the Malta Planning Board, the Saratoga County Industrial Development Agency, the Mechanicville-Stillwater Industrial Development Agency, the Saratoga County Planning Board, the Army Corp. of Engineers (Corps), the New York State Department of Transportation (NYSDOT), New York State Department of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH), New York State Department of Public Service (NYSDPS), New York State Historic Preservation Office (NYSHPO), Empire State Development Corporation (ESDC), and the Village of Round Lake Board of Trustees.

A Draft Scoping Outline was prepared to enlist public input on the proposed content of the Draft GEIS. It was distributed to involved agencies, interested parties, environmental groups and other stakeholders. The Draft Scoping Outline was also distributed to and made available at the Malta and Stillwater Town Halls. A public scoping session was held on July 24, 2002 to receive comments on the Draft Scoping Outline. Oral comments received at this scoping meeting, as well as written comments received through the public comment period which closed on July 31, 2002 were considered and incorporated, as appropriate, pursuant to the SEQR regulations, into this Final Scoping Outline which was accepted by the Malta Town Board on August 12, 2002. The Final Scope outlines the issues to be studied and analyzed in this Draft GEIS. The Final Scoping Outline as adopted is included as Appendix A to the Draft GEIS.

Pursuant to the State Environmental Quality Review Act's (SEQR) requirements, the Draft GEIS was prepared by SEDC to facilitate the environmental review process, provide detailed information regarding the proposed action and the environmental setting of the project site, seek public comment and constructive input, and provide a basis for good decision making. The Draft GEIS presented an analysis of the potentially significant adverse and beneficial environmental impacts of the proposed action, as well as impact mitigation measures and reasonable alternatives to the proposed action, consistent with the Final Scope.

In accordance with the SEQR regulations, the Malta Town Board on January 16, 2003 accepted the Draft GEIS prepared by SEDC, and filed a combined Notice of Completion of Draft Generic EIS and Notice of SEQR Hearing on January 22, 2003. This combined notice was issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law, and Articles VII and X of the Town of Malta Zoning Ordinance regarding PDDs and amendments to the Zoning ordinance, respectively. The notice established a 60-day public review and comment period, including two (2) public hearings, extending till the close of business on Monday, March 24, 2003.

Copies of the two (2) public hearing transcripts from the public hearings and written comments received by the Lead Agency are included as Appendix A and Appendix B, respectively. Responses to these comments comprise Section 2.0 of this FGEIS. Additionally, a table in Appendix C summarizes all the comments received on the DGEIS.

This FGEIS is a collaborative effort that has been prepared by a team of consultants working for the Towns of Malta and Stillwater, and SEDC. The form and substantive content of this FGEIS was drafted by C.T. Male and critically reviewed by the Towns' engineers, as well as other members of the SEDC project team, as discussed in the April and early May, 2003 project meetings, prior to undertaking the formal responses to comments.

1.4 Summary of the DGEIS

The DGEIS dated January 16, 2003, evaluated the potential environmental impacts of the proposed action as prescribed by the proposed Planned Development District (PDD) Regulations and Master Plan. The PDD Regulations and Master Plan, originally submitted as part of the June 3, 2002 application for the LFTC with the Malta and Stillwater Town Boards, have been revised in response to public comments. The revised PDD Regulations can be found in Appendix J.

Section 1.1 of this FGEIS provides a summary of the proposed action, and its likely impacts and mitigation. It is important to note that this section provides only a brief summary of the DGEIS and has been included for the convenience of the reader of this FGEIS. The complete DGEIS has been incorporated by reference to this document in accordance with 6 NYCRR Section 617.9.

2.0 RESPONSE TO PUBLIC COMMENTS ON THE DGEIS

The following represents the responses to comments that were received on the DGEIS for the proposed Luther Forest Technology Campus. A public comment period was held open between January 22, 2003 and March 24, 2003, during which time two (2) public hearings were held on February 20, 2003 at the Town of Malta Community Center, and on February 26, 2003 at the Stillwater Community Center.

The comments included in this section represent both written comments (refer to Appendix B) submitted to the Malta Town Board during the public comment period and oral comments received during the two (2) public hearings (refer to Appendix A).

The comments have been categorized according to substantive issues raised, including the following:

- Master Plan and PDD Regulations
- Transportation
- Infrastructure
    - Water
    - Sewer
    - Electric Power
    - Natural Gas
    - Telecommunications
- Socioeconomic Impacts
- Quality of Life Issues
- Threatened and Endangered Species
- Alternatives
- Semi-Conductor Industry
- Growth Inducing Impacts
- Health and Safety
- Land Use and Zoning
- Visual Impact
- Recreation
- Educational Facilities
- Emergency Services
- Wetlands
- Flooding
- Cumulative Impacts

- Air Resources
- Malta Rocket Fuel Area
- Open Space
- Vegetative Impacts
- Private Water Wells
- Noise Impacts
- Construction Impacts
- Geology
- Public Water Supplies
- Surface Water Impact
- Fish and Wildlife
- Historic and Archeological Resources
- Waste Management
- Critical Environmental Areas
- Petroleum and Chemical Bulk Storage
- Energy Conservation
- Unavoidable Adverse Impacts
- General and Miscellaneous

2.1 Master Plan and PDD Regulations

1. Comment: How can you guarantee that the specific manufacturer that comes into the LFTC has a good track record on environmental compliance and be "world class nanoelectronics manufacturing companies", how will this determination be made, and what kind of companies could be expected? What assurances can be offered that these companies will do everything that's laid out in the DGEIS and be in compliance with applicable environmental regulations? If Malta or Stillwater has a legitimate complaint during operation of the LFTC, what legal steps could be taken? Applicant should provide a list of "good" corporate citizens, as well as those that don't make this list. Several commenters suggested that environmental impacts could not be seriously addressed in the absence of a specific Applicant company.

Response: Under Section D of the proposed LFTC PDD regulations (Draft GEIS, Appendix E), the Planning Board(s) would review information as to whether the candidate companies complied with the corporate "Guiding Principles" of "good corporate citizenship" as set forth in that section. It is assumed that the Planning Board will require an affirmative demonstration of a company's compliance with "Guiding Principles", and that site plan review and approvals (and maintenance of Certificates of Occupancy) will require continued compliance with all relevant conditions of project and site plan approvals.

In the PDD regulations, the Applicant has set proposed qualifications that must be met by a corporation in order to become a tenant of the LFTC. The Draft PDD legislation in Section C (Draft GEIS, Appendix E) further identifies the design consideration and objectives for LFTC in a clear and concise fashion that will have to be followed by a developer or future tenant.

In the future, when corporations come forward to develop property in the LFTC PDD, additional permitting oversight by the NYSDEC and the respective approval Board will be completed in accordance with the approved PDD regulations. Typically, required permit applications to NYSDEC will include air source, chemical bulk storage, and State Pollution Discharge Elimination System Permits. The Planning Board will consider the site-specific issues related to the development of the site.

If a facility were arguably not in compliance with any such relevant permit conditions or mitigation measures at any time during its construction or operation, the facility owner or operator could be subject to action under Town zoning ordinances or local laws in the same way that such zoning laws now govern the construction and occupancy of other land uses. Presumably, such enforcement efforts would be under the jurisdiction of the Town Building Inspector or Zoning Enforcement Officer.

2. Comment: Several commenters questioned whether buildings having a height of 110 feet would ever be allowed inside the LFTC. One commenter (Stephen Rutkey)

asserted that the PDD regulations should specify a maximum building height less than 110 feet.

Response: Allowing structures having a height of 110 feet in Pod 1 is an industry requirement. Lower building heights would not satisfy the objectives of the project sponsor nor the industry's requirements.

The industry standard, which has been noted within Appendix G of the DGEIS, is to have building of approximately 110 feet in height to accommodate necessary air handling equipment space. The ultimate potential height of 110 feet would include the enclosed roof mounted equipment ranging in heights from 25-35 feet. The enclosure of the roof-mounted air handling equipment allows for a unified design of the architectural skin of the proposed buildings.

As documented in the Visual Impact Assessment within the Draft GEIS, the 110-foot height can be accommodated at the Luther Forest site due to the heavy forest cover, elevation of the site, site topography, and regional position.

The tall trees at the perimeter of the project site create a screen and the developable portions of the project site are located within a relatively flat plateau that reduces the potential visibility of 110-foot structure from being readily visible from adjacent areas and those areas within three miles. The zone of visibility map clearly shows the expected visibility of the 110-foot tall portion of the buildings (See Draft GEIS Appendix O Figures 2 and 3). The amount of visibility and distance at which the structure could be seen contribute to the overall low impact.

Refer to Section 2.12 of this FGEIS for more expanded discussions of structure visibility.

3. Comment: The buffers being proposed for the manufacturing facilities are insufficient. A minimum of 1,000 feet of undisturbed buffer, not just green space, should be provided.

Response: The proposed PDD legislation and concept plans have provided for a minimum 400 feet of separation setback from neighborhoods. This is five to ten times deeper than any setback requirement found in the applicable zoning codes. The 400-foot setback distance is 100 feet wider than the buffer zone adjacent to the I-87 corridor in Malta and four times wider than the stated buffer zones within the Town of Stillwater. It should be noted that while the buffer zones are a minimum of 400 feet to the nearest residential neighborhood, the proposed setback from the existing Thimbleberry Road is approximately 1,000 ± feet to the nearest section of Pod #1 development. The DGEIS has indicated the potential noise and visual impacts and has demonstrated that these impacts can be adequately mitigated by the buffer zones as proposed.

4. Comment: One commenter (Heather Atkinson) suggested that the proposed action be consistent with a "walk-able community," providing a direct walking path to the downtown from the Campus.

Response: Within the campus setting, the facilities will be arranged to provide pedestrian access between buildings within the manufacturing area and the supported areas of the LFTC. The current plan calls for pedestrian/bicycle connection to the Route 9 and Route 67 corridors, as well as the existing Downtown area.

The distance between the fabrication area and the support office area is 1,500 feet, which is within the 2,000-foot guidance for pedestrian oriented development (Calthorpe 1993, The Next American Metropolis). The straight-line distance to the Route 9 and 67 intersection is 4,400 feet, twice the pedestrian-oriented development guidance "for easy efficient walking distance". The actual walking distance is over 5,280 feet (1 mile) and cannot be reduced due to the size of the parcel and desirability of the campus concept. Although these distances may be in excess of what would normally be considered a walkable community, the establishment of the facilities will allow individuals the opportunity to access the campus by means other than automobile.

5. Comment: One commenter (Joe DeLong) stated that the DGEIS does not contain a Master Plan, suggesting that the environmental review was, "putting the cart before the horse."

Response: The Draft GEIS contains a Master Plan for the PDD development which would be realized in a four-phased development over a 15- to 25-year timeframe. See Draft GEIS Section 2.3, Figures 2-1 and 2-2 and Appendix E, Proposed PDD regulations, Sections B.2 and C.

6. Comment: One commenter (Roy Muermann) stated that there is a difference between nanotechnology and chip fabrication, and that they're not necessarily the same thing. Several commenters asked for a clarification of the term, "nanotechnology," and suggested that this term was too broadly defined, lacking an SIC code. Does this definition include bio-terrorism research, biopharmaceuticals, chemical manufacturing? There should be a very clear understanding as to what is being proposed, and what is not being proposed, for the LFTC. Should uses be limited to semiconductor manufacturing only?

Response: For purposes of defining allowable manufacturing uses within the LFTC development areas (i.e., pods) as part of a zoning code, as explained in the Draft GEIS Master Plan narrative (DGEIS Section 2.3 and Appendix E, Section B.2 of the PDD regulations), the LFTC PDD regulations propose a simple, functional definition of manufacturing buildings containing "clean rooms". Such buildings would have similar physical land use requirements and impacts (height,

bulk, utilities and infrastructure) and come within the desired "industry cluster" focus for the LFTC, promoting synergies of physical and intellectual capital within the project site.

It is true that microelectronics and chip fabrication are only a subset of potential allowable nanotechnology uses as they are defined in the LFTC PDD regulations, and that the range of products which can be manufactured in cleanroom environments is evolving and growing beyond microelectronics to other areas mentioned in the Draft GEIS, such as flat panel displays, MEMS and biological/medical applications of nanotechnology. For the purposes of defining the basic allowable land use and affording a clear and simple definition which could be applied by future Planning Boards, the functional "nanotechnology" means "manufacturing within cleanroom" definition seems most appropriate. Such a flexible definition also avoids the regulation drafting problem of attempting to inclusively anticipate many or all potential classes of compatible uses or products which have not yet been developed.

With respect to the extent of environmental approvals for nanotech manufacturing as established in this GEIS process and the PDD regulations, however, there is an important caveat to any nanotech uses and technologies which vary significantly from those semiconductor manufacturing processes studied and approved in this EIS process. Although such variant nanotech uses might be potentially allowable uses under the PDD regulations, they would not necessarily be "uses as of right" without further supplemental SEQR review.

As envisioned by the PDD Regulations (DGEIS, Appendix E, Section D.5 regarding the need for supplemental environmental impact statements), the generic finding of environmental compatibility for any nanotech uses on the Campus made in this proceeding is restricted to the processes and representative chemicals which relate to the principal proposed use of the Campus for silicon-substrate semi-conductor manufacturing as discussed in Draft GEIS Section 4.9, the Health and Safety Report (DGEIS, Appendix G), and the Industry Requirements Report (DGEIS, Appendix C). Therefore, to the extent that the chemicals, tools or processes of any different proposed nanotech use vary substantially from those described in the these health and safety reports, which variations might have the potential for a significant adverse environmental impact not studied in this overall GEIS review, a future SEQR supplemental determination of significance and potentially a Supplemental EIS would be require to address any such new "nanotech" uses. Under the Proposed PDD regulations (DGEIS, Appendix E, Section D.5), that SEQR review and supplemental determination would be made by the Planning Board(s) when a use is actually proposed and applies for site plan approval.

7. Comment: How can the GEIS take precedence over Town zoning ordinances, as stated in the PDD regulations, when there is a conflict between the two? Shouldn't local law apply where there's a conflict, and thus require a variance application?

Response: A PDD is an authorized mechanism provided for in the zoning laws of both Towns whereby a local law (the PDD ordinance) amends the underlying zoning ordinance to provide for a separate and distinct zoning use district where the special "district" standards take

precedence over the general zoning law requirements within that special development district. Since the PDD-specified nanotech uses would be allowable by definition, no variances would be required, however information would need to be supplied during the site plan review to ensure that the potential tenant conforms to the approved nanotech use set forth within the PDD regulations. The PDD mechanism is an authorized and accepted zoning tool and is a widely used and generally accepted in both the Town of Malta and Stillwater, as well as surrounding communities and the State for, mixed-use projects which do not fit the pre-established, single-use categories of typical zoning ordinances.

8. Comment: Is the property privately owned now and who is going to own the LFTC in the future? Who will be responsible for oversight in the future. The DGEIS indicates that an "entity" will manage the common areas. Specific details about the organization, creation of and sustainability of the proposed "entity" should be discussed within the GEIS.

Response: The property is currently privately owned by the Luther Forest Corporation (Mackey family) and Wright-Malta Corporation. The future owners and development entities for the overall LFTC are unknown at this time. It could be a commercial real estate development and management company (i.e., the development entity) which owns the facility or which professionally manages it under contract for a not-for-profit or quasi-public development corporation, or an eventual consortium of tenants/owners in the Campus. In any event, the type or ultimate identity of the economic development entity owning or managing the LFTC should have no bearing on the overall environmental impact assessment matters under consideration in this proceeding.

Zoning controls relate to the use and development, not ownership, of land. Whatever development entity proceeds to develop and manage the project site, it will be bound by the approved PDD Master Plan and Declaration of Covenants and Restrictions and Reciprocal Easements of Ingress/Egress and Commons Access for the project, as well as the Draft and Final GEISs and Findings Statement, which together will bind the development entity and future owners and tenants within the Campus to the approved uses, conditions and mitigation measures applied to the project site.

9. Comment: Section 2.3.1.2, Development Pods 6, 7 and 8 Campus Center, section indicates that the uses proposed will not compete with general business areas of the Towns, however the types of uses identified include cleaners, newsstands/bookstores, restaurants, hotels and similar uses. How can these types of uses which, for the most part, currently exist within the downtown Malta area not be considered competition for the existing businesses? Given Malta's vision for creating a "downtown Malta", how would allowing these uses within the LFTC impact the town's ability to realize their vision? One commenter stated that Campus commercial uses

(hotels, restaurant, retail, banking) should be deleted as a proposed use. Other areas of Malta zoned commercial should be identified to determine if existing commercial areas at build out can meet the needs of the Campus. A plan should be developed as part of the LFTC to identify how the proposed industries and workers, "will benefit Malta by using existing commercial businesses." Another commenter suggested there needed to be a happy medium between the level of commercial development allowed in the LFTC versus downtown, to address the needs of Campus workers while not flooding the downtown area.

Response: The "test" for competition with a general Central Business District (CBD) in Malta under the proposed PDD regulations (Draft GEIS Section 2.3.1.2; PDD Regulations, Appendix E, Section B.3(c)), would be whether the business is principally for the convenience of the employees and guests of the proposed Campus.

Applicant SEDC believes that this proposed standard provides a workable test for trying to avoid siting businesses at the Campus, which would draw "unrelated-to-LFTC" traffic to magnet stores within the Campus. The Planning Board can reasonably make this determination in the future when deciding, for example, that a 1,500-square foot dry-cleaner shop is principally for the convenience of the Campus tenants while a proposed freestanding 200,000-square foot book, department or building materials store would be inconsistent with the "Campus Commercial" designation.

The Commenters also mistakenly assume that if the "downtown" Malta (Route 9/67/Exit 12) CBD district has an existing use, such a business would necessarily suffer "destructive competition" from a similar business at the LFTC. This is not necessarily the case: the central district business location of a dry cleaner, post office, restaurant, hotel, bookstore or similar use is not that "competitive" for an LFTC employee who must drive, or (in good weather) bicycle or walk more than a mile from the Campus or alter his/her commute to shop at the Route 9/67/Exit 12 area.

Such future commercial locations at the LFTC might also be locally owned as well, and existing merchants may find it profitable to open and develop "satellite" locations at the LFTC while keeping their existing stores in the CBD or elsewhere. Moreover, zoning laws, like any government regulation of commerce, by "default", should generally be presumed and construed to promote greater competition and choice for consumers. For these reasons, increasing competition in the marketplace is generally believed to be in the public interest and is the general public policy of government in the United States.

It is far from clear that SEQR or zoning law restrictions can or should protect existing merchants (such competitive commercial interests which have been held not to have "standing" to raise environmental issues in judicial challenges of SEQR decisions, for instance). The Applicant believes that the limited potential "competition" existing businesses might experience from the "campus commercial" uses allowed in the PDD regulations will not harm the "community character" or development of the current Central Business District in the Exit 12 area, nor render those properties commercially infeasible for their existing, authorized uses. That

is the proper test to be applied, and by that measure (similar to that used under zoning ordinances for "neighborhood commercial" designations), some limited services primarily targeted to Campus users should be allowed as proposed.

The Applicant's design objective is to develop a campus that is walkable and that does not create an undue burden on the community. The distance between the fabrication area and the Route 9 and 67 corners is in excess of 4,200 feet, which is double the walkable standard. Focusing all support retail facilities at Route 9 and 67 vicinity will obligate private vehicle use to access general business, therefore, a sound plan of limited small-scale convenience service within the LFTC Campus is necessary. It is anticipated that the retail areas around Route 9 and 67 will be the receiver of the combined or bypass vehicle trips of individuals coming and going to places of employment on a daily basis. Given that the retail areas are already developed, these facilities will most likely be larger, with greater depth of services or options than the limited general business area proposed to be allowed at LFTC.

To balance the needs of tenants yet provide for enhanced business environment within Malta, the retail areas on the Campus will be significantly related in size and number, and must be intended for use by Campus workers. Up to three (3) free-standing restaurants will be developed on the proposed Campus and each structure will be less than 4,000 square feet. The proposed hotel conference center will be limited to fifty (50) suites and conferencing facilities for 150 individuals.

The most recent Malta Town Master Plan revision (December 2000) identified Luther Forest as a separate neighborhood (Neighborhood 5). The Luther Forest area was identified as a unique mix of residential areas with the potential for business development within the Luther Forest PDD and at NYSERDA. The master plan anticipated the development of 3,300,000-square feet of incubator scale businesses at the NYSERDA property (Pages 13 and 14 of the 12/2000 Malta Master Plan). The LFTC will have approximately 1,900,000-square feet of commercial space, therefore, the NYSERDA area which is much smaller would be able to host the balance of the 3,300,000-square feet, or 1,400,000-square feet of development. Expansion of business development in the vicinity of Luther Forest was linked to construction of primary access from Route 9.

10. Comment: One commenter (Paul Sausville) suggested that the Master Plan for the Campus be inclusive of not only the project site, but also the downtown/Route 9 and Route 67 area, addressing the "whole impact area of Malta" and demonstrating, "how the Campus would fit into downtown and the Town as a whole." Suggested components of such a plan would include:

- Identification of polices and actions to strengthen connectivity between the Campus and downtown.

- Evaluation of project site access, particularly for people currently residing in the Luther Forest residential community, and future residential subdivisions along Route 9 and inbound north from I-87 with support maps.

- Integration of a mass transit system to downtown.

- Show how Dunning Street and Plains Road (access through NYSERDA) will be used, perhaps limiting Plains Road access to only shuttle buses, mass transit, permitted users and visitors.

- Multi-use path connections between the Campus and the town network, including a discussion of maintenance costs.

- Best sites identification for municipal support facilities such as State police, recreation facilities, or YMCA, located in the town, not at the Campus.

Response: The potential impacts and opportunities of the LFTC on off-site land uses is proposed to be further studied and addressed in the Master Plan/zoning revision process described in the Response to Comment #2.9.1 relating to induced growth impacts.

The LFTC development plan can be further integrated into the Routes 9 and 67 business areas without creating significant or undesirable impacts. The primary means to strengthen the connection between LFTC and the existing developed area will more than likely have to be a bus-based mass transit system of shuttle buses or "trolleys". There is a potential role for the Capital District Transportation Authority and the Capital District Transportation Committee to assist in the operation and development of the mass transit system. Commuter transportation within the Campus and ride parking lot system would be a logical outgrowth of this development. In later phases, an internal shuttle may be advantageous for all the tenants of LFTC and the downtown area of Malta. Implementation of a bus/trolley transit system and the logistics of planning and funding this system will be evaluated as part of the future planning studies to be completed.

A system of multiple-use paths can act as a secondary means of connectivity and are proposed for all internal LFTC roads and would connect to the Route 9 corridor. However, due to the distances from the campus to the Route 9 corridor and the Downtown area of Malta, the actual use may be less than one would anticipate for regular use by employees of the LTFC. This is due to a variety of reasons including the time individuals have for breaks and lunch, the availability of pathways and existing on-site recreational opportunities as opposed to off-site opportunities in proximity to the campus and potential accessibility constraints during the winter months.

The proposed multiple use paths on the project site will be maintained by the LFTC development entity as part of its overall maintenance responsibilities. Should the streets and roadways be dedicated at some time in the future it is anticipated that the maintenance of both the roadways and the multiple-use pathways within the rights-of-way to be dedicated would become the responsibility of the accepting agency.

The development plan for LFTC does not utilize the NYSERDA and Wright-Malta Corporation entry road (i.e., Hermes Road), except for emergency access purposes (refer to DGEIS Figures 4.2 and 4.3). No trips from the LFTC have been allocated within the traffic study to access Hermes Road at the intersection of Dunning Street – Plains Road or the roadway corridor. The exclusion of traffic from this intersection and corridor is due to existing capacity issues and the fact that better and more appropriate vehicular access routes have been proposed. As the LFTC matures, in later phases of development it may be desirable to utilize Hermes Road for mass public transit, access to the project site and from the Route 9 and 67 area. However, such access along the Dunning Street – Plains Road corridor is not currently proposed and the potential use of this access point at this time does not warrant inclusion of this intersection as a useful access LFTC development.

11. Comment: Recognizing that laws and tax incentive programs can change over time, one commenter (Paul Sausville) suggested that the PDD regulations should contain specific legislation which, "ensure that the Town receives the necessary taxes from industries locating in the Campus."

Response: Comment noted. It would be possible to condition project approval to require that future development is approved on condition that no project component shall seek or receive any abatement of real property taxes. As discussed in the fiscal impacts section of this Final GEIS, "Empire Zone" certified businesses would pay full-assessed real property taxes to local municipalities and receive a tax credit from the State. There will be no abatement of local taxes. If there were a supplemental PILOT agreement through an IDA, that agreement would provide for no abatement (i.e., 0% abatement, or, alternatively, 100% tax payment) of real property taxes. See Response to Comment #2.4.4.

This condition will be added to the proposed PDD regulations. A logical place to amend the proposed regulations would be to add this condition to the "Guiding Principles" requirements at Section B.3.(b) of the PDD Regulations (Draft GEIS, Appendix E) for corporate tenants/owners developing in the LFTC Campus.

Additionally, the condition of full payment of ad valorem taxes is included as a SEQR threshold in Table 2.36.7. See Response to Comment #2.36.7.

12. Comment: How many more amendments to the PDD regulations are anticipated as described in Section C(7)?

Response: No future amendments as such are anticipated or known at this time. However, like most regulatory codes or long-range Master Plans, the proposed PDD Regulations and Master Plan contain general provisions by which such rules might possibly be amended in the future, depending on new or changed circumstances, or unanticipated needs that may arise.

As noted in such provisions regarding future amendments (Proposed Regulations, Section C.7), any such revisions would need to be approved by the Town Board(s) in the same manner as the zoning ordinance itself is amended, requiring advance notice and an opportunity for public hearings as required by Town Law §264 and §265 and the related provisions of the local ordinances. Additionally, as required by SEQR (6 NYCRR 617.10(d)(4)) and discussed in the PDD Regulations (Section C.7) and PDD Master Plan (Draft GEIS, Section 2.3 at Page 38), such changes would need to be evaluated to determine whether they have the potential for a significant adverse environmental impact not evaluated in this GEIS process, and might therefore require the preparation of a Supplemental EIS with respect to those proposed amendments.

13. Comment: Why would the proposed action be exempt from the subdivision approval process?

Response: The proposed action is not proposed to be exempt from the established subdivision approval process. Subdivision review will be required after the creation of the LFTC PDD district to divide the project lands, which will comprise the LFTC from the remaining lands of Luther Forest and Wright-Malta Corporations. The specific parcels which will require such initial subdivision are set forth in Draft GEIS Table 2-2. Those subdivision approvals by the two (2) Town Planning Boards are also listed in the "Permits and Approvals" table of SEQR "involved agencies" which will also subsequently review aspects of the Project which are covered by this SEQR generic review (Draft GEIS, Table 2-3).

However, as prescribed in the proposed PDD Regulations (Section E, Draft GEIS Appendix E), and discussed in the PDD Master Plan narrative (Draft GEIS Section 2.3 at Page 37), further re-subdivisions of lands within the LFTC would be allowed without further subdivision review. Such re-subdivisions will only affect the ownership of title to the lands, however, not their development, use, and/or appearance, which will be entirely regulated by generic approval of the PDD Master Plan and Regulations under SEQR/Town Zoning Codes and subsequent site-specific Planning Board site plan approval. Typically, subdivision approval insures that individual lot development proposals undertaken by different owners/developers will meet uniform minimal dimensional standards, provide required ingress/egress to highways and other adjacent developments, and otherwise be consistent with zoning requirements for adjoining lots and the overall character of the zoning district or neighborhood. However, in this instance, the development and use of lands is already being comprehensively regulated by the PDD Master Plan/Regulations and site plan review.

Conversely, as discussed in the Draft GEIS and proposed PDD Regulations (Section E of Appendix E), manufacturers in the LFTC will typically need nominal, ministerial subdivision approvals to seek financing for the "footprints" of their individual developments, similar to those typically sought by large commercial facilities such as enclosed regional shopping malls where an anchor store, theater or free-standing outparcel development might need to have an ownership interest in the "footprint" of its own facility, for secured financing purposes (mortgages, bonds).

For instance, at other nanotech facilities, suppliers and sub-contractors such as electric utilities, water purification companies and bulk gas and feedstock suppliers often own the "footprints" of their own facilities.

As such, the requirement to seek subdivision approvals and associated variances for these "zero lot line" subdivisions (which by definition would likely not comply with required standard lot line setbacks, off-street parking and similar "area" requirements relative to subdivided parcels) would appear to offer the public any additional regulatory protections concerning the use, development and appearance of lands within the LTFC.

Lastly, it should be noted that such local land use controls such as site plan and subdivision approvals are not uniformly required for all new land use and development, but, rather, that broad categories of actions can be and are deemed "exempt" from certain approvals because such actions have categorically been found to result in no adverse consequences. For instance, subdivision review is often not required for "minor" subdivisions (e.g., typically two or three lot subdivisions), and site plan review is typically not required for residential construction, based on the legislative judgment that other existing review processes are sufficient to regulate development, and that de minimus or ministerial actions need not be subject to the full panoply of zoning controls required for major actions. SEQR as well comports with this principle by exempting "ministerial" actions which do not themselves involve physical alterations to the environment from review.

Therefore, the proposal of the PDD Regulations that re-subdivisions of lands within the LFTC be addressed concurrently with the site plan review process.

14. Comment: What guarantees do the Towns have that these companies will gain and keep the public trust?

Response: As with almost all "guarantees" relating to future conditions, there are, and indeed cannot be, any ironclad "guarantees" that LFTC tenants will gain and keep the public trust.

However, the requirements of the Guiding Principles of the LFTC PDD Regulations that LFTC tenants will be "good corporate citizens" is more than mere precatory (i.e., wishful thinking) language: the PDD rules are regulations which have the force of law and will be implemented by local government bodies. Beyond the legal requirements, given the huge capital expenditures involved in constructing a Fab (on the order of $2.5-billion per Fab) and needs for local labor and community acceptance as a "good neighbor", it is also expected that the major tenants in the LFTC particularly will have sufficient and strong incentives to gain and keep the public trust, aside from the zoning law requirements that they endeavor to do so and demonstrate their efforts and "track record" during the facility permitting process. Additionally, as within other communities which host these types of companies, it is anticipated that a Town and LFTC committee will be formed to allow a greater degree of interaction between the tenants of the LFTC and the public.

15. Comment: Section 2.3.1.3 (Development Pods 2, 3, 4, 5, and 9 - Nanotechnology Manufacturing and Support, Offices) provides for the development of "smaller wafer Fabs and similar high-tech manufacturing uses (i.e., microelectronic mechanical systems (MEMS) and flat screen displays)." Allowable uses with in the LFTC will be limited to facilities that utilize similar materials and processes analyzed within the DGEIS.

Response: See Response to Comment #2.1.6, above.

16. Comment: The GEIS and PDD legislation should establish submission requirements for future site plan applications to ensure the proposed uses are consistent with the processes and materials included in the GEIS.

Response: The PDD legislation contains submission requirements and procedures. Section D.4 of the PDD Regulations (DGEIS, Appendix E) provides that project sponsors must submit a narrative with applications for site plan review that demonstrates the consistency of the proposed development with the substantive standards, criteria, thresholds and mitigation measures of PDD Master Plan Regulations (including corporate "Guiding Principles"), and SEQR Findings Statement. Submission of this narrative as part of the application is required, and the Planning Board has jurisdiction to seek additional information to satisfy itself that the proposed development is in compliance with the PDD Master Plan and Findings.

As further noted in Section D.5 of the proposed PDD regulations and Response to Comment #2.1.6, proposed nanotech facilities will need to either use materials, representative chemicals or processes which are similar to those involving silicon-based semi-conductor devices, and thus be covered by the generic approvals involved in this GEIS <u>or</u> they must provide a detailed supplemental narrative (and required SEQR EAF) which reviews the different methods or materials proposed and demonstrates (similar to the Health and Safety Report, DGEIS Appendix G), that such variations will not create significant environmental or health and safety impacts or concerns.

17. Comment: The DGEIS indicates that "future owners of developed lands within the "Pods" will be financially obligated to contribute to the ongoing maintenance of the campus common lands, interior roads, facilities, buffers and green space." What mechanism will be utilized to accomplish this goal, when will it be in place and how will it be enforced?

Response: The mechanism will be a legally binding restriction on all developable property within the LFTC, in the form of a recorded master Declaration of Covenants and Restrictions and Reciprocal Easements of Ingress/Egress and Common Land Access. Such recorded

instruments create easements and restrictions within the "chain of title" for properties within the Campus which are perpetual and "run with the land" in accordance with common law and State statutes affecting title to real property.

The legal instruments created to create such enforceable "burdens" on lands within the Campus would be similar in theory and effect to easements which are imposed on residential lots in a new residential subdivision, where each building lot is given an undivided interest in the subdivision roads and common properties, and is similarly obligated to pay a collective Homeowners Association (HOA) managed by the developer or tenants which will maintain the common areas and infrastructure (with enforceable liens, similar to tax liens, assessable against properties which do not timely pay their HOA assessments). The only difference in theory between such typical HOA arrangements for a residential subdivision and what is proposed here is that, unlike a residential subdivision, governmental approval of the Attorney General or other agencies is not necessary to form an "industrial HOA" before offering the property for sale.

As noted in Response to Comment #2.9.1 regarding induced growth, Applicant proposes that open space and recreational needs of the community be provided in other off site areas of the Towns identified in the Town(s) Master Plan revision process(es), rather than on the LFTC Campus, in response to the statements of public needs and desires expressed in the Draft GEIS comments in this proceeding.

The December 2000 Malta Master Plan identified the following parks:

- *Malta Community Park 22.59 acres*
- *Shenantaha Park 62.41 acres*

In addition, 44.80 acres of land was deeded to the Town of Malta for park development. The total available park acreage is 85 acres. The applicable planning standard is to have the following types of parks in a community (Canter et al, 1985; Burchell et al, 1994):

- *Neighborhood 2.2 acres per 1,000 development units*
- *Community 5.0 acres per 1,000 development units*
- *Playground 2.7 acres per 1,060 development units*

Based on these suggested minimum requirements, adequate park space already exists, but may not be in convenient locations or lacks the complete complement of equipment.

The LFTC has proposed to construct, or to set aside for future use, 18 acres of land for park development along with a 100-acre park, as well as the approximately 50% of the site which is designated green space. This combination of future active recreation space and a variety of passive open space uses is believed to be adequate to serve the community.

18. Comment: On the illustrative plan (Figure 2-1) it is not clear how many nanotechnology manufacturing operations are shown. This should be clarified and shown appropriately on the illustrative plan.

Response: The number and type of nanotechnology manufacturing operations are listed in the DGEIS, Table 2-1, Typical Resource Requirements for Nanotechnology Manufacturing Facilities. The PDD illustrative plan has been revised based on public comments (Figure 2.1.1) and shows the four (4) "anchor" nanotechnology manufacturing facilities in Pod 1. For clarity, one of the potential "anchor" manufacturing facilities has been shaded a dark brown. The potential three remaining facilities have been indicated in a light tan color.

19. Comment: It is not clear if the additional area shown on Figure 2-1 within Pod 1 as "potential future development" is included within the full build out. If this area is anticipated to be within the full build out scenario, a concept development scenario should be provided to determine the potential impacts associated with clearing, grading and stormwater management associated with this area of development.

Response: DGEIS Figure 2-1 is an illustrative (i.e., hypothetical example) master plan that expresses the content and general layout of the proposed LFTC facilities, consistent with the proposed PDD Master Plan and Regulations, as well as the semi-conductor industry requirements. The area labeled "future development" in Pod 1 is part of the 325 acres that is proposed for development as shown on DGEIS Figure 2-2. The illustrative master plan shows one possible build-out for Pod 1 that is consistent with the proposed PDD Master Plan and Regulations. This illustrative example may not represent the actual proposed site development within Pod 1, which is dependent upon the specific designs of a semi-conductor company subject to site plan approval by the Town Board(s). It does however approximate the magnitude of development that would be allowable in Pod 1, specifically allowing for a four (4) Fab layout.

DGEIS Figures 2-1 and 2-2 are replaced by Figures 2.1.1 and 2.1.2, respectively in this FGEIS.

20. Comment: It is not clear if Figure 2-1 shows complete build out of the ancillary uses. The illustrative plan should show build out of 2-million square feet or identify the square footage shown and indicate that the remaining building area will be included in the adjacent NYSERDA property.

Response: Figure 2-1 illustrates the 2,000,000± square feet required footprint area needed to support long-term development of the ancillary uses of the LFTC.

21. Comment: Only the potential heights of the manufacturing structures have been proposed. The GEIS needs to identify the anticipated heights of the potential structures for the ancillary uses.

Response: The non-nanotechnology production areas will be built to a maximum height of 75 feet. A height of 75 feet was selected due to the height of many of the trees in LFTC being between 60 to 80 feet. At a height of 75 feet, the proposed building design and scale will be compatible with the nanotechnology buildings on the project site as well as the surrounding vegetation. As a guide, a 75-foot building can accommodate approximately six (6) stories of office space. Building slightly taller structures will have the potential to reduce the footprint space required in order to accommodate the same square footage of work space while preserving additional open space (e.g., a 6-story building can have half the land disturbance of two or three story building to provide the same amount of work space).

22. Comment: While it is understood that actual building design for each building with in the Campus would be subject to review and approval during the site plan review process, the GEIS should establish building design guidelines that set the frame work for acceptable and unacceptable materials and finishes. The illustrations provided in Appendix O present a vision for the campus core and nanotechnology buildings. This vision should be documented in draft building design guidelines and included in the GEIS.

Response: The LFTC development plan recognizes the need for promoting quality architecture and the need to preserve a regional/vernacular style that the towns of Malta and Stillwater have portrayed as goals for all development in this region. Given the unique landscape of the LFTC Campus and cutting-edge technological industries envisioned, a balance of ideals must be met.

The industrial building types being proposed are mixed use buildings that combine manufacturing functions as well as research and development, and office space needs within the same structure or a complex of adjacent buildings. These buildings and the entire industry are very much based on international architectural and engineering influences. As "corporate signatures" these building often strive for unique, stylized facades at the public entry points of the complex while remaining very functional and practical in the non-public production or manufacturing portions of the buildings which are not readily visible from the Campus points of entries.

Typically, newly constructed Fabs have an attached office building which serves as the point of secure entry for both employees and visitors to the Fab complex, including the cleanroom in the main production building. Employees of the Fab who work outside the cleanroom, performing operations, maintenance or management functions, would typically have their personal work areas within the attached office building rather than elsewhere within the Fab complex. The office-building facade is typically provided within the entrance to the Fab complex and is the most visible part of the building complex from the adjoining entrance plaza and parking lots.

Depending on the site-specific parameters, other elevations of the Fab building and related structures may be seen in the mid-ground in some views.

The LFTC guidelines are designed to encourage both the industry's needs and architectural preferences while incorporating appropriate regional influences, by providing hybrid standards for design criteria, materials and finishes for each of the varied building types proposed. These guidelines will be known to potential development parties, and the LFTC entity will be highly active in reviewing any proposed building plans prior to applying for PDD site plan approvals to insure the proposed development is consistent with the architectural guidelines, as well as other elements of the PDD Master Plan. The guidelines should provide appropriate incentives and specific guidance for the developers to choose aesthetically pleasing building designs and finishes where appropriate to enhance the overall campus setting, as required by the PDD Regulations and Master Plan. The guidelines also attempt to be flexible and not unduly prescriptive, so as to not stifle the creative aspects of future industrial development and to allow for truly innovative architectural solutions.

The following is a guide for minimum architectural treatments by building type:

A. NANOTECHNOLOGY MANUFACTURING AND SUPPORT FACILITIES:

1. Pedestrian/Public Access Building Areas:

- *Linkages to the parking, trails, walks, and drop-off points should be landscaped in a manner that promotes areas for gathering, shade, plantings indigenous to the surroundings, and presents a strong pleasing pedestrian experience.*
- *Building facades should promote a blend of corporate identity with the regional architectural influences.*
- *Roof lines should not be long flat planes.*
- *Roof materials should compliment the facades in both color and material.*
- *Colors should harmonize with the surrounding wooded setting.*
- *Local styles that promote the use of elements such as: columns, arcades, divided glazed surfaces and pedestrian scale details are encouraged.*
- *Large expanses of undivided reflective glass are discouraged.*
- *Masonry, brick, stone, metal, and cast stone are to be preferred facade finishes.*
- *The use of exterior insulation foam systems (EIFs) at pedestrian contact levels are to be discouraged.*

- *Long unbroken horizontal facades are to be discouraged. Facades that present a unified rhythm, numerous insets, and broken planes are preferred and encouraged.*

- *Up-lighting of facades is to be discouraged.*

- *Architectural styles that blend the "Modern International Industry" style building with the dominant regional historic vernacular styles (i.e., by using Colonial, Greek Revival, Victorian or Classical influences, elements, building materials or finishes), will be encouraged in "focal point" areas of public view, where otherwise appropriate and functional.*

2. *Non-Public/Manufacturing and Functional Building Areas*

- *Functional need and industrial standards for utilities, deliveries, mechanical systems, etc. are recognized as requirements for those non-public view portions of the building.*

- *Guidelines for these areas are to be less restrictive and not intended to interfere with corporate needs of the industry. However, items listed below will be reviewed for adherence to the buildings overall ability to blend as best as possible to its surrounding setting.*

- *Roof lines that are flat or slightly pitched are recognized as industry standard.*

- *Roof materials should be selected so that roof colors are not reflective and are in the earth tone ranges.*

- *Roof mounted equipment should be screened from public viewing areas. The screening for these elements should blend harmoniously with the architectural style of the building.*

- *Building façade of concrete, masonry, steel, stone, metal, or glass are to be permitted. However, all attempts at encouraging colors blend with the surroundings are encouraged.*

- *Building openings for overhead doors and loading areas should be screened whenever possible from public areas.*

- *Utility service structures and support buildings should appear unified with the building style and design.*

- *Architectural styles for these portions of the building are encouraged to remain functional in appearance but should be considered integral with the public façade*

and whenever practical by incorporating elements that are presented to the public throughout the building.

B. CAMPUS CENTER FACILITIES

All buildings within the Campus Center should promote a high level of architectural facade treatment and style. The intent of this portion of the campus is to encourage the pedestrian and the user experience to be enhanced by organizing the buildings in a manner that orients the front facade toward the public street or core of this project and by providing a walkable campus center which is enhanced by pleasing architecture and appropriate landscaping.

- *Building facades should be designed so that all sides of the building have a unified appearance.*
- *Roof lines should be designed to promote interest and avoid long unbroken lines.*
- *Entrances and building accents should be enhanced through changes in the roof line.*
- *Building colors should compliment the entire campus core and be in harmony with each buildings bold differences are discouraged.*
- *The use of traditional building elements such as columns, arcades, divided windows, architectural fenestration and pedestrian scale details are encouraged.*
- *Designs that incorporate interpretations of local vernacular styles are encouraged.*
- *Masonry, brick, stone, metal, and cast stone facades are preferred.*
- *The use of EIFs at pedestrian contact points is discouraged.*
- *Buildings that incorporate interesting broken expanses along the facade are encouraged.*

In addition to the listed PDD guidelines, the LFTC Campus development entity recognizes the national trends of encouraging innovative building systems. These architectural guidelines are not intended to discourage any products that may be developed during the build-out of the Campus that are not listed as preferred. Acceptable alternatives at such a time when buildings are proposed will be considered.

Also, the project sponsors acknowledge the desires of the National Green Building Council Initiatives, and LEEDS program currently instituted by New York State, as well as Governor George Pataki's Executive Order No. 111 to encourage energy-efficient, environmentally-friendly building designs. Should any building proposed desire to comply with those initiatives, the LFTC development entity will encourage the proposal and the application of these guidelines may be adjusted accordingly in any areas of conflict.

Based on the "regulatory philosophy" of the proposed LFTC PDD Regulations to put all applicable development standards in the text of the District Regulations, SEDC proposes the above "Minimum Architectural Standards" should be added to the proposed PDD regulations as a new subsection C.(2) under Section C ("Master Plan") of those regulations.

23. Comment: A delineation of the anticipated roadway ownership on the project site and off-site should be provided.

Response: Off-site roads improvements (such as the access road connector) will most likely be dedicated to the State or county. The on-site roads will be built to county or town standards for that class of highway and may or may not be dedicated to the municipality (in the latter instance similar to internal 'ring roads' in large private developments such as regional shopping malls which are typically not dedicated to, nor maintained by the municipality). This is similar to the roadway design and dedication processes already in place with both the Town of Malta and Stillwater.

24. Comment: An interconnection between the LFTC and the NYSERDA's STEP project should be discussed and incorporated into the Master Plan.

Response: The LFTC and NYSERDA properties are not under common ownership and the proposals for development of these projects has not been coordinated in the review process. Therefore, there are no formal plans or agreements for connection of these two sites at this time.

The Applicant would not object to providing such connections as the Town planners believe is in the best interests of the community, considering possible traffic issues in the Dunning Street and Luther Forest area which may be of concern. The Applicant would suggest that the details of the interconnection of these two sites be studied upon a formal application of the NYSERDA's master plan to the Town of Malta. This forum would also allow the community to further clarify the Town's vision for NYSERDA and Neighborhood 5 as described in the existing Master Plan (December 2002).

25. Comment: While the illustrative plan (Figure 2-1) shows conceptual build-out of the buildings, roads and parking, it is lacking utility corridors and stormwater management areas. This is problematic due to the potential clearing necessary to accommodate the volume of stormwater and utilities associated with this type of development. In order to adequately determine the potential impacts of stormwater runoff, a preliminary evaluation of the various site components (i.e. typical pod and typical ancillary site) should be completed to identify the order of magnitude stormwater management basin required for each pod site. The illustrative plan should

be revised to incorporate the conceptual stormwater management areas. In addition other utility corridors (clearing) should be shown.

Response: The project site has Class A soils which are dominated by highly permeable sand. These soils will readily accept groundwater recharge of stormwater. The modified illustrative plan (Figure 2.1.1) has included additional area for stormwater management outside of the buffer or setback zones.

26. Comment: The illustrative plan (Draft GEIS Figure 2-1) indicates an 18-acre area as "Public Access Area". The GEIS should identify what the intended use is for this property and discuss how it is consistent with the Town's master plan.

Response: Refer to Response to Comment #2.1.17, above. The PDD district formation legislation (167-26-J) of the Malta Zoning Code sets forth a requirement that land for recreation purposes be dedicated to the Town be set aside as part of the PDD or that a fee be paid to the recreational fund. Whether a fee or land will be acquired by the Town is at the discretion of the Town Board. Comments on the DGEIS do not appear to indicate a clear community desire for on-site park land; however, there does appear to be interest in providing off-site recreational amenities which could serve the community at a more central location within the Town.

27. Comment: Discrepancies between the buffer areas, specifically those along Cold Springs Road, shown on the PDD Master plan (Figure 2-2) and the illustrative plan (Figure 2-1) should be clarified. Buffers adjacent to Cold Springs Road and the residential areas should be identified by minimum dimension of undisturbed vegetation.

Response: Refer to the revised Illustrative Master Plan (Figure 2.1.1) which address these discrepancies.

28. Comment: The PDD master plan indicates the development "Pods" are set back from the proposed road network in keeping with the proposed "campus atmosphere". The minimum "Pod" setback should be defined within the GEIS and PDD legislation.

Response: Refer to Response to Comment #2.1.27 above.

29. Comment: The DGEIS indicates that within the undeveloped areas of the campus regular timber harvesting would occur. This would allow harvesting of timber within

the buffer areas adjacent to the residential areas whose purpose is to provide visual buffering and noise abatement. The document should indicate how the integrity of the buffer will be maintained during and after timber harvesting occurs within these areas. The document should discuss what impacts would result from establishing these buffers as "forever-wild" areas which would prohibit any forestry management.

Response: A "forever-wild" forestry management policy at the LFTC is not proposed. Such a land use could have unacceptable risks to the surrounding residences and companies locating in the Campus if a wild fire were to occur, given the billions of dollar investments in numerous homes and businesses on and off the LFTC campus. The specific forestry management practices allowing for periodic selective tree cropping as proposed in the Forestry Management section of the LFTC PDD Master Plan (Draft GEIS, Section 2.3.13) is the appropriate management approach which will maintain a healthy forest while reducing fire hazard. Such a managed approach will also not interfere with the use and function of the forested Campus buffer to provide an effective visual and noise screen of the LFTC from adjacent residential areas in Luther Forest, as it is intended to do. Managing the buffers as "forever wild" would not improve their "buffering" capabilities and would increase wild fire hazard risks. The future management entity of the LFTC will be required to communicate to the Town on a yearly basis what areas will be managed and the amount of timber to be removed.

30. Comment: The DGEIS indicates that the proposed PDD, "necessitates the use of a unified landscaping plan with lawns and ornamental trees and shrubs within both common areas and private development." In order to accomplish this goal, the GEIS should include landscaping guidelines and standards for acceptable materials, sizes and maintenance requirements. The use of plants that are native to the area should be included.

Response: The following are suggested overall guidelines for creating a unified landscaping scheme within the Campus:

- *Since the project site is in an existing pine plantation, existing climax vegetation is a mix of deciduous and evergreen trees of approximately 60-85 feet in height. To provide for a transition to the "human" scale of pedestrians and smaller buildings at the Campus, plantings should be primarily smaller deciduous trees, which would reach a climax height of 30 to 50 feet.*

- *New deciduous tree cover should also be augmented by flowering plants in beds of both annuals and perennials.*

- *Trees, plants and other landscape materials should be those which are used typically through Saratoga County and have a specified hardiness zone classification of 5 or greater (e.g., zones 1 - 5).*

- *A mixture of indigenous and adapted hybrid species should be used.*

- *The above landscaping guidelines are appropriate while being flexible enough to allow landscape architects sufficient guidance without being overly prescriptive and impractical. Given the number of potentially attractive and suitable plants which could be used consistent with the above guidelines, and the evolution of new hybrid plants designed for cooler climates like the Zone 4/5 hardiness conditions in Saratoga County, creating and maintaining a list of "approved plant species" would also be difficult to keep up to date and may not actually provide a benefit to the Town.*

Like the architectural guidelines and standards discussed in Response to Comment #2.1.22, these landscaping guidelines could be added to the PDD regulations as a new subsection in the "Master Plan" section (Section C).

Facility landscaping plans will be reviewed by the Planning Board at the time of site plan review, and, as typical, the Planning Board may revise the developers' submissions to require a landscaping plan which varies from that which was originally proposed.

31. Comment: The GEIS should identify if security measures will be Campus wide, creating a secure campus, or on a POD-by-POD basis. Design guidelines for achieving the required secure site, while maintaining a "campus atmosphere" should be included in the GEIS. All LFTC security plans should be accessible under the Freedom of Information Law (FOIL).

Response: Security in the form of access control will be provided at a "pod" or "facility" level, similar to other business park facilities. It is not anticipated that the entire LFTC permit authorized access only through a gate house or guard house at the Campus entrances. Most similar nanotech tenants elsewhere implement access control at the building level (i.e., within a Pod); that is, employees and visitors pass through a secure entrance in the "main" office building to gain access to a Fab facility. It should be noted that there may be secure access (guard house) at the service entrances to the facilities.

However, it is also anticipated that there may need to be some additional security assets and operations within and outside the "pods", such as surveillance cameras, remote sensing devices or security vehicles patrolling the parking lots, common areas, ring roads, and the like, similar to the security typically provided in the parking lots and internal ring roads of large enclosed shopping malls in the area.

As provided by the Freedom of Information Law (FOIL), public disclosure of the precise operational details of security programs, assets or facilities, where such disclosure would compromise security or law enforcement efforts, is neither prudent nor required, for obvious reasons. It is also anticipated that documents which are filed for valid governmental regulatory

purposes (e.g., building or emergency plans) will not be available for review by the general public at libraries or town halls, under similar confidentiality protections of FOIL.

32. Comment: Parking for the manufacturing facilities (FABs) is proposed at 0.8 parking spaces per employee per shift. Is this adequate to accommodate the parking required at shift change, when there will be a need to provide parking for both shifts?

Response: According to American Planning Association (APA) (2002) the range of parking for industrial manufacturing facilities based on the largest shift is between 0.5 - 1.5 spaces per employee. The proposed standard of 0.8 spaces per employee is adequate to accommodate shift changes, due in large part to how the shift change operates at these facilities. The shift changes during the operational phase will occur over an extended period of time and not take place as a hard shift exit or entrance. The actual process of shift changes may take place over a period of an hour or more which decreases the potential employee competition for parking spaces.

33. Comment: The allowable uses in the PDD should be restricted to semiconductor manufacturing. Residential and commercial uses should be prohibited.

Response: Comment noted.

34. Comment: The PDD regulations should include BMP's that serve to protect nearby public and private water sources.

Response: Refer to Response to Comment #2.36.7 which proposes that the Final GEIS provide a comprehensive, unified table of all environmental BMPs, standards, thresholds and conditions applicable to the proposed action. Such standards could then be made applicable to all future development and operations within the LFTC through the SEQR Findings Statement and mitigation conditions contained therein. Although placing this listing in the PDD Regulations as well might therefore be viewed as duplicative, the Applicant has no objections to including such BMPs and standards in the PDD Regulations as well, if doing that will enhance public confidence.

35. Comment: The Applicant has failed to demonstrate how a housing development is in any way integral to development of a high technology industry cluster, and why it is included as a use for the site. Pod 10 is an unnecessary element of the LFTC.

Response: The Malta Town Comprehensive Master Plan (December 2000) for the subject area (denoted "Neighborhood 5" in the 2000 Master Plan update) specifically identified the preferred land uses for the area as a mix of industrial and housing development. The current approved

PDD #9 district zoning for Luther Forest also provides for this mix of land uses; therefore, Pod 10 development as a single-family residential areas is consistent with both existing zoning and long-term plans for the PDD. It provides a logical extension of limited residential use inside the 1-mile non-habitation easement.

36. Comment: There is no reason why the project site needs to accommodate a four Fab layout.

Response: The ability of the site to accommodate four Fabs is the key element to this project and is what makes this site "unique" to the target industry. This information has been provided to the Applicant by their industry consultants, AGI, as well as direct discussions the Applicant has had with prospective tenants in the semi-conductor industry. It is the large size of the LFTC compared to other available sites within the nation as well as worldwide and its potential expansion to four "Fabs" which is the Project's principal competitive advantage compared to such other sites. Refer to Section 2.1.2.3 of the Draft GEIS, and Responses to Comments #2.7.2 and 2.7.3. This advantage will allow the Applicant to attract the type of tenants they are seeking, as well as provide long-term expansion capabilities to allow the LFTC to continually develop and redevelop. The ability to redevelop on site increases the long-term employment opportunities for the Towns of Malta and Stillwater, Saratoga County, and the Capital District as opposed to other facilities that may only have the ability to expand to two or three Fabs.

37. Comment: What percent of the Fabs and related buildings will be in the Town of Malta, and what percent in the Town of Stillwater?

Response: The actual arrangement and locations of buildings within the proposed authorized development areas ("pods") are unknown at this time, and represented by the illustrative Master Plan. The illustrative Master Plan drawing (DGEIS, Figure 2-1 and Figure 2.1.1 herein) for a potential 'four anchor Fab layout' in Pod 1 shows roughly ±80% in Malta and 20% in Stillwater.

38. Comment: The development legend for Figure 2-2 adds up to 570 acres of development but text states 600 to 800 acres.

Response: Comment noted. The PDD Development Master Plan (DGEIS, Figure 2-2) has been updated based on public comments (refer to Figure 2.1.2). As listed on this figure, the pod areas correspond to a maximum build-out of approximately 540 acres within the development pods.

39. Comment: A 62-day approval process for engineering reviews, planning board reviews, public comment, and permit and control reviews may not be adequate or responsible. This project does not require a "simplified approach to future regulation".

Response: The time period cited is the uniform "maximum" time limit standard which was prescribed by the State Legislature for performing site plan review of commercial and industrial projects, and represents a balancing of the need for effective public regulation of land use with the needs for businesses for prompt and responsive review. This 62-day review presupposes a complete application which contains all required information needed to judge consistency with the PDD Regulations, SEQR Findings Statement and other relevant laws and standards. Under typical administrative procedures, including Town Law §274-a, regarding site plan review, the 62-day "clock" would not begin to run until an application is deemed complete and adequate, with all required and relevant information, having been reviewed by the Town(s) and accepted for public review and hearing. This protects the Town planners and public from being "stampeded" with vague proposals and a demand to make a decision based on inadequate or incomplete information.

Where a proposed project element complies with all of the many detailed standards and Findings for this Project as resolved in this FGEIS, and the Findings Statement, it is reasonable to expect that a majority of the environmental concerns and uses of the LFTC will have already been approved in this generic review, or have very clear direction on future submission requirements. It is this review of the environmental issues and questions of use within the SEQR process which typically forces review periods beyond the 62-day standard as prescribed by NYS law. The process of completing the environmental review through the GEIS process prior to the application of a specific project allows the site plan review process to be more streamlined and in fact will allow more public input, than if they were done simultaneously as they normally are

In essence, the concept that the future review process could be expeditious is based on the related assumption that this generic environmental proceeding has resolved the critical environmental issues, thus allowing for a statement of finding and future submission requirements which can easily be followed by both future tenants at the project site and the Towns. This related concept is consistent with the target industry's requirement of providing "predictability".

40. Comment: How much non-essential lighting will be turned off after business hours for a 24-hour facility?

Response: All non-essential lighting will be turned off during the night time hours to minimize the potential impact to the surrounding residential neighborhoods.

41. Comment: The GEIS should contain a matrix or table which identifies acreage of buildings, wetlands and stream and associated undevelopable buffers, green space, buffers from residential areas, parking, roadways, etc.

Response: The GEIS contains this information. Figure 2.1.1 and 2.1.2 provide a tabulation of pod development, as well as overall site size, open space, pedestrian trails, and wooded areas. Building areas, parking areas, and roadways are approximated on the revised illustrative plan, Figure 2.1.1. Streams and wetlands are summarized in Sections 3.2.2, 3.2.3, 4.2.2 and 4.2.3 of the DGEIS and Sections 2.16 and 2.28 of this FGEIS.

42. Comment: The proposed action should include a community accessible medical clinic along with a town library.

Response: Comment noted. The potential inclusion of these types of facilities are deemed to be a potential community benefit and as such should be evaluated by the Town(s) and determined to be appropriate and necessary. It should be noted that the above suggestion for a library and medical clinic were not typical of the many pubic responders who indicated that open space preservation for aesthetics and recreation was the most pressing local public need which the Applicant is willing to address. Accordingly, neither a community accessible medical clinic nor town library is proposed with the LFTC.

43. Comment: The PDD regulations should specify the amount of green space required within development pods.

Response: Specifying the amount of green space required within development pods would be contrary to the development design of the facility to allocate green space and buffers to the overall Campus, assuming for planning purposes a "worst case" scenario of full clearing and development of lands within the development "pods" (100% developed, 0% green space). In other words, the facility-wide Plan provides for adequate minimum green space and buffers, even if all the lands within the pods is developed.

However, as developed, the development pods will ultimately have some green space and interior landscaping as proposed in site plan applications for Project components, which will be reviewed and approved by the Planning Board at the time of detailed site plan application. To the extent that green space is ultimately provided within a pod, it would be thus above the project-wide green space minimums that are established in the PDD Master Plan and Map.

44. Comment: Pod 11 (conference/retreat center) is an unnecessary component of the LFTC. It will require the construction of a long road at the expense of upland open space.

Response: Opinion noted. A conference center and/or a small inn hotel has been mentioned as a desirable attribute for a technology campus given the number of visiting employees, and/or specialists that will come to the site for a brief period of time.

45. Comment: Figure 2-2 illustrates a pink development zone (associated with Pod 1) on the east side of the internal access road from the Cold Springs Road northward to a pod area. However this development strip and pod is not shown east of the internal access road in Figure 2-1. In addition, the power line route into the project site is shown in two different locations on the two figures. This is important to the Town of Stillwater because Figure 2-2 illustrates a much narrower vegetative buffer along this eastern edge of this development site than Figure 2-1. The area of open space/buffers should also be identified on the Development Legend.

Response: See revised Figures 2.1.1 and 2.1.2.

46. Comment: Given that the 12-hour shifts in the fabrication facilities, with odd begin and ending times are important to the effectiveness of the transportation plan, the incorporation of off-peak shift changes should be a requirement of the PDD.

Response: It would be expected that if the traffic generation pattern of a proposed anchor Fab tenant were to depart from the non-standard, 12-hour models and off-peak hour characteristics studied in the Draft GEIS, some supplemental review of traffic impacts and required mitigation would be required under SEQR and the project thresholds adopted in the Findings Statement would need to be reviewed and possibly revised. Since this assumption regarding off-peak traffic generation characteristics of the "anchor" Fabs is an essential foundation of the SEQR Findings for the PDD, it would not be inappropriate to reference this assumption in the PDD Regulations by conditioning the use of "Pod 1" to off-peak uses as proposed.

47. Comment: Should the description of "office" (in Section B.2.d) be clarified to state that it is in support of the nanotechnology services, similar to the definition included for item b, "Nanotechnology Manufacturing Support Businesses"? Should open-space (in Section B.2) be defined? It is unclear where the forestry management plan is relative to the PDD.

Response: No. It is the intent of the regulations that the "support" being mentioned is a general rather than specific requirement and does not prescribe any sort of demonstration that the office uses are directly related to nanotechnology. In other words, a general office use such as a back office operation, software firm or call center is allowable in the "ancillary" pods.

Open space, as indicated within the PDD Master Plan and PDD regulations, has been defined as those areas outside of the development pods and roadway corridors.

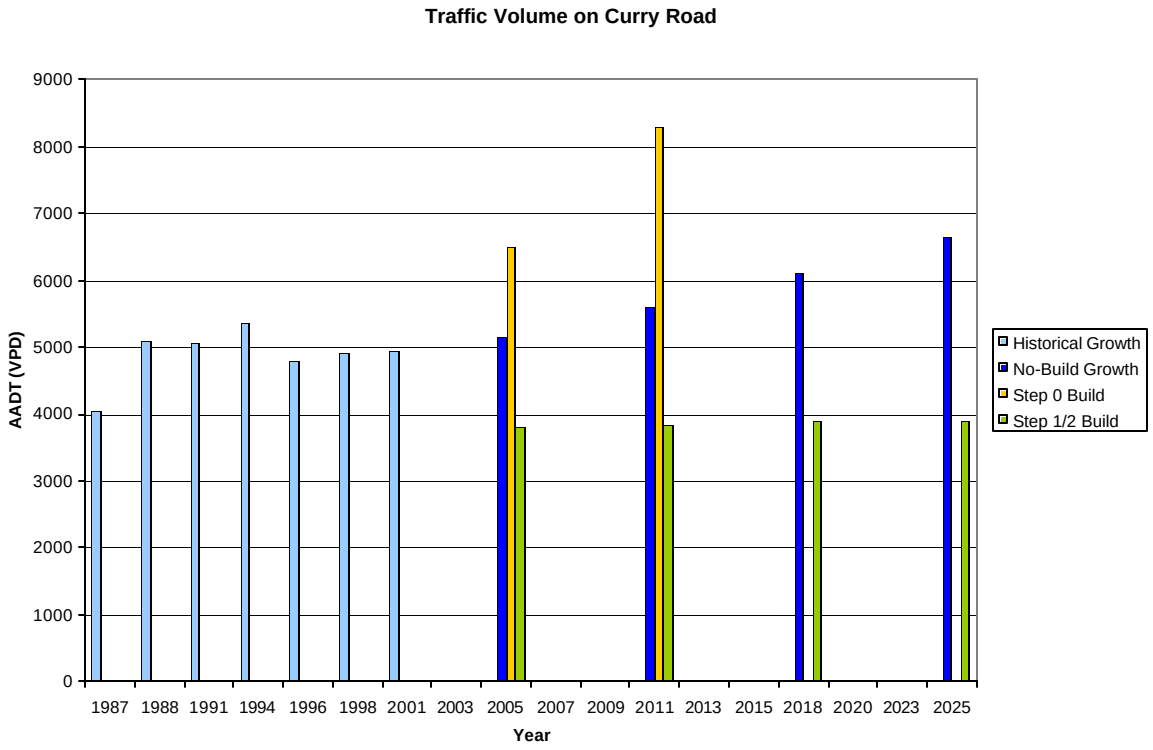
It is anticipated that all open space outside of the pod boundaries would be subject to forestry management practices.

2.2 Transportation

1. Comment: Round Lake is concerned about the current traffic that flows through the village today, and is certainly concerned with the traffic flow through the village that will result from the proposed action.

Response: The existing and future traffic volumes expected to travel through the Village are summarized in Table 3.8, Appendix F of the DGEIS. Traffic volumes are expected to increase without the proposed action, and significantly increase with the proposed action with no improvements (the Step 0 Build condition). However, one of the primary and most important objectives of the project is to provide efficient access to the LFTC campus while minimizing the impact on the Village of Round Lake. The proposed action including the Step 1 and Step 2 access improvements will divert traffic out of the Village. The impact of the access road on the average annual daily traffic (AADT) was presented to the Village during a public meeting on February 4, 2003. The following Figure 2.2.1 illustrates that with the proposed action and the proposed Step 1 and/or Step 2 improvements, future daily traffic volumes through the Village would be reduced by approximately 2,000 vehicle trips per day (vpd), to levels consistent with that observed in 1987.

Figure 2.2.1
Traffic Volume on Curry Road



In Figure 2.2.1, historical growth refers to the past, measured traffic volume on Curry Road, no-build growth estimates the future traffic volume on Curry Road in the absence of the proposed action, Step O build estimates the future traffic volume on Curry Road with implementation of the proposed action and no Step 1 or 2 improvements, and Step 1/2 build estimates the traffic volume on Curry Road with implementation of the proposed action and Step 1 or 2 improvements.

2. Comment: One commenter (Lance Spallholz, Village of Round Lake Planning Board Chairman) stated that the Round Lake Planning Board has "never been approached by SEDC with their plans for the bypass," and that, "they never asked for our opinion."

Response: The Town of Malta Town Board is the Lead Agency for the SEQR process. The Applicant did voluntarily present the development project to the Village officials during initial public meetings on May 28 and June 5, 2002. During these public meetings at the Village Hall, aerial photographs showing the conceptual alignment of the access road were provided to the Mayor and Village Board and the request was made by the Applicant for the Village officials to make comments on the conceptual alignment. Additional presentations were made during public meetings in January and February 2003 in the Village for the purpose of soliciting public comment on the project. A public scoping session was held in July 2002 at the Malta Community Center and a break out room was provided for the purpose of discussing the transportation alternatives with the Applicant's consultant. In addition, the Applicant and their consultants offered to meet with Village officials, representatives and residents to discuss the access road or any other aspect of the project. The access road is consistent with long-range transportation plans developed by the Village of Round Lake for addressing an existing traffic concern.

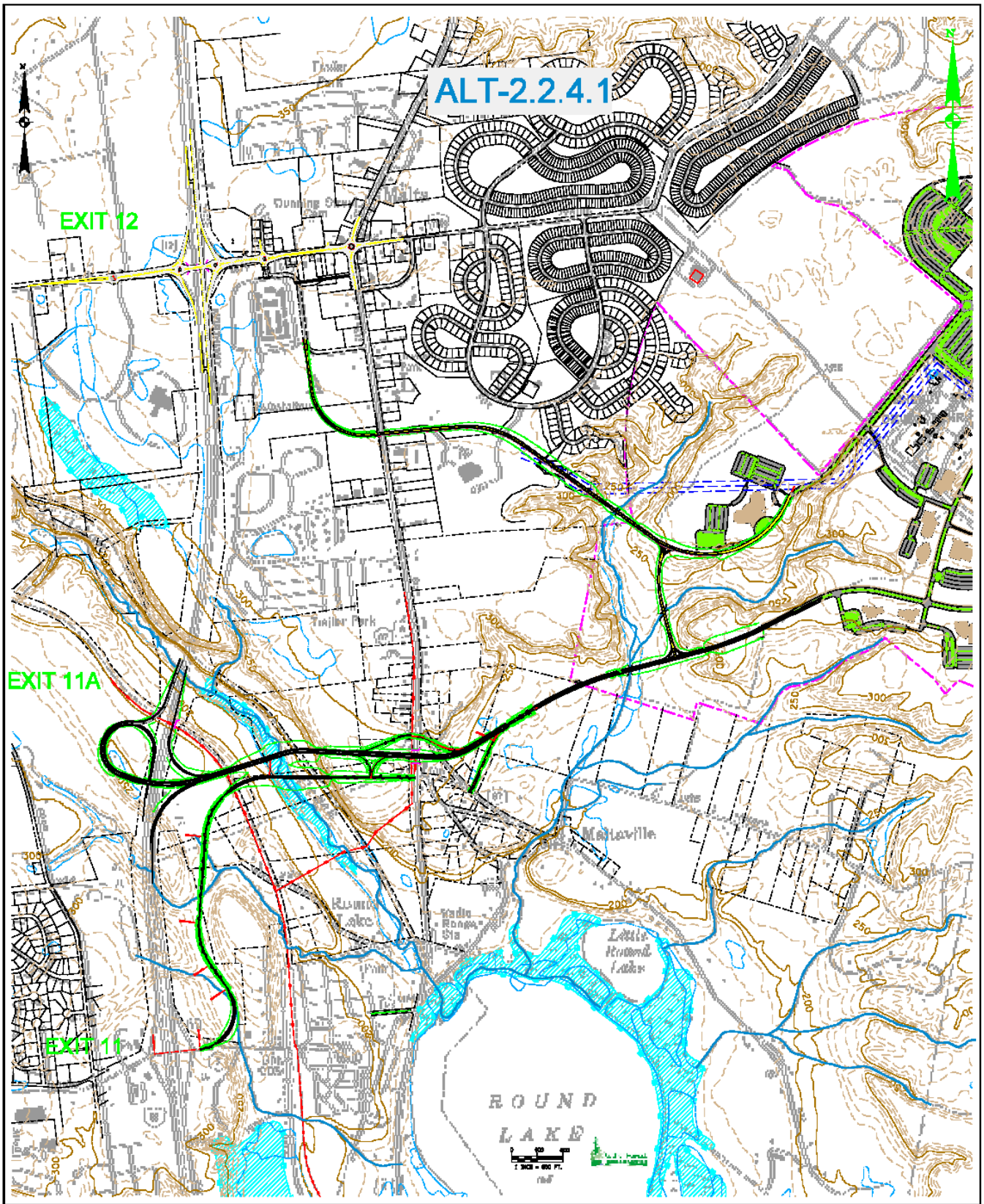
3. Comment: Several commenters stated that SEDC's initial proposal for transportation improvements did not contain a new exit on the Northway, I-87.

Response: The initial proposal for transportation improvements did not include the addition of a new interchange on I-87 because at the time of this initial proposal the project was smaller in terms of the amount of development proposed on the project site. The initial development proposal did not include ancillary development within the project site and as a result a new interchange on I-87 was not warranted. However, based on the initial input received from representatives from the Town of Malta and the Village of Round Lake, an access alternative that includes a new interchange was incorporated into the project scope. The new interchange provides regional benefits for commuter traffic between I-87 and the Town of Stillwater, City of Mechanicville and points east of the site, while mitigating an existing traffic volume condition in the Village of Round Lake and will likely reduce excess traffic pressure on Exit 12 and Downtown Malta.

4. Comment: The proposed Step 1 alternative access road is not believed to be "the correct one" for the residents of Round Lake, Malta, and Stillwater. The Village (Lance Spallholz, Village of Round Lake Planning Board Chairman) provided design sketches for an alternative exit on the Northway, directly west of Route 67 and north of Ballston Creek at the ridge one-mile south of Exit 12. This proposal includes an access road along the Northway to the north across Ballston Creek and up the ridge to join Route 67. The commenter stated that this alternative exit scenario with permission from the Federal Transportation Authority could happen immediately (in two years) resulting in a, "northbound exit ramp onto the exit road." This alternative exit scenario would allow the alternative access road to remain in place, becoming the northbound exit ramp, and would include a bridge over the Northway, perhaps extending Route 67 west and north through State Farm, creating an east-west corridor for Route 67 that crosses Route 9 and the Northway, and, "avoids the Dunning Street traffic light and Exit 12," with traffic flowing directly in and out of State Farm. This alternative proposal was stated by Mayor Dixie Sacks to be more beneficial to more people in both the town and village, and is endorsed by the Round Lake Planning Board. Several other commenters either endorsed this alternative proposal or stated that it warranted further consideration.

Response: Several alternative alignments for the interchange were evaluated in the draft Conceptual Access Modification Proposal (CAMP) for Exit 11A (refer to Appendix D of this FGEIS). Both Alternative 2 and Alternative 2A (Figures A-1 and A-3, respectively of the CAMP) depict an interchange north of Ballston Creek. Based on public comment, the southern interchange alternative presented in the CAMP (Alternative 1) was modified slightly, resulting in an interchange south of Ballston Creek that would allow the access road to remain in place through Step 2 improvements. This design alternative is shown conceptually in Figure 2.2.4.1, which shows the south of Ballston Creek alignment. This is the preferred alternative for the following reasons:

- *The alternative presented by the commenter includes an access road that is considerably longer than the access road shown in the preferred alternative. The longer access road requires a longer travel time from Exit 11 to Route 9 than the existing transportation system. Therefore, the northern access road alternative would not be as effective at diverting traffic out of the Village of Round Lake prior to the construction of the interchange. Existing roads such as Curry Road, George Avenue and Maltaville Road would provide quicker access to Route 67, east of Route 9, than the northern alternative. The preferred access road alternative (south of the creek) would provide a quicker travel route to Route 9, which would induce traffic to use the new access road in lieu of traveling through the Village. See Table 2.2.4.*



PREFERRED ALTERNATIVE SOUTH
OF BALLSTON CREEK

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 01-062	DATE: 10/02	FIGURE: 2.2.4.1

Table 2.2.4
Estimated Distance and Travel Time

Link	Est. Distance (Miles)	Est. Travel Time (Min.: Sec.)	Est. Ave. Speed (Mph)
Thru the Village of Round Lake (Existing)	1.57	4:45	19.8
Using Proposed Access Road (Step 1)	2.20	4:30	29.3
Using L. Spallholz Access Road (Figure 4 Alt. Plan 1, Step 1)	2.96	6:20	28.0
Using Proposed Exit 11A (Step 2 – South of creek)	2.10	3:00	42.0
Using L. Spallholz Proposed Exit 11A (Step 2 – North of creek)	2.63	4:25	35.7
Using L. Spallholz Proposed Alt. Plan 2 Exit 11A (Figure 6 Alt. Plan 2, Step 2, North of creek)	2.95	4:30	39.3

The distance for a vehicle to travel from I-87 northbound to Route 67 eastbound is approximately 1.57 miles and takes approximately 4 minutes and 45 seconds. This includes the travel time and signal delay experienced by vehicles turning right from the Exit 11 northbound off-ramp, traveling through the Village of Round Lake, waiting to turn left onto Route 9 and then turning right onto Maltaville Road. From the same start and stop points, the proposed Step 1 access road will provide a travel route that is approximately 0.6 miles longer but approximately 15 seconds quicker. With the proposed Step 2 Exit 11A interchange located south of Ballston Creek, a driver will have a shorter distance to travel than the Step 1 access road and will take approximately 3 minutes to complete. A comparison of the travel times of the proposed Step 1 and Step 2 improvements and the existing cut-through route indicates that a reduction in travel time is apparent for drivers using the alternative routes versus those using the Village of Round Lake and Maltaville Road as a "cut-through" route.

Travel distances and times were also developed for the alternatives proposed by Lance Spallholz using the same assumptions as the proposed access improvements. As presented by Mr. Spallholz at the February 25, 2003 Public Hearing, Figure 4 of the presentation includes an access road extending from Curry Road north, parallel to I-87. This proposal would result in a travel distance of approximately 1.4 miles longer and over a minute

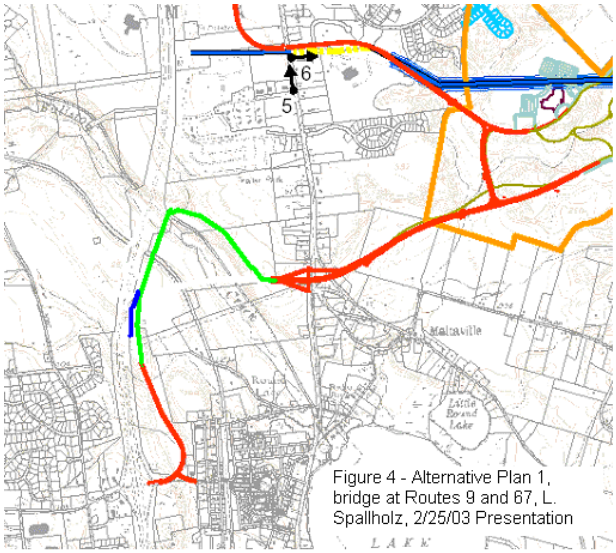


Figure 4 - Alternative Plan 1, bridge at Routes 9 and 67, L. Spallholz, 2/25/03 Presentation

and a half longer than the route cutting through the Village. Therefore, this proposal is not expected to decrease the amount of cut-through traffic from Exit 11 to Route 67 eastbound.

A second issue raised with this proposal is the proposed ramp entering the access road which Mr. Spallholz notes "could and should be built at the time the bypass road is built and it would have the immediate advantage of reducing westbound traffic through the Village of Round Lake." This ramp intersects the access road at-grade resulting in a merge, which prohibits two-way traffic on the access without the construction of a flyover. A flyover of the slip ramp could be constructed, but this would have a greater visual impact on the valley than the LFTC proposed access road. In addition, this ramp does not provide any accommodations for westbound traffic. This ramp is on the east side of I-87 and would only serve the northbound I-87 drivers.

A second proposal presented at the February 4, 2003 Village of Round Lake Planning Board meeting, included a diamond interchange on I-87 north of Ballston Creek. Under this condition, the travel distance would be approximately 1 mile longer than the existing cut-through route but the travel time would be approximately 20 seconds less than the existing route.

Another proposal was presented in Mr. Spallholz's February 26, 2003 presentation. Figure 6 of the presentation includes an interchange north of the creek in close proximity to another residential area, with the connection to Route 9 approximately half a mile north of the existing Route 9/Route 67 intersection. With this proposal, an approximately 3 mile route is proposed with an approximately 4 and a half minute travel time.

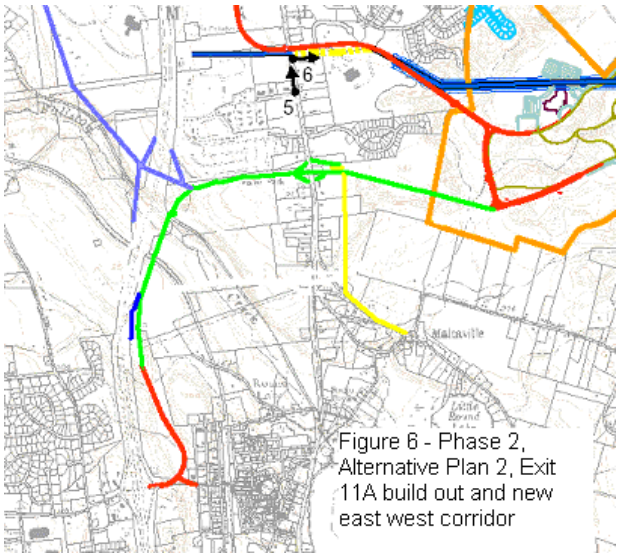
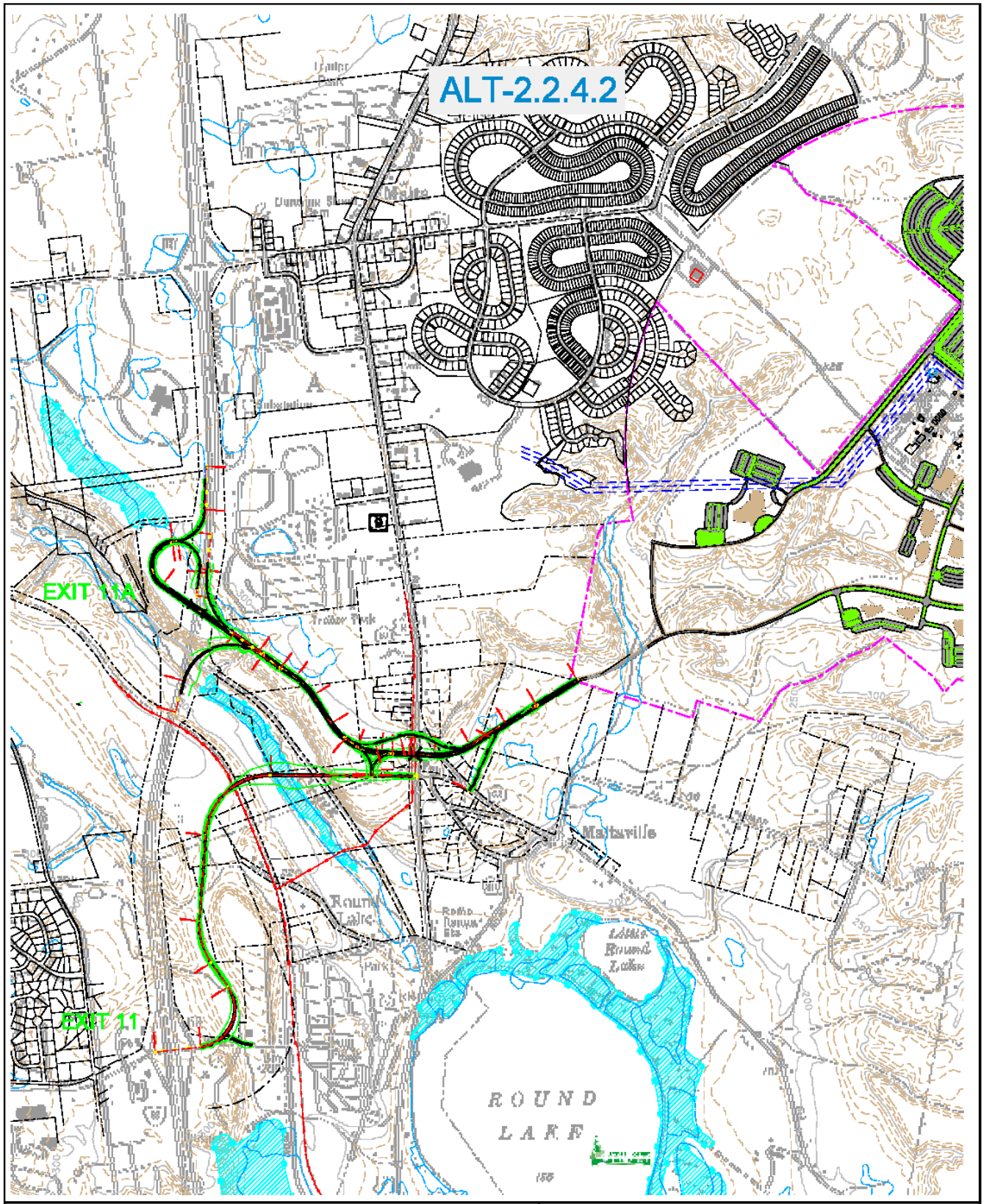


Figure 6 - Phase 2, Alternative Plan 2, Exit 11A build out and new east west corridor

Overall, Table 2.2.4 clearly demonstrates that the proposed LFTC Step 1 and Step 2 access improvements will have a greater effect at reducing the volume of cut-through traffic through the Village of Round Lake, primarily due to the fact that the farther away a "bypass" road is constructed from the problem area, the less effective it will be.

- *The alternative presented by the commenter included a northbound exit ramp from I-87 (refer to Figure 2.2.4.2 which shows the north of Ballston Creek alignment). This is considered a partial interchange and would not be permitted by the Federal*



PREFERRED ALTERNATIVE NORTH OF BALLSTON CREEK

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 01-062	DATE: 10/02	FIGURE: 2.2.4.2

WFILE9

Highway Administration (FHWA). Furthermore, this alternative does not appear to accommodate traffic exiting LFTC or vehicles traveling westbound on Route 67 headed southbound on I-87 prior to the implementation of the full interchange (i.e., traffic headed to the south on I-87 would travel through the Village). The preferred access road design alternative accommodates all northbound and southbound traffic to and from I-87.

- *An interchange on the ridge would have a greater adverse visual impact. Vehicles traveling south on I-87 currently have a scenic view of the Ballston Creek valley. The duration of this scenic view is approximately 16 seconds. A new interchange and the associated exit and entrance ramps would obstruct a majority of the available view of the valley looking east from I-87. It is estimated that the scenic view would be blocked for approximately 11 to 12 seconds by this new interchange, thereby reducing the duration of the scenic view to approximately 4 to 5 seconds. Constructing an interchange on the ridge would also require greater clearing of trees and vegetation. The preferred alternative includes constructing the interchange under I-87, which has less of a visual impact for both northbound and southbound traffic on I-87 in much the same way that Exit 11 has less of a visual impact than Exit 12. The preferred alternative is less obtrusive to the motorists traveling on I-87 and preserves, to the maximum extent practicable, the scenic vistas.*

- *The northern alternative will have greater noise impacts. The preferred alternative includes constructing the connector road under I-87 at Exit 11A. The natural topography of the area will mitigate the noise impacts on residences near the new interchange.*

- *Constructing the interchange under I-87 is clearly feasible as evidenced by the existing interchanges on I-87 at Exits 2, 4, 5, 9 and 11. The impact to traffic flow on the mainline is comparable regardless of whether the connector road is constructed under or over I-87.*

- *The preferred design alternative for the interchange does not preclude the future extension of an access road to intersect Route 67 west of Exit 12. However, FHWA would not permit a direct connection from the Interstate onto private property such as State Farm.*

The CAMP was submitted to both the New York State Department of Transportation and FHWA. The February 5, 2003 letter from FHWA indicates the new interchange appears feasible (see Appendix E).

5. Comment: One commenter (Lance Spallholz, Village of Round Lake Planning Board Chairman) stated that the final build out must connect Route 67 with a bridge

that would cross Route 9 at that intersection, "so that drivers on Route 67 can get to the Round Lake bypass road or to a new Exit 11." Without a bridge over Route 9 and unsignalized traffic flow, traffic from the east on Route 67 will not use the proposed alternative access. The proposed plan was stated to not provide for the development of a new east/west Route 67 corridor. This east-west corridor could include an extension west and north of I-87 to join Route 67 west of Exit 12, resulting in less traffic crossing the Northway at Exit 12.

Response: The access road was designed to intersect Route 9 directly across from Route 67, which would induce more commuter traffic from Route 67 to use the access road as compared to the streets in the Village. The preferred design alternative for the interchange considers the relative volume of traffic traveling westbound on Route 67 as compared to the volume of traffic exiting LFTC at full build out. The bridge over Route 9 will accommodate the higher volume traffic exiting LFTC. The expected two-way traffic volume on the bridge (to and from the LFTC site) is approximately 1,400 vehicles during the AM and PM peak hours of the adjacent street traffic and 2,300 vehicles during the PM peak hour shift change for full build out of the site, as compared to approximately 80 vehicles traveling to and from the east on Route 67 if Route 67 was connected with a bridge. Route 67 would intersect Route 9 opposite the off-ramp in a modified diamond interchange configuration. This design can accommodate the design volumes on Route 67 through the 2025 design year. The preferred design alternative would accommodate the future construction of an east-west corridor, connecting Route 67 near the LFTC site to Route 67 near State Farm. Several options could be investigated in the future such as modifying the proposed Exit 11A trumpet interchange to provide a connection to Route 67 west of State Farm, or extend the east-west connection to Ruhle Road or even as far as East Line Road.

6. Comment: Several commenters asked if any development would be allowed on the project site before any off-site transportation improvements. One commenter (Mayor Dixie Sacks, Village of Round Lake) asked that no development be allowed on the project site, "until a road is complete so that we will not have the heavy truck traffic from the construction going through the Village of Round Lake." A projected timeline for implementation of the transportation improvements was requested. Several commenters asked what would happen if the Round Lake access road was never built, and if there were viable alternatives that didn't include the Round Lake access road.

Response: The existing transportation system at Exit 11 and through the Village of Round Lake has sufficient reserve capacity to accommodate some development on the project site. Based on early input received from residents in the Town and Village, using the existing transportation system (i.e., no access road) did not appear to be a viable alternative for development of the four (4) nanotechnology manufacturing facilities proposed in Pod 1. An alternative phasing scenario was presented in Section 6.6 of the DGEIS, in which some relatively minor amount of development could occur on the project site prior to an anchor tenant locating in Pod 1. It is probable that the first building in LFTC would be a 300,000 square feet general office building

with access provided to Route 9 via Stonebreak Road. This building could be approved, constructed and fully occupied within two (2) years, at which time the proposed roundabouts would be in place along Route 67. Based on data published by the Institute of Transportation Engineers (ITE), a 300,000 square foot office building is estimated to generate 450 trips during the morning peak hour of adjacent street traffic and 415 trips during the afternoon peak hour of adjacent street traffic. This is 25% less than the trip generation threshold for Phase 1 identified in Table 3.3 of the Traffic Impact Study included in the DGEIS and would result in 108 trips during the AM hours and 100 trips during the PM hours through the Village of Round Lake. The levels of service of the study area intersections without the access road (referred to as Step 0 improvement) are summarized in Table 4.1 of the Traffic Impact Study. The analysis indicates that the access road around the Village of Round Lake is not warranted for development of only 300,000 square feet of general office. The improvements required to accommodate this alternative phasing scenario include a southbound left turn lane on Route 9 at Stonebreak Road and widening Stonebreak Road to provide two (2) lanes exiting onto Route 9 (i.e., separate westbound left and right turn lanes). With no other access to the 300,000 square foot building, no improvements are warranted at the other site driveways.

The access road is proposed as mitigation for potential quality of life impacts that might result from increased traffic through the Village generated by the nanotechnology manufacturing facilities. The project sponsor has committed to constructing the access road prior to the granting of a certificate of occupancy for the first Fab within LFTC. Prior to the completion of the access road, construction traffic generated by LFTC will be directed to use Exit 12 and Exit 10. Construction vehicles generated by LFTC will be instructed not to travel through the Village of Round Lake. Heavy vehicles will travel on State highways such as Route 67 and Ushers Road to Route 9 into the project site.

7. Comment: Many of the transportation improvements will cause the relocation of residences and some businesses, what will happen to these owners? What will be the process for land acquisition? Who is the purchasing agent? What will be the road setback requirements? How will the value of our property be assessed? One commenter (John Mcintyre) stated that he could not sell his property on Easy Street while the LFTC proposal was pending. Another commenter (Carol Henry) questioned land availability for the transportation improvements, while another commenter (Harry McDonough) questioned the noise and visual impacts of the transportation improvements as proposed on the Starting Gate Cottages.

Response: The transportation improvements were designed to minimize the impact to adjacent properties. Construction of the proposed transportation improvements will require the acquisition of additional right-of-way. This will include private residences and commercial properties. The process for a right-of-way taking is well defined by the New York State Department of Transportation. As discussed in DOT's publication "How Your State Acquires Property for Public Purposes", the acquisition of property required for a public improvement

occurs after an extensive and thorough engineering process that includes a series of planning and design phases which lead to a determination that the property is necessary in order to construct the public improvement. When it is necessary for the Department to acquire private property, a map is prepared which shows in detail the extent of right of way needed from each property. Title to the private property required is vested or transferred to the State when a copy of the map is filed in the office of the County Clerk for the county where the property is located. However, before any transfer of title takes place, the owner will receive a copy of the map, thorough explanation of the acquisition and a firm offer of compensation in writing. Prior to this, the Department will have had appraisals made to determine the fair market value of the property that must be acquired and the monetary damages, if any, that are caused to the remaining property which you own. The offer of compensation will be based on those appraisals, after they have been thoroughly reviewed for accuracy and content.

For more information refer to http://dotweb1.dot.state.ny.us/red/property.html. The noise and visual impacts of the transportation improvements were analyzed in the DGEIS, Section 4.8.

8. Comment: There was a general concern over the increase in traffic on local roads around the project site, including Joyce Road, Dunning Street, Cold Springs Road, Knapp Roads, and others. The Town of Stillwater was particularly concerned with increased levels of traffic on the Cold Springs Road corridor. Potential safety to children playing in the streets was stated as a concern. Several commenters generally predicted future traffic conditions significantly greater than current conditions. Creating 8,000 to 10,000 jobs was predicted to "worsen our already burdened local roadway systems", particularly the Route 67 east-west corridor. One commenter (Andrea Austin) stated that a new exit on the Northway, "doesn't do nothing to address the traffic on east-west corridors." Another commenter (Carol Henry) stated that the Town roads are, "rural, and they can't handle the traffic that they have now." Cold Springs Road is a dirt road with lots of pot holes that some residents love. It provides recreational opportunities for snowmobiles, biking, hunters, and horse back riding. Currently Cold Springs Road has a low level of traffic, and this project will significantly increase traffic flows, not only on Cold Springs Road, but also Fitch Road and Sawmill Hill. One commenter (E. Graham Thompson) asked how traffic would be kept off of Knapp Road and Dunning Street, questioned the amount of truck traffic on Cold Springs Road and asked if trucks could even make the steep grade of the road. Another commenter (David Stiles) stated that the existing east-west corridors in the towns will continue to be pressured by outside growth in Saratoga County, and that the LFTC provides an opportunity to design traffic flows to improve east-west traffic overall without hurting and ultimately helping traffic flow in Malta and Round Lake.

Response: Cold Springs Road will be improved by paving the road, straightening horizontal curves to provide adequate sight distance, and constructing shoulders. These improvements will also provide safety benefits to Cold Springs Road. Truck traffic generated by the site will not use

Cold Springs Road. Truck traffic will be directed to use Route 67 and Route 9 into the project site. The Step 1 and Step 2 access improvements and the identified intersection improvements will mitigate the traffic-related impacts of the project, including the Route 67 corridor west of Exit 12. The percentage increase in traffic on Cold Springs Road, Fitch Road and Sawmill Hill will be significant as compared to existing levels, but it will be much lower than the capacity of these roads. Currently traffic volumes during the peak hours on Cold Springs Road are approximately 10 vehicles. With the build out of the site, traffic volumes may increase to approximately 150 vehicles at the south end of Cold Springs Road and up to 900 vehicles (total of both directions) at the north end under the peak hours for full build conditions. However, these volumes are within the capacity of a two-lane road which is approximately 3,200 vehicles per hour. The volume of traffic generated by LFTC that will travel on Cold Springs Road will be less than the amount of traffic that could be generated by an allowed use in accordance with the Town of Stillwater's Master Plan and zoning. Traffic will be deterred from using these roads by providing better access to the project site via the driveways on Route 9.

9. Comment: Several people referenced the Step 1 access road, after Step 2 improvements, will not be needed and become a dead end road. Some residents were concerned about partying and speedway activities that would go on at the end of this road.

Response: As a result of this and other comments, the Applicant has modified the plan so the access road will not be abandoned after completion of the Step 2 improvements. Prior to the construction of the interchange, it is envisioned that the access road will be a limited access highway. That is, there will be no driveways along the new road to facilitate the through movement of traffic between Exit 11 and Route 9. After construction of the interchange, property along the access road could be developed in accordance with the Village's zoning code, pending approval from the Village Planning Board. The design alternative included as Figure 2.2.4.1 indicates how the access road would be incorporated into the design of the Step 2 improvements.

10. Comment: Seasonal variations in traffic are not limited to the summer. In the winter there are lots of people traveling north for skiing too. Traffic counts were done in July and August, is it appropriate to reduce traffic counts by approximately 25% to represent average conditions? Explain why the projected traffic volumes represent a seasonal average, and that July and August volumes may be significantly higher. What "safety-factor," if any was used when designing the intersection upgrades to accommodate the increased volumes? What will happen in the summer when normal, seasonal lake traffic is added to the mix?

Response: Seasonal traffic volume variations documented by NYSDOT on I-87 and Route 9 indicate that July and August represent the peak travel season of the year and December through

February represent the lowest monthly traffic volumes. Traffic volumes that are adjusted to reflect average conditions are used as a basis to describe typical conditions. This is done to avoid using uncharacteristically high traffic volumes, which would result in a transportation system that is over-designed and will rarely be used to the full potential. An over-designed transportation system (e.g., a six-lane section on Route 9) is inconsistent with the vision for the Town of Malta, the New York State Department of Transportation and the Capital District Transportation Committee. An over-designed transportation system could have adverse environmental impacts such as unnecessary impacts on noise, air, aesthetics, and quality of life.

The Town of Malta's consulting engineer has reviewed the seasonal adjustment factors and concurred with the methodology (see Response to Comment #2.2.24).

11. Comment: The DGEIS states that Step 1 improvements should handle the relatively low volume of traffic expected in Phases 1 and 2, but I (Carol Henry) don't consider 4,000 vehicles a small impact or relatively low volumes of traffic.

Response: Comment noted. The commenter refers to the trip generation of the project during the peak hour of the generator after development of all four phases (see Table 3.2 of the Traffic Impact Study, DGEIS, Appendix F). The DGEIS states that the Step 1 improvements will accommodate the first two phases of development on LFTC, which includes a trip generation of up to approximately 1,200 trips during the AM peak hour and 1,250 trips during the PM peak hour of adjacent street traffic. The surrounding transportation network will have adequate capacity to accommodate the trip generation of the LFTC with the appropriate mitigation. There are no off-site locations that will experience a 4,000-vehicle increase during the peak hours. This full-build trip generation will be distributed over the entire transportation system and access the site through four driveways.

12. Comment: Who is going to pay for all the road improvements and maintenance, including the new traffic lights? Can the project be stopped if the road improvements are not made? In light of NYS's current budget deficit, the new Exit is nothing more than a "pipe dream."

Response: The transportation improvements, including the traffic lights, will be paid for through a combination of private investment and public financing through State and federal programs and revenue streams. Development of the LFTC will be contingent on the specified improvements being in place. For example, if the new interchange is not built, development on the LFTC site will be limited to the thresholds established in this Final GEIS and Findings Statement (i.e., 2 Fabs/phases with ancillary development). The new exit will be operational prior to the issuance of the certificate of occupancy for Fab 3.

13. Comment: Several commenters questioned the amount of time required to get a new exit approved and constructed, with estimates ranging from 2 to 15 years. One commenter (E. Graham Thompson) referred to the new exit on I-87 as "far-fetched" and questioned if it would ever occur.

Response: It takes approximately 8 years for a new interchange on an interstate to be studied, designed, approved and constructed. Upon review of the draft Conceptual Access Modification Proposal (included as Appendix D), FHWA indicated that the new interchange appears feasible. In a memorandum dated February 5, 2003, FHWA provided their initial response to the proposed concept of Exit 11A and noted that it "appears to have no obvious flaws" (see Appendix E). This is not an approval and requires addition studies and design documents to receive approval. This process can not be completed in a timeframe as to meet the project objective of beginning development in 2004. Furthermore, the traffic volumes associated with Phases 1 and 2 of the project will not warrant the construction of Exit 11A. Therefore, even if a new interchange could be studied, designed, approved, and constructed in two years, the process would not begin until such time that a new interchange was warranted.

14. Comment: One commenter (Kevin Cronin) questioned how a bridge could be built across the valley, and a tunnel could be constructed under the Northway, Saratoga County Sewer line, and Zim Smith trail. Construction of "the tunnel" under the I-87 will have a severe impact on traffic during construction. A bridge over I-87 would have less of an impact on traffic during construction.

Response: See Response to Comment #2.2.4. There are several interchanges on I-87 that were constructed under the Northway, including Exits 2, 4, 5, 9, 11, 18, and 21. Construction of the preferred alternative with the connector road under I-87 is feasible and modern construction techniques and procedures will be employed to minimize the impact of traffic on I-87. The highway improvements for both Step 1 and Step 2 will go over the Zim Smith Trail and the Saratoga County sewer line. The access road will go over the trail by constructing a culvert through which the Zim Smith Trail will traverse. Highways are routinely designed to cross utility lines. The impact of the access road crossing over the Saratoga County sewer line is insignificant and can be accommodated through perpendicular crossings to minimize any disturbance to the utility.

15. Comment: One commenter (Stacey Jedynak) expressed confusion over the relationship between the trip generation and the number of jobs proposed, and suggested that the traffic report was in error since it didn't account for 10,000 trips correlating to 10,000 jobs.

Response: The total number of jobs that will be created by development of LFTC is not the same as the peak hour trip generation of the project. The nanotechnology facilities are expected to

operate daily on two 12-hour shifts, with a rotation of 4-day and 3-day work weeks. These trips will be generated during off-peak commuter hours. The ancillary development may have more traditional office park trip generation characteristics, such as one 8-hour shift and 5-day work weeks. These trips will have different peak hours than the nanotechnology manufacturing facilities. Therefore, not all of the 10,000 employees will enter or exit the site during the same hour. The trip generation estimate accounts for the varied shifts and starting times for the different land uses on LFTC. The DGEIS accounts for this variation in trip generation by establishing trip thresholds that correspond to highway improvements.

16. Comment: The proposed new exit on the Northway, part of Step 2, is less than one mile from Exit 11, which is unacceptable. A greater distance would be desirable.

Response: A minimum interchange spacing of two miles is desirable on rural highways, but is not mandatory. It should also be noted that I-87 is classified as an urban principal interstate from Exit 11 south, and from Exit 13 north. With no significant changes in the characteristics of the traffic or transportation facility, the section of I-87 between Exits 11 and 13 are effectively urban. Under these conditions a minimum interchange spacing of one mile is desirable, but again, is not mandatory. Existing Exits 6 and 7 provide an example of comparable interchange spacing on I-87. The bridge over I-87 at Exit 7 is approximately 4,200 feet north of the bridge over I-87 at Exit 6. In comparison, the preferred alternative for Exit 11A (south of the creek) would result in a new interchange bridge (under I-87) approximately 4,700 feet north of Exit 11. Therefore, the proposed interchange spacing would be greater than the existing interchanges at Exits 6 and 7. Additionally, a review of the CAMP by NYSDOT and FHWA indicates that a new Exit 11A appears feasible. See also Responses to Comments #2.2.13 and 2.2.64.

17. Comment: Much of the proposed construction for the transportation improvements is over the existing Saratoga County sewer line which might need to be re-routed.

Response: The location and depth of all existing utility lines will be considered during the final design of each improvement. The designers will coordinate directly with Saratoga County Sewer District #1 during the design and construction of the improvements. Accommodating existing utilities is standard during design of highway improvements. The conceptual design of the Step 1 and Step 2 improvements indicates that there will be perpendicular crossings of the Saratoga County sewer line and the improvements would go over the sewer line. See Response to Comment #2.2.14.

18. Comment: What's the backup contingency plan, if this project becomes approved, after Step 1 improvements are made, and a new exit on the Northway is never constructed? What happens if the Round Lake bypass doesn't get built?

Response: The preferred development of the LFTC site will not move forward as proposed without the access road around the Village of Round Lake. The Town of Malta and/or the Town of Stillwater would not permit additional development on LFTC beyond Phase 2 without the completion of Exit 11A.

19. Comment: There were divergent views expressed regarding public transportation. Some commenters felt that some form of mass transportation (shuttles, buses, trolleys) ought to be required as part of the first phase of development to help tie the Campus to the rest of the Town, and that the need for public transportation should be explained, and costs of such public transportation should be estimated with the method of payment specified. Others thought that the DGEIS was overly optimistic regarding use of public transportation to access the project site, and suggested that only cars would be used. Others stated that the DGEIS did not adequately discuss realistic public transportation alternatives. One commenter (Bailliere Consulting) stated that the vehicle traffic volume projections should not include any public transportation offsets without clearly documenting the amount of assumed offsets and illustrating how such programs would be supported.

Response: The provision of public transportation to the LFTC project site will be dependent on the market demand for such services. Bus service to this area of Saratoga County by the Capital District Transportation Authority (CDTA) is feasible as the development density increases. The availability of such trip reducing modes of travel is less critical in the beginning stages of the project, as there would be fewer people on site who could use public transportation. As the project site is built-out there will be an increased potential to utilize public transportation which will have a greater impact on reducing the site-generated peak hour trips. The trip generation estimates for the project do not include the use of trip reducing programs such as carpooling, public transit, and bicycle/pedestrian modes of travel. Travel demand management (TDM) was presented in the DGEIS as a means to reduce the potential trip generation of the project, in order to conservatively present the project impacts. Companies locating in the LFTC will be encouraged to employ TDM measures.

20. Comment: There are several references in the transportation sections of the DGEIS to road "to be constructed by others," who are these others, and what is the timetable for this construction?

Response: Figure 1.2 of the Traffic Impact Study (DGEIS, Appendix F) illustrates a road to be "constructed by others" connecting Route 9 to Saratoga Village. This road is shown in the

Town's Master Plan and is presented as a concept for a parallel access road in the Malta Linkages Study, sponsored by CDTC and the Town of Malta. Other concepts presented in the linkages study include an extension of Kelch Drive from Route 67 to East High Street, driveway consolidation on Route 9, and bicycle and pedestrian accommodations throughout the downtown area, among others. The linkages study has been finalized (August of 2003). The final report presents this parallel access road as a long-range improvement. While LFTC has taken into account the location of this future linkage on the west side of Route 9, construction of the linkage is not required to mitigate potential traffic impacts of LFTC. The other reference in the DGEIS to a road "to be constructed by other" refers to the reconstruction of Route 67 from Exit 12 to Route 9, which will be built by NYSDOT within the next two years.

21. Comment: The Industry Requirements Report (Appendix C, prepared by Abbie Gregg, Inc.) identifies that 2,000 workers are required for each semiconductor facility plus 500 additional contract support staff to operate the plants on a 24/7 basis. The rotation of work shifts produce two 12-hour shifts per day. The trip generation estimated for the semiconductor manufacturing component of the project is predicated on this staff being equally distributed over the shifts such that 1,000 manufacturing employees and 250 support staff work each day, divided equally over two 12-hour shifts. However, the Industry Requirements Report states that the staffing of each shift is not equally distributed, with 65% of the total employees expected to work on one of the four shifts. The trip generation estimates for the project should be revised to reflect the shift distributions identified in the Industry Requirements Report.

Response: The traffic impact study is based on the trip generation of LFTC during the peak hour of the adjacent street traffic and not the peak hour of the nanotechnology manufacturing facilities. The employee distribution of the four (4) shifts characteristic of nanotechnology manufacturing facilities is not a significant factor in the trip generation estimate during the peak hour of adjacent street traffic. The shift changes occur at off-peak times. The trip generation estimate for the nanotechnology manufacturing facilities reflects a worst-case scenario based on an estimate of 2,500 total personnel per Fab, 80% attendance and 100% working one of the four shifts. These assumptions resulted in the trip generation estimate shown in Table 3.2 of the Traffic Impact Study (DGEIS, Appendix F), which is summarized as 500 employee trips entering and 500 employees trips exiting for each Fab during the peak hours of the generator. Applying the 65% "rule of thumb" would reduce the trip generation of the Fabs during the peak hour of the generator to 325 employee trips entering and 325 employee trips exiting for each Fab during the peak hours of the generator. This would reduce the potential impact of LFTC during the peak hour of the generator.

If 65% of the work force works on the four-shift scenario, beginning and ending at 5:45 AM and 5:45 PM, the remaining 35% of the work force would travel outside of the peak hours of the generator. The remaining 35% work the core hours of 10:00 AM to 3:00 PM, with flexibility regarding the beginning and ending times for the typical nine (9) hour shift according to the

Industry Requirements Report prepared by AGI (see Appendix C of DGEIS). For example, some of the 35% would work from 7:00 AM to 4:00 PM, some work from 8:00 AM to 5:00 PM and some would work from 9:00 AM to 6:00 PM. That is why the Traffic Impact Study estimated that 10% of the trip generation during the peak hours of adjacent street traffic would be generated by the Fabs and not the ancillary development. The important factor to consider is that the traffic analysis is more generic and is based on trip thresholds, which would trigger specific transportation improvements. That is, if there is a greater percentage of Fab employees that travel during the peak hour of adjacent street traffic, then there will be less ancillary development that will be permitted by the traffic thresholds. The Industry Requirements Report indicates the total personnel per Fab can range from 1,800 to 2,500 per Fab. Because there is variability in the total personnel of the Fabs and there is flexibility regarding the schedule for employee shifts, the traffic analysis in the DGEIS was based on the trip threshold methodology.

22. Comment: The estimated trip generation for the semiconductor facilities factored an average attendance rate of only 80% each day. This equates to a generous average allowance of more than 10 weeks per employee for holidays, vacations, sickness and personal leave annually. Supporting evidence should be provided that this is an industry-standard benefits package, or the traffic estimates should reflect a higher attendance rate.

Response: The nanotechnology manufacturing facilities operate seven (7) days a week. The 80% attendance applies to the total number of employees and seven (7) days a week. It accounts for employees having days off. In comparison, the attendance rate for a typical office building may be closer to 100% for five (5) days a week, but when this is averaged over seven (7) days a week the average daily attendance is approximately 70%. The 80% attendance rate was modeled after a specific semi-conductor company to represent a typical tenant in LFTC. It applies to the trip generation during the peak hour of the generator, whereas the traffic impact study is based on the trip generation during the peak hour of adjacent street traffic. Furthermore, the DGEIS has established trip thresholds that would trigger specific transportation improvements. If the trip generation is greater than that which was analyzed in the traffic impact study, then the trip thresholds would be met earlier, with less amount of development on LFTC per phase.

23. Comment: The Industry Requirements Report identifies more than 100 chemicals and other materials that are required for the operation of each semiconductor facility. This report also describes hazardous and solid waste generated by the facilities that require transport from the site. The traffic study should identify the number and frequency of truck trips generated by the project for transporting manufacturing and waste materials as well as other support deliveries to the site. The likely delivery route should be described as well.

Response: The number of truck trips generated by LFTC will vary significantly during each

phase of development, depending on the number and size of the land uses within the Campus and the status of on-site construction activities. Many chemicals are transported in 55-gallon drums or totes. These can be transported on smaller trucks. The end-products are shipped via single-unit trucks such as Federal Express or UPS trucks. There will be approximately 150 light trucks per day that deliver time sensitive cargo to the airport. The trucks will use an on-site access road that is separate from the general employee driveways. Trucks will be directed to exit the site onto Route 9 and Route 67 and will not use Cold Springs Road.

24. Comment: The traffic study text notes that there was a reduction factor applied to the collected data to account for seasonal variation. A comparison of the data collected and the base volume figures (Figs 2.4 and 2.5) show that in fact the volumes were not universally adjusted. The volume adjustments appear to represent a reasonable balance between data sources over the transportation network.

Response: Comment noted.

25. Comment: The traffic generation thresholds for the four phases of planned development are indicated in the study to include trips generated by the adjacent NYSERDA site, trips generated by the semiconductor manufacturing facilities outside the shift change, and the ancillary development on the LFTC site. The study should clearly identify how much of the two-million square feet of development represented by these thresholds is associated with the NYSERDA site development and how much is available for the proposed ancillary development on the LFTC project site.

Response: The approach of the traffic study was to establish trip thresholds, which correspond to transportation improvements. The purpose of establishing trip thresholds was to allow flexibility in the location and size of ancillary development. At the time the DGEIS was prepared there was no specific plan for development of the NYSERDA parcel, yet access between NYSERDA and LFTC is inter-related, so there is no differentiation between trips generated by NYSERDA and LFTC. The DGEIS prepared for LFTC assesses the impact of up to two-million square feet of ancillary development, which could easily all be developed on the LFTC site. If the future ancillary development of both the NYSERDA site and LFTC exceeds two-million square feet and the trip thresholds during the peak hour adjacent street traffic are exceeded, then additional traffic analyses would be required to determine what additional mitigation measures would be necessary. In addition, NYSERDA is in the process of preparing a DEIS for development of that project.

26. Comment: The traffic study should identify the basis for the estimate that only 10% of the traffic thresholds estimated to be generated during the peak hours of

adjacent street traffic is associated with the semiconductor facilities.

Response: The Industry Requirements Report, DGEIS, Appendix C indicates that there is a range in the number of personnel at a typical large wafer fabrication facility of 1,800 to 2,500 employees. The traffic impact study presents trip generation information during the peak hour of the generator based on the higher end of the range, 2500 employees. However, the entire traffic impact study is based on trip thresholds during the peak hour of adjacent street traffic. The only purpose of the estimate that 10% of the trip generation during the peak hours of adjacent street traffic is associated with the nanotechnology manufacturing facilities was to calculate typical ancillary development land uses that correspond to the trip thresholds. If the trips generated by the nanotechnology manufacturing facilities actually make up a greater percentage of the trip generation during the peak hour of adjacent street traffic, then it will reduce the amount of ancillary development that would be permitted on the LFTC project site. The mitigation corresponds to trip thresholds and not the size of the development on the site.

27. Comment: The estimated trip distribution of site traffic does not appear to consider the growth-inducing potential of the project for accelerated new residential growth in the Town of Malta and communities east of the project site.

Response: The Capital District Transportation Committee (CDTC) developed the trip distribution for the site based on their computerized Systematic Traffic Evaluation and Planning (STEP) model for the four counties of the Capital District. The model includes 500 zones within the four counties that represent areas where people live and work. For the LFTC analysis, CDTC added microzones in the Towns of Malta and Stillwater and adjusted the model based on year 2000 census housing numbers and additional traffic counts conducted within the study area. CDTC refined the road network within the model to account for the NYSDOT improvements at Exit 12, which will add capacity to the interchange. CDTC's Land Use Model was used to determine that adding thousands of new jobs in the Town of Malta would result in new households which would be distributed throughout the four counties. The Land Use Model recognized the potential for additional residential development to the east of the site. As a result of this modeling, CDTC indicated that 19% of the traffic generated by LFTC would come from the east. These trip distribution percentages were reviewed by the NYSDOT Planning department in March 2002. NYSDOT recommended minor adjustments in the trip distribution percentages, but concurred with CDTC that 19% of the site generated traffic would come from the east. The trip distribution percentages that NYSDOT and CDTC developed were used as the basis of the traffic impact study for LFTC.

28. Comment: The traffic study utilizes a background growth rate of 3.5% up to 2005 and 1.25% from 2005 to 2025 which is based on historical growth trends in the area. Given the growth inducing impacts of this project the GEIS needs to provide additional justification for the 1.25% growth rate used from 2005 to 2025. The decrease in growth

rate during development of the LFTC (2005-2025) was questioned by several commenters who suggested that such background growth rate would rather increase during this period, as the LFTC is being developed.

Response: The 3.5% per year growth rate was used to estimate background traffic in 2005. This growth rate was derived from the NYSDOT design report for the Route 67 - Exit 12 project. NYSDOT developed the 3.5% growth rate based on projects that were proposed in the Route 67 corridor at the time the design report was prepared. These projects included future development on the State Farm campus, significant commercial development on the horse farm and other projects in the area. Since the completion of the NYSDOT design report, circumstances have changed that would affect future traffic volumes in the Route 67 corridor. For example, additional development of State Farm is constrained due to wetlands and the horse farm is currently contemplated for a lower intensity development such as a cemetery and a church. As a result, the 3.5% growth rate is very conservative (i.e., much higher than expected). During the preparation of the DGEIS for LFTC, an analysis was conducted of planned and approved projects within the study area. The traffic generated by these other planned and approved projects in the study area is accounted for in the 3.5% and 1.25% growth rates. Retail development that may occur within the study area would capture some of the trips generated by LFTC. For example, the trips to a new gas station on Route 9 will not be in addition to the trips generated by LFTC, but instead will be the same traffic entering or leaving the LFTC site.

29. Comment: The construction of a new interchange to I-87 is a key element of the traffic access and mitigation plan for the project. While the study identifies the general process for federal approval, the study should also identify the impacts of constructing this interchange on the operations of I-87. The following comments at a minimum should be addressed in the evaluation of the impacts on I-87:

- Will the geometry of the proposed interchange meet the standards contained in AASHTO's *A Policy on Geometric Design of Highways and Streets*?
- Has the proposed interchange been designed to provide the correct spacing from Exits 11 and 12 in conformance with the interchange spacing criteria dictated by AASHTO and the Federal Highway Administration?
- The level-of-service for the new interchange ramps in combination with Exits 11 and 12 should be determined, given that the interchange spacing will likely result in weaving conditions.
- Since the proposed interchange is located in a low point on Interstate 87, the effect of trucks climbing the grades on the ramps and on the acceleration lanes on Interstate 87 (both to the north and south) should be evaluated.

Response: The Draft Conceptual Access Modification Proposal (CAMP) included the operational analyses requested in this comment. A copy of the CAMP is included herein as Appendix D. The conceptual design of the new interchange meets applicable industry standards published by AASHTO and NYSDOT. There is adequate spacing between interchanges. The

levels of service for the mainline and ramp junctions as well as a weave analysis are included in the CAMP. Upon review of the draft CAMP, the Federal Highway Administration determined that a new interchange between Exits 11 and 12 appears feasible (see Appendix E).

30. Comment: The peak hour traffic generation information presented in the study indicates that the site will generate approximately 25,000 new vehicle trips per day when fully developed, with 58% of this traffic accessing the site from Interstate Route 87. The traffic study should describe the impacts of this additional traffic on the operations of this interstate facility.

Response: The 25,000 new vehicle trips per day is not presented in the DGEIS and it is unclear how the commenter calculated this figure. The traffic impact study is based on a peak hour analysis and not daily trip generation estimates. The impact of the additional site-generated trips on I-87 was analyzed in the CAMP (Appendix D). See also the Response to Comment #32.2.29.

31. Comment: The traffic study notes that the current plans do not include a connection to the adjacent NYSERDA site, but also states that the existing access from NYSERDA to Dunning Street was analyzed as an emergency access only for both sites. The relationship of traffic generation, access and circulation of these two sites needs to be more clearly defined.

Response: The DGEIS analyzes the potential impact of approximately two-million square feet of development, some of which would occur on the NYSERDA site or the LFTC project site. There is additional developable land on the LFTC project site that could accommodate more than 2 million square feet of ancillary uses. The traffic impact study and the findings of the DGEIS would still be applicable to a larger development size (more than two-million square feet of ancillary uses) if the trip thresholds are not exceeded. It was assumed that if development of the LFTC project site was approved and progressed simultaneously as development of the NYSERDA site, access to Dunning Street would be restricted to only emergency access for both projects and access to NYSERDA would be through the LFTC project site. If the LFTC site is not approved, and development on the NYSERDA site progresses, it is assumed that access to NYSERDA will be provided from Dunning Street until the thresholds identified in the Clough, Harbour and Associates study from 1999 are exceeded. It is understood that the amount of development on the NYSERDA site is limited by SEQR findings for that project. An alternative to the Dunning Street access is required to maximize the potential development on the NYSERDA site. A separate DEIS is being prepared for the NYSERDA project.

32. Comment: The analyses of the traffic generated by the ancillary uses during the

peak hours of adjacent street traffic represent the times when the highest overall hourly volumes occur through the street network. This analysis may not represent the full impact of the project, however, since the directional flow of traffic generated by the ancillary site development is generally in the opposite direction of the existing peak directional flow during these time periods. The traffic study shows that existing traffic volumes during the period from 5:30 PM to 6:30 PM, when the semiconductor facilities' shift change occurs, are only slightly lower than the 4:30 PM to 5:30 PM peak hour. The traffic generated by the shift change of 4,000 employees of the semiconductor facilities will have a greater impact on peak directional flows of traffic during this peak hour than does site traffic during the peak hour of adjacent street traffic. The operating conditions during the PM peak hour of the generator should also be analyzed.

Response: A supplemental analysis was conducted to determine the relative magnitude of impact from the traffic generated by the nanotechnology facilities during the PM peak hour of the generator (5:30 PM to 6:30 PM). The intersections included in this analysis were chosen based on their relatively high existing traffic volumes and their proximity to the site, in that these intersections will experience a larger concentration of site generated trips as drivers converge on the site. These intersections include Exit 12 interchange, Route 67/Route 9/Dunning Street, Route 9/Site Driveway 1, Route 9/Route 67 (Round Lake), and Route 9/George Avenue.

Existing traffic volumes recorded at these intersections during the PM peak hour of the generator (5:30 PM to 6:30 PM) were used as the basis for developing the No-Build traffic volumes for each design year, consistent with the methodologies used in the LFTC Traffic Impact Study. Design year Build traffic volumes were developed by adding the No-Build traffic volumes to the trip assignment of the nanotechnology facilities, and the redistribution of background traffic volumes associated with the completion of the Step 1 and Step 2 access improvements. Levels of service were then determined for the existing and No-Build traffic volumes. Two (2) build conditions were analyzed for each design year during the PM peak hour of the generator. The first of which represents the arrival peak flow of trips generated prior to the afternoon shift change, and the second analysis represents the departure peak flow of trips generated after the shift change. Table 2.2.32.A summarizes the overall intersection levels of service for the existing condition and development phases 1 and 2. Table 2.2.32.B summarizes the overall intersection levels of service for development phases 3 and 4.

Table 2.2.32.A
Level of Service Summary
PM Peak Hour of Generator, LFTC Development Phases 1 and 2

Intersection	Control	2001 Exist	2005 No-Build	2005 Build		2011 No-Build	2011 Build	
				Arr.	Dep.		Arr.	Dep.
Rt. 67/Exit 12 SB	S	C	---	---	---	---	---	---
	R	---	A	A	A	A	A	A
Rt. 67/Exit 12 NB	S	D	---	---	---	---	---	---
	R	---	A	A	A	A	A	A
Rt. 9/Rt. 67/Dunning St	S	D	---	---	---	---	---	---
	R	---	A	A	A	A	C	C
Rt. 9/Site Drwy 1	S	---	---	B	B		C	C
Rt. 9/Rt. 67 (Round Lake)	U	A/B	A/B	---	---	A/B	---	---
With Access Road	S	---	---	C	C	---	C	C
Rt. 9/Maltaville Rd/George Ave	S	A	B	A	A	B	B	B

Table 2.2.32.B
Level of Service Summary
PM Peak Hour of Generator, LFTC Development Phases 3 and 4

Intersection	Control	2018 No-Build	2018 Build		2025 No-Build	2025 Build	
			Arr.	Dep.		Arr.	Dep.
Rt. 67/Exit 12 SB	R	A	A	A	A	A	A
Rt. 67/Exit 12 NB	R	A	A	A	A	A	A
Rt. 9/Rt. 67/Dunning St	R	A	A	A	A	A	A
Rt. 9/Site Drwy 1	S	---	B	B	---	B	B
Rt. 9/Exit 11a WB Ramp	S	---	A	A	---	A	A
Rt. 9/Rt. 67	S	B	---	---	B	---	---
With Exit 11a EB Ramp	S	---	B	B	---	B	B
Rt. 9/Maltaville Rd/George Ave	S	B	B	B	B	B	B

Key: Control: S = Signalized Intersection, U = Unsignalized Intersection, R = Roundabout

The above analyses include the Step 1 and Step 2 access improvements and any improvements recommended as mitigation in the analysis of the intersection during the peak hour of adjacent street traffic. As evident from the above summary, the traffic impact generated by the proposed nanotechnology facilities can be accommodated with the mitigated transportation system. The background traffic volumes during the PM peak hour of the generator are slightly less than that which occurs during the PM peak hour of adjacent street traffic. The study area intersections can accommodate the increased directional flow and provide adequate levels of service. No additional improvements are warranted to accommodate the peak hour of the generator. Traffic volume figures summarizing this analysis are included as Figures 2.2.32.1 through 2.2.32.9.

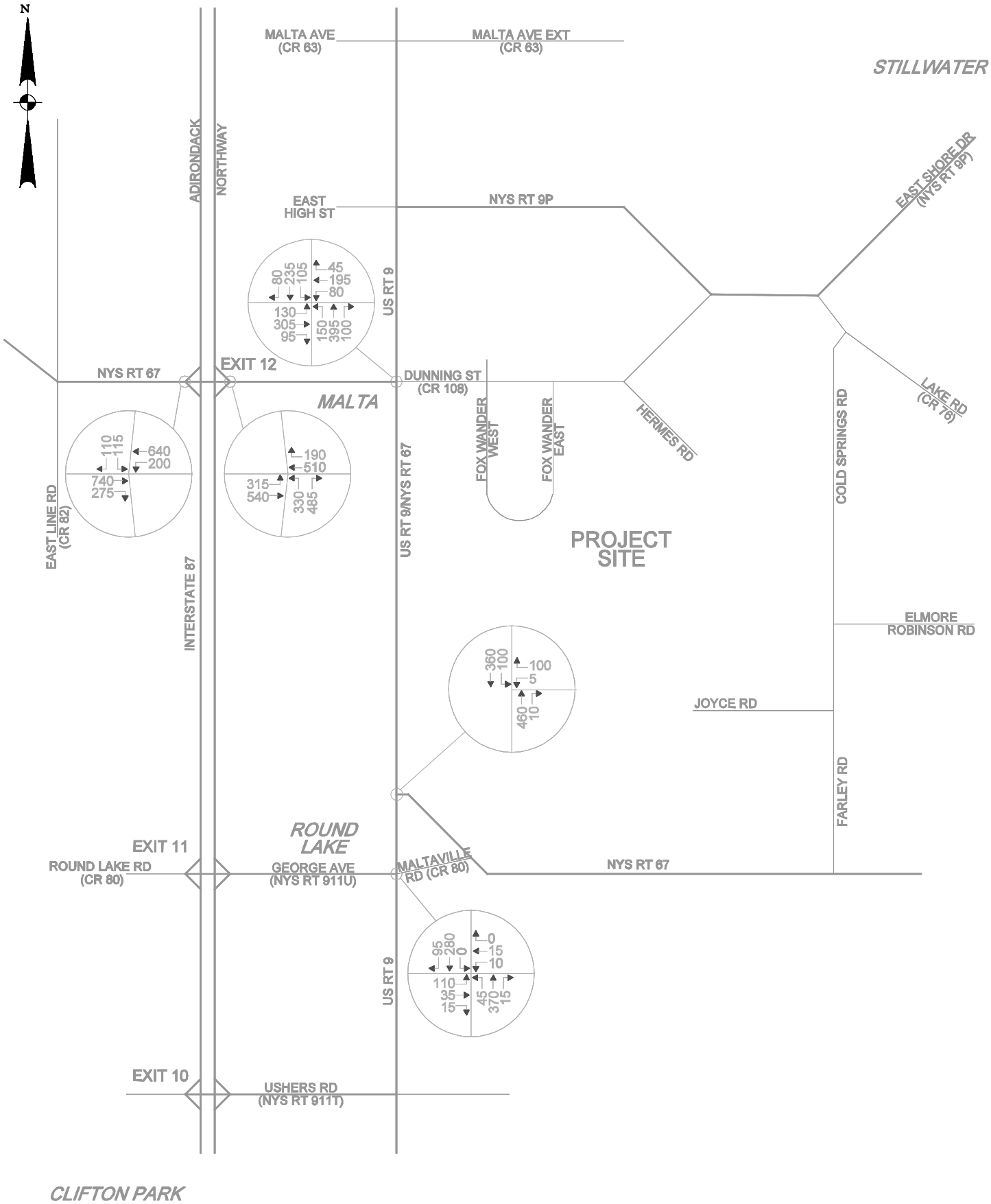


FIGURE 2.2.32.1
2001 EXISTING TRAFFIC VOLUMES
PM PEAK HOUR OF GENERATOR

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12203

PROJECT: 01-062 | SCALE: NONE | DATE: 5/03

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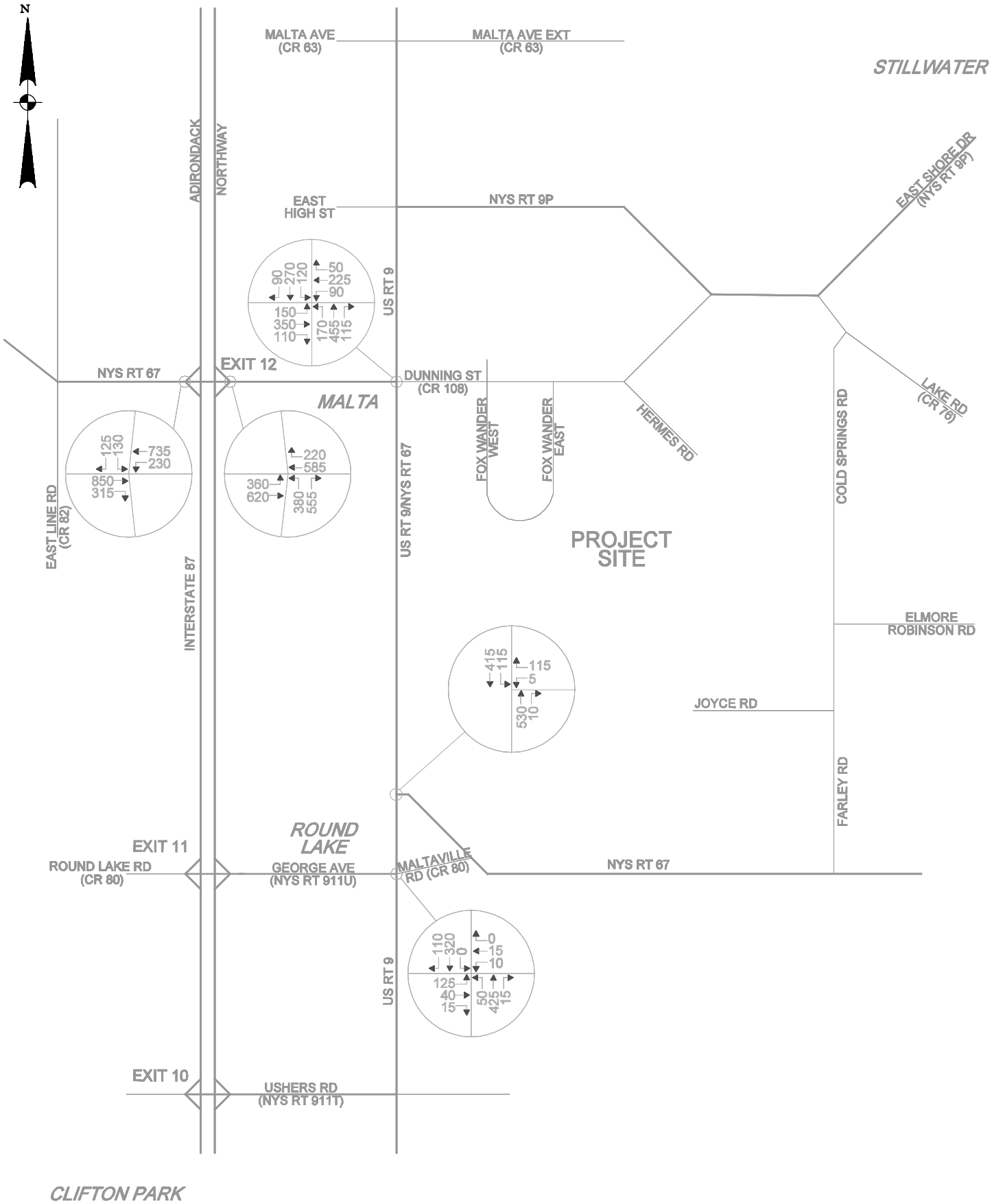

FIGURE 2.2.32.2
2005 NO BUILD TRAFFIC VOLUMES
PM PEAK HOUR OF GENERATOR

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12203

PROJECT: 01-062 | SCALE: NONE | DATE: 5/03

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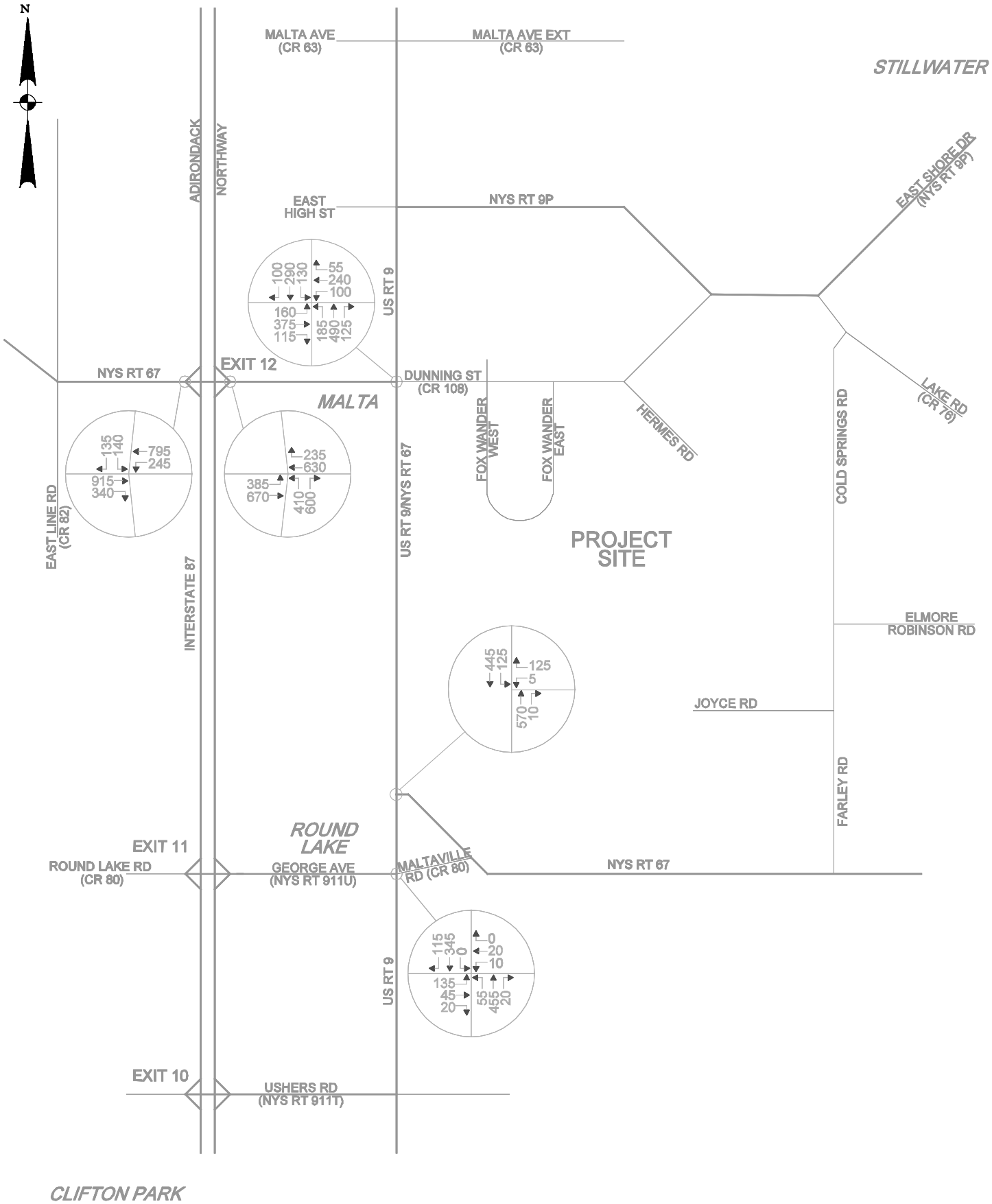

FIGURE 2.2.32.3
2011 NO BUILD TRAFFIC VOLUMES
PM PEAK HOUR OF GENERATOR

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12203

PROJECT: 01-062 | SCALE: NONE | DATE: 5/03

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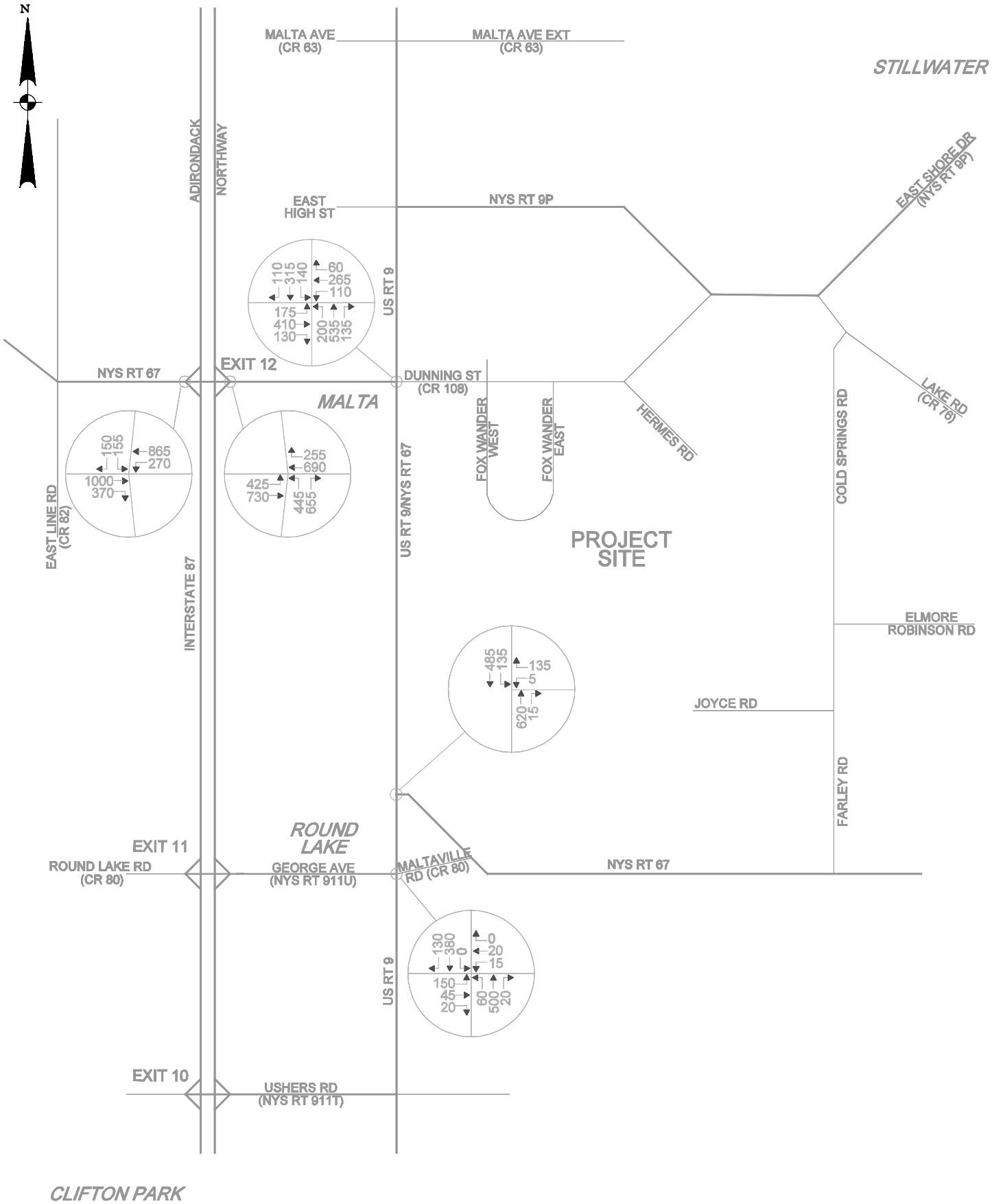

FIGURE 2.2.32.4
2018 NO BUILD TRAFFIC VOLUMES
PM PEAK HOUR OF GENERATOR

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12203

PROJECT: 01-062 | SCALE: NONE | DATE: 5/03

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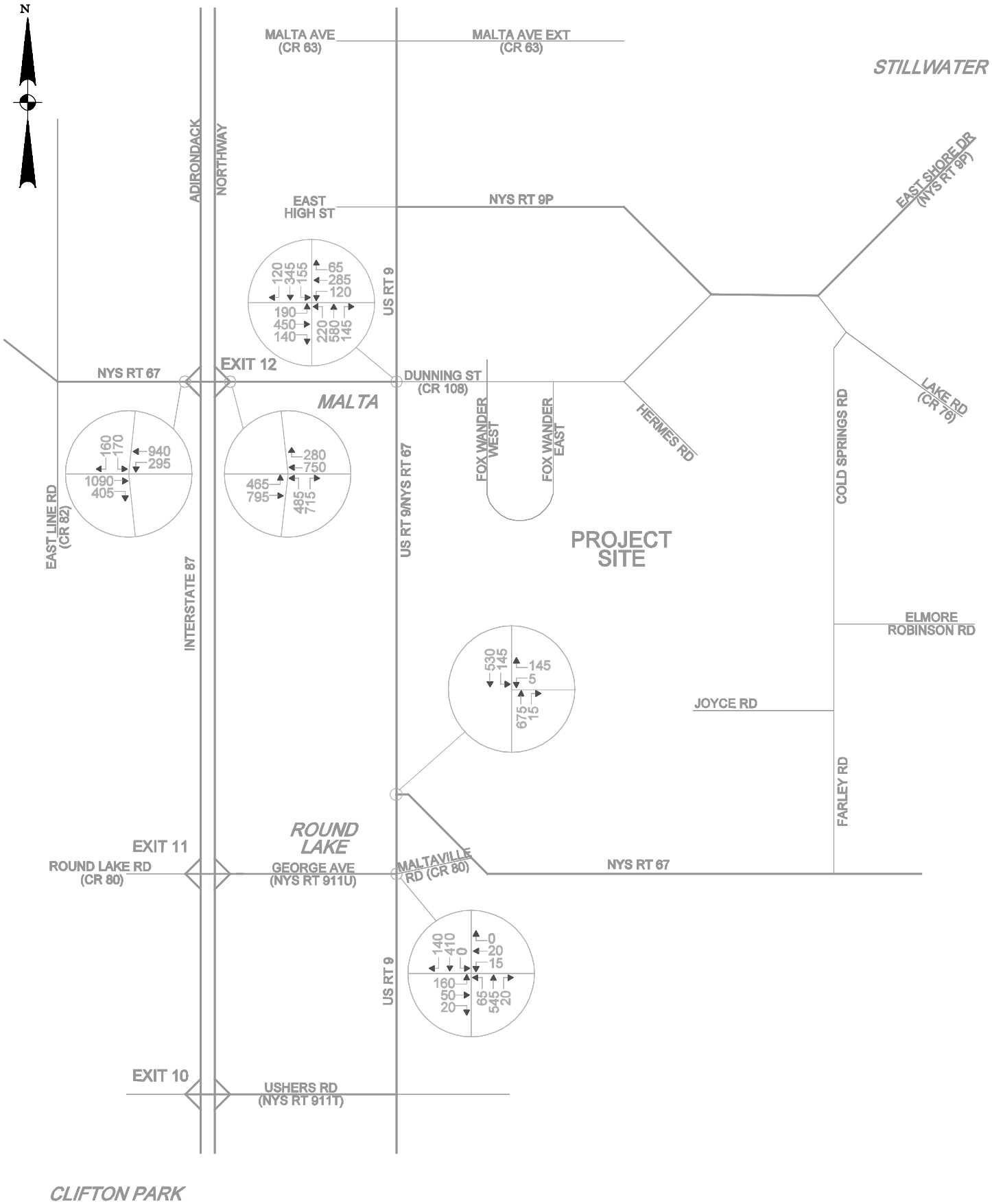

FIGURE 2.2.32.5
2025 NO BUILD TRAFFIC VOLUMES
PM PEAK HOUR OF GENERATOR

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12203

PROJECT: 01-062 | SCALE: NONE | DATE: 5/03

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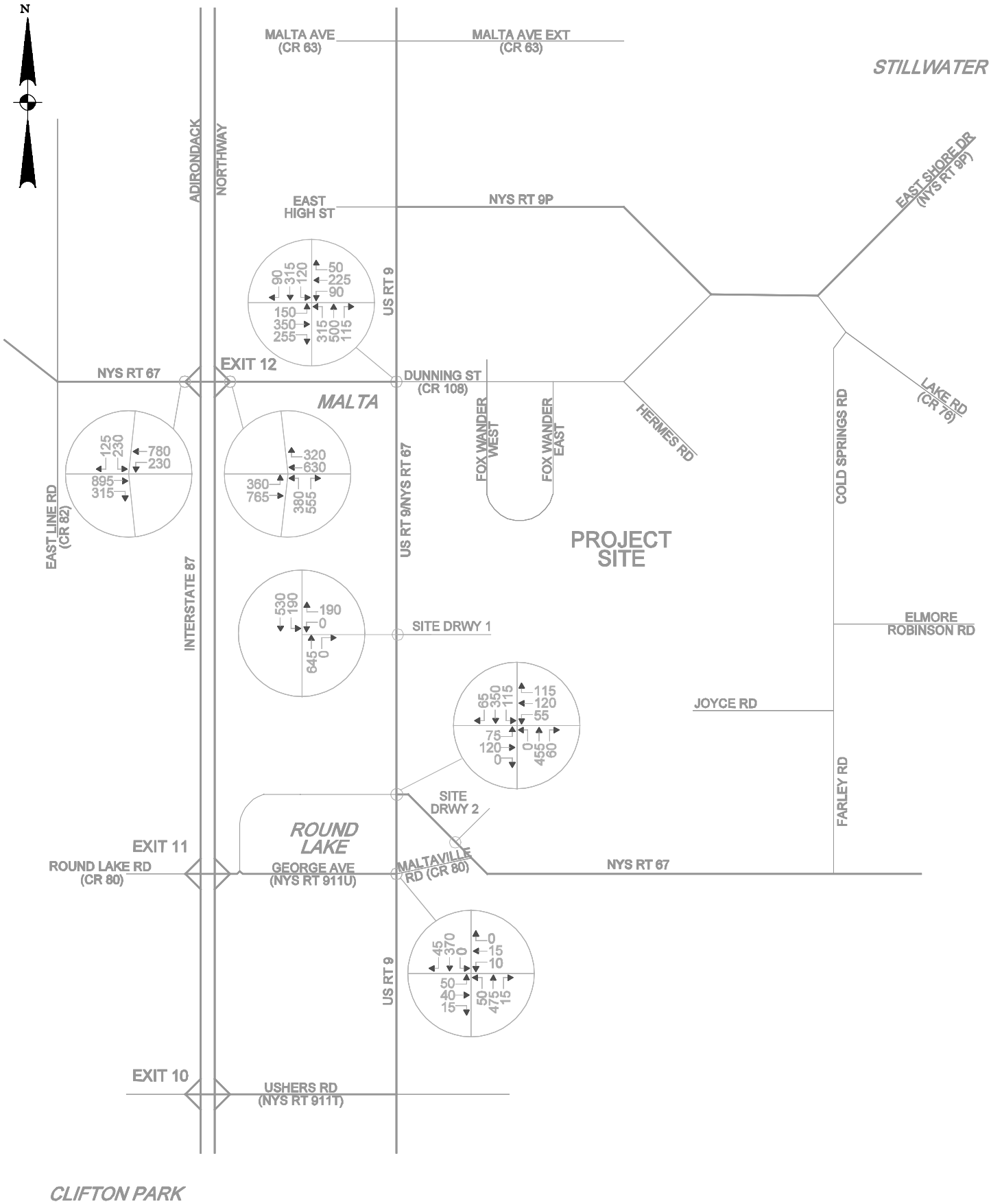

FIGURE 2.2.32.6
2005 BUILD STEP 1
PM PEAK HOUR OF GENERATOR

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12203

PROJECT: 01-062 | SCALE: NONE | DATE: 5/03

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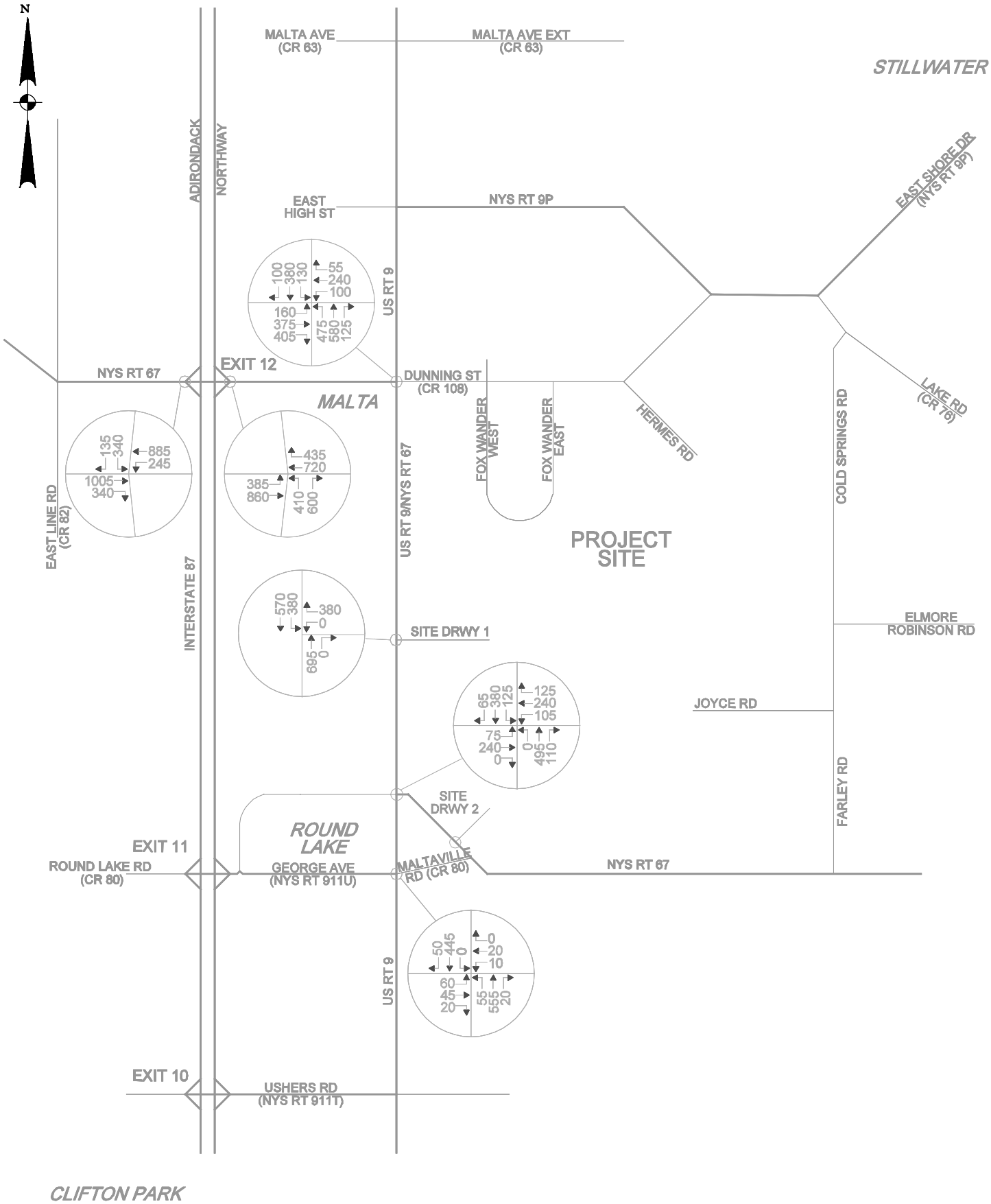

FIGURE 2.2.32.7
2011 BUILD STEP 1
PM PEAK HOUR OF GENERATOR

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 01-062 | SCALE: NONE | DATE: 5/03

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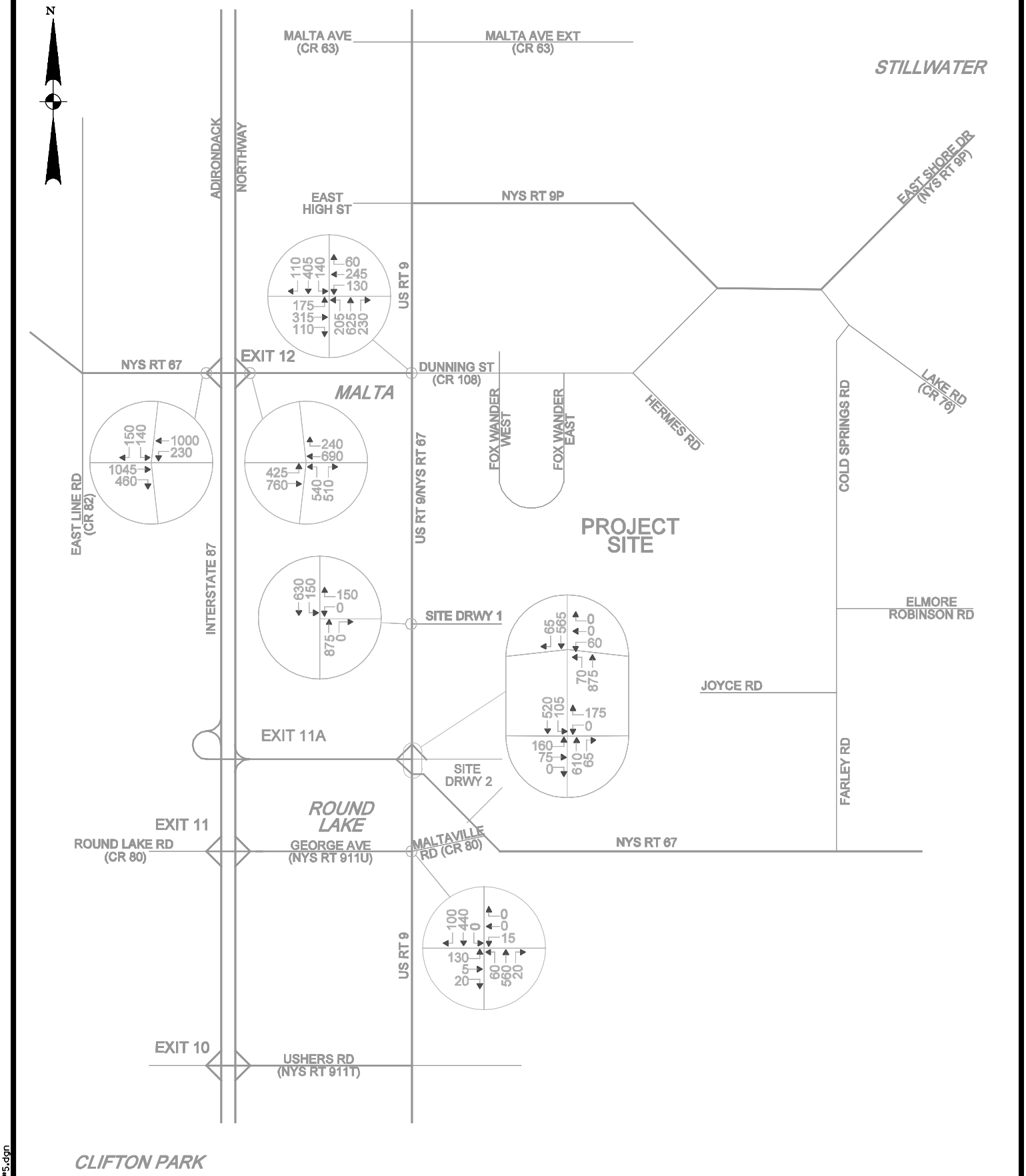

FIGURE 2.2.32.8
2018 BUILD STEP 2
PM PEAK HOUR OF GENERATOR

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 01-062 | SCALE: NONE | DATE: 5/03

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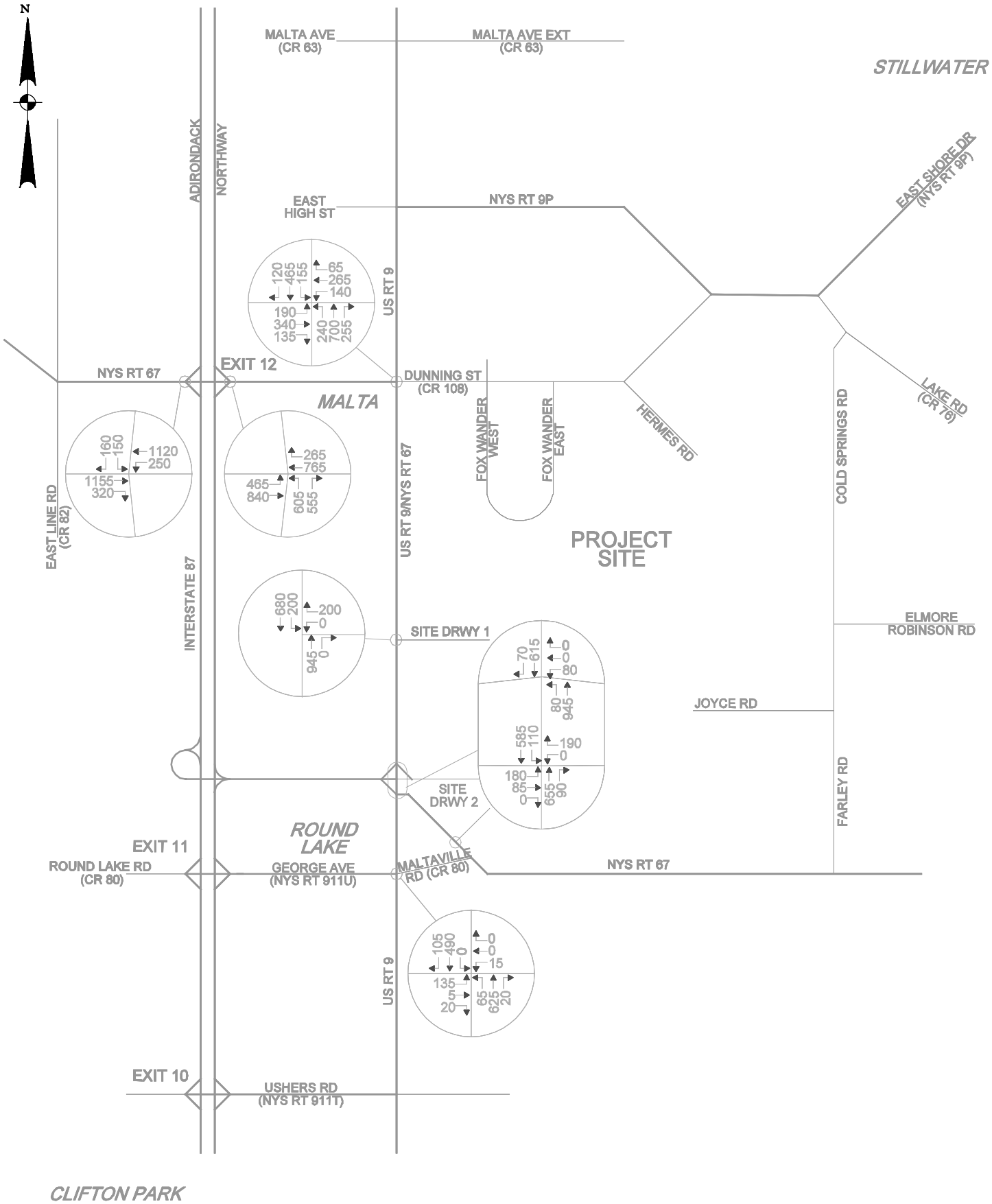

FIGURE 2.2.32.9
2025 BUILD STEP 2
PM PEAK HOUR OF GENERATOR

LUTHER FOREST TECHNOLOGY CAMPUS
TOWNS OF MALTA AND STILLWATER, NEW YORK

CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12203

PROJECT: 01-062 | SCALE: NONE | DATE: 5/03

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33. Comment: The peaking characteristics of the semiconductor plants are separate and distinct from the ancillary uses. The traffic analyses should describe the effect these site characteristics will have of extending the number of hours each day where "peak" traffic volume conditions will occur.

Response: Traffic volumes within the study area are highest during the weekday morning and afternoon commuter hours, which generally occur from 7:00 AM to 8:00 AM when residents are traveling to work and from 4:30 PM to 5:30 PM when residents return home from work. The ancillary land uses within LFTC will demonstrate similar trip generation characteristics. The trip generation of the ancillary uses will be highest during the existing peak hours of adjacent street traffic. One distinction between the trips generated by the ancillary uses within LFTC and the trips generated by the nearby residents, such as those in Luther Forest, is the directional distribution. Trips generated by the ancillary uses will be traveling into the Town of Malta during the morning peak hour as most adjacent residents are traveling out of the town and vise versa during the afternoon peak hour. This reverse commute characteristic allows LFTC traffic to utilize the existing reserve capacity in the transportation system during the peak hours of adjacent street traffic.

The nanotechnology manufacturing facilities (referred to above as semi-conductor plants) typically operate on a four (4) shift, 24 hour a day, seven (7) day a week schedule. The shift changes typically occur at 6:00 AM and 6:00 PM each day. The hour during which the traffic generated by the nanotechnology facilities is highest occurs before the weekday commuter peak hour in the morning and after the weekday commuter peak hour in the afternoon. The peaking characteristics of the nanotechnology facilities are expected to occur from 5:30 AM to 6:30 AM and from 5:30 PM to 6:30 PM weekdays and weekends. Therefore during weekday mornings, traffic volumes are expected to increase around 5:30 AM as nanotechnology employees arrive and depart for the 6:00 AM shift change. There will then be a slight decrease in volumes before the peak hour of the adjacent street occurs at 7:00 AM and then the traffic volumes will decrease again after 9:00 AM. During the weekday afternoons, traffic volumes begin to increase at 4:00 PM with the start of the afternoon commute, peaking from 4:30 to 5:30, followed by the arrival and departure of the nanotechnology employees for the 6:00 PM shift change. Effectively, there will be two AM peak hours, and what will appear to be a two-hour long afternoon peak period.

34. Comment: The GEIS needs to discuss traffic impacts along the Route 67 corridor west of the I-87. Volumes appear to be approaching capacity of the current lane configuration. The need for system wide improvements along this corridor should be discussed.

Response: The traffic impacts along Route 67 west of I-87 are summarized and discussed in the results presented for the Route 67/East Line Road intersection in Section 4.5.2 of the DGEIS and Chapter 4 of the Traffic Impact Study contained in Appendix F of the DGEIS. The existing geometry of Route 67 at East Line Road serves as a bottleneck for the progression of traffic along

Route 67. Widening Route 67 to provide a left turn lane on the eastbound and westbound approaches would increase the ability of this signalized intersection to process through traffic along the Route 67 corridor. The improvements recommended in the DGEIS will mitigate the potential impacts of the additional traffic generated by LFTC at the Route 67/East Line Road intersection. Route 67 is one of the few east-west corridors in Saratoga County. The traffic volumes along Route 67 will increase without the proposed action and will likely require improvements. CDTC has allocated funding for an area wide study of the Route 67 corridor from I-87 to Ballston Spa to address existing and future operational issues along Route 67.

35. Comment: The side-path proposed along the primary arterial boulevards within the campus will encourage the use of non-motorized transportation in addition to providing a recreational facility. However, to function properly, the side-path needs to be slightly wider than the proposed 8 feet (section 4.5.6 on page 182). AASHTO's Guide for the Development of Bicycle Facilities recommends a paved width of 3.0 m (10 feet) for a shared use path. NYSDOT Highway Design Manual - Chapter 18, Facilities for Pedestrians and Bicyclists (specifically section 18.8 Recreational Walkways and Multi-Use Paths), states that the Department's minimum recommended width for multi-use paths is 4.0 m (13 feet).

Response: This primary intent of the side-paths is to provide a recreational amenity for the employees of LFTC and to foster connectivity to Downtown Malta. It is not intended to be a dedicated bicycle route and may be privately owned and maintained and therefore not fall under the regulations as noted above. Should the facilities be dedicated at some time in the future, AASHTO's Guide for the Development of Bicycle Facilities indicates a width of eight (8) feet (2.4 m) can be adequate. The eight (8) foot width can be used where the following conditions prevail: (1) bicycle traffic is expected to be low, (2) pedestrian use of the facility is not expected by more than occasional, and (3) there will be good horizontal and vertical alignment providing safe and frequent passing opportunities. A minimum two-foot wide graded area with a maximum 1:6 slope will be maintained adjacent to both sides of the path, which will provide refuge for pedestrians, if necessary.

36. Comment: In order to provide "real" opportunities for the use of alternative modes of transportation to the campus, the multi-use paths should be extended to provide connection to the Zim Smith trail, the adjacent Luther Forest neighborhood, "Downtown Malta", Cold Springs Road and Saratoga Glen Hollow. What options have been considered to encourage car pooling, alternative modes of transportation (i.e., buses, bicycles) or other measures that would reduce the number of vehicle miles traveled?

Response: Carpooling can be promoted through the use of preferred parking close to building

entrances that is offered only to carpool participants. A semi-conductor company that was used as a model of a typical tenant during the preparation for the DGEIS for LFTC has a program established for encouraging carpooling. CDTC also offers incentives to carpool participants in the form of a Guaranteed Ride Home program and a free website to advertise carpools. More information can be found at www.commuter-register.org. The provision of mass transit services such as the use of shuttles or buses will be dependent on the demand for such services as the employee density on LFTC increases. Bicycle travel will be promoted by the availability of multi-use paths on the LFTC campus. The project sponsor has committed to constructing the multi-use paths to the site property line. This will provide a connection to the designated bicycle route on Route 9. No off-site construction of bicycle trails is proposed.

37. Comment: The GEIS indicates that the step 2 transportation improvements will include the partial removal and abandonment of the step 1 Round Lake "by-pass road". The potential impacts to the Village and surrounding neighborhood should be discussed. Will this road become a Village Road at this point?

Response: See response to Comment 2.2.9. Based on comments received during the public hearings and throughout the SEQR process, the preferred design alternative has been modified slightly. The Step 1 access road will not be abandoned. It will remain a public road. Ownership of the Step 1 access road will be an issue for future discussion with NYSDOT, the Town of Malta and the Village of Round Lake.

38. Comment: A summary of all proposed new roads should be provided which identifies type of road, length and proposed ownership and maintenance responsibility.

Response: There are two general types of roads proposed in the DGEIS: public and private. Future roads that will built off-site as mitigation for the potential traffic impacts of LFTC will be publicly owned and maintained. This includes the approximately 1.5-mile long Step 1 access road and the Step 2 interchange on I-87. The ownership and maintenance responsibility for the Step 1 improvements has not been determined, but in any event such responsibilities will not be imposed upon either the Village or Town. Step 2 improvements will be owned and maintained by NYSDOT. There are approximately six (6) miles of roads planned on the LFTC campus that will provide local access to the buildings on the campus. The main arterial roads on the project site are expected to be publicly accessible and maintained by the LFTC development entity, unless dedicated to the respective Towns with their permission.

39. Comment: Given the significant undeveloped land to the east of the site and the potential growth inducing impacts of the project the GEIS should explore the potential of developing the "Main Access Drive" as a through road to Route 9P providing an

alternative access to the Northway from points east of the site.

Response: The creation of a through-road is not consistent with the vision of the LFTC design. The goal is to create a campus style atmosphere on-site rather than a commuter route through the site. Improvements are proposed off-site to mitigate the potential traffic impacts of LFTC on Route 9P.

40. Comment: The GEIS should evaluate the ability of the "Mitigated" transportation network (with proposed improvements) to accommodate a likely build-out of the Route 9 corridor and downtown areas and establish any additional transportation measures which may be necessary as a result of the build-out. This should be evaluated for two scenarios, 1. Build out of the corridor and the Tech Park with step two improvements in place, and 2. Build out of the corridor if FHWA does not grant approval of the new interchange, step one improvements remain and the Tech Park development is stopped with 2 "Fabs" and one million square feet of ancillary uses.

Response: The level of service analysis summarized in Table 4.11 of the Traffic Impact Study (DGEIS, Appendix F) indicates that the improved transportation system provides reserve capacity to accommodate additional development within the Route 9 corridor for both scenarios listed in the comment. The extent to which additional development can be accommodated depends on the type of development, the trip generation characteristics of the development and the location of the development. Additional development within the Route 9 corridor and downtown areas is subject to approval by the Town of Malta Planning Board. The intensity of commercial development is under the Town's control insofar as the overlying zoning permits development by right. If LFTC is approved as planned, the Town may wish to consider updating its Master Plan in the short term and then periodic updates of the Master Plan as development of LFTC progresses. Based on the detailed level of service reports contained in Appendix D of the Traffic Impact Study the following table is a summary of the volume to capacity ratios for Route 9 under the two scenarios noted above:

Table 2.2.40
Volume to Capacity Ratios

Intersection	Phase 2 with Step 1 Access Improvements				Full Build with Step 2 Access Improvements			
	AM		PM		AM		PM	
	NB	SB	NB	SB	NB	SB	NB	SB
Rt. 9/Site Drwy 1	0.21	0.44	0.76	0.33	0.28	0.64	0.92 (0.75)	0.40 (0.36)
Rt. 9/Rt. 67/Site Drwy 2 WB Ramp	0.29	0.67	0.68	0.40	0.29	0.64	0.73	0.44

(__) = V/C ratio with alternative signal timings while maintaining acceptable levels of service.

Under the proposed conditions there will be reserve capacity on Route 9 if development of LFTC were to stop after just two phases and with only the access road (Step 1 improvements) as well as after full build out of the project with the new interchange (Step 2 improvements). It should be noted that the amount of reserve capacity is partially dependent on the signal timings at each intersection. If development on Route 9 increases, additional green time will be required on the northbound and southbound approaches thereby increasing or at least maintaining the amount of reserve capacity available.

41. Comment: Expanding the Route 67/East Line Road to a four lane highway that includes six lanes where turning lanes are involved, will destroy the rural character of the communities and homes in this area. Such improvements to this intersection would destroy homes on the national historic registry, businesses including the Double M, as well as the buffer area for Timber Trace.

Response: The DGEIS identified the need for improvements at the Route 67/East Line Road intersection, which would have no impact to the Double M or homes on the national historic register in the vicinity of the horse farm. The improvements include the provision of left turn lanes on all approaches to the intersection to accommodate the first two phases of development on LFTC. This would result in a three-lane section near the intersection. To accommodate full build-out of LFTC, it was recommended that additional through lanes be added to Route 67 through the East Line Road intersection. The DGEIS did not recommend a four-lane or six lane highway extending from Exit 12 to Ballston Spa. CDTC has budgeted for a study of the Route 67 corridor from I-87 to Ballston Spa, which is scheduled to begin upon conclusion of the SEQR process for LFTC.

42. Comment: Will the proposed roundabouts at Exit 12 have sufficient capacity for the proposed action if Step 2 improvements are not approved by FHWA? Will they have enough capacity for the induced growth, as well as the Town's planned growth?

Response: The proposed roundabouts are expected to have adequate capacity for phases 1 and 2, as well as the predicted background growth. Additional phases of development on LFTC will not be advanced without the Step 2 improvements. Refer to Response to Comment #2.2.32.

43. Comment: The method of assessing the peak travel volume and road capacity does not address the issue of increased volume created at all other times of the day, and does not fully portray the real impact to the community. The DGEIS neglects to quantify the amount of traffic imposed on the community by the Fab employees, working 12 hour shifts, who constitute a much larger trip generation than the ancillary development. It was suggested by one commenter (Bailliere Consulting) that projected

traffic volumes over a typical 24-hour day be included in the DGEIS, in graphical form.

Response: In general, implementation of the proposed action is expected to increase traffic volumes over a typical 24-hour day, however precise quantification of this increase is not possible based on the Town approved transportation scope of the DGEIS.

The Final Scoping Document set forth the required method of assessing the potential traffic impacts of LFTC during the peak hours of adjacent street traffic. During other hours of the day, the existing and background traffic volumes are lower and there is additional reserve capacity in the transportation system to accommodate the trips generated by the development on LFTC. The amount of traffic generated by the Fab employees working 12-hour shifts was quantified in the Traffic Impact Study, Appendix F of the DGEIS. The request for 24-hour trip generation data is unreasonable. The scoping document required an analysis of the peak hour of adjacent street traffic, which is consistent with standard traffic engineering methodologies. Daily trip generation information is not relevant to capacity analysis calculations.

44. Comment: One commenter (Bailliere Consulting) was critical of the construction period impacts on transportation resources, making the following statements. Assumptions made to assess construction impact are light, or do not fully quantify the sequencing of the construction process, especially in the early phases of the project. The largest amount of construction traffic will likely occur in the first phase of the project from 2003 to 2006 when work will take place for the off-site improvements and on the project site. Large trucks and associated heavy equipment will constitute much of the construction impact, having more of a negative impact than regular personal vehicles. The 30 contractors per 100,000 square feet rule of thumb only applies to single buildings, and would actually be larger if constructing two or three buildings simultaneously. The number of construction workers analyzed in the traffic study is inconsistent with the Industry Requirements Report, which states the creation of 3,000 construction jobs with employment for 18 months per Fab.

Response: Construction of the access road around the Village of Round Lake will occur during the first phase of development on LFTC. Until the access road is constructed, heavy vehicles and construction traffic associated with LFTC will be directed to use State highways such as Route 67 and Route 9 to access the site. Heavy vehicles will not use Cold Springs Road or Dunning Street or travel through the Village to access the project site. Large construction equipment is usually delivered to the site once, and is on-site for the duration of its use, thereby minimizing the need to transport the equipment on and off the site. Similarly, for large construction projects such as LFTC, some products can be stock piled on-site to minimize truck deliveries. Trips generated by construction workers generally occur outside of the peak commuter hours. Construction shift changes would typically occur at 7:00 AM, 4:00 PM and 11:00 PM. These vehicle trips will occur between the morning peak hours of the Fab employees and the peak hour of adjacent street traffic. During the afternoon peak hour, the construction traffic will be

generated before the peak hour of adjacent street traffic and the peak hour of the Fabs. The estimate of the number of contractors on site depends on the number of buildings being constructed at any one time. The estimate of 3,000 construction jobs includes those who will be tasked with tooling the manufacturing facility after the building is enclosed. Not all of the construction workers will be on-site at the same time. For example, concrete foundation work does not coincide with window installation.

45. Comment: One commenter (Bailliere Consulting) recommended that the GEIS include an estimation of vehicular traffic volume associated with the proposed road intersection modifications, suggesting that the local road network in Malta will in a "constantly recurring state of construction or reconfiguration for the next 15-20 years." It was suggested that the GEIS include data pertaining to the decrease in the level of service of existing roads during the periods of reconstruction, and that the GEIS should investigate the option of completing each, "intersection upgrade to full build-out capacity in one try, rather than upgrade each intersection four times." Another commenter (Chazen) suggested that the GEIS should provide a brief description of "levels of service" and what the different levels mean.

Response: The duration of construction is relatively short (a few months) for improvements such as left turn lanes and traffic signals. The commenter appears to be confusing the duration of the construction improvements with the design years for the traffic analysis, which relate to the phased build-out of LFTC. No intersection in the study area will require construction improvements for each level of development. Table 4.12 of the Traffic Impact Study (Appendix F of DGEIS) identifies the improvements required for each level of development. For example, the Route 67/East Line Road intersection would require eastbound and westbound left turn lanes in 2005 for phase 1 development, and northbound and southbound left turn lanes in 2011 for phase 2 development. It may be more economical to construct the left turn lanes on all four approaches of the Route 67/East Line Road intersection in one step, with the possibility of additional improvements if and when development phases 3 and 4 of LFTC are completed. The improvements required at each intersection for most phases will be completed in one step and the transportation system in the Town of Malta will not be in a constant state of improvement.

Detailed descriptions of level of service criteria can be found on page D-35, Appendix D of the Traffic Impact Study (Appendix F of the DGEIS).

46. Comment: One commenter (Bailliere Consulting) recommended that the GEIS provide threshold limits to the vehicle traffic volume of the 12-hour working shifts, or estimate and quantify the amount of ancillary development employees which would be working on this 12-hour schedule and include such in the trip generation reports.

Response: Trip threshold limits for the nanotechnology facilities were provided in Table 3.2 of

the Traffic Impact Study (Appendix F of the DGEIS). There will be approximately 700 to 1,000 trips generated per facility during the peak hours of the generator associated with the 12-hour shift changes if 100% of the employees work on this 12-hour shift change schedule. If only 65% of the total work force works on the 12-hour shift change schedule, then there will be approximately 470 to 650 trips generated per facility during the peak hours of the generator, depending on the total number of employees per Fab. See Response to Comment #2.2.21.

47. Comment: One commenter (Bailliere Consulting) noted an apparent discrepancy between trip generation threshold numbers. Section 4.5 on page 172 states that the trip generation thresholds of the adjacent traffic are between 600 to 625 peak-hour trips per phase (Table 4-6), whereas pages 35 and 39 reference an assumption that the adjacent road network can accommodate an additional 500 peak-hour trips for each of the four Fabs proposed.

Response: Table 4.6, page 172 of the DGEIS, summarizes the cumulative trip thresholds during the peak hours of adjacent street traffic. These thresholds include 600 trips in the AM peak hour and 625 trips in the PM peak hour for each phase of development. Both the morning and afternoon peak hour trip thresholds include 500 trips in the peak direction per phase (refer to Table 3.3 of the Traffic Impact Study). The references on page 35 and 36 of the DGEIS should be clarified to say that the "500 peak hour trips" relates to 500 peak hour trips in the peak direction. The reference on page 39 should be clarified to say that the ancillary development thresholds are 600 trips in the AM peak hour and 625 trips in the PM peak hour per phase.

48. Comment: If the ancillary support employees are limited to 2,500 persons, then the amount of ancillary support development being proposed seems very high at 500,000 square feet per each of four phases. The NYS Building Code assumes between 200 to 300 square feet of occupied space per person for these types of occupancies.

Response: The traffic analysis is based on trip thresholds of 600 peak hour trips during the AM peak hour and 625 trips during the PM peak hour. The area or building size of ancillary development that would correspond to the same number of peak hour trips depends on the type of land uses proposed as ancillary development. Based on the expected ancillary land uses and peak hour trip rates published by the Institute of Transportation Engineers (ITE) in the Trip Generation, 6th edition, the 600 and 625 peak hour trip thresholds equate to approximately 500,000 square feet per phase. Three examples of the combinations of land uses that would generate the trip thresholds are summarized in Table 3.4 of the Traffic Impact Study (Appendix F of the DGEIS). The NYS Building Code is not the appropriate reference to use in determining the traffic impact of the proposed Project.

For the purpose of emergency ingress and egress, NYS Building Code sets forth criteria for the maximum number of people who would be able to fit into a building. This NYS Building Code

information is provided based on a maximum floor area allowance per occupant for various building occupancy classes. This code information also allows the local fire department to quantify the maximum number of persons that would be able to fit into a given type of space at a single time (i.e., not the total number of employees per building). Using the H-5 fabrication and manufacturing area occupancy category (from Table 1003.2.22 of NYS Building Code), which corresponds to 200 square feet per occupant, a potential building size of 300,000 square feet, would correspond to a maximum number of 1,500 employees in the building at one time.

49. Comment: There is an apparent conflict with afternoon peak hour. The DGEIS identifies the afternoon "peak-hour" of travel from 4:30 PM to 5:30 PM, whereas the NYSDOT continuous count station hourly reports for the months of March and August 2001 on Route 9 apparently denote peak travel volumes between 5:30 PM and 6:30 PM

Response: Continuous count data collected by NYSDOT count stations are reported for each hour and not in 15 minutes increments. The NYSDOT continuous count station hourly reports would not denote a peak travel period beginning at 5:30 PM. The peak hour would be reported as an "even hour" time, such as 4:00, 5:00 or 6:00 PM. Although peak hours may vary from day to day, the designation of the afternoon peak hour generally being from 4:30 to 5:30 PM is based on turning movement traffic counts collected at the study area intersection in 15 minute intervals.

50. Comment: Will aerial commuting be permitted with helipads on the Campus? If so, what will be the impacts of such trips?

Response: There are no plans to provide a helipad at the LFTC. Helicopter traffic can be accommodated in nearby facilities such as the Saratoga County Airport, Round Lake Airport and Albany International Airport. Potential travel by helicopter will be very infrequent, if at all, and as such the relative impacts are insignificant.

51. Comment: Forty-six residents living on and near Maltaville Road, County Route 80, signed a petition expressing concern over the current and future levels of truck traffic on this road, requesting the Town of Malta actively pursue Saratoga County to eliminate commercial truck traffic from Maltaville Road. This petition states that Maltaville Road is commonly used as a truck thoroughfare between Routes 9 and 67, that it has tight corners with limited sight distances, and that the increased truck traffic and recreational use creates a safety concern.

Response: Comment noted. It is anticipated that the Step 1 and Step 2 access improvements will reduce the volume of traffic using Maltaville Road as a cut-through between Route 67 and

Route 9 by providing direct access to the proposed project off of Route 9.

Regardless of the outcome of the SEQR process for LFTC, the residents of Maltaville Road could submit their petition to the Town Supervisor for the appropriate review and action by Saratoga County.

52. Comment: The DGEIS states that there will be a connection between the phase 1 north roadway at Stonebreak Road and Fox Wander. This road will have the effect of providing a shortcut between Dunning Street and southbound Route 9 traffic. This configuration should be avoided.

Response: There will be no connection to Fox Wander.

53. Comment: When will the four (4) access roads be constructed? What is the cost for construction and who will pay for these roads? Who will pay for the cost of upgrading Cold Springs Road?

Response: It is likely that the connection to Stone Break Road will be constructed first and the access road will be continued through the Campus to intersect Route 9/67. The access roads on Cold Springs Road will likely be constructed later in phase 1. It is envisioned that all four access roads would be constructed within the trip thresholds identified as Phase 1 development. The cost for construction of the roads on LFTC is approximately $15-million. The cost for constructing these roads, upgrading Cold Springs Road and all of the other transportation improvements will be paid for through a combination of private funds from future tenants, County industrial development agency funds, State grants, industrial access programs and federal funding. There will be no additional local tax burden on town residents for construction of the road improvements identified in the DGEIS.

54. Comment: The new exit on I-87 should be required under phase 1. At a minimum the FHA should commit to a design and funding scheme prior to any approval for this project. One commenter (Stephen Rutkey) stated that the GEIS should contain the Conceptual Access Modification Report (CAMP) submitted to FHWA with a determination whether the interchange "appears feasible." Another commenter (Malta's Town Comptroller, Kevin King) stated that the Town should demand that all the necessary approvals and permits be completed and in place for the new interchange, and that the proposed funding be in place and property secured, encumbered, or bonded to prevent future legislators from delaying the construction of the new exit.

Response: The CAMP is included in Appendix D. The letter from FHWA indicates the interchange is feasible (see Appendix E). The new exit on I-87 is not warranted for the Phase 1 development. The interchanges at Exit 11 and Exit 12, with the future capacity improvements planned by NYSDOT, can accommodate the traffic generated by LFTC through the Phase 2 development, which could be as long as fifteen years. If the new interchange is never constructed, then development on the LFTC project site would be limited to the first two phases.

55. Comment: The full build traffic volume analysis for Joyce Road, year 2025 is the same as the no build load, year 2005. This seems highly unlikely in that the two driveways on Cold Spring Road estimate that 28% of the traffic will use Cold Spring Road. And construction traffic for the water and sewer upgrades will travel over Joyce Road.

Response: Refer to Figures B-1, 2 and B-44, 45 of Appendix B of the Traffic Impact Study (Appendix F of DGEIS). Traffic volumes on Joyce Road were shown to increase slightly between the 2005 no-build and 2025 build conditions, with an average of approximately 20 vehicles on Joyce Road in 2005 and 25 vehicles in 2025. There is no benefit for site-generated traffic to use Knapp Road and Joyce Road to access the site from the west (Route 9), when the new internal site driveways would provide better, more direct access. It is noted that construction operations for the utility upgrades may result in a temporary increase in vehicles on Joyce Road.

56. Comment: Ravine crossings on the project site should be accomplished using single span bridges rather than earthen fill with culvert pipes. Can any of the three project site ravine crossings be eliminated?

Response: The ravine crossings cannot be eliminated without a significant adverse impact on Cold Springs Road. The ravine crossings are necessary to provide access from Route 9 and Route 67. The ravine crossings will be designed to minimize environmental impacts such as potential impact to wetlands and other waters of the U.S., including floodplains, with either bridges or culverts depending on the elevation of the ravine at the crossing.

57. Comment: The grade of Route 9 beneath the new overpass is likely to limit sight distance to the far side signal in either direction, resulting in a possible accident risk.

Response: The intersections on Route 9 adjacent to the overpass leading into the LFTC project site will be constructed to the appropriate design standards so as to provide adequate sight distance to the signal heads. There are many locations with a diamond, or modified diamond interchange where the ramp intersections are controlled by traffic signals. The NYSDOT will ensure that the proper clearances are provided for vehicles traveling along Route 9.

58. Comment: The traffic impact study is deficient in its consideration of Route 9P, which will be a very popular route from Saratoga, Stillwater, and Wilton. Route 9P is narrow and winding and can't be improved due to proximity of homes and camps to the road on both sides.

Response: The need for improvements was identified at the Route 9P/Lake Road intersection. This improvement included the installation of a traffic signal in 2018. If the proposed action is approved and constructed, improvements to Route 9P will be completed with consideration given to the constraints of Route 9P. Specifically, a traffic signal can be installed within a relatively small right-of-way.

59. Comment: Malta's Town Comptroller (Kevin King) asked that the GEIS provide estimated costs for the construction of the loop road (connecting Malta Commons with Route 9), the construction of the new parallel access road, and increased Highway Department personnel, equipment and other costs associated with the maintaining of these new roads, including those roads within new housing developments constructed to provide housing to the new employees, including the effect on the Town Highway Tax Rate over the next ten years. Both of these roads are stated to be needed as mitigation for additional traffic on Route 9.

Response: The proposed loop road from Malta Commons to Route 9 is a project unrelated to LFTC (see Response to Comment #2.2.20). Similarly, construction of the new parallel access road is not proposed as mitigation in the DGEIS. Both of these roads are shown in the Town's Master Plan and are not proposed as mitigation for the traffic impacts associated with LFTC. There is a connection proposed as part of LFTC between Plum Poppy South and Plum Poppy North that would become a Town road and require maintenance by the Town Highway Department. Currently, there are two cul-de-sacs within the Luther Forest residential development that are maintained by the Town. LFTC will connect these two ends of Plum Poppy North and South, thereby eliminating the two cul-de-sacs. The cost of maintaining this new connection could be off-set by the cost savings associated with eliminating the maintenance of two cul-de-sacs.

60. Comment: One commenter (Nora Cunningham) claimed the Woodfield area of Route 9 as being a dangerous intersection in need of a traffic signal, and asked what could be done regarding this traffic issue with or without the proposed LFTC.

Response: The SEQR process for the Woodfield development required the installation of a traffic signal at the Route 9/Woodfield intersection in the future when the commercial land uses near Route 9 are developed. At any time, unrelated to the development of LFTC, the resident or the

Town could petition the Department of Transportation to conduct an analysis to determine if the traffic volumes or accident patterns warranted the installation of a traffic signal. Based on the current available data, this intersection does not currently warrant a signal.

61. Comment: The GEIS does not provide an explanation or segue from Table 4-7, Level of Service to identifying which intersections require mitigation and defining those mitigation measures. For example, the only intersection identified in Table 4-7 with LOS of D in Phase 1 was Round Lake Road/Exit 11 SB. As a result, it is unclear why the "extra" mitigation measures on page 176 are being proposed in Phase 1.

Response: Table 4-7 (Section 4.5.2) of the DGEIS is a summary of the overall level of service operations for each of the intersections and include the proposed mitigation improvements. Level of service details can be found in the Traffic Impact Study contained in Appendix F of the DGEIS. Appendix D of the Traffic Impact Study illustrates in greater detail where poor levels of service are expected on each lane group at the study area intersections and the resulting levels of service with mitigation. In addition, Step 1 access improvements are proposed to mitigate "quality of life" impacts for the residents of the Village of Round Lake, which are not measured in terms of level of service.

62. Comment: The GEIS does not describe the levels of service at the intersections post-mitigation, especially for those intersections where a LOS D is identified in Table 4-7.

Response: Table 4-7 of the DGEIS is a summary of the overall level of service for each of the intersections post-mitigation. Level of service details during pre-mitigation conditions can be found in greater detail in Chapter 4 and Appendix D of the Traffic Impact Study (Appendix F of the DGEIS).

63. Comment: It is unclear how the traffic volumes for ancillary traffic were calculated (on page 24 of Appendix F). Was a number that would cause an impact of adjacent street traffic determined and then a determination made of how much ancillary development (approximately 1.8- to 1.9-million square feet) could be proposed that would equal that amount.

Response: The trip generation thresholds were determined through preliminary analysis of what the adjacent transportation system could accommodate with reasonable improvements. Through this process, it was determined that approximately 600 AM peak hour and 625 PM peak hour trips per phase could be accommodated, and this was to be used as the trip thresholds for each phase. The land use scenarios summarized in Table 3.4 of the Traffic Impact Study (Appendix F

of DGEIS) for the approximately 2 million square feet ancillary development were provided for illustrative purposes only. The LFTC project site could accommodate additional ancillary development beyond the two million square feet analyzed in the DGEIS, depending on the type of development proposed. This potential future development would require further analysis, mitigation and a separate SEQR process.

64. Comment: NYSDOT stated that it was involved in the development of the scope for the Traffic Impact Study, and in the discussion and resolution of various matters concerning the technical analysis. In general, the methodology the study uses is consistent with our past discussions, as well as with standard traffic engineering practices. The traffic forecasts for the site, trip-distribution percentages, and trip assignments are all reasonable. The proposed two-step Interstate access scenario is a reasonable approach, as are the development of trip thresholds for each of the four phases of development, and the identification of impacts and the proposed mitigation measures necessary for each phase of development. We would strongly suggest that, as each phase of development is pursued and completed, the trip-thresholds and study methodology be revisited to verify the accuracy of the assumptions made and, if necessary, to also make appropriate adjustments to the mitigation plan.

Response: Comment noted. As development is proposed within LFTC, traffic counts will be required at the four access points to identify when the trip thresholds are met and determine what improvements are required before a certificate of occupancy can be issued for the next building.

65. Comment: NYSDOT contacted FHWA for a preliminary assessment of the proposed interchange feasibility. FHWA initial review of the proposed interchange modifications is that there "appears to be no obvious flaws which would rule out its eventual approval." This preliminary assessment by FHWA is based on information currently available, and a full evaluation of the concept in accordance with the applicable federal procedures for modifications to Interstate access will still be required.

Response: Comment noted. The initial review by FHWA indicates that it appears feasible to construct a new interchange between Exits 11 and 12. The next step in the design process for a new interchange is the Access Modification Report, which is the design approval document prepared for a change in access to the Interstate highway system for State and federal design projects.

66. Comment: One commenter (Larry Benton) suggested that "Dunning has capacity and with completion of the final loop road at the northeast quadrant of Rte. 67

and Dunning this connection would provide good access to the park especially from the north along Rte. 9." Another commenter (Anne Garrity) stated that the traffic study doesn't give enough weight to southbound traffic, employees coming from the north, suggesting that most commuters would use Route 9 or Exit 12, and not the new exit.

Response: The loop road the commenter is referring to in the northeast quadrant of the Route 67/Dunning Street intersection is one element of the Town's current Master Plan. There are no plans for this connector road to be constructed as mitigation for LFTC because access is not proposed from Dunning Street. The distribution of site traffic from the north was determined by CDTC in cooperation with NYSDOT (see response to Comment #2.2.27). The trip distribution analysis indicates that 32% of the site generated traffic will come from the north on I-87 and Route 9. After construction of the new exit, it was estimated that all of the traffic from I-87 southbound would use the new exit in lieu of Exit 12 and traveling through the roundabouts during the peak hours. In contrast, an estimated 75% of the traffic from Route 9 southbound would continue to use Route 9 after construction of the new interchange. (refer to Figures B-9 and B-11 of the Traffic Impact Study, Appendix F of DGEIS).

2.3 Infrastructure

Required infrastructure for the proposed LFTC includes: water, sewer, electric power, natural gas, and telecommunications.

2.3.1 Water

1. Comment: Several commenters referenced the existing water problem between the Town and Village of Stillwater, and asked if what is being proposed will solve these problems.

Response: The existing "water problem" in the Town and Village of Stillwater is an existing baseline condition which is unrelated to the proposed action herein under review. The two potential sources of water supply proposed for the LFTC (the upper Hudson and lower Hudson sources) would make public water available to the Town and Village of Stillwater should they like to extend service from the proposed water supply systems. The decision to extend service to either the Town or the Village would be a Town or Village decision.

2. Comment: How much will the water improvements cost? Who will own, operate and finance the new water system? How will the capital and operating costs be paid? Will taxes be increased as a result?

Response: Cost estimates are presented in DGEIS (refer to Appendix H, Water and Sewer Service Feasibility Report. The upper Hudson source would be developed as a County water supply system with water sold at wholesale rates to prospective users. The capital and operating costs of this supply would be paid out of revenue generated activity by water sales. A special taxing district (such as a water district) is not expected to be created, however, existing water districts may be enlarged pursuant to the provisions of Town Law Article 12 or County Law to provide water service to unserved areas in route to the LFTC. It is anticipated that the lower Hudson supply would be developed and operated in a similar manner by a governmental or private entity. Refer to Response to Comment #2.3.1.27 for additional information regarding ownership.

3. Comment: Where will the pipes go for the Hudson River water source? What size will these pipes be? What will happen if they crack or leak?

Response: The main transmission pipe for the proposed upper Hudson source will be located adjacent to the Route 9 corridor from Moreau south to Malta. The pipe size would begin at 36-inches in the northern reaches of the system and decrease to approximately 24-inches at the

southern terminus. The main transmission pipe for the alternative lower Hudson source will be located from the Meeting House Road site west to the project site as shown on Figure 2-8 in Appendix H of the DGEIS. The transmission piping will cross River Road and be routed behind Brickyard Road to the north along an old railroad grade, and then west to County Route 75 where it heads north to McDermott Road, and then goes west along Elmore Robinson Road to Cold Springs Road into the project site. The pipe size for the lower Hudson source would be 36-inches from the water source to the treatment plant and to the project site, and will accommodate future users.

If a pipe is cracked or leaks, then the leak/crack would be located, diagnosed and repaired. The distribution system contains sufficient storage to supply average day needs for one (1) day. Additionally, a low profile water storage tank is proposed on-site to supply one full day of water to the manufacturing facilities, in the event that disruptions to the water distribution systems occur.

4. Comment: The existing poor water quality in Luther Forest residential community was reference by several commenters. One commenter (Joe DeLong) referenced water coming out of his tap that looked more like milk. It was stated that the proposed water system would not improve upon this existing water system.

Response: It is possible for Luther Forest to tie into the new system and correct this reported problem. This would be a decision of the owner/operator of the present water company which is privately owned and regulated by the NYS Public Service Commission. The Hudson River water source of the LFTC, if constructed, would provide an opportunity to resolve the reported, poor water quality concerns in the Luther Forest residential community.

5. Comment: Several commenters stated that there is no environmental review of the proposed water source for LFTC, suggesting that this was contrary to SEQR law.

Response: The impacts associated with the lower Hudson water source have been presented in the DGEIS and the Final GEIS for review and determination by the lead agency as to the significance of these impacts. This approach is compliant with SEQR.

If the water supply is from the upper Hudson source, an independent environmental review, pursuant with SEQR will be conducted as part of that project.

6. Comment: There was a general concern among several commenters that using groundwater from the Cold Springs Road well field or the Mechanicville Reservoir for the initial phases of development (i.e., as an interim source of up to 2.0 MGD) could

adversely impact existing public water supplies. Additional documentation from the City of Mechanicville and the existing public water supply wells was requested for such an interim source to assess impacts and demonstrate potential excess resource capacity.

Response: Neither the Cold Springs Road well field nor the Mechanicville Reservoir will be used for the LFTC. Based on the review of existing data, these two (2) water sources have the potential to supply a limited amount of water to the LFTC, but, because of the potential for an impact to these existing systems, the interim water source has been eliminated from further consideration.

The proposed water source for the LFTC will be the Hudson River, even for the initial phases of development. There will be no interim water source that utilizes either the Cold Springs Road well field or the Mechanicville Reservoir.

7. Comment: Various comments were made regarding the quantity of water usage with some people stating the water use was high, while others stating that water usage was low. These divergent comments are presented as follows:

- 15 million gallons per day of water is not a lot of water, it's less than one percent of the flow in the Hudson, and less than half of what GE Silicones takes out of the Hudson and returns to it every day.
- 6 to 15 million gallons per day of water is a tremendous amount of water.
- One commenter (David Stiles) stated that advances in technology are far more likely to reduce water use projections at full build out.

Response: Semiconductor manufacturing facilities use large quantities of process water, primarily for the repeated and systematic washing of wafers during the step-by-step manufacturing process to remove foreign particulates that could compromise integrated circuitry. Water use projections for the proposed semiconductor manufacturing facilities (presented in the DGEIS, Appendix C, Industry Requirements Document, see Section 4, Raw Water Utilization Rate) were obtained from existing facilities. As stated in Section 3.7.1.1, Water, of the Draft GEIS, the anticipated water supply need for the full build-out of the LFTC is estimated at between 6 and 15 MGD, with the first Fab, corresponding to the first phase of LFTC development requiring 1.5 to 2.0 MGD of water. Ancillary use projections are based on applicable design guidelines.

These present-day water use estimates are considered to be conservative. As noted in Sections 3.7.1.1 and 4.9 of the DGEIS, the semi-conductor industry has an extensive R&D program aimed at reducing water usage. In addition, the "guiding principles" of the PDD Regulations mandate water conservation methods for companies seeking to locate in the LFTC.

8. Comment: One commenter (Bill Beckman) questioned the water usage by comparing the high end sewer flows to the water withdrawal rates, and stated, "I have no idea where that (water) is going to go." Another commenter (Larry Benton) asked for a clarification to the "relatively high disparity in water use vs. sewer discharge."

Response: The anticipated sewer flow is expected to be very similar, but not identical to the water usage. There were ranges provided for both water and sewer. It is anticipated that increased water usage will result in increased sewage flows, but not at a one-to-one correlation basis, since some water is used in the process. Figure 5 in Appendix C of the DGEIS shows a water balance diagram for a Fab. This water balance diagram shows that for every 2.0 MGD of water input into the Fab, there is a corresponding 0.88 MGD of discharge to the publicly owned treatment system, and 1.08 MGD of water vapor discharge to the air. The remainder of the water is consumed in the process.

9. Comment: Where will the water pipeline go, what properties will be affected, and what homes will be displaced? Have options been obtained for the treatment plants and water line routes for the upper and lower Hudson River sources?

Response: Figure 2-9 in Appendix H of the Draft GEIS contains a tentative route, as well as a proposed location for the treatment plant for the proposed lower Hudson source. No homes are anticipated to be displaced by either option. The proposed location of the treatment plant is currently proposed to be located on vacant lands, however no formal negotiations have been entered into at this time. No land has been purchased or optioned for either alternative at this time.

A tentative route for the upper Hudson source is currently being developed by Saratoga County's consultants as part of a current study. As stated in the Response to Comment #2.1.3 above, the main transmission pipe for the proposed upper Hudson source will be located adjacent to the Route 9 corridor from Moreau south to Malta, mostly in public rights-of-way.

10. Comment: Does the LFTC require two water sources or just one?

Response: The proposed LFTC does not require more than one water source. As stated in the Draft GEIS (see Section 4 of Appendix C), ideally a Fab will have access to two (2) redundant water sources, however on-site storage could alternatively be used to satisfy the back-up water need. That is what is proposed for the LFTC.

11. Comment: Development east of Cold Springs Road in the Town of Stillwater can adversely impact the City of Mechanicville's Reservoir. Mechanicville's Supervisor (Chris Scambati) stated a concern over the protection of their water during project development.

Response: The proposed LFTC project site is located west of Cold Springs Road, not to the east. A small portion of the project site is within the Plum Brook Watershed of the Mechanicville Reservoir, however no development within this area of the project site is currently contemplated. Section 3.6.2 of the Draft GEIS describes the watershed regulations developed by the City of Mechanicville for the Plum Brook Watershed, and Section 4.6.2 evaluates potential impacts of the proposed action on the Plum Brook Watershed and proposes mitigation measures to ensure that there will not be an adverse impact on Mechanicville's public water supply.

12. Comment: How long will it take to get a new water source on the Hudson River operational for the LFTC, for either the upper or lower Hudson River options? What is the fall back position if Hudson River water is denied or delayed?

Response: The upper Hudson source proposed by Saratoga County currently has an estimated in-service completion date in the first quarter of 2007 (Malcolm Pirnie, 2003). This schedule includes approximately a one-year duration for final design, bidding in the third quarter of 2004, and approximately 2½ years for construction of the water treatment plant, transmission main, and storage tankage. During preliminary and final designs, the proposed schedule may be modified. It is possible that the proposed schedule for the upper Hudson source could be accelerated with government incentives associated with attracting a semi-conductor manufacturer to the LFTC. Thus far[1], the Clifton Park Water Authority (CPWA) and Town of Ballston have formally resolved to purchase a combined total of 1,350,000 gallons per day from the proposed county-wide water system. Additional commitments for the upper Hudson source are actively being sought by Saratoga County.

The lower Hudson source could be completed prior to 2007, with a similar schedule as presented above. Assuming favorable land acquisition negotiations, the final design could be done within a 6 to 9 month time frame, with construction taking two construction seasons. Assuming a start date of November 2003, it is estimated that construction could be completed by the second quarter of 2006.

There is no fall back position if Hudson River water is denied or delayed. Development of the project site, as proposed, is dependent upon a Hudson River water supply being developed.

[1] As of June 1, 2003.

13. Comment: For the upper Hudson water source, shouldn't the amount of water for the City of Saratoga and others, in addition to the LFTC, be factored into the analysis? Is the proposed upper Hudson water source option economically feasible without the LFTC?

Response: The design of the County-wide system does take into account several other users, including the City of Saratoga. The DGEIS was written specifically for the LFTC. The upper Hudson source may be feasible without the LFTC. Its feasibility depends on the number of factors outside the control of the LFTC project and if the county's proposal moves forward it will be subject to a separate review under SEQR.

14. Comment: What are the heights and sizes of the on-site reservoirs/storage tanks? Will low profile tanks be used?

Response: As part of the water supply system there is planned to be a 5-million gallon tank that will be installed on the southern portion of the LFTC project site. The tank will be located on a natural knoll and therefore will only have to be approximately 70-feet tall. Additionally, companies locating within the LFTC will most likely develop their own on-site storage systems for additional redundancy. Such on-site storage will likely be in low-profile tanks subject to site plan approval.

15. Comment: On page 116 the DGEIS lists four potential interim water supply options. The available capacity of each supply should be listed. Also, the Applicant should confirm that these water systems have been contacted and that they will commit their excess capacity to this project.

Response: As previously mentioned, the plans for an interim water supply have been eliminated by the Applicant. The Hudson River is the only proposed water source for the LFTC.

16. Comment: The GEIS should provide documentation of the fire flow requirements of the facilities. This could have a major impact on the water source, transmission mains, and storage facility volume.

Response: The average water usage is so large that the fire flows will likely be accommodated by the larger pipe sizes and the average day demand in storage requirement of the NYSDOH. Fire flows are only a predominant design factor on systems where the overall design flow is small. A conservative fire flow estimate is 1,250 gpm for 90 minutes. This correlates to a water volume of 112,500 gallons which is only a fraction of the on-site water storage.

17. Comment: The Water Feasibility Report indicates that the water system will need approval for the New York State Department of Health (DOH) and the New York State Department of Environmental Conservation (DEC). It appears that the project will require the following additional regulatory permits and approvals:

- New York State Department of Transportation (DOT) Highway Work Permit for all construction work in the right-of-way of State roads.
- Saratoga County Highway Department approval for all construction work in the right-of-way of County roads.
- Town Highway Departments approval for all construction work in the right-of-way of Town roads (i.e., Stillwater and Malta).
- United States Army Corps of Engineers (ACOE) Permit(s) for wetlands, disturbance of streams, construction in navigable waters, etc. (Joint Permit with DEC).
- United States Environmental Protection Agency (EPA) approval for construction of a water treatment plant in a site.
- Railroad Work Permits (as applicable) for construction of water mains under railroads.
- United States Coast Guard approval for construction in a navigable waterway.
- New York State Historic Preservation Office (SHPO) approval for cultural resources, archaeological, appearance, etc.
- New York State Gas and Electric (NYSEG) approval for crossing their rights-of-way and construction of a raw water intake in their forebay.
- New York State Thruway Authority, Division of Canals (i.e., New York State Canal Corporation (NYSCC)) Work Permit for construction on NYSCC-owned land. In addition, a NYSCC Lease Agreement may be needed for structures (i.e., raw water intake) on NYSCC-owned land.
- New York State Thruway Authority – Facilities Approval for structures (i.e., raw water intake) on NYSCC-owned land.
- Town of Stillwater Planning Board.

Response: The major permits required are from the NYSDOH for source treatment plant design approval, and from the NYSDEC for the taking of Hudson River Water and approval of the service territory. The other permits listed are generally required for the pipeline routing and the site specific aspects of the plant. The following are not applicable to the proposed action: 1.) New York State Thruway Authority – Facilities Approval for structures (i.e., raw water intake) on NYSCC-owned land, 2.) United States Coast Guard approval for construction in a navigable waterway, and 3.) United States Environmental Protection Agency (EPA) approval for construction of a water treatment plant in a site.

18. Comment: The listing of DEC permits for this project (Page 20 of the report) should include changing the stream classification of the Hudson River in the area of the proposed intake. It is our understanding that it is currently a Class B stream and that Class A designation is required for potable water sources. It is also our understanding that this process is quite lengthy.

Response: Comment noted. The upper Hudson source is currently designated Class A while the lower Hudson source is designated Class B. An upgrade in the classification of the lower Hudson source from B to A is achievable and approvable by the regulatory agencies. Potential upstream users could be affected by this reclassification of the Hudson River. However, based on the existing variation in classification of the Hudson River downstream of the proposed lower Hudson intake for the LFTC, it is likely that the reclassification, as might be necessary, will only affect a short segment of the Hudson River with existing classifications remaining unchanged. This reclassification process will be done in close consultation with NYSDEC.

It is important to note that the net result of a higher level reclassification (i.e., from B to A) would be a further protection of Hudson River water quality.

19. Comment: NYSDEC commented that given the early stage of the LFTC, the DGEIS adequately describes the impacts associated with the water filtration plant and the water transmission line. Staff requests, however, that this analysis be expanded to include discussion of potential entrainment and impingement impacts at the actual water intake structure in the Hudson River. Depending on projected velocities at the intake, it may be necessary to discuss and/or commit to using equipment that is commonly employed to minimize entrainment and impingement impacts.

Response: Comment noted. It is recognized that potential entrainment and impingement impacts are associated with all surface water intakes, whether they be for a public drinking water supply or any other purpose. The general performance objective for the proposed Hudson River water intake structure in Stillwater is to provide adequate openings in the intake structure such that the required intake rates are achieved and there is not a significant adverse impact to aquatic species. It should be noted that the proposed intake in question is for the alternative water source for the LFTC. The primary water source is the proposed Saratoga County upper Hudson source, which will undergo its own SEQR review, if this option is advanced by the County.

During the design phase for the water intake structure in the Hudson River, the detailed engineering design details will be provided for NYSDEC review and approval prior to construction. In this way, an adequate design relative to "impingement and entrainment" can be assured, such that there will not be a significant adverse impact to the aquatic fisheries populations of the Hudson River.

20. Comment: How will the planned dredging of the Hudson impact use of the Hudson River as a water source? Will treatment costs be increased? Will there be a delay?

Response: The first water source preference is the upper Hudson, which is upstream of the proposed dredging and will not be affected by the proposed dredging in any way. Based on information from the USEPA (2003) regarding the resuspension of sediments during the dredging, prolonged spikes in the turbidity associated with the dredging are not expected at the lower Hudson source, and therefore will not adversely impact its use, nor increase treatment costs significantly, or cause a significant delay.

Detailed engineering performance standards are being developed by USEPA for the proposed dredging operations which are currently scheduled to begin in 2006. These engineering performance standards are technical requirements to help ensure that the cleanup meets the objectives for protecting public health and the environment. Three (3) types of engineering performance standards are being developed: dredging-related resuspension, dredging residuals, and dredging productivity. The resuspension standard is designed to protect water intakes down river of the dredging operations and to limit the down river transport of PCB-contaminated dredging material. It has been set at 500 part per trillion of PCBs, which is the federal standard for safe drinking water. Additionally, this performance standard will include water quality monitoring during dredging to ensure compliance with the standard. Compliance with this standard during dredging will ensure that there will be no downstream adverse impact to any public water supply.

It is important to note that the most significant treatment overflow for turbidity will occur seasonally during spring high flows or following intense rainfall events independent of the dredging operation. Any and all water treatment plants using a river source need to address this seasonal constraint.

21. Comment: Will water be made available to landowners along the new transmission lines? Page 255 states that if the lower Hudson River were the water source, then the development entity would actively seek out other customers in the project area to assist in project financing. This has the potential to spur development in the Town of Stillwater, west of the project site within the constraints of existing zoning which should be acknowledged. There are large undeveloped tracts of land along the proposed water alignment in the Town of Stillwater.

Response: If the lower Hudson water source is developed, it is fully expected that landowners on the distribution side of the treatment plant will be able to tap into the main. Increased development, if this water source is selected, should be anticipated. The Town of Stillwater may

wish to adjust their zoning to either spur or curtail development in this area. Refer to Section 2.9 for more information on induced growth associated with the proposed action.

22. Comment: Mayor Ernest W. Martin of the Village of Stillwater stated his opinion that the best solution for providing Hudson River water to the LFTC is using the Village's modern water plant located on the end of Ferry Lane.

Response: The existing Village water plant's capacity would have to be increased significantly and the distance to the LFTC is greater than it is with the southernmost alternative. The upper Hudson source under study by Saratoga County appears to be the most cost effective and preferred solution. If for some reason the upper Hudson River source is not available, then the next best preferred option would be the lower Hudson River source using alternative 4, not the Village water plant site.

23. Comment: The GEIS (in Section 3.7.1.1) states that the water requirement for the first Fab is estimated at 1.5 to 2.0 MGD. This is consistent with Table 2-1, but doesn't appear to include any accessory development. It is unclear if there will be accessory development in Phase 1, and if so, the level of water demand associated with this development.

Response: The water requirement for the first Fab is estimated at 1.5 to 2.0 MGD, not including any ancillary development. A water usage of 3.0 to 4.0 MGD is estimated for the first phase of Campus development, including both the first Fab and the first phase of ancillary development.

24. Comment: If it becomes apparent that the upper Hudson River source would be the LFTC's sole or primary water source, what provisions would be necessary to facilitate phases beyond phase 2?

Response: The treatment plant's capacity would have to be increased to handle the additional flow. It is critical that the site selected is conducive to any and all anticipated upgrades. It will likely be necessary to increase the storage in the distribution system. The piping will be sufficiently sized to provide full build-out flows.

25. Comment: Section 3.7.1.1 does not address water supply with respect to fire protection. The domestic demands for the Campus may be far greater than fire flow demands, however, the report should discuss fire flow demands as they directly affect the health and welfare of the Campus' inhabitants and surrounding areas.

Response: Comment noted. The proposed water source alternatives will not negatively affect the health and welfare of the Campus' inhabitants due to the fact that fire protection and flow for the buildings will be evaluated and designed at the outset of each architectural design. Additionally it is anticipated that the NYS building code would direct the designer and code review official to adequately provide fire protection facilities.

Inhabitants in the surrounding areas may benefit from the proposed water route alignment due to the fact that fire hydrant would likely be installed along the route providing fire protection.

26. Comment: The GEIS does not mention the need for an intake structure in the Hudson River for the 10 MGD water line. This is a Section 10 Activity under the Rivers and Harbors Act. It would likely need an individual permit because an intake structure can only be permitted under nationwide permit 7 if it also has an outflow component permitted by NPDES/SPDES. The GEIS might also want to briefly discuss (in Section 4.2.2.2) some of the BMPs for installation of the intake structure, such as testing for PCBs prior to construction, obtaining authorization from NYS Office of General Services and/or the New York State Canal Corporation, and using a cofferdam to work in the dry.

Response: Comment noted. The lower Hudson water option for the LFTC would involve the installation of a new intake structure in Stillwater and would require a Section 404 Permit from the U.S. Army Corps of Engineers (Corps) as identified in Section 2.6 of the Draft GEIS. If required, typical BMPs for such intake structures will be employed during the construction and operation. Specific authorizations would be required by the Corps, NYSDEC, NYS Office of General Services (OGS), and possibly the NYS Canal Corporation. The details of the BMPs, if required, will be described in permit applications to these agencies, and will need to meet with their approval prior to implementation. In this way, the construction and operation of the intake structure for the lower Hudson water source, if required, will not have any significant adverse impact.

27. Comment: The Water and Sewer Study Feasibility Report (Appendix H) should be expanded to include potential Town/Village of Stillwater approvals that may be required for siting of the plant and any approvals required by the Saratoga County Department of Public Works for placement of the transmission lines. Should these agencies be considered involved with respect to this review because of their potential approval authority?

Response: The text of the DGEIS (refer to Table 2-3) addresses the permits and approvals that are required for all components of the proposed LFTC, including the water and sewer requirements presented in Appendix H. All involved and interested parties have been involved

with the review and comment of the DGEIS, and all involved agencies will be part of the permitting process which will follow the SEQR Findings Statement.

28. Comment: The GEIS should identify potential municipal agencies that the lower Hudson water system would be conveyed to. The study identifies four potential sites for the proposed water treatment plant. Three of the sites (which includes the recommended site) are within the Town of Stillwater and the fourth is within the Village of Stillwater with a majority of the transmission lines passing through the Town. The water system could potentially be conveyed to either for operation and maintenance of the facility and associated transmission lines. An alternate municipal agency would be at the county level with the establishment of a water authority, similar to what is proposed for the upper Hudson River Source.

Response: It is recommended that a County level entity be created to provide this function for the lower Hudson water source in the Town of Stillwater, if necessary. Similar to the upper Hudson River water source, Saratoga County appears to be the most appropriate County-level entity to assume such ownership. Alternatively, the development entity for the LFTC could assume this role. Based on dialogue with both the Village and Town of Stillwater, neither of these entities desires ownership and financing responsibilities for the water source. Moreover, either of the two proposed Hudson River water sources would provide a regional benefit, which would most appropriately be controlled by a regional entity such as Saratoga County.

29. Comment: The GEIS should discuss the viability of providing additional water to additional users. As the project progresses and a final site has been selected for the treatment plant and transmission line, the municipality(s) for which these infrastructure improvements will be located should be involved in the design for the purpose of defining potential service areas.

Response: Comment noted. It is fully anticipated that the water source for the LFTC, whether it be either the upper or lower Hudson source, will viably provide water to additional users. If it is decided to pursue the lower Hudson water source as the "final site" for the treatment plant and transmission line, it is anticipated that the Town of Stillwater will be actively involved in the development process, including the definition of potential service areas.

2.3.2 Sewer

1. Comment: Several commenters expressed concern over the impact that the proposed action would have on existing and future users. Using the available capacity of both the sewer plant and the transmission piping was stated to be of concern with specific questions that included the following.

- Will there be an impact to the existing sewer system in Luther Forest?
- Will the construction of new residential housing or other developments be put on hold because of no sewerage capacity left?
- The excess sewer capacity needs to consider growth and the attendant increase in sewer usage in the absence of the LFTC.

Response: Future development will not be "put on hold" because of the loss of sewerage transmission capacity. The proposed connection point for the first phase of the LFTC is the existing gravity sewer in Dunning Street. There is a reserve capacity of approximately 2.1 MGD in the existing sewer in Dunning Street per the 2000 "Trunk Sewer System Capacity Evaluation" report prepared by Malcolm Pirnie, Inc.. To avoid using the entire remaining capacity of this sewer it is anticipated that the reserve capacity of the sewer in Dunning Street will be increased to approximately 4 MGD by installing a parallel pipe, leaving an excess sewer transmission capacity in excess of 1.5 MGD to accommodate future development. The existing reserve capacity increases to over 4 MGD at the point where the existing trunk sewer turns and runs southerly from Dunning Street through the Luther Forest Subdivision. The existing infrastructure within the Luther Forest has adequate capacity to accommodate this initial flow. When warranted, a new trunk sewer flowing south from the LFTC will be installed freeing up additional capacity in the Dunning Street sanitary sewer.

2. Comment: Who is responsible for upgrading Saratoga County's sewer plant in Mechanicville, if necessary?

Response: The existing reserve capacity of the sewer plant is significantly greater than the anticipated wastewater flow generated from the first phase of the LFTC such that no immediate capacity increases are foreseen nor warranted. When capacity upgrades are required the SCSD#1 will be responsible for making the upgrades. The specific details of the financing to cover the costs to do the upgrades is not yet determined. At the appropriate time, SCSD#1 will evaluate financing options for upgrade work at the plant. Such financing may impact user rates. Refer to the accompanying correspondence from SCSD#1 which is included as Appendix F of this FGEIS.

3. Comment: The Water and Sewer Feasibility Report, mentions the sewer system will need approval for the New York State Department of Environmental Conservation

(DEC) for SEQRA, Wetland and Floodplain Permits and Permits for State Owned Property, however, it would appear that the project will require the following additional regulatory permits and approvals depending upon the final sewer alignment:

- New York State Department of Transportation (DOT) Highway Work Permit for all construction work in the right-of-way of State roads.
- Saratoga County Highway Department approval for all construction work in the right-of-way of County roads.
- Town Highway Departments approval for all construction work in the right-of-way of Town roads (i.e., Malta).
- United States Army Corps of Engineers (ACOE) Permit(s) for wetlands, disturbance of streams
- New York State Historic Preservation Office (SHPO) approval for cultural resources, archaeological, etc.
- Saratoga County Sewer District. No. 1

This should be noted in the GEIS.

Response: Comment noted. Section 2.6 of the Draft GEIS outlines the permits and approvals for the proposed LFTC, including necessary permits for the sewer improvements. The road permits listed above from the Town, County, and State will likely be required for the sewer improvements. Similarly, approval from SCSD#1 will be required for the sewer connections, but for purposes of this SEQR review for the LFTC, SCSD#1 is not considered an involved agency.

4. Comment: The GEIS identifies several alternatives to providing sewer service to the project, however it is not clear which alternative(s) will actually be implemented. The potential impacts of various options differ. For example the sewer options presented in figures 3.2A and 3.2B could limit future build out of "downtown Malta" and the Route 9 corridor. (SL-3 Trunk) The GEIS should identify which alternative will be implemented and provided documentation that the S.C.S.D. #1 is in agreement with the approach.

Response: It is anticipated that the Dunning Street alternative shown in Figure 3-2A, Proposed 4 MGD Sewer Connection, of the Draft GEIS, Appendix H will be constructed to service the first phase of LFTC development. As warranted to support future phases beyond phase one, the new trunk sewer shown in Figure 3-6, Proposed Alternative 10 MGD Sewer Connection, of the Draft GEIS, Appendix H will be installed along Cold Springs Road to the main trunk sewer line. Alternatively, depending upon the timing of LFTC development and the availability of project financing, the Cold Springs Road 10 MGD option could be developed as part of the first phase of LFTC development. The determining factor for either connecting to Dunning Street or

constructing the trunk line down Cold Springs Road is timing, the ability to bring the required infrastructure to the project site in a two-year window, which is critical for Fab development.

This proposed strategy for providing sewer service to the LFTC will leave excess capacity in the existing trunk sewer running down Route 9 for the future build out of "downtown Malta" and NYSERDA's STEP, as well as provide an alternative sewer trunk line down Cold Springs Road.

The strategy for providing sewer service to the LFTC has been discussed with SCSD#1 over the last two years during various phases of planning. Recent correspondence from SCSD#1 is provided in Appendix F.

5. Comment: The sewer Feasibility Report indicates that the current S.C.S.D. #1 wastewater treatment plant has a reserve capacity of 8.3 MGD and that wastewater flows form the project could reach 10 MGD. It is not clear from the DGEIS if the S.C.S.D #1 is willing to commit the remainder of it's current capacity to this project. The NYSDEC typically requires plant expansions to be investigated once a facility reaches 80% capacity. The ability of the S.C.S.D.#1 treatment plant to be expanded should be discussed in more detail, outlining area/ property required, processes to be expanded, permitting required (wetlands, etc) and associated cost. Correspondence from the S.C.S.D. #1 should be included in the GEIS indicated their agreement with the information presented and approach to servicing the project.

Response: Development of the LFTC will occur in phases over a 15- to 25-year period. It is anticipated that the first phase of development will generate not more than approximately 2.5 MGD as a peak flow during initial FAB startup operations, i.e., flushing. The existing treatment plant can accommodate this additional first phase flow without any upgrades, and may be able to accommodate additional LFTC development beyond phase one depending upon the amount of incremental flows that are added to the system in that time frame.

Additional upgrades to a plant treatment capacity of at least 32 MGD can be accommodated at the existing plant site as the need arises. During the mid 1990's a study was performed for the sewer district investigating the implications of increasing the plant's capacity from 13 MGD to 21.3 MGD and to 32 MGD. The report concluded that both upgrades could be accommodated within the current property boundaries of the treatment plant site. The plant's capacity was increased in the late 1990's from 13 MGD to 21.3 MGD, and currently has an excess capacity of approximately 6.3 MGD. As the plant nears capacity, SCSD#1 will plan, as necessary, for expanding its treatment plant to meet the anticipated future demand for not only LFTC, but also other projects in the service area.

Refer to correspondence from SCSD#1 in Appendix F.

6. Comment: The sewer report indicates a sewer pump station would be required along Route 67. The GEIS should include discussions on the land required and the availability of property to accommodate the required infrastructure. Potential impacts should be discussed including the area required, noise, odors and aesthetics.

Response: It is estimated that the wastewater pumping station would require a land area of between ¼ and ½ acre. The size would depend on surrounding conditions, i.e. slopes, water bodies, residences etc. The main pumps would be located in a building. The building and ancillary equipment will be designed to limit the noise and odors to acceptable levels depending on the characteristics of the selected site. The building will be designed and constructed to address aesthetic concerns, subject to approval from the Town, SCSD#1 and NYSDEC.

7. Comment: In Table 3-3 "Estimated Sewer Costs for Off-Site Sewer Collection" the unit cost for 20" force main is lower than the unit cost for 16" force main. Force main piping is shown the same price as gravity piping which is typically installed at a greater depth. It does not mention if pavement replacement is included in the costs shown. Land purchase costs for the off-site pump station(s) are not shown.

Response: Table 3-3 has been revised and is replaced as follows by Table 2.3.2.7 to address this comment.

Table 2.3.2.7
Estimated Capital Costs for Off-Site Sewer Collection

Item Description	2 MGD Gravity	4 MGD Gravity	4 MGD	7 MGD	9 MGD	10 MGD	10 MGD Gravity
2,000 LF – 24 " gravity sewer	---	$450,000	---	---	---	---	---
2,000 LF – 16 " gravity sewer	---	---	$350,000	$350,000	$350,000	$350,000	---
6,500 LF – 30" gravity sewer	---	---	$1,625,000	$1,625,000	$1,625,000	$1,625,000	---
2,500 LF – 16" force main	---	---	$375,000	$375,000	$375,000	---	---
Sewer Pump Station	---	---	$800,000	$1,050,000	$1,350,000	$1,350,000	---
300 LF – 16" force main	---	---	---	$45,000	$45,000	---	---
2,500 LF – 16" force main	---	---	---	---	$375,000	---	---
8,900 LF – 20" force main	---	---	---	---	---	$1,557,500	---
11,100 LF – 24" gravity sewer	---	---	---	---	---	---	$2,497,500
8,300 LF – 30" gravity sewer	---	---	---	---	---	---	$2,075,000
TOTAL CONSTRUCTION	---	$450,000	$3,150,000	$3,445,000	$4,120,000	$4,882,500	$4,572,500
Engineering/Project Management (12%)	---	$54,000	$378,000	$413,400	$494,400	$585,900	$548,700
Land Purchase / Easements	---	$25,000	$50,000	$50,000	$50,000	$75,000	$100,000
Administration & Legal Costs (2%)	---	$9,000	$63,000	$68,900	$82,400	$97,650	$91,450
TOTAL CAPITAL COSTS	---	$538,000	$3,641,000	$3,977,300	$4,746,800	$5,641,050	$5,312,650

8. Comment: The Sewer Effluent Comparison, Table 4-8, presented in the DGEIS indicates that the S.C.S.D. #1 does not have established effluent limits for seventeen (17) of the categories listed. The GEIS should include correspondence from the S.C.S.D. #1 indicating that the "Typical Nanotechnology Effluent" limits included in Table 4-8 are acceptable or establish pre-treatment limits that will be required.

Response: Comment noted. SCSD#1 does not have established effluent limits for all types of chemicals listed on Table 4-8 in the Draft GEIS. This is not unusual. Industrial users typically have unique effluent discharge parameters, corresponding to their unique process flow manufacturing and treatment operations. And, pretreatment for certain effluent parameters is commonly required for industrial users of a municipal wastewater treatment system. Specific pretreatment requirements for a company seeking to locate in the Campus will be determined by SCSD#1 and subject to NYSDEC approval in accordance with applicable USEPA regulations, on a case-by-case basis.

The "generic" concentrations shown in Table 4-8 for nanotechnology manufacturing have been reviewed by SCSD#1. Based on this preliminary review, SCSD has preliminarily determined that some pretreatment requirements will be applicable to nanotechnology manufacturing operations at LFTC. With pretreatment, the chemical composition of the discharge should be able to be adequately treated at the plant. However, until a specific industry is identified, it is premature to establish any specific effluent limits. In addition to pretreatment, there will also be

active monitoring of the company's discharge into the sewer system to ensure that designated discharge standards are being attained. With such measures in place and monitored, SCSD#1's wastewater treatment plant should be able to meet their effluent limitations for Hudson River discharge.

USEPA is currently in the process of reviewing SCSD#1's sewer use ordinance. Modifications to the sewer use ordinance will need to be complied with by companies locating in the LFTC.

Refer to correspondence from SCSD#1 in Appendix F.

9. Comment: There is no estimate of operation and maintenance costs for the sewer pumping stations and force mains. Who will pay for the required sewer infrastructure improvements? What will the cost for disposal into this system be for the companies locating in the LFTC? Will any of these costs be subsidized by the Towns?

Response: The improvements will be paid for by a combination of federal, State and private funds. It is anticipated that the SCSD#1 will own and maintain the collection system once it is constructed and accepted. The cost to dispose wastewater into the system will be set by the SCSD#1 consistent with how rates are set in the remainder of the County. No Town involvement or funding is anticipated in the operation and maintenance of the collection system.

10. Comment: NYSDEC commented that given the early stage of the LFTC, the discussion of wastewater contained in the DGEIS is sufficient and appropriate.

Response: Comment noted.

11. Comment: How often will wastewater be tested before it enters into the County system? Who will do this testing and where will the results be submitted?

Response: The wastewater will be tested on a periodic basis by the generator of the waste stream. The testing frequency will be mandated by the SCSD#1, based on the characteristics of the discharge. SCSD#1 will receive and review the test results, and from time to time SCSD#1 will collect samples from the industry discharge to check the accuracy of the reports being provided. All testing will be done at the discharge point into the county district sewers as mandated by USEPA and NYSDEC.

12. Comment: How often will Fabs flush up to 2.5 MGD during initial start ups? Will this flushing have any impact on the sewer lines?

Response: The frequency of the flushing is not anticipated to be more than once per day during initial start ups. It is anticipated that the reserve capacity in the Dunning Street gravity sewer or the main trunk line connect south of Cold Springs Road will be in excess of 2.5 MGD, which will easily accommodate the start-up flows. If required, the flow from flushing operations can be temporarily stored and released at an average rate of not more than 2.5 MGD.

13. Comment: Will sewer be made available to landowners along the new transmission lines?

Response: Once the sewer is accepted by the SCSD#1, then it is a public sewer and potential users along its alignment will have the opportunity to connect to the system with the proper approvals by the SCSD #1. The Applicant expects that the location of tie-in manholes will be coordinated and approved by the SCSD#1 prior to the construction of the sewer line.

14. Comment: What is meant by the term "diluted wastewater"?

Response: The wastewater from a Fab facility is very clean because the water is extensively purified prior to being used in the fabrication process. Consequently, the wastewater from a Fab is considered to be more pure, relative to typical industrial discharges, and will dilute the wastewater generated from surrounding commercial and residential generators.

15. Comment: It is unclear how full-build out sewer volumes at LFTC were obtained, and the estimate of 4 to 10 MGD is not documented. The peak flows for the phase 1 Fab, at 2.5 MGD when systems are being flushed is not documented. The discussion does not indicate if future developments in the area were taken into consideration when determining the excess capacity at the SCSD#1 plant or in collector mains. The GEIS does not provide a thorough enough discussion to demonstrate that excess capacity to 10 MGD can be obtained at SCSD#1. The GEIS should clarify whether there is adequate space in the vicinity of the SCSD#1 to expand the plant to this size. The GEIS should also discuss whether it is critical to know at this time that there will be adequate wastewater disposal capacity for full build-out.

Response: The peak flow of 2.5 MGD was obtained from existing semi-conductor companies that have experienced several plant start-ups. Development of the LFTC will occur in phases over a period of 15- to 25-years. It is anticipated that the first phase of development will generate not more than approximately 2.5 MGD. As stated in the Response to Comment #2.2.2.5, the capacity of the existing treatment plant can be increased up to 32 MGD by expansions at the existing plant site.

Refer to correspondence from SCSD#1 in Appendix F.

16. Comment: Section 5.3 states that the sewer improvements are intended to entirely service the proposed Campus. If this is the case, the GEIS should state more emphatically that there will be no connections allowed into the sewer line between the LFTC and the wastewater treatment plant. A similar restriction should be stated for any water line between the lower Hudson River and the LFTC.

Response: Infrastructure improvements, specifically water and sewer, will be constructed for the LFTC and any reserve capacity will be available, at the owner's (anticipated to be Saratoga County and SCSD #1) discretion.

2.3.3 Electric Power

1. Comment: The GEIS shall evaluate the potential for installing the 115 kv transmission line underground.

Response: As requested, the following discussion sets forth a generic evaluation of the proposed overhead 115 kv routing as compared to an underground (or partially underground) alternative, and explains why the overhead routing was selected as the preferred alternative. Generally speaking, an underground alternative is much more costly and technically complicated than an overhead line, and is generally only required by the PSC either to protect certain specifically enumerated resources, none of which are present in the study area, or in instances where overhead line corridors of sufficient width are not available. This occurs primarily through highly developed, urbanized areas. Although underground electric distribution at lower voltages is common such that it is a standard requirement for new residential subdivisions, for instance, undergrounding of transmission-level voltage facilities such as the proposed 115 kv line is very rare outside of cities for the reasons described above.

The cost penalty for underground high voltage lines ranges from three to ten times the cost of overhead. As indicated on Table 2-3 of the Draft GEIS, "Permits and Approvals", Niagara Mohawk must seek approval of the NYS DPS for the two initial proposed connections to the new LFTC substation (Malta-LFTC and Mulberry-LFTC) pursuant to the PSC "Part 102" procedures at 16 NYCRR Part 102. Part 102 applies to new subtransmission or transmission-level power lines at 65 kv or higher, regulating those lower voltage or shorter lines than those to which the PSC's "Article 7" siting jurisdiction applies, such as 115 kv lines less than the Article 7 jurisdictional threshold of ten miles in length, including the two initial 115 kv lines to the LFTC substation.

Part 102 directly addresses the issue of undergrounding alternatives, and requires the preparation of a detailed, quantitative "advantage-disadvantage" analysis of such an alternative in four instances, none of which are present here, for those high voltage lines traversing: (1) Formally designated and municipally-owned parks, (2) Formally designated [i.e. not simply "eligible"] historic register sites, (3) Central Business Districts in cities and villages [NOT towns], and (4) existing, developed residential subdivisions larger than 20 acres with greater than > 1 house/acre density. 16 NYCRR 102.3(a). An additional definitional provision relating to the above-referenced central business district provision, §102.1(e), makes clear that Central Business Districts (CBDs) are only intended to apply to "downtown"/"center city" areas, stating that "Commercial areas essentially one lot deep along a thoroughfare [i.e., such as those in the DEIS study area along Routes 9/67] are more aptly described as strip developments and not central business districts" for the purposes of Part 102, and further notes that CBDs cover a small percentage of all urbanized areas (between 0.4% and less than 4%).

Aside from the absence of the enumerated resources protected by 16 NYCRR 102.3(a), above, the Draft GEIS identified no other environmental resources which would be significantly adversely impacted by overhead construction, including significant visual impacts, and determined that overhead wooden pole structures as proposed would therefore have no significant adverse environmental impacts, mitigated as practicable by final alignment of the 150-foot right-of-way

within the 500-foot generic study corridor, placement of pole structures back from roads, perpendicular road crossings, landscaping and similar final design details.

Aside from cost, an underground alternative also presents operational issues for a project sponsor. These include:

- *Repair of 115 kV underground cables can take significantly longer than repairs on overhead lines. Location of a fault on an underground cable is often time consuming. When a fault has been located, it can take more than 12 days to make a repair on an underground cable. By comparison, faults are easily located in overhead lines and repairs can usually be made within 24 to 48 hours.*

- *Many faults on overhead lines are temporary in nature. Often it is possible to "re-close" (re-energize) an overhead line after a temporary fault, and return the line to service with only a brief interruption. Faults on underground transmission cables are almost never temporary. If an underground segment of line is added to an overhead line, it is necessary to either not reclose the line for temporary faults on the overhead system, or to add relaying and communication systems to distinguish cable faults from a fault in the overhead segment.*

- *Underground cables have significantly higher capacitance than overhead lines. This can create voltage control problems at light load.*

- *Underground routes (UG routes) will typically follow established streets to ensure adequate access for construction and maintenance of the system. This can avoid the need to secure new right of ways (a potential benefit of UG). However, in the case of the Luther Forest development, use of city streets will potentially lengthen the overall distance from the substations to the new Luther forest substation because the routing is not as direct.*

- *Installation of underground lines can temporarily affect vehicular and pedestrian access to the area under construction.*

- *If pipe type underground cables are used, (steel conduits filled with pressurized insulating fluid) there are ongoing maintenance requirements of cable pressurizing equipment, and environmental issues in the event of leakage of the insulating fluid.*

- *A small substation is typically required to transition between overhead and underground transmission lines.*

While underground and overhead systems can be designed to meet the same high standards of reliability, because of these operational issues, underground systems may be perceived by potential LFTC tenants as presenting a greater reliability risk, as compared to the proposed overhead alternative.

For all of the above reasons, in the instance of the LFTC, where the PSC Part 102 enumerated "special resources" do not exist, and an overhead alternative would have no significant adverse environmental impacts, the above generic discussion of the advantages and disadvantages of undergrounding the proposed lines demonstrates that the preferred overhead alternative is the preferred choice within the study corridors, based upon a proper balance of cost, environmental, PSC "permitability" and operational considerations.

2. Comment: Removing vegetation and erecting enormous electrical transmission lines will have a tremendous visual impact on the town, destroying protected view sheds and obliterating thousands of acres of wildlife habitat.

Response: It became evident at the public meetings, that the width of the right of way "corridor" necessary for the double circuit lines was not clearly communicated. In Appendix H of the DGEIS, a 500-foot wide corridor was shown to reflect the current best routing "path" to be further investigated as a means to connect the Malta and Mulberry substations to the new LFTC substation. The actual width of the electric corridor necessary to accommodate the lines is planned to be 150 feet. Exceptions to this width will be those areas where Niagara Mohawk procures additional width for guying of structures or for difficult angle turns made in the transmission line. The impact to the environment will be much less than some may understand when first looking at the exhibits.

When the actual design is performed many factors will be considered including view sheds and vegetation conversion. The design height of the structures may be designed such that the mature trees are taller than the proposed structures and would preserve a mask or screen for specific views. Other screening techniques could be considered as necessary and prudent. Regarding wildlife, contemporary right-of-way vegetation management strategies which promote shrub habitats, rather than trees, are quite effective in promoting many forms of plant and wildlife. Many right-of-way species are, in fact, becoming increasingly rare outside power lines as a result of forest maturation and dominance as a cover type.

3. Comment: The GEIS should address the environmental impacts of the third interconnection facility in order to evaluate all the impacts associated with full build out.

Response: The "third" double-circuit line (the 14.5-mile line from North Waterford) will be licensed under a different set of criteria (NYS PSC – Article VII). The two double-circuit lines (2.5-mile Malta line and 5.5-mile Mulberry line) will be addressed under a NYS PSC 16 NYCRR Part 102 review process. Because the "third" line may not ever be required, the permitting/licensing may not be necessary.

It was the opinion of the Applicant that the third line not be reviewed in detail as part of the SEQR process in that its future need is speculative and the third line is an "exempt" SEQR

Type II action because it would receive SEQR-equivalent review before the PSC as an "Article VII" case (see SEQR regulations at 6 NYCRR 617.5(c)(35)). Niagara Mohawk's system may significantly change in the Northeast region with addition of other generation and with infrastructure development and the loading requirements of the customer.

If it is deemed necessary to have an additional "third" line introduced to serve LFTC load, a formal Article VII process would be instituted. This process would involve a full participation of local agencies and public comment through the PSC process. The two proposed electrical transmission lines to the LFTC will in all likelihood meet the full build-out needs of the Campus.

4. Comment: What is the timetable for planning and construction of the power supply system, including right-of-way approvals and acquisition? Will the electric power supplies be phased in, similar to the transportation improvements, or will they be completed at one time?

Response: The exact construction schedule for the power lines is based upon the construction of the LFTC. As load materializes, Niagara Mohawk will adjust schedules to meet the load. The current plan is to provide an express distribution feeder of approximately 7 MW capacity to serve early plant load and to provide construction power. This is based upon conceptual electrical requirements for construction power needs. The distribution feeder(s) will utilize existing available pole lines up to and partially into the project site.

As build-out of the LFTC continues, it is anticipated that the 2.5-mile double-circuit line from Malta, the 5.5-mile line from Mulberry, the Luther Forest substation and work at existing NM substations (North Troy, Malta etc) will be constructed in parallel path for the first phase of LFTC construction and operation. With a pre-permitted site, this process may take from 18 months to three (3) years depending upon right of way acquisition and other design concerns. Once all of the new right-of-way is bought and secured for the electrical transmission lines, the process is reduced by one (1) year and may take from 18 months to two (2) years.

5. Comment: Who will pay for all the costs of the electric power supply? Is any of it subsidized by Saratoga County taxpayers? Will electric costs rise for town residents?

Response: Typically, Niagara Mohawk recovers most of the costs associated with gas or electric line extensions from the end use customer seeking the service. This occurs through tariff-based requirements approved by the PSC, which permits the Niagara Mohawk to require the customer to execute an agreement to reimburse most of those costs prior to the commencement of construction. In this case, Niagara Mohawk is expecting to apply the same process and treatment. However, until the terms of an agreement are reached between the customer and the appropriate State or local agencies who are attempting to bring the customer to the LFTC project site, it is not possible to state with certainty how all of the electric and gas-related project costs

will ultimately be financed and funded. Given all known facts today, a rate increase to town residents resulting from this project is not expected.

6. Comment: Will there be electric power interruptions or "brownouts" during construction.

Response: Because all infra-structure facilities (substation and transmission lines) will be constructed independent of Niagara Mohawk existing facilities (i.e., not tied into existing facilities) there will be no potential to lose power as a result of the proposed construction.

7. Comment: Table 2-1 states that the full build-out of the four-Fab facilities requires 140 MW of electricity, not including other developments in the LFTC. This does not appear to take into consideration the electrical requirements for the other development components of the Campus. It appears that full build-out of the LFTC will require more than 140 MW of electricity.

Response: Electrical estimates are considered conservative. Niagara Mohawk and NYSEG have considered ancillary loading requirements and feel confident that loading beyond that of the actual Fab plants can be handled by the proposed electrical transmission facilities. As new potential development occurs around the LFTC, modifications may be made to Niagara Mohawk and NYSEG substations and distribution feeders in the area to support new load growth.

8. Comment: The Electric Power Report (Appendix I) mentions that this activity will require coordination between Niagara Mohawk and NYSEG. The report briefly states the processes used for coordination between these two energy providers. Will such coordination pose a difficulty?

Response: Both utilities have attended weekly team meetings discussing the proposed LFTC, and both are aware of involvement by each other. It is anticipated that there will be continued cooperation as the proposed LFTC moves forward beyond the local approval phase. Niagara Mohawk and NYSEG (as well as other utilities) commonly address concerns/issues relative to serving load along franchise boundaries. This is a common occurrence and does not pose any difficulties for either utility.

2.3.4 Natural Gas

1. Comment: What is the timetable and cost to install the three phases of natural gas improvements? Who pays for this cost?

Response: The specific time table depends on when the gas service proposal is received. Upon receipt of the formal gas service proposal, Niagara Mohawk will develop a design package, obtain necessary permits, and begin material procurement, system upgrades and construction. These steps can take from six (6) months to one year to execute.

Relative to cost, typically Niagara Mohawk recovers most of the costs associated with gas or electric line extensions from the end use customer seeking the service. This occurs through tariff-based requirements approved by the PSC, which permits Niagara Mohawk to require the customer to execute an agreement to reimburse most of those costs prior to the commencement of construction. In this case, Niagara Mohawk is expecting to apply the same process and treatment. However, until the terms of an agreement are reached between the customer and the appropriate State or local agencies who are attempting to bring the customer to the LFTC project site, it is not possible to state with certainty how all of the electric and gas-related project costs will ultimately be financed and funded. Given all known facts today, a rate increase to town residents resulting from this project is not expected.

2. Comment: Will the natural gas users in the area be impacted and suffer loss of gas service, reduced pressure, limitations or increased natural gas costs?

Response: There will be no loss of gas service for existing users with the level of service remaining the same as it is today. There will be no increase in gas costs due to the new customers at the LFTC. The new gas load required for the LFTC has been thoroughly analyzed utilizing Niagara Mohawk's load modeling software and engineering designs so that the current gas distribution system would maintain its current level of operation and system integrity.

3. Comment: Table 2-1 states that the full build-out of the four-Fab facilities requires 360,000 cfh of natural gas. The GEIS text states that this amount of natural gas is required for the full build-out of the LFTC. This does not appear to take into consideration the natural gas requirements for the other development components of the Campus.

Response: The 360,000 cubic feet per hour (cfh) load correlates to the presently anticipated full build-out of the proposed LFTC, based on current information provided in the Industry Requirements Report (Appendix C of DGEIS). It is possible that more natural gas may be required for the future full build out of the LFTC, however 360,000 cfh of natural gas is a moderately high load that certainly can accommodate a large amount of future development over

at least a 5- to 10-year period. This amount of natural gas can accommodate four (4) working Fabs, or a combination of less than four (4) working Fabs and ancillary development that may require a moderate to high gas load.

The 360,000 cfh natural gas load will be established as a SEQR threshold for the Campus; any future LFTC development that exceeds this amount will trigger the need for a more detailed assessment of the potential environmental impacts, if any, associated with increasing the load above 360,000 cfh for the proposed development that exceeds this SEQR threshold. This supplemental environmental assessment will be done, as necessary, in the future at the time in which the LFTC's natural gas load demand is predicted to be in excess of 360,000 cfh. This future environmental assessment by necessity will take into consideration any improvements that have been made in Niagara Mohawk's natural gas delivery system.

4. Comment: The acronyms cfh/DT/Day and mcfh should be explained. They are not in the acronym list.

Response: The acronym, cfh, is an abbreviation for cubic feet per hour, DT/Day is short for dekatherms per day; and mcfh stands for million cubic feet per hour (which is equivalent to dekatherms per hour).

Some conversion factors related to the above units are as follows:

- *1 mcf = 1,000,000 cubic feet*
- *1 Therm = 100,000 btu*
- *1 Dekatherm = 10 therms = 1,000,000 btu*

5. Comment: It is unclear why Phase 1 Gas requirements are for 200,000 cfh @ 20 psig, which would be the total needed for all four (4) plants. All previous phase discussions have been for each of the four Fabs and ancillary development. In this case, it appears that since the gas requirements for all four Fabs can be brought on-line from the existing gas distribution system, this is how Phase 1 was defined here. The fact that this phasing differs from the phasing used in the rest of the GEIS should be clarified.

Response: The request for natural gas service at the LFTC was to analyze the system capabilities to support a 200,000 cfh load and a 360,000 load split four (4) ways evenly. Therefore the outcome of the engineering studies was such that the 200,000 cfh load would not require significant system upgrades. These upgrades would include a main extension and some tie in work to strengthen the system to support the new load. The larger load of 360,000 cfh would require system pressure upgrades on top of the other upgrades, so that system integrity can be maintained with the increased loads.

6. Comment: The Phase II and Phase III natural gas upgrades discuss a new load that will require additional pressure to supply extra capacity to the three Fabs. It is unclear if the extra capacity is for the other Fabs, or for ancillary development at the site. Extra capacity needs at the Fabs had not been raised as an issue up to this point. The issue of which facilities (i.e., ancillary versus Fabs) need how much gas when (i.e., in which phase) should be clarified.

Response: The Phase II and III natural gas upgrades will be necessary to meet the anticipated full build out load of the LFTC, 360,000 cfh, which is inclusive of ancillary development, despite that fact that there is no load information for the ancillary development at the present time. Refer to Response to Comment #2.3.4.3 for additional details related to the ancillary development natural gas demand, and Appendix J of the DGEIS for the currently predicted natural gas demands for the phased development of the LFTC.

2.3.5 Telecommunications

1. Comment: What are the costs associated with bringing telecommunications to the project site? Who will pay for these costs?

Response: In the course of bringing tariffed services (i.e., those for which there is a fixed price including T-1, T-3, as well as home telephone service) to the project site, there are no construction charges. All costs will borne by Verizon, the telecommunications provider, in the hope of recovering such construction costs through service charges from the customers of the extended service. In the event that some form of special, non-tariffed service (i.e., something which is specially configured and paid for on a limited service offering (LSO), for example Transparent LAN Service (TLS)) is requested by a company located in the Campus, there could be construction charges which would be paid by the customer. Such charges are site and engineering specific and would be to extend facilities from the end of the (new) cable to the customer's building (Verizon, 2003).

2.4 Socioeconomic Impacts

1. Comment: Several commenters cited the loss of manufacturing jobs in our region, while emphasizing the importance of the proposed modern manufacturing jobs to the economy, particularly in relationship to service sector jobs. Some commenters questioned whether any jobs associated with the semiconductor industry were stable in today's global market. The reference to a "Capital Region brain drain," where locally raised and educated children leave the region for jobs elsewhere, was made by several commenters, while one commenter (Harold Howe) claimed no such thing. One commenter (Ed Moriarty) cited a regional unemployment rate of less than three percent, and stated that the jobs from the LFTC would come from outside the Town of Malta. Another commenter (Scott Baldwin) stated that many of his friends have lost jobs with AMD and Motorola, and it was suggested by several commenters that the local unemployment rate could increase as a result of the LFTC. Several commenters mentioned that the jobs being proposed are good, high-salary jobs, while others referred to them as entry level manufacturing jobs for people with a high school education that are not high-paying, earning only $9/hour or $35,000/year. One commenter (Vince Nagengest) stated that the vast majority of jobs are not union jobs. Several commenters stated that the proposed jobs would not necessarily be obtained by local residents. One commenter (Bill Beckman) asked if companies moving into the area are going to bring some of the people with them to fill the big salary jobs. Several commenters questioned how the number of jobs could be predicted when the companies that would locate in the LFTC haven't yet been identified. One commenter (Dale Buswell) suggested that Saratoga County doesn't need these jobs, but that other areas do.

Response: The responses to this composite comment have been subdivided into the following subject matters, designated A through G.

A. Whether semiconductor industry jobs are stable in today's global market?

The outlook of nanoelectronics manufacturing in the United States is as stable as any other sector of manufacturing and, in some ways, more stable than most. According to the U. S. Department of Labor, Bureau of Labor Statistics, Occupational Handbook, 2002-2003 Edition, nanoelectronics manufacturing possesses a number of characteristics that make it particularly likely to grow and expand within the United States. Because this industry's rapid pace of innovation and technological advancement require a higher proportion of employees who are professionals or from related occupations, the Bureau of Labor Statistics (the "Bureau") predicts that there will be an increasing demand for a more highly skilled workforce like that found in the United States within the nanoelectronics manufacturing industry, as opposed to more traditional manufacturing jobs that are easily exported overseas to areas with cheaper labor. Moreover, unlike end products like keyboards and computer casings and products of more traditional manufacturing processes like paper and televisions, the sensitivity of wafers during the sophisticated manufacturing process make them vulnerable to minor but costly flaws that

make production by higher skilled and therefore higher paid workers more desirable than exporting production to countries with cheaper but less skilled labor. Despite the up and down cycles that characterize the nanoelectronics industry, demand for wafers is strong and is expected to continue to grow due to technological advances that not only permit their incorporation into a wider array of products but also permit existing products to expand their applications, such as cellular phones that can now be used to browse the internet. Increased defense spending and global insecurity caused by terrorism and uncertain economies of Southeast Asia and Latin America should also benefit domestic workers in nationally sensitive sectors like nanoelectronics. While individual companies may encounter problems stemming from their own business plans, such as erring in deciding which products to manufacture or making unsound business decisions, the Bureau estimates that wage and salary employment in nanoelectronics manufacturing in the United States will increase faster than the average for all other occupations during the next decade. Refer to Section 3.A., pages 23-25, of Appendix B of the Draft GEIS.

B. Whether there is a "Capital Region brain drain"?

While the purpose of the Economic Impact Analysis is neither to prove or disprove the oft-discussed theory that the Capital Region has been afflicted by a "brain drain" in accordance with which theory locally raised and educated youth are compelled to leave the region in order to find quality jobs elsewhere, the census data analyzing local and regional population trends on which the analysis was based does show that there is a disproportionately large number of people within the 20-34 age range leaving the Capital Region. Refer to Draft GEIS, Section 2.B., page 10; and Section 2.F, page 15, of Appendix B. The decline in the percentage of the population in that age range in the Capital Region was 1.8% higher than the decline experienced at the State and national levels in the same age group. This alone would be statistically significant in and of itself. However, it raises even more questions when one considers that the 21 institutions of higher education located in the Capital Region would generally cause one to expect regional population data to reflect a higher than average number of people in the 20-34 age range. While the Capital Region is generating a comparatively high number of graduates from its universities and community colleges, the census data shows that more young people are leaving the area than are choosing to enter or remain in the region. Although there could be many reasons why young people in the 20-34 age range are choosing to locate elsewhere, job opportunities often play a significant role in determining geographic location.

C. Given the relatively low unemployment rate in Saratoga County, does Saratoga County really need the Semiconductor Industry to locate here and the jobs associated therewith? Will those jobs largely be filled by people from outside the Towns of Malta and Stillwater? Would the Project be better suited elsewhere "where jobs are needed"?

Like any other community, Saratoga County must continually tend to its economy and ensure that it is well positioned to weather changes in the increasingly global economy in which it competes for jobs and market position. Increasingly, Saratoga County is not in competition with Warren or Washington Counties or even neighboring states; it is competing against Georgia, Colorado, the Philippines, China, Mexico, and other regions around the country and the world.

Although general economic indicators, such as the unemployment rate, indicate that Saratoga County's economy is relatively strong, there are a number of weaknesses that threaten future prosperity if left unaddressed. In particular, Saratoga is experiencing a regional decline in manufacturing arising mainly from changes in the global economy and the increasing obsolescence of existing infrastructure in Saratoga County, much of which was first constructed during the 19th or early 20th centuries, which obsolescence largely results from the failure of existing industry to reinvest capital in existing plants and equipment. Refer to Draft GEIS, Section 2.G., page 16-18, of Appendix B. As noted in Appendix B of the Draft GEIS, many of the industries that have historically maintained a strong regional presence, such as the paper industry, have matured and declined while others are relocating significant portions of their operations outside the region, leading to regional contraction (refer to Table A-2, page 38, of Appendix B).

Even industries that only recently located in Saratoga County and which appear to be thriving have been subject to sudden downsizings, such as the recent announcement by State Farm Insurance Co. that it will transfer 208 jobs from its regional headquarters in Malta to facilities in Colorado, Texas, Illinois and Ohio over the next two to four years as part of a company-wide consolidation. This local reduction in workforce will cause State Farm Insurance, which opened its office in Malta in 1991, to drop from the fourth largest employer in Saratoga County to seventh in one stroke. Refer to Draft GEIS, Table A-1, page 38, of Appendix B.

Moreover, even the seemingly positive unemployment statistics raise questions upon further inquiry. While the unemployment rate provides a picture of those living in the area seeking employment, it does not identify how many people may have left the area or job market due to lack of employment opportunities. As discussed in section B of this response, there appears to be a disproportionately small number of people in the 20-34 age range in the Capital Region despite the large number of local colleges and universities.

Saratoga County's dependence on traditional manufacturing and the attendant decline in traditional manufacturing across the State and the nation, as well as the vagaries of the economy that subject all sectors of the economy to changes in employment, make it imperative that the County cultivate high-quality sources of employment to replace those jobs that have already been lost and that will continue to be lost - industries with the potential to grow and expand as traditional regional employers continue to contract. Given nanoelectronics manufacturing's existing track record and its predicted potential for growth and stability, described more particularly above, nanoelectronics manufacturing appears to be a good addition to the local and regional economies that will provide diversity and growth.

Finally, it should be noted that the nanoelectronics manufacturing facilities for the LFTC are part of a larger plan by Governor Pataki and Senate Majority Leader Joseph Bruno to promote the nanoelectronics industry in New York State. State leaders anticipate that the LFTC, in conjunction with the nanoelectronics research center known as SEMATECH hosted by the University at Albany and development related thereto, will promote economic growth over a wide swath of upstate New York from Kingston north to Plattsburgh and Utica east to Pittsfield, Massachusetts. Refer to Draft GEIS, Section 3.B., page 27, of Appendix B. Although one could

argue that economic development efforts such as this should begin in the places with the greatest need, such as communities in western or northern New York, the reality is that industries like nanoelectronics manufacturing, which place a high value on and are dependent upon a highly skilled workforce, must locate in areas capable of attracting and retaining an educated workforce. Professionals and other upwardly mobile people are generally more attracted to thriving, culturally diverse communities like Saratoga rather than those experiencing prolonged declines. Second and third tier development generated by nanoelectronics industries that locate in the Capital Region will benefit areas with comparatively greater need to the north, south, east, and west, which should eventually lead to improvements for those areas. However, that wave of economic redevelopment must begin by attracting the first tier industries to our State, and communities in areas like Saratoga and the Capital Region are better suited to that task.

D. Are the semiconductor industry jobs associated with the Project high quality jobs? Some say the jobs are high salary while others call them entry level manufacturing jobs for people with a high school education that are not high paying, earning only $9/hour or $35,000/year.

The jobs that would be created by the four nanoelectronics manufacturing facilities ("Fabs") described in the Draft GEIS (Section 3.C., pages 27-29, of Appendix B) are high quality manufacturing jobs comprised of a mix of production, professional and managerial, and administrative positions. According to the data provided by industry consultants Abbie Gregg, Inc. ("AGI"), which data is in accordance with compensation data collected for the nanoelectronics (i.e., semiconductor) manufacturing industry generally by the U.S. Bureau of Labor Statistics, all positions will likely receive compensation well above the per capita income of residents of both the Towns of Malta and Stillwater, and the majority of all such employees will earn salaries that also exceed the median household income of residents of both towns. Refer to Draft GEIS, Section 3.C., page 29, of Appendix B.

Nanoelectronics manufacturing is unique in that it employs significant numbers of both professionally trained staff and entry-level production employees. An unusually large proportion of the nanoelectronics manufacturing workforce – about three in ten – is made up of employees in professional and related occupations, such as electrical engineers, computer systems analysts, and physical scientists. Approximately 35% of the predicted new jobs (an estimated 630 to 875 employees per Fab) will be professionals or members of related occupations who will earn between $65,000 and $130,000 annually. The need for such a large number of professional employees stems from the fact that the manufacturing process is constantly evolving due to advancements and innovations in technology. Not only must the professional staff of a Fab continuously find ways to adapt existing operations to comply with new technologies developed by others, they are also involved in the research and development of such new technologies on-site.

However, there will also be a large number of highly compensated entry level and more advanced, non-professional manufacturing jobs. Approximately 55% of the predicted new jobs (an estimated 990 to 1,375 employees per Fab) will be "technical" or "production" jobs with compensation ranging from $40,000 to $90,000 annually.

Most entry level production jobs are composed of operators who start and monitor the wafer manufacturing equipment. According to the U.S. Bureau of Labor Statistics, the median hourly earnings of operators (i.e., semiconductor processors) were $12.23 in 2000 with the highest ten percent earning more than $19.10 an hour. While the Bureau of Labor Statistics wage data is representative of the entire semiconductor industry, including all sizes and types of wafer fabrication facilities across the nation, the report provided by industry consultants Abbie Gregg, Inc. ("AGI") is more accurate in that it was prepared for this particular Project, taking into account the projected date that these jobs will come online, advances in the semiconductor industry that have lead to a change from less advanced 200 mm wafer Fabs to 300 mm Fabs that require more highly skilled workers, this site's proximity to advanced R&D facilities in Albany that are likely to encourage the latest and most technologically advanced production methods to be used at the site, and the site's size, all of which are likely to attract the highest caliber wafer fabrication industry members.

E. Are most of the semiconductor jobs associated with the Project non-union jobs?

According to the U. S. Department of Labor, Bureau of Labor Statistics, Occupational Handbook, 2002-2003 Edition, Semiconductor Processors, approximately one fourth of all electronic semiconductor processors, who account for an estimated 55% of all Fab employees, belong to a union. The Bureau noted that this is a considerably higher rate of unionization than the rate for all occupations.

F. Will the semiconductor industry companies that would likely locate at LFTC bring their own people from outside the community to fill all of the "good jobs"?

The majority of jobs created by the Fabs will be filled from the local and regional population. The initial core start-up team responsible for transferring the technology and expertise from corporate headquarters or other Fab facilities outside the area to the new manufacturing facilities generally consists of about 300 personnel (refer to Draft GEIS, Section 3.C., page 27, of Appendix B). As discussed at length in Appendix B, the presence of a highly educated population from which the Fabs can draw employees is one of the most significant siting requirements of the industry.

G. How can the number of jobs likely to be created as a result of the Project be predicted when no actual companies have yet agreed to move into LFTC?

The Applicant has been working closely with industry consultant Abbie Gregg, Inc. and other experts at University at Albany with knowledge of and access to members of the nanoelectronics manufacturing industry to obtain the most accurate job creation data possible based on the size and other characteristics of the LFTC project site. Moreover, the data supplied by its consultants is also analogous to nanoelectronics industry statistics collected by the Bureau of Labor Statistics.

2. Comment: There were numerous comments concerning local taxes. Several local residents stated that the proposed action would lower their tax bills, while other commenters claimed an expansion or increase of the tax base in the local community to pay for such things as emergency services, road and trail maintenance, mass transit, and other off-site improvements. One commenter (Dick Butler) stated that, "Stillwater needs the improved tax base, and it won't come from housing." Another commenter (Peter Quartaro) stated that the proposed action would result in, "tremendous commercial tax revenue increase," and made comparison to new residential housing construction. One commenter (E. Graham Thompson) asked what would be the amount of taxes (school, town and village) that the Campus will pay, and requested a guarantee for 50% school tax and 30% town tax reductions. Another commenter (Larry Benton) stated that the added revenues from the proposed action would "certainly have a significant benefit on local taxpayers through a reduction in their tax rates per thousand," and noted that Appendix B "provides for the scenario whereby the IDA would abate property taxes on the value of all improvements." Another commenter (Michael Mertens) asked what the effect the LFTC would have on the property taxes of residents in the Ballston Spa school district whom do not reside in the town of Malta? Will an increased tax base created by companies locating in LFTP impact residential taxpayers in the towns of Milton and Charlton?

Response:

It is anticipated that the LFTC will have a positive impact on local real property and school tax revenues. Refer to Draft GEIS, Section 3.E., pages 30-33, of Appendix B, for a description of the likely tax liability of the Project property; the Response to Comment #2.4.12 for a discussion of the Project's anticipated impact on local Town budgets; the Response to Comment #2.4.17 for a discussion of the Project's anticipated impact on affected School Districts; and the Response to Comment #2.4.13 describing limitations that have been placed on any PILOT applied to properties within LFTC.

Because off-site improvements, such as road improvements, are expected to be funded through a combination of federal, State, and private funding, rather than local funds, and the LFTC will not in and of itself generate students to attend local schools, revenues derived from the LFTC through real property, school, and sales tax levies will most likely exceed any increased cost of maintaining local roads, handling increased volumes of permit applications, or such other similar direct project impacts on Town resources (refer to Response to Comment #2.4.6). The degree to which the Malta and Stillwater town governments use the LFTC to reduce the tax liabilities of existing residents and/or to encourage residential and commercial development of their towns is entirely up to them (refer to Response to Comment #2.4.17).

With respect to the comment asking whether the increased tax base created by companies locating in LFTP will impact residential taxpayers in the towns of Milton and Charlton, the answer is yes insofar as those taxpayers pay school taxes to the Ballston Spa Central School District. The increased tax base created by the LFTC will benefit all taxpayers of the affected

school districts. Thus, any increase in school tax revenues derived from the LFTC by the Ballston Spa School Central District will positively impact not only those taxpayers of the district residing in the Town of Malta but also those residing in the Towns of Charlton, Milton, and Ballston Spa. Similarly, any increase in school tax revenues derived from the proposed action by the Stillwater Central School District will positively impact not only those taxpayers of the district residing in the Town of Stillwater but also those residing in the Towns of Easton, Saratoga, and Schaghticoke.

3. Comment: Several residents commented on the impact of the proposed action on their property value. One resident claimed that property values would increase, while others questioned if this was an accurate portrayal. One commenter (Paula Hays Fanning) stated that property values are already on the rise. Another commenter (Harold Howe) hypothesized that as the value of real estate increased, then property taxes would rise. Another commenter (Andrea Austin) suggested that some properties that backed up to the project site, "bordering a pristine habitat," would lose value, and that market studies should be done. Several comments asserted that increased property value would create a higher tax liability. One commenter (Chazen) stated that the GEIS should cite evidence to support the assertion that there will be an increase in residential property values.

Response: As noted in Draft GEIS (Section 3.H., page 34, of Appendix B), property values in communities that have become hosts to nanoelectronics manufacturing facilities have generally appreciated. For example, according to industry consultant Abbie Gregg, Inc., in the last five years, property values in Chandler, Arizona and Austin, Texas appreciated by 7% and 8.1% respectively after the introduction of nanotechnology manufacturing facilities as compared to an average appreciation of 6.1% nationally over the same period.

While it is anticipated that the LFTC workforce will, by and large, be derived from the existing local population within commuting distance of the project site, some employees may look for housing closer to their workplace, such as housing available in the Towns of Malta and Stillwater. Refer to Response to Comment #2.4.18 and the Draft GEIS (Sections 2.C., 2.H., and 2.G. of Appendix B), for a discussion of existing and anticipated local workforce capacity and the compatibility of such workforce with nanoelectronics manufacturing. Because salaries of LFTC employees are above average for our area, it is expected that employees purchasing homes within the Towns of Malta and Stillwater will have a positive impact on housing values. Refer to Response to Comment #2.4.1.

As compared to alternative uses of this site, the LFTC is unlikely to have any negative impact on property values of neighboring properties. The project site is already zoned for commercial uses, and the property owners are actively looking to sell and/or develop the property. Because nanotechnology manufacturing facilities are generally indistinguishable from office buildings, this type of commercial development is likely to have the least comparative impact on the property values. Moreover, the proposed design of the project site retains much of the green

space and tree cover along the outside of the property that borders existing residents, rendering it largely invisible to neighboring properties. The proposed design will preserve more than 50% of open space, some of which will be dedicated to recreational uses, such as hiking trails and bike paths. Refer to Draft GEIS, Appendix O, Visual Impact Analysis.

Although increased property values may raise the assessed value of existing property and consequently result in increased property tax levies for affected property owners, the benefits of increased property values should more than offset the increased tax liability to individual homeowners. Such benefits include: (1) the higher sales proceeds for those who wish to sell their homes, (2) the increase in value of one of the household's main retirement assets, and (3) the increase in home equity against which homeowners can borrow funds for other investments, such as stocks or bonds, starting their own businesses, or seeking a higher education. Any increase in tax burden would be a small percentage of the overall increase in wealth resulting from the raised property value.

4. Comment: There were several comments regarding the State's Empire Zones program. These comments included:

- Under Governor Pataki's proposed budget localities will have to absorb more of the financial load on any tax incentives for Empire Zones.
- This land is already in an Empire Zone.
- It was suggested by one commenter (Harold Howe) that the Empire Zone program results in deregulation and lower corporate tax rates, which save companies money and shift the burden of payment onto local citizens.
- There are new tax credits available inside Empire Zones which include a tax reduction credit that cuts the firm's tax liability under the alternative minimum tax to zero.
- During the first 10 years, companies that locate inside an Empire Zone don't pay any taxes at all, and they are given credits for the things they buy without even paying the four percent State sales tax.
- There is no guarantee that Empire Zones will be 100% funded in the future.

Response: Empire Zones are designated areas throughout New York State that offer special incentives to encourage economic and community development, business investment, and job creation. There are three levels of benefits available to businesses located within Empire Zones based on the individual businesses' eligibility. A minimal number of benefits are available to any business physically located in an Empire Zone. Other benefits are available only to businesses that qualify for certification as "certified zone businesses." A third category of

benefits are available to certified zone businesses that qualify as Qualified Empire Zone Enterprises ("QEZEs").

Empire Zone benefits are structured to give the greatest benefits to businesses that create new jobs and/or make significant physical alterations to their properties, such as expanding, building new commercial property, or substantially renovating property. The more employees hired and the more capital investments made by a business, the more Empire Zone benefits for which it will qualify. Most of the benefits are given in the form of credits against the business's New York State income tax liability. QEZEs, and to a lesser extent certified zone businesses that do not qualify as QEZEs, also may be exempt from the New York State portion of the sales tax on certain purchases. Benefits are generally available for a 10-year period, and many benefits are phased out gradually over the 10-year period. It is possible for businesses that create a large number of jobs and make significant investments within a given tax year to reduce their New York State income tax liability to $0 for that year if they are able to qualify for enough benefits to equal or exceed their tax liability. Thus, State benefits offered under the program are tied to the program goals of job creation and capital improvements that benefit local communities.

Businesses located in Empire Zones must pay 100% of the real property tax levied by the local taxing jurisdictions, as well as the local portion of the sales tax. Refer to Draft GEIS, Section 3.E., page 33, of Appendix B. As currently written, the Empire Zone legislation does not require local taxing jurisdictions to reduce tax revenues in any way – either through reductions in real property taxes or reduced collection of the local sales tax. Although the Empire Zone legislation does permit local communities to "opt in" to certain parts of the program, such as by extending the sales tax exemption to the local portion of the sales tax, the vast majority of communities have elected not to do so. Nor has Saratoga County or any of the municipalities within Saratoga County chosen to do so.

The Empire Zone legislation will sunset in 2004, unless it is extended by the New York State Legislature. Based on the history of the statute and its success in generating jobs and capital investments in New York State, the Legislature will most likely extend the program in some shape or form. A number of proposals have been put forth by the Governor's Office suggesting changes to the program. However, all proposals are preliminary at this point, and none have been adopted. While some proposals have suggested reducing benefits at the State level and providing local municipalities with the option to make up the difference through local credits of real property or sales tax, all still active proposals thus far provide this option to localities on a voluntary basis.

The land that makes up LFTC is not currently located in the Saratoga County Empire Zone. However, based on the projected job creation and capital investment that the Project would bring, it is anticipated that the Zone Administrative Board ("ZAB") and other State and local authorities that collectively must approve any boundary amendment of the Saratoga County Empire Zone would approve the inclusion of the Project area within the Zone if the Project receives approval to proceed. Once the property is included in the Zone, individual companies that locate there will be required to apply for certification and, if applicable, QEZE status individually on their own merits before they can qualify for the majority of benefits.

Based on the Applicant's conversations with industry experts, Empire Zone benefits are a deciding factor with respect to the location of companies in LFTC. Applicant is reasonable confident that given the successes of the Empire Zone program statewide, it will be continued in at least the near-term project planning period.

5. Comment: Project benefits are merely short-term benefits.

Response: See Response to Comment #2.4.6 for a discussion of the long-term Project benefits.

6. Comment: You cannot expect the industry to come in here and pay for all the required infrastructure and transportation improvements. Large incentives need to be offered to entice this type of industry to an area, with no tax base benefit and no long-term gain from all the public money we spend. Concern was expressed that there was no State money for such incentives.

Response:

Funding of Improvements: As indicated in the Draft GEIS, Section 3.I., page 35, of Appendix B, funding for off-site infrastructure improvements associated with the LFTC, such as connection to sewer, water, and power, as well as the construction of new or modification of existing roads, will be provided through a combination of State, federal and private sources. Based on precedent set at other communities that have received projects of this magnitude, the Applicant expects associated road improvements to be paid for through a mixture of federal, State and private funds – thus, no local tax monies are anticipated to be used in the funding of road improvements necessitated by the proposed action.

Similarly, other infrastructure improvements like the extension of sewer and water services to the site will be paid for by the LFTC companies through user fees and other capital improvement fees assessed against the project site properties. No local subsidies are proposed. In fact, with respect to water services, the Saratoga County cost analysis for the proposed county-wide water system in which the LFTC would partake describes the need for a single large user, like the LFTC, to help offset the costs of extending the system to other users. Therefore, rather than increasing the tax burden on County taxpayers for the extension of water services to LFTC, the proposed LFTC actually makes the County's plans to create a county-wide water system more possible.

Not only does the size of the LFTC render it likely to receive a significant amount of State and federal funding, the fact that it is closely connected with New York State's and the United States' independent and joint efforts to increase the nanotechnology sector of the State and national economies further enhances the Project's potential to attract State and federal funds. As discussed in the Response to Comment #2.4.1, New York State's SEMI-NY initiative, designed

to attract nanotechnology manufacturing to the State, has been a focal point of Governor Pataki's and Senate Majority Leader Joseph Bruno's economic development efforts (also refer to Draft GEIS, Section 3.B., page 26, of Appendix B). Given the unwavering support for promoting nanotechnology in New York State expressed by the Governor and the State legislature and the overwhelming success the State has had to date, namely becoming only the second State in the nation to host a major center for research and development of wafers under the sponsorship of SEMATECH at the University at Albany, it is expected that funding for projects like LFTC will not be significantly affected by the State's budget negotiations. Moreover, federal funding aimed at promoting the nanotechnology industry nationwide, mainly through a program known as the National Nanotechnology Initiative, is also unlikely to experience reductions in the near future. In fact, the House of Representatives recently approved a bill authorizing an investment of $2.36 billion over three years in nanotechnology research and development, which will mostly be given to academia and industry through the National Science Foundation, the Defense Department, and other government agencies. See, "House Authorized $2.36-billion For Research, by Barnaby J. Feder, page C4 of The New York Times, Thursday, May 8, 2003. Likewise, the Senate is developing similar legislation. Id. Because of the close proximity of LFTC to the University at Albany's SEMATECH facility, nanotechnology companies that locate within LFTC will effectively have two ways in which to access federal funds – individually and through joint programs with University at Albany.

Incentives: The proposed LFTC does not envision the use of any local incentives other than providing LFTC companies the option of applying to the IDA for exemption from the mortgage recording tax and/or the local share of sales tax for construction costs. As noted in the Response to Comment #2.4.4, the leading economic incentive is the availability of Empire Zone benefits, which are designed so as not to affect local tax revenues.

Furthermore, as discussed more extensively in responses to other comments and in Appendix B, there are a number of factors that make the Capital Region, and therefore LFTC, attractive to the nanotechnology industry beyond programs like the Empire Zone Program. Briefly, these include the project site's proximity to the SEMATECH facility at the University at Albany, the presence of a highly educated and skilled workforce from which to draw employees, and convenient access to suppliers and customers. Refer to Draft GEIS, Section 3.A., pages 24-27, and Section 2.H., pages 18-19, of Appendix B; and Response to Comment #2.4.18.

Tax Benefits: It is anticipated that the Project will have a positive impact on local real property and school tax revenues. Refer to Draft GEIS, Section 3.E., pages 30-33, of Appendix B, for a description of the likely tax liability of the LFTC property; the Response to Comment #2.4.12 for a discussion of the LFTC's anticipated impact on local Town budgets; the Response to Comment #2.4.17 for a discussion of the LFTC's anticipated impact on affected School Districts; and the Response to Comment #2.4.13 describing limitations that have been placed on any PILOT applied to properties within LFTC. Because off-site improvements are expected to be funded through a combination of federal, State and private funding, rather than local funds, and that the Project will not in and of itself generate students to attend local schools, revenues derived from the Project through real property, school, and sales tax levies will most likely exceed any

increased cost of maintaining local roads, handling increased volumes of permit applications, or such other similar direct Project impacts on Town resources.

Long-Term Benefits of Project: The proposed action will have a number of long-term benefits for the Towns of Malta and Stillwater, as well as the Capital Region generally. As noted above, the Project will improve the tax base of both towns (see Responses to Comments #2.4.12 and #2.4.17).

It will also provide quality employment to residents of the region who wish to enter the high technology industry or who have or will experience downsizing or other job reductions; partially reverse the trend in the regional loss of manufacturing jobs upon which half of all upstate jobs depend; bring high technology industry to our region thereby making it competitive in the "new economy" that values a highly educated, skilled, and compensated workforce; and reduce regional dependence on government employment. Refer to Response to Comment #2.4.1; the Draft GEIS, Section 2.G., page 16, of Appendix B; and Section 2.H., pages 18-19, of Appendix B.

Moreover, LFTC will permit Malta and Stillwater to benefit from those federal and State monies allocated to promoting the nanotechnology industry in the nation and the State, which monies will be allocated and spent somewhere else if LFTC is not approved. Those federal and State funds can potentially be harnessed by the towns to make traffic and other quality of life improvements sought by the towns, which would otherwise be difficult or impossible to achieve in the absence of a project of this size and type with the attendant funding and intergovernmental cooperation.

7. Comment: One commenter (Mark McKenzie) stated that businesses are leaving New York State, "week in and week out," because it is too expensive to do business in New York State relative to other states like Arizona.

Response: See Response to Comment #2.4.1; the Draft GEIS, Section 2.G., page 16, of Appendix B; and Section 2.H., pages 18-19, of Appendix B, for a discussion of the regional decline in manufacturing jobs and the need to attract new industry to the Capital Region that values a highly skilled and therefore highly compensated workforce. Also, refer to Response to Comment #2.4.6 for a discussion of why nanotechnology manufacturers will be attracted to LFTC.

8. Comment: One commenter (Paul Sausville) stated that the, "feasibility of a special taxing district for the Campus to pay for off site improvements, such as boulevard redevelopment of Dunning Street, bus services and other improvements should be explored. This exploration should extend to other innovative incentive (financial and otherwise) to encourage people to live in the Town and work at the Campus."

Response: Refer to Response to Comment #2.4.6 for a discussion of how infrastructure improvements will be funded. Also, see the Responses to Comment #2.9.1 for a discussion of whether growth will occur and the ways in which it can be managed if it does occur.

9. Comment: It appears that the socioeconomic and quality of life impacts on the Town of Malta and/or Stillwater have not been fully addressed. The report states that the project will employ 7,200 to 10,000 employees at build out. The report further states that the unemployment rate for Saratoga County is 3.8%, substantially below the State and Nation. It is apparent that most of the 7,200 to 10,000 employees will not be from the region, but outside the county and outside the region. It can be assumed that a substantial proportion of those new employees will settle in the Town of Malta because of its proximity to the project site and its quality of life. For example, if 50% of the estimated 10,000 new employees were to settle in the Town of Malta, this would create 5,000 new households and the average household size in Malta are 2.45 for a total new population of 12,500 people. The Town of Malta population in 2000 was 13,005 and its estimated build out population is 23,617 according to its Comprehensive Plan. If the project development schedule to build out is 15 years then the Town of Malta could build out before then. This could result in substantial negative impacts on the socioeconomic characteristics of the Town and its quality of life. In order for the Town to assess these potential impacts the report should estimate the number of employees by occupation and the occupational salary ranges for the phases on an estimated time schedule. Then, the estimated salaries by occupation can be translated to the housing values that employees can support. Then, the report can estimate based on the travel times for propensity of new employees to reside in the Town of Malta. The report should forecast the generation of school age children to determine impacts on the school system. The Town of Malta then can assess the impact on its community.

Response: Population growth within the Towns of Malta and Stillwater will be directly controlled, as it always has been, by local zoning and other local controls on development. If the Town of Malta intends to cap its population at 23,617 by declining to permit additional residential construction permits or other methods of control, the LFTC will not prevent it from doing so.

It is anticipated that the LFTC workforce will by and large be derived from the existing local population within commuting distance of the project site based on current and anticipated workforce capacity and the high levels of skill and education possessed by the State and local population generally. See Response to Comment #2.4.18, the Draft GEIS, Sections 2.C., 2.H., and 2.G. of Appendix B. While it is true that a small portion of the Fab workforce will come from outside the region (refer to Response to Comment #2.4.1) and that some workers from the Capital Region may want to move closer to the project site, it is unlikely that all will choose to relocate directly to either Malta or Stillwater. Nor is either town under any obligation to expand existing housing stocks to accommodate demand for new housing. Moreover, figures provided

by Abbie Gregg, Inc., indicate that minimum salaries of 90% of the workers in this industry will exceed the per capita income of residents of both the Towns of Malta and Stillwater, and that the majority of such employees will earn salaries that also exceed the median household income of residents of both towns. See Response to Comment #2.4.1. Therefore, it is expected that employees of the LFTC purchasing homes within the Towns of Malta and Stillwater will have a positive impact on housing values as the introduction of nanotechnology manufacturing has had on other communities. See Response to Comment #2.4.3.

Given that most of the positions will likely be filled by workers already living within the Capital Region, that local zoning and land use controls may be used to limit population growth, and that workers from outside Malta and Stillwater that choose to move closer to the project site may increase the number of school age children within the Towns of Malta and Stillwater. Nonetheless, because school systems in New York State are largely funded through local real property taxes, the school systems of both towns are likely to experience a significant increase in school tax revenues from the Project. Refer to the Draft GEIS, Section 3.E., pages 31-33, of Appendix B, and Response to Comment #2.4.17.

With respect to ancillary development, the Applicant is voluntarily working with the towns to set thresholds that will limit ancillary development in LFTC through the SEQR process (see Draft GEIS, Section 3.J., page 35, of Appendix B). Development within LFTC will be controlled by traffic generation thresholds identified in the SEQR Findings Statement by the Lead Agency. Ancillary development that occurs outside LFTC will be controlled by the local zoning and other local controls on development.

10. Comment: The report states opinions and conclusions that are not supported by data or data that is not documented by calculations and source and in some cases inconsistencies. For example, the report concludes; "that the substantial increase in assessment and taxes derived there from will far outweigh the increased costs on municipalities involved and more than compensate for those additional demands without raising local tax rate." There has not been an application of a fiscal impact model and documentation of the input data and its source and documentation of output data and its analysis to support this conclusion.

Response: See Response to Comment #2.4.12 for an analysis of the LFTC's impact on Town revenues. Also, see Response to Comment #2.4.17 for an analysis of the LFTC's impact on applicable School Districts. Moreover, see Response to Comment #2.4.13 describing limitations that have been placed on any PILOT applied to properties within LFTC.

11. Comment: The Applicant should clarify how many ancillary jobs will be created both within each phase of the project and cumulatively upon completion of the proposed project. Currently the DGEIS indicates that between 1,476 and 23,600 jobs

could be anticipated to be created as result of the project. It is realized that while there are differences within the two models which were used to forecast the potential number of jobs created, the difference in impact is grossly different between the two figures and should be clarified and further analyzed to determine the potential impacts of the proposed ancillary development on the Towns of Malta and Stillwater.

Response: Both the RIMS and ESD models described in the Draft GEIS, Section 3.J., pages 35-37, of Appendix B, predict ancillary job creation. The RIMS model predicted that, following construction of one Fab, 23,600 ancillary jobs will be created, which jobs include "permanent" jobs and temporary construction jobs. On the other hand, the ESD model predicted that one Fab will generate only 5,432 ancillary permanent and construction jobs. The 1,476 ancillary jobs identified by the commenter refers only to the number of permanent ancillary jobs predicted by the ESD model for one Fab but does not include the predicted construction jobs. Because the RIMS data does not differentiate between permanent and construction jobs as the ESD model does, when comparing the ESD results to that of the RIMS model, one must combine the permanent and construction jobs. See Response to Comment 2.4.12. for additional information about the ESD data.

As explained in the Draft GEIS (Section 3.J., pages 35- 37, of Appendix B), both models used the same input data. The difference in the results generated by the two models is due to how each model calculates the multiplier, which is a function of the model itself rather than the input data. Both models employ a multiplier derived from the direct project data that is then multiplied against the direct project data to produce an estimate of the ancillary or indirect jobs likely to be created by the Project. As explained more fully in Appendix B of the Draft GEIS (Section 3.J.), because the ESD model was constructed specifically for use in upstate New York, it most likely gives a more accurate description of the ancillary jobs that would be generated by the LFTC. However, because the RIMS model is more widely used, it may have more meaning to individuals familiar with how the RIMS model works and/or when comparing LFTC data to other projects.

12. Comment: The economic impact analysis as presented provides for detailed data and analysis in support of an economic market analysis for a technical park for nanoelectronics manufacturing within Saratoga County. The current economic impact analysis does not provide sufficient data to determine the potential fiscal impacts on the Town of Malta and Stillwater's General Government, Highway Fund, Fire District or School District as well as Utilities.

Response: Given the large number of variables in a project of this size, it is difficult to provide an accurate estimate of the increased fiscal impacts to the host municipalities. See Responses to Comments #2.9.7 and #2.9.5. However, because the LFTC benefits, such as increased assessed property values, are comparatively large and more easily estimated, it may be more useful to assess the anticipated impact of the LFTC on the Town and School District budgets to determine

whether there will be sufficient funds derived from the LFTC to pay for costs associated therewith. Viewing the data from this perspective should permit the Town governments to make informed decisions with respect to planning, including future revisions to their comprehensive plans or specific decisions with respect to individual future projects. Depending on whether the Town governments choose to encourage or discourage such things as population growth and commercial development within their borders, the Towns may choose to use the additional revenues derived from the LFTC either to reduce the tax liability of its residents or offset the cost to residents of new residential and/or commercial development.

Estimated Real Property Tax Revenues To Be Derived from the LFTC and the Impact on Town Revenues:

Tables 2.4.12.A and 2.4.12.C below depict the existing revenue sources and amounts that made up the Town of Malta and Stillwater budgets for fiscal year 2001, which is the most recent year for which data is available from the New York State Comptroller, as well as the estimated additional revenues expected to be derived from the Project based on the tax rates in effect for 2002. The additional estimated LFTC revenues depicted in the tables are derived solely from increased real property taxes, including special assessments, but excluding school tax revenues that are paid directly to the school district. Although both Towns are likely to earn even more revenues from the Project than those identified in Tables 2.4.12.A and 2.4.12.C through sales tax receipts, permitting and licensing fees, and perhaps state and federal grants, these other sources of revenue are not possible to estimate at this time.

According to Table 2.4.12.A, the Town of Malta is likely to receive $424,274 to $1,348,274 from real property taxes levied against the Project property based on 2002 tax rates, which is a 10% to 31% increase in revenues compared to Town revenues in 2001. Because the Town of Malta's general town tax is allocated specifically and exclusively to the Volunteer Ambulance Corps and relies heavily upon annual sales tax receipts to pay town expenditures, the data provided in Table 2.4.12.A most likely underestimates LFTC revenues. Nonetheless, the Project's impact on revenues based on real property tax levies alone is notable.

Because the Town of Stillwater employs a more traditional tax structure that includes a general town tax from which the revenues are allocated across all categories of town expenditure, the additional estimated tax revenues derived by Stillwater from the LFTC is even more pronounced despite the fact that the Town of Stillwater will host only about one-quarter of the Project. According to Table 2.4.12.C, the Town of Stillwater is likely to receive $1,762,506 to $2,203,036 from real property taxes levied against the Project property based on 2002 tax rates, which is a 48% to 59% increase in revenues compared to Town revenues in 2001.

Tables 2.4.12.B and 2.4.12.D show how the additional Project tax revenues may be spent by the Towns based on the way town revenues were expended in fiscal year 2001. For instance, Table 2.4.12.B provides that the Town of Malta would have twelve percent to forty percent more funds to expend on health and 89 percent to 283 percent more funds to expend on fire district costs. In another example, the Town of Stillwater expended approximately 43% of its total revenues on transportation-related costs, which amounted to approximately $1.4 million or $25,004 per mile of road given that there are 55.6 miles of road within the Town of Stillwater. Table 2.4.12.D provides that Stillwater would have an additional $757,878 to $947,305 in revenues from

Project real property tax levies to spend on transportation, which would be an increase of 55% to 68% above the 2001 transportation budget, which is an estimated increase of $13,631 to $17,038 per mile of road.

Table 2.4.12.A
Town of Malta Breakdown of Revenues and Additional Estimated Revenues Derived from Project Based on Fiscal Year 2001

Function	2001 Revenue ($)	Percent of total Revenue	Add'l Est. Revenue*
Real Property Taxes (includes special assessments)**	$679,900	16%	$424,274 to $1,348,274
Non-Property Taxes (includes sales tax)	$2,482,700 (of which $2,402,100 was sales tax)	58% (sales tax equaled 56% of total revenue)	Unknown***
Intergovernment Revenue	$532,100	12%	Unknown****
Interest on Investments	$149,300	3%	$0
All Other	$452,600	11%	Unknown*****
Total	$4,296,600	100%	$424,274 to $1,348,274

*Ranges depict estimated revenues based on 1 Fab, 100% in Malta to 4 Fabs, 80% in Malta.
**These figures do not include school taxes which are paid directly to the School District rather than the Town. In addition, existing real property tax revenues derived from the Project property in its existing condition were deducted from the figures so as to reflect only additional tax revenues generated by the Project. In keeping with existing taxing procedure, the full market value of the parcels was used to calculate the existing fire district tax levy while a partial assessed value was used to calculate the general town tax levy of those parcels subject to partial exemption under the Fisher Act
***As discussed in the text at greater length, due to the difficulty of determining what percentage of Fab expenditures will be on end user consumable goods that are subject to local sales tax and the proprietary nature of such information, it is not possible to estimate additional sales tax revenues that will be generated directly by the Project. However, the Project is expected to have a positive impact on Town sales tax revenues given that (1) the increased property value assessment of Town property resulting from the Project will likely increase the Town's share of sales tax revenues split among the various municipalities of Saratoga County, and (2) the Project's overall impact on sales tax receipts County-wide is likely to be much higher through the increased economic activity stemming from ancillary industry throughout the municipalities in Saratoga County generated by the Project, the commute of workers from around the region to the Project site, and the increased economic activity likely to result from the high salaries earned by residents employed by the Project.
****It is expected that the Project will receive New York State and Federal funding for off-site improvements, such as road improvements, necessitated by the Project. Depending on these grants are structured, the Town may experience an increase in the Intergovernmental Revenue category.
*****The All Other category of revenue includes revenues collected from licenses and permits. The Project is likely to generate an unknown amount of additional revenue in this category.
(Source: Based on data provided by Comptroller's Special Report on Local Government Finances for New York State, Town Data for Local Fiscal Years Ended in 2001, Released April 2003; Saratoga County Treasurer, 2002 Town Tax Roll; and industry data provided by Abbie Gregg, Inc.)

Table 2.4.12.B
Town of Malta Application of Additional Estimated Tax Revenues Derived from Project According to Expenditure by Function Based on Fiscal Year 2001 Town Data

Function	2001 Expenditure ($)	Percent of total Expenditures	Add'l Est. Revenue*
General Government	$933,900	25%	$0
Police	$0	0%	$0
Fire**	$454,000	12%	$404,068 to $1,284,068
Other Public Safety	$25,000	<1%	$0
Health	$162,300	4%	$20,206 to $64,206
Transportation	$1,104,700	30%	$0
Economic Assistance	$43,000	1%	$0
Culture-Recreation	$783,300	21%	$0
Home and Community Services	$243,100	7%	$0
Total	$3,749,300	100%	$424,274 to $1,348,274

*Ranges depict estimated revenues based on 1 Fab, 100% in Malta to 4 Fabs, 80% in Malta.
**Based on input from the Town of Malta, the general town tax revenues are allocated solely to the category of Health while the fire district tax revenues are allocated solely to the fire district.
(Source: Based on data provided by Saratoga County Treasurer, 2002 Town Tax Roll; Industry information provided by Abbie Gregg, Inc.; the Comptroller's Special Report on Local Government Finances for New York State, Town Data for Local Fiscal Years Ended in 2001, Released April 2003; and additional information provided by Kevin T. King, Town of Malta Comptroller.)

Table 2.4.12.C
Town of Stillwater Breakdown of Revenues and Additional Estimated Revenues Derived from Project Based on Fiscal Year 2001

Function	2001 Revenue ($)	Percent of total Revenue	Add'l Est. Revenue*
Real Property Taxes (includes special assessments)**	$1,092,500	29%	$1,762,506 to $2,203,036
Non-Property Taxes (includes sales tax)	$1,101,200 (of which $1,072,000 was sales tax)	30% (sales tax equaled 29% of total revenue)	Unknown***
Intergovernment Revenue	$1,168,200	32%	Unknown****
Interest on Investments	$19,600	<1%	$0
All Other	$325,300	9%	Unknown *****
Total	$3,706,800	100%	$1,762,506 to $2,203,036

*Ranges depict estimated revenues based on 4 Fabs, 20% in Stillwater to 1 Fab, 100% in Stillwater.
**These figures do not include school taxes which are paid directly to the School District rather than the Town. In addition, existing real property tax revenues derived from the Project property in its existing condition were deducted from the figures so as to reflect only additional tax revenues generated by the Project.
***As discussed in the text at greater length, due to the difficulty of determining what percentage of Fab expenditures will be on end user consumable goods that are subject to local sales tax and the proprietary nature of such information, it is not possible to estimate additional sales tax revenues that will be generated directly by the Project. However, the Project is expected to have a positive impact on Town sales tax revenues given that (1) the increased property value assessment of Town property resulting from the Project will likely increase the Town's share of sales tax revenues split among the various municipalities of Saratoga County, and (2) the Project's overall impact on sales tax receipts County-wide is likely to be much higher through the increased economic activity stemming from ancillary industry throughout the municipalities in Saratoga County generated by the Project, the commute of workers from around the region to the Project site, and the increased economic activity likely to result from the high salaries earned by residents employed by the Project.
****It is expected that the Project will receive New York State and Federal funding for off-site improvements, such as road improvements, necessitated by the Project. Depending on these grants are structured, the Town may experience an increase in the Intergovernmental Revenue category.
*****The All Other category of revenue includes revenues collected from licenses and permits. The Project is likely to generate an unknown amount of additional revenue in this category.
(Source: Based on data provided by Comptroller's Special Report on Local Government Finances for New York State, Town Data for Local Fiscal Years Ended in 2001, Released April 2003; Saratoga County Treasurer, 2002 Town Tax Roll; and industry data provided by Abbie Gregg, Inc.)

Table 2.4.12.D
Town of Stillwater
Application of Additional Estimated Tax Revenues Derived from Project According to Expenditure by Function Based on Fiscal Year 2001 Town Data

Function	2001 Expenditure ($)	Percent of total Expenditures	Add'l Est. Revenue*
General Government	$501,000	15%	$264,376 to $330,455
Police	$180,700	6%	$105,750to $132,182
Fire	$0	0%	$0
Other Public Safety	$65,000	2%	$35,250 to $44,061
Health	$70,300	2%	$35,250 to $44,061
Transportation	$1,390,200	43%	$757,878 to $947,305
Economic Assistance	$13,600	<1%	<$7,050 to <$8,812
Culture-Recreation	$146,600	4%	$70,500 to $88,121
Home and Community Services	$902,100	28%	$493,502 to $616,850
Total	$3,269,500	100%	$1,762,506 to $2,203,036

*Ranges depict estimated revenues based on 4 Fabs, 20% in Stillwater to 1 Fabs, 100% in Stillwater.
(Source: Based on data provided by Saratoga County Treasurer, 2002 Town Tax Roll; Industry information provided by Abbie Gregg, Inc.; and the Comptroller's Special Report on Local Government Finances for New York State, Town Data for Local Fiscal Years Ended in 2001, Released April 2003.)

Sales Tax Revenues: *Sales tax is generally applied to the end-user purchaser of consumable goods. Thus, like most states, New York exempts from sales tax purchases of such things as raw materials, machinery, equipment, parts, tools, supplies, utilities, and fuel used or consumed in the production process. As manufacturers of wafers, which are themselves incorporated into other products prior to sale to the end-user, many of the goods and materials purchased by the Project anchor tenants will not be subject to sales tax. The majority of purchases made by the Project anchor tenants that will be sales taxable will generally fall under the category of office materials and supplies, such as paper goods and office equipment. Due to the proprietary and highly variable nature of such purchases, it is not possible to calculate the estimated sales tax revenues that may be generated directly by the Project. However, it can generally be assumed that the Project will have a positive impact on Saratoga County sales tax revenues and, therefore, a positive impact on that portion of County sales tax revenues allocated annually to Malta and Stillwater. In addition to direct taxable expenditures made by the anchor tenants, total County sales tax receipts are likely to be positively affected by workers commuting to the Project site from around the region, the higher salaries earned by residents employed by the LFTC that will increase spending power of area residents, and increased economic activity stemming from ancillary industry attracted by the Project to municipalities throughout Saratoga County.*

Moreover, not only is the Project expected to increase total County sales tax receipts, it is also anticipated that the Project will increase the percentage of all tax receipts allotted to both towns under the formula used to divide local tax receipts among participating municipalities in Saratoga County. All County sales tax receipts are divided among Saratoga County and participating municipalities within the County. According to the Saratoga County Treasurer, during fiscal year 2002, the Town of Malta was apportioned 3.34% of all County sales tax receipts while the Town of Stillwater received 1.6% of the same. However, it is anticipated that

the share of County tax receipts allotted to both towns will increase under the formula used to divide the receipts due to the increased property value assessment of property in both towns expected to result from the Project.

School: For a discussion of the Project's anticipated impact on the Ballston Spa Central and Stillwater Central School Districts, see Response to Comment #2.4.17.

Cost Analysis: In addition to the geographically specific data provided above, the applicant also requested that Empire State Development ("ESD") input additional data into its proprietary economic model so as to get a better feel for the fiscal costs associated with the LFTC as they compare to the fiscal benefits, which was the focus of the first set of data generated by ESD's model and cited in Appendix B of the Draft GEIS (see Section 3.J., pages 35-37, of Appendix B, and footnote (1) in Section 3.E., page 30, of Appendix B). ESD's model is only able to quantify the Project's estimated fiscal benefits and costs to New York State and local governments in upstate New York generally; it cannot identify the specific fiscal benefits and costs to any particular municipality, like Malta or Stillwater. However, given the nature of this Project, which is part of larger effort by New York State to promote nanoelectronics manufacturing statewide and which is expected to draw employees from all over the Capital Region within commuting distance, the ESD model provides a good estimation of the costs and benefits to New York State and municipalities over the entire project area, which can generally be conceived of as the Capital Region. A complete copy of ESD's Benefit Cost Analysis Report can be found below (the "Report").

Perhaps the most insightful data provided by the Report is the fiscal internal rate of return for all state and local governments, which equates the Project's stream of net benefits over the 10-year period of analysis to the fiscal cost in the initial project year. According to the Report, for every dollar invested by state and local governments in connection with the first Fab, they will reap a return of 406% to 407% over a 10-year period. The rate of return will then rise with the introduction of each successive fab until the rate of return reaches 499% to 500% with the fourth Fab at full build-out. What this means, according to the Report, is that state and local governments would recover costs associated with the Project in just one year from the Project's overall economic benefits (direct and indirect).

It should be noted that the input data used to generate this Report differed slightly from the input data used to generate the first results of the ESD model discussed in Appendix B of the Draft GEIS. First, more detailed information about LFTC costs were input the second time the model was run so as to generate the Report. As a result, the Report provides more data than was originally available at the time that Appendix B was written. Secondly, the first Project year (i.e., the year construction begins or when State or Local government costs are incurred) was changed from 2003 used in the first run of the model to 2004 at the suggestion of the Town of Malta's advisors to reflect the fact that the Project schedule has been pushed out slightly due to a longer SEQR review period than initially anticipated. Although the start year was pushed back one year, the Project salaries were not adjusted to reflect inflation that generally causes salaries to go up over time. Therefore, the number of indirect (or ancillary) jobs predicted by the Report are slightly lower than the number predicted by the first run of the ESD model cited in Appendix

B, i.e., the Report predicts the creation of 20 – 23 fewer permanent ancillary jobs and 94 fewer construction jobs after the first Fab than the first model results reported in Appendix B. Finally, it should also be noted that the construction and ramp up schedule for the four Fabs differs from the ramp up schedule provided in the remainder of the DGEIS and FGEIS in that it is slightly accelerated and shortened. This is due to the fact that this was the schedule under consideration when the Project was first analyzed by ESD. However, as the SEQR process progressed, the schedule was further modified. When ESD was asked to re-run its program to include additional data so as to better reflect fiscal costs, ESD used the input data previously provided without revising it - only adding to the previously provided information some additional cost data.

In keeping with the above and additional information about how the data previously provided by ESD should be interpreted, Table 3.J.1 (now known as Table 2.4.12.E), page 37, of Appendix B, shall be revised as follows:

Table 2.4.12.E
ESD Proprietary Upstate New York Economic Model Indirect Impact Results

	Ancillary Permanent New Jobs	Temporary Construction Jobs generated by Ancillary Development*	Fiscal Benefits resulting from Ancillary Development**
1st Fab	1,456 to 1,724	3,581	$111,691,000 to $127,681,000
Full Build-out (4 Fabs)	5,824 to 6,936	12,967	$436,248,000 to $513,292,000

*Construction jobs means the estimated average annual number of full-time, contractual and part-time jobs. **Fiscal benefits means the estimated tax revenues flowing to New York State and local governments generated by ancillary development activity, including estimated personal incomes, corporate and business incomes, excise and user taxes, negative transfers and other taxes. The benefits reported are the sum of total annual indirect fiscal benefits to state and local government over the 10-year period of analysis.
(Source: ESD based on data provided by SEDC and industry consultants, AGI).

Moreover, footnote (1) in Draft GEIS, Section 3.E., page 30, of Appendix B, shall be revised to read as follows: "In concert with the data provided in this section, Empire State Development's proprietary economic model, using information provided by SEDC, estimates the annual tax revenues flowing to New York State and local governments in the form of personal incomes from Project employees, business income tax excise and user taxes, negative transfers and other taxes as a direct result of 4 Fabs would be $101,801,000 to $121,133,000."

The following is the Report generated on May 14, 2003 in its entirety:

ESD Benefit Cost Analysis: Luther Forest Technology Park Project (Saratoga County)

The attached table provides the results of the Luther Forest Technology Park Project (the "Project"; SIC 36-- semi-conductor chip manufacturing) using revised details as discussed.

NOTE: Employment ramps up over a 3 to 5 year period after an initial 2-year construction period in the Low and High cases, respectively. The Project is evaluated over a 10-year period so that Project impact will include several years at full capacity employment. All dollar values are expressed in year 2003 dollars. Benefits to the Project that are as-of-right are not counted as cost to state or local governments. The analysis considers only discretionary costs where they are known.

Assumptions:

- ***Four scenarios are considered. A Low Case and High Case are estimated for each of four chip fab facilities. Construction cost for each facility is assumed to be $500 million over 2 full years. Employment in the Low Case is assumed to be 1,800 ramped up over 3 years and 2,500 in the High Case ramped up over 5 years.***

	Construction Period	*Employment Ramp Up Period*
Fab #1 Low Case:	*2004-2006*	*2006-2008*
Fab #1 High Case	*2004-2006*	*2006-2010*
Fab #2 Low Case:	*2006-2008*	*2008-2010*
Fab #2 High Case:	*2006-2008*	*2008-2012*
Fab #3 Low Case:	*2009-2011*	*2011-2013*
Fab #3 High Case:	*2009-2011*	*2011-2015*
Fab #4 Low Case:	*2013-2015*	*2015-2017*
Fab #4 High Case:	*2013-2015*	*2015-2019*

- ***Weighted Average Annual Salary: $73,750***

- ***Project is located in the Saratoga County.***

- ***Assumed NYS residents will hold 99% of the jobs (model default for the area).***

- ***Displacement effect of this assisted project on other NYS-based competitors is assumed to be 20%.***

- ***<u>Sales Tax Exemption on Construction Materials</u>: Although the Project is eligible for reimbursement of NYS sales tax on construction materials through the Empire Zone Program, the analysis assumes that the Project will use the sales tax exemption (both state and local) through the IDA. For both High and Low cases, it is assumed that 7% on 50% of construction expenditures is exempted.***

NYS STE	*$2,500,000*	*Year 1 (starting mid-year)*
	$5,000,000	*Year 2*
	$2,500,000	*Year 3 (through mid-year)*
Local STE	*$1,875,000*	*Year 1 (starting mid-year)*
	$3,750,000	*Year 2*
	$1,875,000	*Year 3 (through mid-year)*

- ***The analysis assumes that there will be a PILOT paid to the IDA equal to the full-assessment tax liability that would have been paid to local taxing jurisdictions. The***

PILOT will be disbursed by the IDA to the appropriate jurisdictions. No property tax will be abated or exempted, therefore, there is no cost to local government.

- ***Project is eligible for energy cost savings through the Empire Zone Tariff as of right.***
- ***The project may be exempted from payment of the Mortgage Recording Tax for both NYS and local government. There is insufficient information at this time to determine the cost to state and local government.***
- ***A proposed county-wide water system under consideration by the county depends upon a single large user to allow the water system project to go forward. In this case, the Project would not have caused the county to make the infrastructure investment sooner than planned, since, in the absence of the Project (or other large user), the proposed water system would not be undertaken.***

ESD Benefit Cost Analysis : Luther Forest Technology Park Project (Saratoga County)

	Fab #1 Low Case	Fab #1 High Case	Fab #2 Low Case	Fab #2 High Case	Fab #3 Low Case	Fab #3 High Case	Fab #4 Low Case	Fab #4 High Case
Jobs (Permanent Resident NYS)								
Direct	994	1184	994	1184	994	1184	994	1184
Indirect	1456	1734	1456	1734	1456	1734	1456	1734
Total	2451	2917	2451	2917	2451	2917	2451	2917
Construction-Related Job Years[3]								
Direct	3543	3543	3365	3365	3114	3114	2808	2808
Indirect	3581	3581	3401	3401	3147	3147	2838	2838
Total	7125	7125	6766	6766	6261	6261	5647	5647
Fiscal Cost[4]								
NYS Government	$9,428,018	$9,428,018	$8,886,811	$8,886,811	$8,132,691	$8,132,691	$7,225,791	$7,225,791
All Government	$16,499,032	$16,499,032	$15,551,920	$15,551,920	$14,232,210	$14,232,210	$12,645,134	$12,645,134
Fiscal Benefits[5]								
NYS Government (Direct)	$48,137,980	$55,082,158	$47,690,350	$54,634,527	$47,060,812	$54,004,989	$46,293,846	$53,238,023
NYS Government (Dir.+Indir.)	$94,454,119	$107,301,402	$93,354,293	$106,201,576	$91,807,521	$104,654,804	$89,923,088	$102,770,371
All Government (Direct)	$237,878,276	$250,433,441	$239,720,421	$252,275,585	$238,470,762	$251,025,927	$236,948,303	$249,503,468
All Government (Dir.+Indir.)	$332,526,817	$357,198,742	$333,051,426	$357,723,352	$329,948,813	$354,620,739	$326,168,900	$350,840,826
Fiscal Cost per Direct Job								
NYS Government	$9,482	$7,965	$8,938	$7,508	$8,180	$6,871	$7,267	$6,105
All Government	$16,594	$13,939	$15,642	$13,139	$14,314	$12,024	$12,718	$10,683
Fiscal Cost per Job (Dir.+Indir.)								
NYS Government	$3,847	$3,232	$3,626	$3,046	$3,319	$2,788	$2,949	$2,477
All Government	$6,733	$5,656	$6,346	$5,331	$5,808	$4,879	$5,160	$4,334
Fiscal Benefit/Cost Ratio[6]								
NYS Government	10.02	11.38	10.50	11.95	11.29	12.87	12.44	14.22
All Government	20.15	21.65	21.42	23.00	23.18	24.92	25.79	27.75
Fiscal IRR[7]								
NYS Government	171%	168%	174%	171%	179%	175%	185%	181%
All Government	407%	406%	429%	428%	458%	457%	500%	499%
Fiscal Payback Period[8]								
NYS Government	2	2	2	2	2	2	2	2
All Government	1	1	1	1	1	1	1	1
Economic Benefits[9]	$1,378,572,546	$1,555,388,501	$1,369,724,706	$1,546,540,662	$1,353,440,879	$1,530,256,834	$1,333,602,290	$1,510,418,245
Economic Benefits per Total Job	$562,554	$533,154	$558,944	$530,121	$552,299	$524,540	$544,203	$517,739
Economic Benefit/Cost Ratio[10]	83.55	94.27	88.07	99.44	95.10	107.52	105.46	119.45
Economic IRR	1644%	1643%	1678%	1677%	1723%	1722%	1787%	1786%
Economic Payback Period[11]	1	1	1	1	1	1	1	1

[1]Dollar values are present value calculated over a 10-year period. Separate evaluations are made and reported for New York State government assistance and for All government (State and Local).
[2]Permanent resident jobs are average annual jobs estimated over the 10-year project evaluation period.
[3]Construction job years express the average annual number of full-time, contractual, and part-time jobs engaged in a project's construction activities.
[4]Fiscal cost includes the value of grants, loans, and associated default risk, and discretionary subsidies, such as tax exemptions or abatements on sales, property, and interest income.
[5]Fiscal benefits are the tax revenues flowing to NYS and Local governments generated by the project activity. This includes estimated taxes on personal incomes from project direct and indirect employment, corporate and business incomes, excise and user taxes, property taxes, negative transfers, and other taxes.
[6]Fiscal benefit/cost ratio is the ratio of tax revenues flows from project-related direct and indirect activity to project fiscal cost.
[7]Fiscal internal rate of return (IRR) is the rate of return that equates a project's stream of net benefits over the evaluation period to the fiscal cost in the initial project year. The fiscal IRR is computed for NYS government and for All government (State and Local).
[8]Fiscal payback period is the time (years) in which project cost would be recovered from tax revenue flows from project related activity (direct and indirect).
[9]Economic benefits are estimated project benefits measuring fiscal flows to government plus net resident disposable income from project employment (direct and indirect) net of transfers, without adjusting for individual income earners' opportunity cost of employment.
[10]Economic benefit/cost ratio is the ratio of economic benefits from project direct and indirect activity to All government fiscal cost.
[11]Economic payback period is the time (years) in which project cost to All governments would be recovered from the project's overall economic benefits (direct and indirect).

13. Comment: The report states that the total assessed valuation of all properties in the Town of Malta are approximately $735-million and that the potential impact of this project on taxable assessed valuations is "remarkable". In support of this statement the report states that if a PILOT (payment in lieu of taxes) is used for improvements they cannot be taxed and only land is subject to taxation. While the Applicant has not indicated if a PILOT would be pursued it would be a likely scenario based on the scope of the development. As part of the PILOT program an Industrial Development Authority, a public corporation, would issue bonds for the useful life of the improvements (i.e. 20 years). After the bonds are retired the improvements becomes the property of the firm; whose faith and credit is behind the bonds. Given this scenario the report states the assessed value for the proposed project is $6,362,305 (based solely on the land value exclusive of any improvements) while the current assessed value for land is $1,276,388, resulting in a net increase of $5,085,917 in assessed valuation. This increase of $5,085,917 in assessed value, due to the project, compared to the current total assessed value of $735 million for the Town of Malta represents an increase of 0.7%. This is not remarkable. In fact, as the Town's assessed value increases over time due to other development, the 0.7% increase will decrease as a percent of the whole.

Response: Following more detailed discussions with members of the nanotechnology industry, the applicant has offered to include, as a condition of the PDD, a requirement that any development in LFTC for which a PILOT is sought must provide that PILOT recipients pay to the IDA the equivalent of taxes that would be incurred by the property at its full assessment value, which monies the IDA would then re-distribute to the local taxing jurisdictions in the same proportion as those jurisdictions would have received had the taxes been paid directly to the local tax collector. Thus, there would be no abatement of property taxes. Instead, the tenants of LFTC would retain the option of applying for IDA benefits that would exempt them from the local portion of the sales tax on eligible construction purchases (not including labor) and exemption from the mortgage recording tax, if applicable. These benefits would only be applicable, however, to those companies seeking mortgage financing and/or eligible costs not already exempt from the state and local sales tax under state law.

The PILOT originally described in Appendix B, which provided for a reduced assessment limited to the increased value of the purchase price of the land, was included based on assumptions that if Empire Zone benefits, for whatever reason, are not available, a PILOT of the sort described might be used instead. However, based on input from members of the nanotechnology industry, it has been discovered that if Empire Zone benefits are not available, it is unlikely that any nanotechnology manufacturers would locate to the site. Therefore, if, for some reason, Empire Zone benefits are generally not available to tenants of LFTC, the Project as described in Appendix B and the DGEIS generally will not come to fruition in which case the applicant might seek to amend the PDD Master Plan and Regulations to accommodate another type of economically feasible industrial development.

In accordance with the above, all reference in Appendix B to a PILOT for LFTC properties should be amended to provide that the PILOT will not result in a reduction of real property taxes assessed against the property and collected by the IDA for dispersal to the local taxing jurisdictions. In particular, the following tables contained in the Draft GEIS, Appendix B are revised as follows:

Table 2.4.13.A
(previously Table 3.E.1)
Town of Malta Estimated Assessed Value of
Project Property During Project Phases

Project Phases	Estimated Assessed Value
Current Assessed Valuation:	
Town of Malta Current Total Assessed Valuation	$734,912,139
Project Property Current Assessed Valuation**	$1,276,388
Project Phases/Scenarios:	
1st Fab 100% in Malta*	$506,362,305
4 Fabs of which 80% in Malta*	$1,606,362,306

*Applicant assumes that the assessed valuation would be equal to the purchase price of the parcels + $500 Million per each Fab. These values may differ from the values eventually assigned by the Town Assessor.
**When the Fisher Act partial exemption is taken into account, the total current assessed valuation used to calculate the general town, county, and school tax levy is $1,186,665.
(Source: Based on data provided by Saratoga County Treasurer, 2002 Town Tax Roll and AGI)

Table 2.4.13.B
(previously Table 3.E.2)
Town of Stillwater Estimated Assessed Value of
Project Property During Project Phases

Project Phases	Estimated Assessed Value
Current Assessed Valuation:	
Town of Stillwater Current Total Assessed Valuation	$338,674,439
Project Property Current Assessed Valuation	$608,708
Project Phases/Scenarios:	
1st Fab 100% in Stillwater*	$501,050,231
4 Fabs of which 20% in Stillwater*	$401,050,231

*Applicant assumes that the assessed valuation would be equal to the purchase price of the parcels + $500 Million per each Fab. These values may differ from the values eventually assigned by the Town Assessor.
(Source: Based on data provided by Saratoga County Treasurer, 2002 Town Tax Roll)

Table 2.4.13.C
(previously Table 3.E.3)
Town of Malta Real Property and School Taxes During Project Phases

	Est. Town Tax Liability (Vol Amb. Corps Tax)	Est. Effect on Town Tax Rate for all Town Taxpayers	Est. County Tax Liability	Est. Effect on County Tax Rate for all Town Taxpayers	Est. School Tax Liability	Est. Effect on School Tax Rate for all Ballston CSD Taxpayers	Est. Fire Dist. Tax Liability	Est. Effect on Fire Dist. Tax Rate for Dist. Taxpayers
1st Fab 100% in Malta	$20,254	-42%	$1,326,668	-6%	$11,434,667	-32%	$404,068	-80%
4 Fabs of which 80% in Malta	$64,254	-70%	$4,208,668	-18.70%	$36,274,867	-60%	$1,284,068	-254%

(Source: Based on data provided by Saratoga County Treasurer, 2002 Town Tax Roll; Ballston Spa Central School District Transaction History dated 11/15/01, the Town of Malta Comptroller's Office, and the New York State Office of Real Property Services)

Table 2.4.13.D
(previously Table 3.E.4)
Town of Stillwater Real Property and School Taxes During Project Phases

	Est. Town Tax Liability	Est. Effect on Town Tax Rate for all Town Tax Payers	Est. County Tax Liability	Est. Effect on County Tax Rate for all Town Tax Payers	Est. School Tax Liability	Est. Effect on School Tax Rate for all Still. CSD Tax Payers
1st Fab 100% in Stillwater	$721,512	-63%	$1,543,234	-11%	$9,114,099	-65%
4 Fabs of which 20% in Stillwater.	$577,512	-58%	$1,235,234	-20.7%	$7,295,099	-60%

(Source: Based on data provided by Saratoga County Treasurer, 2002 Town Tax Roll; Stillwater Central School District, and the New York State Office of Real Property Services)

14. Comment: The Economic impact analysis infers or concludes that the fiscal impacts on the Town's general fund, highway fund, fire district and school district are positive. However, there is no documentation of this statement from the application of a fiscal model with input and output data and data sources to demonstrate this. For example, the report states that under the PILOT the Town of Malta fire district will receive $254 a year in taxes from the project. This is not sufficient funds to meet the needs for fire facilities, equipment and manpower to meet the demands of the project and the necessary criteria for the Town to maintain the insurance rates for its property owners.

Response: All fire, ambulance, library, lighting and other special district taxes will be paid in full. The statement regarding the $254 a year in fire taxes applies to the current condition, and

is not applicable to future development scenarios. See the Response to Comment #2.4.12 for an analysis of the LFTC's impact on Town revenues. Also, see Response to Comment #2.4.17 for an analysis of the LFTC's impact on applicable School Districts, and Response to Comment #2.4.13 describing limitations that have been placed on any PILOT applied to properties within LFTC.

15. Comment: The proposed economic impact analysis needs to be able to determine the fiscal impacts of the project on their respective funds based upon documented input data and the output data that is documented and analyzed. This is necessary for Town's to determine if the project's potential impacts and the appropriate level of mitigation required. The Fiscal Impact Handbook, published by the Center for Urban Policy Research, identifies several models and their applications. There are several standard models such as the Capital District Regional Planning Agency's and the MUNIES Model. The key factors would be:

- Cost of operations and capital improvements for construction and maintenance of roads;
- Cost of fire operations, facilities and equipment;
- Cost of operations and capital improvements of the general town government; and
- Cost of capital improvements and operation of the school district and utilities to serve the project.

The fiscal impact analysis should be conducted for each phase of the project including build out for the various tax incentive packages which may be pursued by the project (PILOT , Empire Zone, Full Assessment, etc).

Response: See the Response to Comment #2.4.12 for an analysis of the LFTC's impact on Town revenues. Also, see Response to Comment #2.4.17 for an analysis of the LFTC's impact on applicable School Districts. Moreover, see Response to Comment #2.4.13 describing limitations that have been placed on any PILOT applied to properties within LFTC. Finally, see Responses to Comments #2.9.5 and #2.9.7 describing impact of the LFTC on Town costs.

16. Comment: The GEIS should include a summary of each required infrastructure improvement, the estimated construction costs and the funding sources to be utilized to complete the work.

Response: See Response to Comment #2.4.6 for a discussion of how infrastructure improvements will be funded.

17. Comment: The LFTC will cause a significant increased demand for housing in Malta and Stillwater. The increased student population attendant with new housing will burden our existing school systems, especially Ballston Spa Schools which is already growing so fast that it is one of the largest districts in the State, and has class sizes of up to 50 students.

Response: As noted in Response to Comment #2.4.9, growth resulting either directly or indirectly from the LFTC will be determined and controlled by the governments of both Towns through their local zoning and other land use controls. Because the Project involves principally commercial, as opposed to residential, development, it will not in and of itself generate school children; nor is it expected to have any significant impact on the population of school age children in Malta and Stillwater given that it is anticipated that there will be sufficient capacity in the existing Capital Region workforce to accommodate the hiring needs of the LFTC. See the Response to Comment #2.4.18 for a more detailed explanation of the workforce. However, in order to provide the Towns of Malta and Stillwater and the directly affected school districts with some guidance, Tables 2.4.17.A and 2.4.17.B below attempt to estimate the number of students whose educational costs could be financed by the anticipated Project school tax revenues based on the school tax rates in force for the most recent tax year. This data may be helpful to the Town governments during their periodic review of zoning and other local controls intended to direct the growth of their municipalities.

Based on the data available with respect to expenditures per pupil by the relevant school district, the estimated school taxes to be derived from the LFTC in terms of one Fab and at full-build out, and local population data, the Project could directly support an estimated 1,009 (one Fab) to 3,200 (full build-out) students in the Ballston Spa School District, which correlates to approximately 1,506 (one Fab) to 4,776 (full build-out) households in the Town of Malta. Similarly, the Project could directly support an estimated 809 (one Fab entirely in Stillwater) to 647 (full build-out with 20% in Stillwater) students in the Stillwater Central School District, which correlates to approximately 1,024 (one Fab entirely in Stillwater) to 819 (full build-out with 20% in Stillwater) households in the Town of Stillwater.

Depending on the degree to which the Towns decide to limit housing growth, the additional school tax revenues provided by the LFTC can be used to either reduce the school tax burdens of taxpayers within the applicable school districts or to offset the increased expense of educating more children that join the school districts. For example, if the Town of Malta and the other municipalities that participate in the Ballston Spa Central School District elect to adopt a no growth policy, the School District could use the additional Project school tax revenues associated with the first Fab to pay the educational costs of up to 1,009 existing students and reduce the overall school tax rate for all taxpayers in the district. On the other hand, if the Town of Malta chose to encourage the town's population to grow to the estimated build-out population provided in the Comprehensive Plan of 23,617, which would require the introduction of approximately

4,331 additional households with an estimated 2,902 children under the age of 19 associated therewith, it could "fund" the estimated cost of educating a little more than one third of those new children through the Project school tax revenues alone.

Table 2.4.17.A
Town of Malta
Estimated Number of Households for which Educational Costs Could be Directly Funded by School Tax Revenues Derived from the Project

	Est. Project School Tax Revenues	Cost Expended Per Pupil By Ballston Spa CSD (2000-2001)*	Est. # of Students supported by Project Tax Revenues	Average # of Children <18 Per Household	Est. # of Households Project Tax Revenues would fund ed. costs
1st Fab, 100% Malta	$11,434,667	$11,337	1,009	.67	1,506
4 Fabs, 80% Malta	$36,274,867	$11,337	3,200	.67	4,776

*The cost expended per pupil is based on the actual cost per pupil (including State aid) for the most recently reported school year of 2000-2001 without the addition of an "escalation factor" to reflect adjustments for inflation, etc. For the sake of interpreting this data, based on expenditure per pupil data provided by the Department of Education dating back to the 1993-1994 school year, the average annual increase in expenditure per pupil in the Ballston Spa CSD was approximately $262 over that period. However, it should be kept in mind that the estimated Project school tax revenues cited above are also static having been based on the 2002 Tax Roll and have not been adjusted for inflation or other factors. Furthermore, the cost expended per pupil is not related to the amount of tax revenues available; thus, any increase in cost per pupil will be shared by the available taxpayers for a given year regardless of whether the Project is approved or not.

(Source: Based on data provided by Saratoga County Treasurer, 2002 Town Tax Roll; Industry information provided by Abbie Gregg, Inc.; the Department of Education at http://www.oms.nysed.gov/faru/Profiles/profiles_cover.htm; and 2000 US Census.)

Table 2.4.17.B
Town of Stillwater
Estimated Number of Households for which Educational Costs Would be Directly Funded by School Tax Revenues Derived from the Project

	Est. Project School Tax Revenues	Cost Expended Per Pupil By Ballston Spa CSD (2000-2001)*	Est. # of Students supported by Project Tax Revenues	Average # of Children <18 Per Household	Est. # of Households Project Tax Revenues would fund ed. costs
1st Fab, 100% Stillwater	$9,113,099	$11,269	809	.79	1,024
4 Fabs, 20% Stillwater	$7,295,099	$11,269	647	.79	819

*The cost expended per pupil is based on the actual cost per pupil (including State aid) for the most recently reported school year of 2000-2001 without the addition of an "escalation factor" to reflect adjustments for inflation, etc. For the sake of interpreting this data, based on expenditure per pupil data provided by the Department of Education dating back to the 1993-1994 school year, the average annual increase in expenditure per pupil in the Stillwater CSD was approximately $400 over that period. However, it should be kept in mind that the estimated Project school tax revenues cited above are also having been based on the 2002 Tax Roll and have not been adjusted for inflation or other factors. Furthermore, the cost expended per pupil is not related to the amount of tax revenues available; thus, any increase in cost per pupil will be shared by the available taxpayers for a given year regardless of whether the Project is approved or not.
(Source: Based on data provided by Saratoga County Treasurer, 2002 Town Tax Roll; Industry information provided by Abbie Gregg, Inc.; the Department of Education at http://www.oms.nysed.gov/faru/Profiles/profiles_cover.htm; and 2002 US Census.)

18. Comment: The GEIS provides no documentation to support the assertion (on page 6) that the Project jobs and ancillary development can be filled from the local and regional population. The document states that there are 4,017 people unemployed in Saratoga County, but does not discuss what percentage of that population has the requisite skills necessary for this work. Page 29 states that the technicians require an associates degree in nanoelectronic manufacturing technology, and operators must have a GED or high school diploma, and more often, an associates degree in nanoelectronic manufacturing. The GEIS should describe any programs (or lack thereof) to reeducate those employees that have been recently laid off from tissue manufacturing plants for this type of work.

Response: As noted in the Draft GEIS, Section 3.B., pages 25-27 of Appendix B, New York State has taken a comprehensive approach towards attracting high-technology industries, such as nanoelectronics manufacturing. The State calls its program the Semiconductor Manufacturing Initiative (SEMI-NY), which was formally created by Governor Pataki in 1997. See, http://www.semi-ny.com/portal/flashed.html. Following a comprehensive study of New York's resources and needs, as well as the needs and prospects for growth of high technology industry, Governor Pataki concluded that nanoelectronics manufacturing would be a good fit with and should be encouraged in New York State. In particular, analysts working with the Governor's Office noted that New York State's highly educated and skilled workforce would be attractive to and benefit from the nanotechnology industry. This is particularly important since industry experts have indicated to the Applicant that this industry will not even consider locating in an

area unless it is certain that at least 80% of its workforce can be supplied by the existing population given that recruiting and other costs associated with attracting workers from outside the area are prohibitive.

In order to prepare the local workforce for new job opportunities in nanotechnology, New York State has taken a multi-pronged approach. One component of the SEMI-NY program involves encouraging community colleges in and around proposed semiconductor sites to incorporate programs into their curricula to provide the local population with the skills necessary to find employment with semiconductor manufacturers, mainly in production positions, which account for approximately 55% of a Fab's workforce. Thus, more than 10 community colleges throughout New York State offer or will soon offer a degree in semiconductor manufacturing technology. In particular, Hudson Valley Community College ("HVCC"), Adirondack Community College ("ACC"), Schenectady County Community College ("SCCC"), and Mohawk Valley Community College ("MVCC") all have plans to offer degree and non-degree programs in nanotechnology. The existence of such programs ensures that the existing population will benefit from the new jobs that are created when a wafer Fab is built in their area. See, Section 3.B., page 26, of Appendix B.

For example, in a recent conversation with the director of Institutional Research and a staff member of the Workforce Development Institute at HVCC, the staff indicated that HVCC and the 25 other "tech valley" colleges and universities, including SCCC and ACC, have held a series of meetings with nanotechnology advisors and educational experts to identify the training needs of nanoelectronics manufacturers and spin-off facilities in order to develop degree and non-credit skills training programs. In fact, HVCC has received approval for a nanotechnology degree program that will be an offshoot of the college's existing electrical technician program. Current students enrolled in the electrical program will be given the option of switching to nanotechnology as early as the Fall of 2003 in which case HVCC anticipates that it will have as many as 25 students graduating with nanotechnology degrees by the Spring of 2004. Thereafter, HVCC will expand the program as needed to meet local demand.

In addition, Project Lead The Way Inc. (PLTW), a national program forming partnerships among public schools, higher education institutions and the private sector to increase the quantity and quality of graduating engineers and engineering technologists, was founded in upstate New York in cooperation with HVCC, RPI, and the New York State Education Department. This innovative program has developed a sequence of technology courses combined with traditional science and mathematics courses which introduces high school students to the scope, rigor, and discipline of engineering and engineering technology prior to entering college. A majority of the public high school districts in Saratoga County participate in PLTW.

At the other end of the educational spectrum, New York State has also provided support and encouragement to its institutions of higher learning to help fuel research and development that is the backbone of high technology industries and produce graduates with bachelors and advanced degrees in fields directly related to the nanoelectronics industry. Thus, New York State created the Centers for Advanced Technology Program ("CAT") in which participating universities concentrate on specific areas of advanced technology that have the potential for economic growth

with State support. There are 13 CATs scattered throughout the State, including five in the Capital Region (three at the Rensselaer Polytechnic Institute ("RPI") and two at SUNY Albany). See Draft GEIS, Section 3.B., page 26 of Appendix B.

Universities in the Capital Region are already producing graduates with degrees suitable for the nanoelectronics industry. For example, according to the Senior Associate Director of the Career Development Center at RPI, 1,530 students are either currently enrolled or graduating this year with degrees from programs relevant to the nanoelectronics manufacturing industry. Moreover, RPI has already cultivated strong relationships with nanoelectronics industry employers, such as IBM, Philips, Advanced Micro Devices, Micron, Intel, Applied Materials, and Texas Instruments. RPI Graduates with degrees in chemical engineering, electrical engineering, industrial and management engineering, and mechanical engineering have already found positions with these companies.

In addition to the formal collegiate programs described above, New York State offers training assistance directly to high-tech companies to help them acquire skilled workers. For instance, Empire State Development will provide individual companies with coordinated and customized job training assistance using State and federal sources of funding. Training programs are also provided to the general population of local communities by the New York State Department of Labor and Workforce New York. See, http://www.semi-ny.com/workforce.asp.

Local Workforce Investment Boards responsible for planning, coordinating, and monitoring federally funded worker training programs under the federal Workforce Investment Act of 1998 ("WIA") are also actively studying the needs of nanoelectronic manufacturers in response to the anticipated growth of high technology industries in New York State. WIA services are provided through a One-Stop delivery system in each County that provides a full range of services, including employment, training, and education services for job seekers to adults, dislocated workers, and youths. In particular, the Saratoga-Warren-Washington Workforce Investment Board ("SWWWIB") is planning programs to help displaced workers from the recent paper plant closures and other mass layoffs that have affected area residents obtain the skills necessary to find employment in those sectors of the economy likely to experience growth, such as high technology. According to the director of SWWWIB, there is a growing emphasis among all of the workforce investment boards in the Capital Region on preparing the local workforce for jobs in nanoelectronics manufacturing and related high technology industries.

Many of the job requirements for nanoelectronics manufacturing can be met by workers in related fields with little or no retraining. A recent presentation prepared by Capstone, Inc. and Bishop House Consulting, Inc. entitled, Human Capital: Preparing and Transforming a High Tech Work Force, which is available at http://www.bishophouse.com, discusses the skills, aptitude, behavior and personality traits needed by employees engaged in nanoelectronics manufacturing (the "Capstone Report"). According to the Capstone Report, nanoelectronics manufacturing employees ideally should have a technical background and/or a background in process technology, an understanding of equipment and equipment sets, familiarity with data management and statistics, as well as the ability to effectively manage dozens and dozens of tools.

The Capstone Report also breaks down the various types of jobs within a Fab. Such jobs include Fabrication Operator/ Assembler; Process Technician; Chemical Mix Technician; Process/ Product Engineer; Production Supervisor; and Fabrication Manager/ Director. The common denominator for these positions includes an aptitude for math, good problem solving skills, and an attention to detail. According to the Capstone Report, Fabrication Operators or Assemblers generally require only a high school education and some college while S/C Process Technicians and lower level Chemical Mix Technicians often require an associates degree in nanotechnology or a related field, such as electronics, or equivalent work or military experience. S/C Processors and Product Engineers, Production Supervisors, Senior Chemical Mix Technicians, and Fabrication Directors must have a bachelors or more advanced degree and/or experience in job related fields like electrical engineering, material science, or chemical engineering.

In particular, the Capstone Report suggests that persons currently employed in the following fields are likely to find employment in nanoelectronics manufacturing production jobs (i.e., the 55% of Fab workforce devoted to production): laboratory technician; welder, sheet metal fabricator, hospital technician, assembler, maintenance technician, machine operator, electronic equipment handler, boiler technician, and mechanical technician. Jobs of equivalent skill levels and responsibility within the Fab would include: fabrication operator, process technician, fabrication assembler, process engineer, equipment technician, chemical mix technician, and inspector.

The Capstone Report's findings were generally confirmed during a recent conversation with the Director of Career Planning and Placement at HVCC who indicated that students and adults with technical aptitude and backgrounds will likely find employment with new nanotechnology firms locating in our area. In fact, some HVCC students graduating from the college's existing electrical technician program have already found employment with nanotechnology firms, such as IBM and Philips. The director noted that the following existing majors could lead to immediate positions in the nanotechnology industry: electrical, mechanical, and chemical technology programs. In addition, students enrolled in automotive technology, civil construction, civil engineering, and industrial technology programs are also likely to find positions in nanotechnology with some additional in-house or external training. Basically, students and adults with strong technology, math and/or science skills are likely to be good candidates for nanoelectronics manufacturing.

Although it is difficult to obtain detailed information about the skill sets of people looking for work in the Capital Region since only about one-third of people looking for work apply for unemployment insurance benefits or other programs for which information about their employment and educational history is gathered. However, the following tables show a high level view of the number and type of people currently out of work in the Capital Region and the Counties of Saratoga, Warren, and Washington Counties who would be likely candidates either for immediate employment in nanotechnology manufacturing or following some re-training.

Table 2.4.18.A lists workers recently laid off from Capital Region employers in fields compatible with nanoelectronics manufacturing taken from the most recent list of layoffs and closings affecting approximately 100 or more workers prepared by the New York State Department of

Labor. Of just those layoffs and closures reported in the January 2003 report, approximately 2,632 to 2,702 workers currently employed in fields compatible with or trainable for careers in nanotechnology are likely to be looking for work in the near future.

Table 2.4.18.B lists workers in Saratoga, Warren, and Washington Counties who are currently receiving unemployment insurance with employment backgrounds either directly applicable to nanoelectronics manufacturing or compatible therewith following some additional training. According to the 2000 U.S. Census, the mean travel to work time of Saratoga County residents is 25.0 minutes while the mean travel time for Warren and Washington County residents is 21.4 and 24.4 minutes respectively. Approximately 1,810 workers currently looking for work in the tri-county area have skills and backgrounds suitable for nanoelectronics manufacturing either immediately or following some additional training. As noted above, because only about one-third of all people looking for work apply for unemployment insurance, this is probably a low estimate of the number of people currently out of work within the three-county area who have backgrounds suitable for nanoelectronics manufacturing.

Tables 2.4.18.A and 2.4.18.B show that there are more than enough local people currently out of work who possess the necessary skills and backgrounds to fill the demand for 1,800 to 2,500 workers at the first Fab. Moreover, the first Fab is unlikely to begin hiring until 2006. Thus, there will be more than sufficient time for local and State workforce and student training programs already underway to prepare dislocated workers, employed adults looking to make a career change, and young people just entering the workforce for careers in nanotechnology. Based on the representative data described herein and the anticipated continued contraction of traditional large manufacturing facilities, like General Electric, in the Capital Region, there should continue to be sufficient local workforce capacity to fill the additional 5,400 to 7,500 Project positions planned to come online between 2011 and 2020. See Draft GEIS, Section 2.G., pages 16-18, of Appendix B.

Table 2.4.18.A
Layoffs and Closings
Affecting Approximately 100 or More Workers in the Capital Region
Likely to Have Skills or Background Compatible with Fab Employment
Extracted from Local Newspaper Clippings by the NYS Department of Labor for the Most Recent Reported Period of January 2003

Employer	Location of Facility to be downsized	Job Type	# of Workers Laid Off
Altx Inc.	Colonie	Stainless Steel Tube Manufacturing	90
Albany Medical Center	Albany	Medical Technicians and assorted other positions	130
Verizon Communications	Throughout the Capital Region	Mostly Installation and Service Technicians	100
Pliant Corporation	Fort Edward	Con-Tact brand adhesive Paper Manufacturing	130
GE Power Systems	Schenectady	Turbine Manufacturer	1,000
International Paper Co	Corinth	Paper Manufacturing	290
Playtex Products, Inc.	Watervliet	Plastic Products Manufacturer	160
PSINET	Troy	Internet Service Provider Employees	122
Fort Orange Paper Co.	Castleton	Cardboard Mill Workers	75
American Tissue Inc.	Waterford	Paper Manufacturing	125
Hudson Respiratory Care, Inc.	North Argyle	Medical Device Manufacturing	120
Isola Laminate Systems Corp	Hoosick Falls	Manufacturer of copper clad laminate for circuit boards	100
Nibco	South Glens Falls	Machine shop and bronze foundry	110-170
Plug Power Inc.	Latham	Fuel Cell Developer	80-90
DynaBil Industries Inc.	Coxsackie	Air Plane Parts Manufacturer	N/A but notice that significant layoffs may be underway in near future
		Total:	2,632-2,702

Source: *http://workforcenewyork.org/crlmi/briefings.htm* New York State Department of Labor Capital Region Expansion and Contractions Report for January 2003.

Table 2.4.18.B
People in the Saratoga-Warren-Washington County Area
Receiving Unemployment Insurance as of May 5, 2003

Job Title	# of Available Workers in Saratoga, Warren, and Washington Counties as of 5/5/03
Accountants	12
Aircraft Body and Bonded Structured Repairers	4
Aircraft Engine Specialists	3
Airframe and Power Plant Mechanics	5
Airline Pilots, co-pilots, and flight engineers	3
Assemblers, Fabricators, not otherwise listed	94
Automotive Master Mechanics	10
Automotive Specialty Technicians	43
Bus and truck Mechanics and Diesel Engine Specialists	4
Business Operations Specialists, not listed separately	29
Casting Machine Set-Up Operators	3
Chemical Engineers	3
Chief Executives	5
Civil Engineers	4
Combination Machine Tool Operators and Tenders, Metal and Plastic	3
Communication Equipment Mechanics, Installers, and Repairers	16
Computer Information Systems Managers	12
Computer Hardware Engineers	4
Computer Operators	14
Computer Programmers	11
Computer Security Specialists	12
Computer Software Engineers	11
Computer Specialists, no listed separately	22
Computer Support Specialists	31
Computer Systems Analysts	20
Database Administrators	3
Electrical and Electronic Equipment Assemblers	3
Electrical and Electronics Repairers, Commercial and Industrial Equipment	9
Electrical Engineering Technicians	3
Electrical Engineers	8
Electricians	79
Engineering Managers	9
Engineers, not listed separately	56
General Operations Managers	87
Geologists	3
Health Technologists and Technicians, not listed separately	3
Health Practitioners and Technical Workers, not listed separately	3
Heating and Air Conditioning Mechanics	4
Industrial Engineers	4
Industrial Machinery Mechanics	23
Industrial Production Managers	16
Installation, Maintenance and repair workers, not listed separately	49
Machinists	35
Management Analysts	8

Table 2.4.18.B (Continued)
People in the Saratoga-Warren-Washington County Area
Receiving Unemployment Insurance as of May 5, 2003

Job Title	# of Available Workers in Saratoga, Warren, and Washington Counties as of 5/5/03
Managers, not listed separately	241
Mechanical Engineers	14
Medical Health Services Managers	12
Metal Workers and Plastic Workers, not listed separately	10
Molding and Casting Workers	3
Network and Computer Systems Administrators	10
Nuclear Engineers	3
Nuclear Power Reactor Operators	5
Operating Engineers	57
Packaging and Filling Machine Operators and tenders	23
Paper Goods Machine Setters, Operators and tenders	53
Plant and System Operators, not listed separately	6
Power Generating Plant Operators, Except Auxiliary Equipment Operators	12
Printing Press Machine Operators and Tenders	15
Production Inspectors, Testers, Graders, Sorters, Samplers, Weighers	35
Production Laborers	142
Production Workers, not listed separately	178
Refrigeration Mechanics	7
Structural Iron and Steel Workers	23
Supervisors/ Managers of Mechanics, Installers and Repairers	10
Supervisors/ Managers of Production and Operating Workers	62
Surveyors	10
Tax Preparers	5
Team Assemblers	17
Technical Writers	3
Telecommunications Line Installers and Repairers	20
Treasurers, Controllers, and Chief Financial Officers	7
Total:	1,810

Source: Workforce NY; http://www.labor.state.ny.us/wdsuite/skill.asp?os=os25 based on data collected by the NYS Department of Labor with respect to those receiving Unemployment Insurance.

2.5 Quality of Life Issues

1. Comment: Several commenters mentioned the attractive quality of life enjoyed by local residents. While some thought that implementation of the proposed action would be beneficial to or improve the quality of life, others thought that it would have a negative impact compared to the present high quality of life, characterized differently by various commenters. Several commenters stated that they felt the quality of life could be maintained or enhanced by the proposed action, while others felt the project would significantly alter the town's existing character. Many commenters linked increased traffic on local roads associated with the proposed action as a detraction to their quality of life. One commenter (Richard Ferro) cited the constant, "struggle with the balance between growth and quality of life." Another commenter (Andrea Austin) stated that, "this project would destroy the nature of our community" and "devastate my quality of life" creating "untenable traffic and headaches" and "view lines characterized and dominated by freeway exists everywhere you look." Malta was never intended to be a manufacturing town. One commenter (Ed Moriarty) characterized his home as a nice, residential, quiet neighborhood," while another characterized Malta as a, "rural town that is very quickly developing into a suburban area." One Round Lake resident (Harry McDonough) stated that he, "liked living in a small community and the way it is." Several commenters linked the off-site transportation improvements to a degradation in quality of life, potentially destroying the existing serenity and peaceful lifestyle. Another commenter (Heather Atkinson) stated that research into existing Fab communities could provide some helpful insights into what might work well for Malta, as well as what mistakes could be avoided.

Response: Quality of life (QOL) is a complex, multidimensional concept that can be difficult to define, meaning many things to different people. In its simplest form, QOL can be defined as, "The overall enjoyment of life, or personal satisfaction with one's cultural or intellectual conditions." More complex definitions of QOL apportion a number of factors that may include job satisfaction, housing costs, crime rate, health care availability, schools and universities, availability of cultural activities, access to and preservation of open space and park lands, and other community characteristics such as road traffic and safety, sidewalk/trail access, noise, etc. Discussions on QOL may also include the availability of good jobs and providing sustainable development (quality development built to last, becoming an integral, valued component of the community).

Through the LFTC Master Plan Development process and the SEQR process potential impacts to QOL have been identified and either avoided or mitigated to the greatest extent practicable. The LFTC site design has been developed based on visions and quality of life issues discussed in the Town of Malta and Stillwater Master Plans. The LFTC Master Plan has been designed to be a sustainable development, creating intellect-based jobs in a campus style setting with ample amounts of green, open spaces and significant buffers to adjacent residential areas. The proposed traffic improvements will include the construction of a primary access (to LFTC and

NYSERDA) from Route #9, as envisioned in the Malta Master Plan, and the development of a direct access road from Exit 11 of the Northway around the Village of Round Lake (ultimately a new Exit 11A). These mitigation measures, while transportation related, will also improve the QOL for the Village and the Town of Malta.

Section 2.4 of the FGEIS clearly indicates the fiscal benefits to the host communities which could be used to fund other specific QOL improvements that are important to each community. In considering QOL issues in combination with potential growth inducing impacts of the LFTC project the FGEIS proposes additional mitigation to include funding of future planning/zoning studies and updates for the Towns of Malta and Stillwater and a significant funding from the LFTC anchor tenant towards open space preservation and enhancing recreational opportunities in both Towns. Response to Comment #2.9.1 of the FGEIS discusses the proposed mitigation measures in detail.

Regarding research into existing Fab communities, and consistent with the Final Scoping Document, the DGEIS (Section 4.8.1.3) summarizes research conducted for: Chandler, Arizona; the Route 128 corridor around Boston, Massachusetts; and Austin, Texas. Additionally, representatives from the Towns of Malta and Stillwater conducted their own independent research at an IBM wafer manufacturing facility just outside of Burlington, Vermont.

2. Comment: One commenter (Laura Moody) suggested that the proposed action should include "quality of life development fees to be made by the owner/lessee for a town library."

Response: With the mitigation offered as part of the proposed action and the net increase of intellect-based manufacturing jobs to the region, as well as ancillary development, infrastructure improvements, increased school funding, among other project benefits, it is expected that the LFTC will have a net increase in the quality of life for local residents. Moreover, there is no generally accepted standard to measure quality of life, therefore, applying a fee to a project would have inherent difficulties and be subject to various interpretations of quality of life which are highly variable between individuals. While SEQR provides jurisdiction to require mitigation, (6 NYCRR Part 617.3.B), such mitigation must be directed towards minimizing or avoiding specific adverse environmental impacts identified in the EIS process. In this case, additional mitigation is not warranted. Implementation of the proposed action is not expected to have any adverse impacts to the quality of life for local residents.

3. Comment: One commenter (Paul Sausville) stated a concern over the LFTC becoming a "destination" for out-of-towners, creating "sprawl and traffic," and suggested that "opportunities for 'community building' (i.e., measures needed to integrate the Malta Campus into the rest of our town)" be identified, "including measures needed to encourage people to not only work at the Campus, but to live,

walk, bike and do business in the rest of the Town." This commenter suggested consultation with a community planning specialist to identify community values and create a plan to "promote community pride and a sense of place for the people and Campus of Malta," and that the DGEIS should discuss how the LFTC "will add or detract from Malta a nice place to live and work," including measures to "preserve community character."

Response: This comment makes an excellent point regarding the impact that a large, regional project such as this can have on a community, if not properly planned and integrated. The visions for each town and efforts to improve upon community character and QOL can be easily placed in the shadow of such a large project. Although this comment is directed toward Malta, both towns would agree with the concept that the LFTC needs to become an integral component of the communities, contributing to QOL rather than becoming a community unto itself.

It is recognized that the LFTC will become a destination for out of town employees, however the layout and design of the proposed project in a campus-style with significant setbacks, green space and transportation improvements coupled with mitigation measures for will ensure that "sprawl" and "traffic" will be controlled, and the "character" of Malta and Stillwater maintained as envisioned in their Master Plans.

The term "community building" used in the comment is an excellent way of describing what is envisioned as the mitigation package for QOL impact. As described in the Response to Comments #2.5.1 and #2.9.1, the master plan update studies is the correct forum to allow the "Communities" to do the "community building" (Planning) in a manner that is consistent with their vision of their towns. It is anticipated that professional community planning assistance will be sought to foster synergy between people, community and commercial entities.

2.6 Threatened and Endangered Species

1. Comment: The DGEIS lacks any biological surveys that were done as a basis for concluding that there are no threatened or endangered species present on the project site. Nobody walked around in there and looked at the site.

Response: The DGEIS in Section 4.4.3 makes the statement that the proposed action will have no impact on any identified threatened or endangered species or their habitat, and further that no threatened or endangered species have been identified within the project area. This determination was reached based both on correspondence from NYSDEC and USFWS, as well as field surveys of the project site and surrounding area. Biologists from C.T. Male familiar with local threatened and endangered species habitat, including the endangered Karner Blue Butterfly, have conducted field reviews of the project site and portions of the project area. These formal reviews were conducted over the period August 28 through September 27, 2001. Additionally, field studies on the project site were conducted by ERM-Northeast in 1994. No threatened or endangered species were identified by any of these field surveys.

2.7 Alternatives

1. Comment: Several commenters made reference to the inevitability of future development on the project site referencing the fact that other alternative development scenarios of the project site could be less beneficial to the local economy, and actually burden school districts in the case of residential development. One commenter (Joe Dalton) stated a hypothetical burden of $9-million per year to local school districts for residential development at a density of one lot per acre. Another commenter (Ray Liuzzo) stated, "I can think of a lot worse uses for this property, and it is not a question of if this property will be developed, but how." Another commenter (Peter Aust) stated that, "the subject property will in all likelihood be on the open market for development and could be developed for a purpose or purposes less beneficial to the local businesses and the local regional quality of life." Another commenter (Dean DeVito) stated that the proposed "planning is much better than piecemealing the project."

Response: Comment noted. As stated in the DGEIS and various public meetings pertaining to the LFTC, the project site is for sale by owner, and eventually will be developed in the future. Recognizing the inevitability of the future development of the project site, the Applicant seeks to rezone the project site for what it believes to be its highest and best use, the proposed Luther Forest Technology Campus Planned Development District. This rezoning action is subject to local legislative approval by the Towns of Malta and Stillwater.

Refer to Response to Comment #2.11.20 regarding the notion of piecemeal versus planned development.

2. Comment: Several commenters while recognizing the substantial benefit of the proposed action, questioned whether the project site was in the best or proper location. Several commenters found it hard to believe that there are no other Fab sites of this size in either New York State or the Northeast U.S. Another commenter (Linda Cepiel) stated that there is no room for this project stating that it's like, "trying to fit ten pounds of sausage in a five pound bag." Another person (Mark McKenzie) simply stated, "the site isn't suitable for development of this size." One commenter (Dale Buswell) speculated that being close to Saratoga, "the big new place to be," was the reason this site was selected, while another commenter (E. Graham Thompson) questioned the availability of sites near IBM in the Kingston area or at the Harriman Campus in Albany. Another commenter (Andrea Austin) suggested that the site's lack of critical infrastructure made it a poor site for nanotechnology manufacturing, and that it was not "proximal" to major land, air, and water transportation modes. A better site was suggested to be in an area that has a high level of unemployment, in need of jobs, and in desperate need of business. Another commenter (Carol Accorsi) stated that China was a more likely location for a new Fab, in comparison with Malta.

Response: The data contained in Section 6.3 of the DGEIS related to alternative sites remains valid. The DGEIS lays the groundwork for a nanotechnology planned development district and demonstrates how the project site can accommodate a four (4) Fab layout and related ancillary uses, and how requisite utilities can be brought to the project site.

As stated in Section 6.7 of the DGEIS, no alternative sites have been identified in New York State or the Northeast that have the capability of hosting an anchor tenant which desires to build four (4) Fab manufacturing facilities. This conclusion has been reached based on discussions with representatives with Albany NanoTech, Center for Economic Growth, Empire State Development Corporation, the Governor's Office of Regulatory Reform, and several industry representatives. None of the identified SEMI-NY sites are large enough to accommodate the four (4) Fab nanotechnology manufacturing development being contemplated at the LFTC.

Within New York State, the ±1,350-acre project site is in a "class by itself" relative to its potential for hosting a world-class nanoelectronics manufacturing facility.

3. Comment: One commenter (Stacey Jedynak) stated that the 1,350-acre site is not unique and that 600 to 800 acres are not required for a Fab, only 50 to 200 acres are required. It was further stated that there are 13 "shelf ready" sites pre-approved in New York State to accommodate a Fab.

Response: The opinion of the commenter is noted. The project site is indeed unique for the multiplicity of reasons stated in the DGEIS.

According to the Industry Requirements Report, Appendix C of DGEIS, a minimum of 600 to 800 acres is required for a four (4) Fab layout. This information has been collaborated by several industry representatives. Based on information provided from Empire State Development Corporation (ESDC) and the Governor's Office of Regulatory Reform, none of the SEMI-NY sites are large enough to accommodate a four (4) Fab layout, as required by the LFTC project objective.

There are not 13 pre-approved SEMI-NY sites in New York State. According to ESDC's SEMI-NY web site[1] there are five (5) remaining SEMI sites in New York State, each in various phases of pre-permitting. Each of these five SEMI sites can accommodate one (1) Fab. They include the Marcy Campus (280 acres), the Clay Industrial Site (245 acres), the Aurelius Industrial Site (219 acres), the North American Center (275 acres), and Crystal Run Road (185 acres). None of these five (5) sites are in the Capital District, and none of these sites are as big as the project site which is capable of supporting a four (4) Fab layout.

[1] Search done on July 22, 2003 at www.seminy.com

4. Comment: What types of other land uses could be substituted for the proposed LFTC that would have less of an impact on the neighbors and residents in the area? Who determined that this plan is the best for this area? The Applicant has failed to demonstrate that alternative land uses are not practicable. Office developments such as the State Farm complex can have tremendously positive impacts on the community which should be further explored. In addition, the GEIS should address allowing the land to remain forested. Alternative high-tech facilities, or small to medium sized companies, would be more appropriate for this site.

Response: Alternatives to the proposed action have been comprehensively addressed in Section 6.0 of the DGEIS. Alternative land uses contemplated included other high-technology facilities (refer to Section 6.5 of the DGEIS), industrial development (refer to Section 6.9.1 of the DGEIS), retail development (Section 6.9.2), residential development/hotel (Section 6.9.3), office development (Section 6.9.4), and mixed use (Section 6.9.5). Additionally Section 6.0, Alternatives, of the DGEIS addresses the no action alternative (Section 6.1), alternative site access (Section 6.2), alternative PDD configurations (Section 6.3), alternative building heights (Section 6.4), alternative phasing (Section 6.6), alternative water sources (Section 6.10), alternative sewer connections (Section 6.11), and alternative electric transmission (Section 6.12). Based on the DGEIS, the Applicant concluded that the proposed action is the most desirable course of action for the future development of the project site. Other alternatives are either infeasible or less desirable in terms of local impacts. The proposed action, as modified by this FGEIS, represents an approvable action by the local town boards; in accordance with SEQR the Draft and Final GEISs demonstrate that the proposed LFTC avoids or other minimizes adverse environmental impacts to the maximum extent practicable.

The alternative of allowing the land to remain forested is not considered to be a feasible option. The current owners of the project site desire to sell the property, and the potential purchaser of the project site will want to develop it in some way. It should be noted, however, that the proposed LFTC would leave a large percentage of the existing primarily pine plantation forest intact, with more than 50% of the project site to remain as open space, much of which will continue to be a managed forest.

5. Comment: Alternative PDD configurations should be provided that only have one or two Fabs, or a scaled down version that would not require as much infrastructure.

Response: Allowing four (4) Fabs within Pod 1 is an essential component of the proposed PDD regulations for the LFTC and a major element of the industry requirements. An alternative configuration that only provides for one (1) or two (2) Fabs does not meet the requirements of the semi-conductor industry, nor does it satisfy the Applicant's project objective. Such alternatives that do not meet the stated project objective are not required to be analyzed under SEQR which prescribes under 6 NYCRR 617.9(b)(5)(v), "…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." (Refer to page 25 of SEQR Regulations, dated September 20, 1995.)

6. Comment: Alternative design proposals with shorter buildings, having less of a visual impact, should be provided. This analysis should include alternative foundations that are built partially below grade.

Response: A discussion of alternative building design heights is provided in Section 6.4 of the DGEIS. As stated in this section, modern Fabs are multi-level buildings where the clean room production area in the middle level of the Fab building is surrounded by unoccupied mechanical floors above (interstitial air handling space) and below (sub-Fab floor or floors). This multistory design results from cost and engineering requirements, and provides substantial benefits as compared to the older, single-story semi-conductor production plants. The evolutionary multi-story engineering design for nanotechnology production facilities (i.e., Fabs) necessarily results in a relatively tall building with a vertical feet height requirement.

As stated in Section 6.4 of the DGEIS, the height above grade of a finished Fab can be reduced by about 20 feet, if the lower sub-Fab level is excavated and lowered below grade by a similar amount. However, such excavation and construction to effect a modest reduction in building height is substantially more costly than the currently envisioned "slab-on-grade" construction. Moreover, an alternative 20 feet lower nanotechnology production building, although being considerably more costly, would not significantly offset any adverse visual impact.

The potential visual impact of the proposed 110-foot high building height has been modeled in the Visual Impact Analysis, (refer to Section 4.8.1.1 and Appendix O of the DGEIS and Section 2.12 of this FGEIS). This analysis has determined that 110-foot high structures are substantially invisible outside the LFTC project site, and thus will result in no significant adverse visual impacts. Therefore, within the LFTC under these circumstances, a lower building height alternative for nanotechnology manufacturing facilities is clearly not warranted, and produces no significantly enhanced environmental benefit, while potentially unduly increasing costs and difficulties of construction. Therefore, the lower building height alternative is not considered a reasonable alternative which will meet the objectives of the project sponsor.

7. Comment: What type of usage is envisioned by the Applicant that would not require infrastructure development? What compatible, smaller-scale development in smaller pods are conceived and proposed?

Response: There is no alternative development scenario on the 1,350-acre project site that would not require any infrastructure development.

Compatible, smaller-scale development is outlined in Section 6.6, Phasing, of the Draft GEIS. This alternatives discussion presents an alternative phasing approach that preserves the overall project site for the four (4) Fab layout provided in Pod 1, by allowing some industrial development in Pod 5 with access via Stonebreak Road (Driveway number 1), as well as outparcel development of Pod 10 as a single-family residence subdivision.

8. Comment: Under the no action alternative, it is inappropriate to say that it is unlikely that any significant amount of mitigation would either be proposed or ultimately constructed by private developers. This is not true, the private developer would encounter the same requirements under State and local law as the Applicant.

Response: Comment regarding SEQR-applicability is noted and agreed; the same SEQR requirements are applicable to all types of developers.

That being said, DGEIS Section 6.1 correctly presupposes that it is reasonable to expect more extensive mitigation from planned, large-unit projects than from smaller, incremental projects, even projects which might be undertaken on the LFTC project site as smaller, uncoordinated development projects under the "no action" alternative, which presumes some smaller-scale industrial, commercial or residential land uses on the site under existing zoning.

While development under the "no action" alternative would be legally required to mitigate impacts under SEQR, incremental impacts of small-lot development are typically also small and are not as easy to generically address as larger-scale planned development, like the LFTC PDD. A smaller development can generally only be compelled to address its own incremental impacts. Since incremental impacts of modest projects are themselves small and localized to the vicinity of that immediate development, typically the most that can be compelled as SEQR mitigation are such modest measures as local traffic improvements (such as a signalized intersection or turning lane) or more site landscaping or green space on the lot being developed. Certainly, a group of smaller incremental developments undertaken on the LFTC site by different developers in an uncoordinated manner over a 30-year project timeframe would be hard pressed to collectively develop and implement extensive mitigation plans and provide financial resources for off-site open space mitigation and planning as is proposed for this project through the proposed PDD Master Plan and this SEQR process.

Lastly, having the preferred alternative being undertaken by an economic development entity with the assistance and support of the State has other benefits to private sector development under the "no action" alternative. Since quality job creation is the public policy and law of the State and nation, significant financial resources are available from government and can be brought to bear to incentivize developers to build at the site. Such incentives include potential direct financial aid for transportation and utility infrastructure needed for the site, such as the access road or new interchange. Since such government assistance lowers the total cost of construction and operation of the new facilities at the LFTC site below the normal market costs to the developer and owner, this in turn frees up some capital to be used for other enhancements

to the site and environmental mitigation. Such "surplus" for mitigation and enhancements would thus be unavailable in the magnitude of the proposed project if the site were developed under the "no action" alternative which allowed for only smaller development without the same job creation potential and eligibility for economic development funding assistance.

2.8 Semi-Conductor Industry

1. Comment: Several people asked why would a community turn its back on high-tech industry, particularly when communities around the world are striving to attract this type of employer.

Response: Comment noted. From an economic development perspective, it would be difficult if not impossible to find an alternative site in the Capital Region with as much potential as the proposed LFTC project site. Many other communities throughout the U.S. and abroad are striving to secure a portion of the next Fab construction phase and are actively competing for the semi-conductor industry. Due to the cyclical nature of Fab construction there are only a few select opportunities to present new sites for consideration by the market.

2. Comment: Several commenters suggested that Fab companies do not provide long-term employment, but rather they build short-term facilities that quickly become obsolete and abandoned. One commenter (Vince Nagengest) suggested that the type of industry being proposed at the LFTC does not stick around as a long-term employer, stating that the Fabs which "were built 20-years ago, the vast majority of them are closed, " and that, "we should get stable industry, not cyclical industry." This commenter further stated that the industry being proposed "has not proven anywhere that it is strong and it is committed to the communities that they come to." Another commenter (Michael McGraw) asked what happens to these facilities when chip fabrication becomes obsolete? Another commenter (E. Graham Thompson) suggested that the semi-conductor industry has a decreasing workforce based on a 2002 article reported to be published in the Associated Press, and stated that the big companies are experiencing hard times.

Response: The nature of growth in an industrial economy is cyclical, depending upon market supply and demand. The U.S. economy has gone through many periods of expansion and contraction during the 20th century, and it should be expected that our economy will continue this trend. While there was much speculation during the 1990s that the "old economy" was no longer an appropriate model for the future, and that cyclical trends would no longer occur, the recent economic contraction and subsequent period of slow growth would suggest that such a theory is flawed. To be certain, it is possible for certain government actions to guide the macro economy over a long period of time, and in this way it may be possible to reduce the downside impacts of cyclical growth. However, it is not reasonable to expect a constant economic expansion.

With regards to the semiconductor industry, economic growth over the last 30 years has been substantial. There have, of course, been both periods of expansion and contraction throughout this time frame, and workforces have been impacted by these periods. However, in regions of the country where the semiconductor industry has established a strong presence (i.e., two or more

Fabs), the semi-conductor industries have remained as strong employers. Certain areas, such as Silicone Valley, have seen a reduction in overall semiconductor manufacturing jobs since the peak period but they remain significant employers to the region. Many of the original semi-conductor manufacturing jobs in these regions were replaced with research and development jobs that are intimately associated with this intellect-based manufacturing industry.

Development of a new region for semiconductor manufacturing requires a significant investment by the industry in developing a well-educated and well-trained workforce. Because of this investment requirement a minimum presence of 25 years should be expected for any specific region.

Fab structures are built to a high-engineering standard in order to satisfy the manufacturing requirements. Once Fab structures have been built they have typically been utilized for 20 to 30 years for nanotechnology manufacturing. The industry will typically upgrade the chip manufacturing devices (i.e., tools) within the structure to incorporate the latest technologies for at least two (2) generations of production. Even once the latest technologies can no longer be incorporated into the Fab structure, it retains significant value as a manufacturing center for semi-conductor commodities. Finally, such structures would have value within other sectors of the economy, such as telecommunications or data processing, which would be able to utilize the high level of technology incorporated into the structures.

3. Comment: Several commenters questioned the delivery mechanism for chemicals that will be used in the Fabs, suggesting that FedEx and UPS trucks do not deliver chemicals and that some tankers would be used. General concern was expressed by several people regarding chemical delivery along truck transport routes.

Response: The use of bulk tanker trucks to deliver chemicals used at the project site will be regulated by NYSDOT regulations, and in part by the NYSDEC Chemical Bulk Storage Requirements once the vehicles had begun the process of loading/unloading. Independently contracted trucking companies will be responsible for complying with the applicable regulations relating to transportation of chemicals to the project site. As noted by the commenters, the vehicles used to deliver chemicals to the facilities will include tanker trucks, as well as box trailers. The reference to the use of FedEx and UPS vehicles is correctly applied with regards to the transport of finished product (i.e., wafers or chips) from the project site, rather than chemicals.

Vehicle transport routes will include well-established, existing corridors such as Interstate 87 and Route 9, as well as the future access roads. These highways are suitable for the transport of such chemicals and will provide for minimal travel time through existing developed areas.

4. Comment: Several comments were made suggesting that the semiconductor industry had a bad history of pollution and other problems, and that many Fabs have OSHA violations. One commenter (Vince Nagengest) stated that Santa Clara County in California has 24 Superfund sites that are directly attributed to "chip factories," while several commenters expressed a general concern over the possibility of a chemical spill or release from the LFTC. Another commenter (David Weiss) referred to the semi-conductor industry as a "toxic industry" and suggested that that this industry would produce horrible waste sites.

Response: The State and federal regulations governing the use and management of chemicals, raw materials, solid wastes, wastewater and hazardous waste have been tightened considerably since the first development of Fab sites in the early 1970s. Many of these regulations were only initially developed in the late 1970s and 1980s, and refinement of the regulations continues to this day as new data becomes known and new technologies are developed. The current level of regulation and oversight with regards to hazardous waste materials is "intense", and the consequences to an industry for violating such regulations can be substantial. Fines may be levied against violators at up to $25,000 per violation per day. It simply is not in the best interest of an industry to knowingly violate a State or federal standard. Rather, there is incentive to not just meet, but exceed, minimum regulatory requirements as evidenced by USEPA's Project XL, a 1995 Presidential strategy to reinvent environmental regulation. Goals of the Project XL are to achieve a cleaner environment at the lowest cost. The program allows corporations to try new, more flexible approaches that make sense for both the environmental and for economic growth, to achieve equal or better environmental protection, instead of reacting to current command and control environmental regulations.

The potential for an accidental release of chemicals is controlled and minimized through the application of various State and federal regulations, including the NYSDEC Chemical Bulk Storage regulations, OSHA Process Safety Management, USEPA Risk Management Plan, petroleum bulk storage programs, and hazardous waste Contingency Plans, to name a few. These regulations provide the design criteria for storage areas, containment areas, and delivery areas; the monitoring and inspection programs necessary to detect small problems before they become larger problems; the response procedures to be followed should an incident occur; and the recordkeeping and training procedures necessary to ensure that the programs are fully implemented.

5. Comment: One commenter (Bill Beckman) questioned the demand curve for chips growing at an annual rate of 16% as delusional and cited the recent reduction in demand for chips with the economic recession.

Response: The revenue generated by the semiconductor industry has increased at an approximate annualized rate of 16% for the last 30 years. The demand for chips has increased at an approximate annualized rate of 8-10% over the last 30 years. The demand for chips will rise and fall along with the national/global economies, as well as within the industries own cyclical

periods. While it is not possible to guarantee the future performance or growth rate of an industry, standard economic theory relies on historic data as a primary indicator of future trends. Given the historic data and the ever increasing presence of nanotechnology devices within our daily lives, the demand for such devices is expected to grow at a significant rate well into the future.

6. Comment: The DGEIS fails to address the extent of globalization and the impact this trend will have on semiconductor manufacturing. Will the proposed Fabs compete with other global Fabs. How can we be competitive with China? We need to make sure that companies that enter into the LFTC stay for a long time, particularly since the financing may have a long-term payback.

Response: Globalization is having an impact on the "commodities" (lower end chips) portion of semiconductor manufacturing. High volumes of lower end chips are, in fact, being manufactured in a global market with significant price pressures forcing a requirement to lower the production costs. This can make locations such as China attractive for "commodities" manufacturing. However, the manufacturing proposed for the LFTC is centered around 300 mm wafers utilizing the latest technology, and it is not subject to the same global cost pressures. Rather, more significant factors considered when locating such a facility include a well-educated and highly-trained workforce; and the stability of the political and economic systems. In addition, the export of certain technologies to locations such as China is restricted for national security purposes, and this results in a decreased ability to manufacture the latest chip designs. Ultimately, these factors result in locations within the U.S. having a high desirability for state-of-the-art manufacturing centers, such as the Albany-Saratoga - Tech Valley Region of New York State.

7. Comment: There were several comments regarding the use of chemicals in the proposed Fabs. One commenter (David Haverly) questioned the representative nature of the list of chemicals that would be used in a Fab, since no mention was made to the use of hydrochloric acid, hydrofluoric acid, acetone, or propenyl. Another commenter (Susan Accorsi) asked what chemicals will be used in the LFTC, and suggested that the companies would contaminate the local water supply and adversely impact human health of the surrounding community. Another commenter (E. Graham Thompson) derived based on information in Appendix C (pages 21-25), a daily chemical usage of 154 tons per day or 56,374 tons per year, as opposed to the levels stated on page 217 of the GEIS. This level of chemical usage was stated to be alarming. Where will all these chemicals go? This kind of chemical storage and daily usage can cause releases, fires, and explosions.

Response: A representative list of chemicals used in a typical modern Fab is presented in Appendix C (Page 21, Figure 14) of the DGEIS. The chemicals listed within the body of the DGEIS were noted to represent only a portion of the total list, and were presented for purposes of facilitating the discussion. Two of the three chemicals noted by the commenter are specifically identified within Table 14 of Appendix C. Due to the evolutionary environment of the semi-conductor manufacturing sector, the list of chemicals presented is only intended to be representative of the typical chemicals and quantities utilized. It is expected that such specifics will change as the industry continues to evolve. It is noted, however, that the underlying State and federal regulatory programs will remain and the facilities locating within the LFTC will be required to satisfy all applicable regulations, regardless of the chemicals utilized.

The chemicals utilized as raw materials are either incorporated into the products, recycled, or converted to waste products. The quantities and characteristics of the air emissions, wastewater, and solid and hazardous wastes are presented within the DGEIS in their respective sections.

Specific process descriptions with a representative list of chemicals used for each proposed tenant of LFTC will be a required submission during the site plan review process.

Meetings and conversations with public safety officials in Chandler, Arizona have proven to document the contrary on potential fires and explosions at a Fab.

8. Comment: One commenter (E. Graham Thompson) asked for more specific information about current Fab plants in the U.S. and asked if any Malta representatives have visited other Fab plants to determine their impacts on the community in which they are located.

Response: After the public hearings and before the adoption of this Final GEIS, representatives of both the Towns of Malta and Stillwater visited the existing IBM facility near Burlington, Vermont. It is assumed that the information and experiences gained during this visit have and will continue be utilized during their decision making processes.

9. Comment: Is a chip fabrication plant a target for terrorism, and does it require federal security as a result of September 11, 2001 terrorist attacks?

Response: Due to their high cost of construction, a Fab could be considered a potential high-dollar value target for terrorism. However, these facilities lack the national prominence that would normally be associated with a potential terrorist target. There is no known federal security requirement applicable to Fabs.

10. Comment: The GEIS should discuss the potential adaptive reuse of the Fab structures for industries other than chip fabrications should the industry leave the LFTC.

Response: The primary reuse of old Fab structures is for them to be refurbished into new Fabs using the latest technologies. Fab structures are built to a high-engineering standard in order to satisfy the manufacturing requirements using modular engineered design elements. Once Fab structures have been built they have typically been utilized for 20 to 30 years for nanotechnology manufacturing. The industry will typically upgrade the chip manufacturing devices within the structure to incorporate the latest technologies for at least two (2) generations of manufacturing. Even once the latest technologies can no longer be incorporated into the Fab structure, it retains significant value as a manufacturing center for semiconductor commodities. Finally, such structures would have value within other sectors of the economy, such as telecommunications or data processing, which would be able to utilize the high level of technology incorporated into the structures.

11. Comment: The Industry Requirements Document included in the DGEIS was based on the development of up to four (4) 300mm silicon wafer semi-conductor manufacturing facilities. This is the basis for all other analysis of potential environmental impacts of the project. Section 2.4 of the document identifies other manufacturing technologies and substrates such as gallion arsenide and MEMS technology. If these or other technologies are proposed within the LFTC, a similar "Industry Requirements Document" should be prepared for each so that the specific requirements can be identified and analyzed through out the GEIS.

Response: The Industry Requirements Document (Appendix C of DGEIS) is intended to be representative of the planned development of the LFTC. Other nanotechnology manufacturing sectors may also desire to locate within the LFTC. While the specifics of these sectors may be different with regards to the processes and chemicals utilized, the underlying State and federal regulatory programs will remain and the facilities locating within the LFTC will be required to satisfy all applicable regulations, regardless of the processes or chemicals utilized. These State and federal regulatory programs have sufficient breadth to include all such nanotechnology manufacturing sectors, and a separate Industry Requirements Document for each such sector would be neither practicable or warranted.

Specific process descriptions with a representative list of chemicals used for each proposed tenant of LFTC will be a required submission during the site plan review process.

12. Comment: The GEIS does not adequately assess the potential impacts of an on-site accident or a hazardous material spill on local roads or highways. An emergency response plan should be a part of the GEIS, including a hazard assessment and

accidental prevention program. Areas that would be included in any emergency planning zone for extremely hazardous substance should be specified.

Response: The development of emergency response and spill response plans is required by a wide variety of State and federal regulatory programs. These programs are generally applicable on a facility-by-facility basis depending upon the types of processes and the potential hazards. Systems and facilities with a higher hazard risk generally require a higher level of planning and coordination. Because these response plans are intended to focus resources on the specific potential hazards, their development is dependant upon site specifics which will not be available until such time as a specific facility and layout are proposed. Development of the site specific plans would then occur contemporaneously with the construction of the facility and be fully implemented prior to the specific chemicals or hazards being brought on-site.

Typical plans prepared for industrial facilities include the following:

- *NYSDEC Chemical Bulk Storage Spill Prevention Report;*
- *USEPA Petroleum Bulk Storage Spill Prevention, Control and Countermeasures (SPCC) Plan;*
- *USEPA Risk Management Plan (RMP);*
- *OSHA Process Safety Management (PSM) Plan;*
- *NYSDEC Hazardous Waste Contingency Plan;*
- *NYSDEC Storm Water Pollution Prevention Plan; and*
- *NYSDEC Best Management Practices Plan*

Since many of these response plans have overlapping coverage it is common for new facilities to incorporate all such programs into an Integrated Contingency Plan (ICP) which includes a well-organized response procedure for any incident experienced at the facility.

13. Comment: When is the next "investment cycle" for the semiconductor industry?

Response: It is not possible to state exactly when the next investment cycle for the semiconductor industry will begin. However, industry expectations and trends suggest that the industry will begin its next upwards cycle within the next 12 months. Due to the extended period of this most recent downwards cycle, industry experts predict that the impending upwards cycle will be more significant (i.e., longer duration and higher peaks) than historic cycles.

14. Comment: One commenter (Fred Larson) asked if there were any "new manufacturing process(es) coming down the pike in the future that may increase hazards or introduce more chemicals"?

Response: It should be expected that the nanotechnology manufacturing industry will continue to evolve in order to meet the demand for new and improved products, and as such, the development of new manufacturing processes should be expected. While the specifics of these processes and chemicals utilized, the underlying State and federal regulatory programs will remain and the facilities locating within the LFTC will be required to satisfy all applicable regulations, regardless of the processes or chemicals utilized. These State and federal regulatory programs have sufficient breadth to include all such nanotechnology manufacturing sectors.

15. Comment: The GEIS (page 27) states that the proposed action will enable the Town of Stillwater's population to reduce their dependence on government jobs and increase employment opportunities closer to home. Later, in Appendix B, Economic Impact Analysis, it is stated that jobs in these manufacturing facilities tend to be given to high school graduates with associates' degrees in nanotechnology manufacturing. It is not clear that the population in the Town of Stillwater has a significant population percentage with associate degrees in nanotechnology manufacturing.

Response: Implementation of the proposed Campus will provide a variety of job opportunities to local residents including, but not limited to, residents of Stillwater. Entry-level jobs, comprising approximately 90% of nanoelectronic manufacturing companies work force, need only be high school graduates with a two (2) year associates degree. Such a degree is offered at Hudson Valley Community College, and can be readily attained by local high school graduates which would allow such degree seeking individuals to obtain a quality job at the LFTC. The population of Stillwater residents currently with an associate degree in nanotechnology manufacturing is irrelevant to this discussion of future job opportunities.

2.9 Growth Inducing Impacts

1. Comment: Several commenters questioned the specific type and location of growth that will occur as a result of the proposed action, asking for more detailed projections of future growth pertaining to housing, companion industries, commercial uses and public amenities. One commenter (Bob Schwartz) stated that nanotechnology facilities result in a, "large growth in small and medium size business." Another commenter (Dave Stiles) stated that growth will occur inevitably in both Malta and Stillwater, and suggested that the proposed action provided an opportunity to plan for such future inevitable growth. Another commenter (Harold Howe) characterized the future growth resulting from the LFTC as "explosive growth" versus "planned growth." Another commenter (Sonny Bonacio) asked for a clarification of the housing requirements (i.e., apartments, condos, townhouses, etc.) for the LFTC workers. Another commenter (Paul Sausville) asked for a quantification of the "ripple effect and growth inducing impacts on the specific neighborhoods cited in the Malta Master Plan," and identification of "multipliers based on experience of other communities hosting a Fab plant," as well as land areas "expected to come under pressure for development." Another commenter (Larry Benton) characterized such impacts as "intermunicipal in nature affecting many of Saratoga County's municipalities," and "questioned the increased demand for residential housing and commercial services." Another commenter (NYSDEC) asked that the GEIS forecast off-site residential and commercial induced growth, at least for the first and fourth (i.e., full build) phases of the proposed action. This analysis should focus on land use impacts, availability and capacity of infrastructure (water, wastewater, roads, electric, gas), status of current zoning, existence of comprehensive plans for the area, consistency of the anticipated development with such plans and identification, even in a general fashion, of the types of improvements or changes that secondary growth would require. Such an analysis will enable a comparative assessment of existing and future land use development patterns. Another commenter (David Haight) asked for an estimation of the scale of new development or its likely location. Potential mitigation was suggested to be the establishment of an open space and farmland protection fund.

Response: The Draft GEIS acknowledged that there would be "induced growth" if the LFTC were to be developed according to the PDD Master Plan, including not only related nanotech industries, but potential residential and commercial growth. It quantified this growth with two available "macroeconomic" modeling programs, the RIMS economic modeling program and the NYS Economic Development's upstate economic model (refer to Draft GEIS Sections 2.1.2.4, 4.8, 5.3 and 9.0). While these models were able to predict on a regional level what the net economic benefits could be, they are not designed to predict on a local level where this "induced growth" could be located or would be likely to occur. However, in the generic sense, induced residential growth on a regional level would be likely to occur within a reasonable driving

distance of the LFTC and in locations that are appropriately zoned and have adequate utility infrastructure to support the potential growth.

The Applicant acknowledges the concerns and fears of many residents expressed in the public hearings that growth and economic development might not bring entirely desired levels or types of development to the community, and that the induced growth might threaten important community plans for the open space and recreation area preservation, or the rural/suburban "look and feel" of Malta and Stillwater, as well as other areas within the region. It is reasonable to assume areas within the Towns of Malta and Stillwater that are currently experiencing development pressure are likely to see an increase in the rate of development. Also due to the size of the proposed project, land speculation is likely to occur in areas which currently may have an agricultural base due to the suitability of agricultural lands to accommodate development. Additionally, and as indicated within the Draft GEIS areas that will be traversed by new utilities may experience additional development pressures as the utilities become available to the nearby properties.

After reviewing the Applicant's submissions that addressed induced growth contained both within the Draft and Final GEIS's; it was determined by the Lead Agency that the most appropriate means of predicting and planning for induced growth is to establish a proactive planning process linked to the anchor Fab development of the project site that would be sponsored (i.e., paid for) by the Applicant. This approach is supported by the intent of a GEIS, which does not necessarily require detailed evaluation or quantification, but rather the establishment of procedures and thresholds for future actions. This provides an opportunity for the towns to plan for selective growth and to continue to evaluate the growth inducing impacts of the proposed action on a local and regional level.

Therefore, this Final GEIS proposes implementation of the following local and regional measures, as a comprehensive means to avoid or mitigate the potential adverse impacts of induced growth associated with the proposed action:

1. <u>Regional Planning Studies</u>

Prior to operation of the first anchor Fab, the Lead Agency and/or Applicant will seek the services of a regional planning entity, for example the Capital District Transportation Committee (CDTC) or other equivalent regional planning entity, to develop a more detailed growth model for the proposed LFTC. Such a growth model could be refined and modified as specific projects are brought forward. This growth model would be expected to provide municipalities with useful information for local and regional planning decision making, evaluation of potential land use impacts, and master planning/zoning amendments. It is recommended that the growth model include reasonable geographic boundaries (e.g., 30 mile radius or 30 to 35 minute driving distance), projected rates of growth, as well as model growth management tools to assist with the control of growth.

Recommendations and model growth management tools can then be provided to address the important issues of each community such as farmland protection, rural character, and community identity, to name a few.

2. Town Master Plan

A majority of the potential impacts relating to growth inducement are anticipated to occur within Towns of Malta and Stillwater initially, due to their location and availability of suitable lands for development, therefore a series of Master Plan updates are proposed. The timing of these updates are anticipated to be coincidental to the acceptance of a site plan application of an anchor Fab to either the Town of Malta or the Town Stillwater, and that both communities will conduct them concurrently. As noted within the Draft GEIS, it takes approximately two (2) years to design, permit, construct and have an anchor Fab become operational. It is anticipated that the Master Plan update and subsequent Zoning updates will be conducted and implemented during this two (2) year time period. This planning revision process would more precisely identify and inventory those important open space, visual and aesthetic resources of which many commenters spoke about preserving the rural/suburban surroundings, and to ensure the vision of the Town can remain or change as the demographics of the area change.

3. Zoning Update/Revisions

It is the implementation phase of the comprehensive plans, typically through zoning updates/revisions that will allow the Towns of Malta and Stillwater to effectively control the induced growth that is likely to occur as a result of the LFTC. The Applicant is proposing to finance the potential zoning updates that are an outgrowth of each Master Plan update for each of the two(2) towns. Similarly to the Master Plan update process, it is anticipated that the zoning updates would occur within the two (2) year time frame of anchor Fab construction. Just as with the Master Plan updates these zoning updates would occur prior to each anchor tenant of the LFTC becoming operational.

4. Open Space Preservation

The Master Plan process or a related advisory board or committee would develop an open space preservation program and fund its implementation. It is expected that some significant level of funding would be provided from the LFTC anchor tenant. Of all of the various possible public amenities or community benefits which could be made available from a major company locating in Malta and Stillwater, the one overwhelmingly cited or suggested by the public was open space preservation for aesthetics, agriculture and recreation. It would be the purpose of this board or committee during the Master Plan revision process to identify or review previous designations of key parcels for preservation and seek to acquire fee interests or development easements over such property. Both the Master Plan and open space preservation processes would benefit from the active participation of the interested stakeholders who came to the public hearings to express their strong interests and concerns. As noted in the Response to Comment #2.36.20, the Applicant agrees with the NYSDEC comment that informal, ad hoc citizen advisory committees would be beneficial to allowing broad public participation on these important areas of concern.

2. Comment: Several commenters compared the future growth of the Capital Region to Austin, Texas. One commenter (Richard Ferro) stated that, "growth will not occur at the same rate here in the capital region as it did in Austin."

Response: As noted in the previous response about "modeling" the overall rate and location of future real estate development potentially "induced" by the LFTC, it is not a valid approach to seek to extrapolate or compare rates of growth from various locations such as Austin or Silicon Valley which occurred years ago in different places with variant characteristics and economic circumstances.

However, one relevant difference between places like Austin, Texas and the Capital Region, as well as to other nanotech hubs similar to Austin, like Phoenix/Chandler, AZ, is that our region, rather than being mostly vacant, undeveloped expanses of desert, scrub or agricultural lands where development can "sprawl" radially outward from existing settlements into the surrounding countryside along an interstate highway, the Capital District has been settled and developed for several hundred years. Although towns like Stillwater and Malta have a lot of undeveloped land, even in light of the increased development that took place in the 1970s, much of this vacant land is isolated or surrounded by developed land. In general, there is an absence of large tracts of vacant land extending for miles in several directions, as was the case with Austin and Phoenix/Chandler. The topography, ground cover types, geology and hydrology here is also much more varied, compared to Austin and Phoenix/Chandler, as well as being interspersed with a much higher density of existing roads and settlements. Similarly, in the Capital District, much of the flat, more easily developed upland properties without serious environmental issues in our region has already been developed, leaving behind in many instances only less easily developable properties as vacant and undeveloped.

These significant differences between Austin and the Capitol Region make it likely that development patterns seen in the southwest U.S. around nanotech centers will not be easily mimicked locally. Rather than the "sprawl-like" growth allowable in those areas with vast, flat, pre-subdivided "greenfield" tracts stretching miles away from existing cities, because of the nature of this area and its long-standing settlement patterns, much new development will have to use "brownfields", or re-development of existing facilities (e.g., Harriman Campus), or "infill" (new development placed within existing developed areas), rather than the "greenfield" or "sprawl" development patters typical of recent urban development in the southern and southwestern U.S.

3. Comment: One commenter (Rosemary Wysocki) suggested that providing water for the LFTC will result in "negative growth" that is unwanted by the locality. The east-west water route for the secondary water source was identified as an area that shouldn't have high density growth since it crosses through Saratoga County Consolidated Agricultural District #1.

Response: The alternative water line route through Stillwater could potentially have growth inducing effects on agricultural and open space resources. If the LFTC were to proceed to

development and the alternative water line proposal to a Stillwater source were used, Applicant would expect that the Stillwater Master Plan might need to be revised with respect to allowable uses and densities in the areas traversed or to be serviced by the water line, as well as reviewing the "open space" resources and needs of that area (as suggested by Comment #2.9.1 above).

Also, as noted in Draft GEIS and Table 2–3, development of the alternative water line would require a specified pre-approval notice to and an opportunity to comment of the Saratoga County Agriculture and Farmland Protection Board and the State Department of Agriculture and Markets under the relevant provisions of the State Agriculture and Markets Law.

4. Comment: Will the new access roads to the LFTC create pressure for commercial sprawl along their route and on Route 9 south?

Response: In the absence of zoning restrictions to the contrary and assuming developable lands along the Route 9 corridor do not have severe problems with soils, water tables, environmental constraints and the like, it would be reasonable to assume that the Route 9 corridor might be susceptible to commercial development because of its desirable location near the LFTC on an existing State highway. The Master Plan and zoning revision process recommended as mitigation in the Response to Comment #2.9.1 would take into account the inherent developability of specific parcels along Route 9, whether commercial development should be permitted or restricted in this area and would propose revised zoning regulations which would implement the decisions made in the Town's Master Plan update process.

5. Comment: While it is agreed that local communities can control growth through their planning and zoning regulations, the current land use management tools and the people responsible for their implementation could be subject to considerable pressure if the magnitude and rate of growth increases dramatically following approval of the LFTC, and comprehensive plans and zoning ordinances may be required to be updated. Additional planning staff may be required by some localities. Who is expected to pay for such updates and additional staff?

Response: Updating the Master Plans and zoning ordinances on account of the "induced growth" made possible by the LFTC is recommended as a mitigation measure for the development of the LFTC. SEQR provides local and State agencies legal jurisdiction to require an developer to pay for measures to avoid or mitigate environmental impacts disclosed in the SEQR EIS process. Refer to SEQR regulations at 6 NYCRR 617.3(b). It is Applicant's expectation, that like the funding for open space preservation, the anchor Fab tenant would contribute substantially to the costs of Master Plan update recommended herein.

The rate of development will likely be the biggest factor in the ability of the communities to provide appropriate planning services. This may impact the town's ability to thoroughly review projects. The towns will strive to control the rate of development to prevent significant planning services impact. This can be accomplished through the planning and implementation mitigation identified in the Response to Comment #2.9.1. The rate, type and density of development will be

dictated by the communities, through their mitigation funded planning processes. The proposed mitigation should place Malta and Stillwater in a good position to be proactive and control the pace of development, as may be necessary, to maintain adequate levels of planning service while avoiding impacts to quality of life.

6. Comment: The proposed action could create a significant increase in land speculation that would focus on rural lands within reasonable driving distance from the project site. There is ample farmland throughout the region which could be impacted by project induced growth.

Response: It is agreed that there is a potential for "induced growth" and "development pressures" on rural land uses such as farms in the project area. Applicant proposes to more precisely identify and mitigate such potential adverse impacts with zoning controls and open space preservation initiatives as discussed in the Response to Comment #2.9.1., above.

7. Comment: The Applicant should provide a detailed cost-benefit analysis that includes an assessment of new school facilities that would need to be constructed to accommodate project-induced growth.

Response: Refer to Appendix B and Section 4.8.1.3 and 4.8.2 of the DGEIS, as augmented by Section 2.4 of this FGEIS for information regarding school tax revenue generation. For information regarding new school facilities, refer to Response to Comment #2.14.1.

8. Comment: The Applicant should analyze underutilized areas in the cities of Amsterdam, Schenectady, Troy and Albany, where infrastructure already exists, to assess feasibility of brownfields redevelopment.

Response: As stated in Draft GEIS Sections 2.1.2.3 and 6.7 (project purpose, public needs and benefits), there are no alternative "brownfields" sites of sufficient size (>400 contiguous acres) which could accommodate the requirements of the LFTC "anchor" tenant as verified by Applicant's consultants and industry contacts (Draft GEIS, Appendix C). Additionally, as noted in the DGEIS alternatives discussions of potential "brownfields" sites such as the Harriman Campus, the substantial costs of relocation of existing utilities infrastructure and demolition of structures needed to accommodate a new Fab would make re-development of a "brownfields" site for a Fab comparatively much more expensive and difficult than the "greenfields" siting as proposed for the LFTC. Significantly, the authors of the Harriman Campus plans and environmental impact studies reached a similar conclusion that development of that site for a new Fab was infeasible (although it would be appropriate for ancillary and related uses such as office, R&D, etc.). Moreover, the center of the LFTC project site is a contaminated site, which will be adaptively reused by implementation of the proposed action. In layman's terms, this is considered a "brownfield" site. Refer to Response to Comment #2.20.3.

9. Comment: The Saratoga County Ag and Farmland Protection Board (AFPB) commented that the proposed action will likely result in significant growth pressure on undeveloped lands throughout the area and could cause a loss of farmland in the county. The secondary water plan includes a trunk line through an agricultural district which could create even more development pressure. Consideration must be given by the Towns of Malta and Stillwater to the preservation of agriculture as an industry and the preservation of open spaces as a natural resource, both of which contribute to our high quality of life which draws people and businesses to or county. The project sponsor should provide additional information about the growth inducing aspects of the project and how this new growth will affect farms and open spaces in the county. The AFPB recommends that consideration be given to appropriate mitigation measures to help preserve agriculture and open space lands in those municipalities likely to be impacted by the growth pressures that will inevitably result from the successful implementation of the proposed action. One possibility is for funds to be set aside for purchasing the development rights on farms and open space or to assist local communities in undertaking updates of their comprehensive plans, zoning ordinances and any additional tools available to help preserve a community's rural character.

Response: Applicant agrees with the comment and that the LFTC tenant industries would support the costs for planning and open space land preservation required as mitigation for the project's potential "growth inducing" impacts. See Responses to Comments #2.9.1 and #2.9.6.

10. Comment: One commenter (David Haight) stated that the GEIS cannot adequately describe the true environmental impacts of the LFTC or appropriate mitigation strategies without estimates of the off-site development to be spurred by it. These estimates are critical for answering the following questions:

- How will these new off-site developments affect demand for public services?
- How will LFTC affect the number of school children attending schools serving the Towns of Malta and Stillwater? What are the estimated costs of educating these new students? How will this affect school taxes?
- How will new residential and commercial development spurred by LFTC affect demand for fire, police, or other community services? How will this affect local taxes?

Response: See Responses to Comment #2.9.7 and #2.9.1.

11. Comment: A representative of the Town Planning Department (Heather Atkinson) questioned the immediate growth impact the LFTC would have in Malta, stating that the number of inquiries and applications to develop parcels has increased, and questioning the ability of the Town to handle future, increased levels of inquires if the LFTC progresses.

Response: See Responses to Comments #2.9.1, #2.9.5 and #2.9.7.

12. Comment: Section 9.0 does not identify the number of construction workers that will work on this site during the four phases of construction. The GEIS does not state what percentage of workers will be from the local area versus the percentage of workers that will be brought in from outside the local region with experience in nanotechnology manufacturing construction. The GEIS does not provide an estimate of the number of local versus outside workers, and/or how long they will stay in the area.

Response: Section V.A, Construction Traffic, of the Traffic Impact Study, contained in Appendix F of the DGEIS estimates the number of construction workers for each of the four (4) phases of construction. It is anticipated that significant portions of the project will require locally-based subcontractors, but during peak periods of construction, the local labor markets will be insufficient and construction labor will also temporarily relocate to the region from the New York - New England region. More precise estimates of the proportions of local and regional labor supplies are not feasible.

2.10 Health and Safety

1. Comment: One commenter (Kathy Cech, Malta Ambulance Corps) stated that she had visited one of these facilities, taking time to speak with local health and safety officials, and that the Malta Ambulance Corps does not "feel there will be any negative impact to the health and safety for the residence of Malta." Another commenter (Ernie Balch) who has worked in Fabs for 29 years stated that they were "clean, safe places to work," with, "nothing to worry about being next door to one."

Response: Comment noted.

2. Comment: Several commenters questioned the excellent safety record of the semi-conductor industry, particularly in comparison with Silicon Valley, and suggested that this type of industry was not necessarily a "safe industry," and that workers in this industry are exposed to health risks from chronic exposure to chemicals used in the manufacturing process, including known carcinogens. One commenter (Stacey Jedynak) stated that he could find no Department of Labor statistics that support the statement that the semi-conductor industry has an excellent health and safety record, and stated that there are numerous lawsuits associated with worker health and safety in the semiconductor industry. Specific reference was made by one commenter (Stacey Jedynak) to a January 14, 2003 news report in Wired News, of safety concerns at a Motorola facility in the United Kingdom that would be an embarrassment for the semi-conductor industry, which was completely ignored in the DGEIS. Another commenter (Andrea Austin) stated that the semiconductor industry had a "deplorable" health and safety record, that "according to Department of Labor statistics, this industry also has injury rates among the highest reported," and that spills and accidents are common.

Response: A review of the data available from OSHA (Bureau of Labor Statistics, 2003) clearly shows that the semi-conductor manufacturing sector has an excellent safety record as compared to other manufacturing sectors, as well as when compared to the entire private sector portion of the economy. According to OSHA's publication of the incidence rates of nonfatal occupational injuries and illnesses by industry for 2001, the semiconductor manufacturing sector had a total of 2.2 incidences per 100 workers. This compares very favorably with other sectors of the economy, as shown in the following Table 2.10.2.A:

Table 2.10.2.A
Industry Sector Safety Comparison

Industry Sector	Total Incidences Per 100 Workers	Industry Sector	Total Incidences Per 100 Workers
Private Sector, Total	5.7	Semi-Conductor Manufacturing	2.2
Agriculture Forestry, and Fishing	7.3	Transportation and Public Utilities	6.9
Mining	4	Wholesale Trade	5.3
Construction	7.9	Retail Trade	5.7
Manufacturing, Total	8.1	Service Industry	4.6

In fact, out of the entire manufacturing sector of the economy, only several activities were reported to have equal or fewer workplace injuries and illnesses than the semiconductor manufacturing industry as shown on Table 2.10.2.B.

Table 2.10.2.B
Manufacturing Industry Sector Safety Comparison

Manufacturing Industry Sector	Total Incidences Per 100 Workers	Manufacturing Industry Sector	Total Incidences Per 100 Workers
Semi-Conductor	2.2	Select Publishing Activities	1.8 to 2.2
Computer & Office Equipment	2.1	Typesetting	0.9
Search & Navigation Equipment	2.2	Petroleum Refining	1.4
Optical Instruments and Lenses	1.8		

The health and safety record of Motorola was researched using the Internet to generally assess the comment regarding safety concerns at a Motorola facility. During the period from 1998 to 2001, world-wide Motorola facilities were reported to have a total of five (5) safety citations, two (2) in 1998 and three (3) in 2000. These citations ranged from a lack of documentation for laser equipment in Tempe, AZ, to failure to provide sufficient contractor oversight in Tianjin, China, to lack of a written injury and illness prevention program in Sunnyvale, CA. The total assessed penalties for these five (5) citations were reported to be $2,385. In fact, Motorola's web site (www.motorola.com) documents several health and safety awards including OSHA's Voluntary Protection Program (VPP) Safety Through Accountability and Recognition (STAR) award, and the British Safety Council's Sword of Honor. Long-term objectives of Motorola include: reuse or recycling of all wastes, elimination of all plant emissions that adversely impact the environment, conservation of natural resources by fully integrating products and processes in recycling loops, using renewable energy where practicable, and designing all products for the environment and safety.

In regard to the January 14, 2003 Wired News report, the investigation conducted by the Health and Safety Executive in the U.K. did report that a few plants inspected did need better monitoring of the performance of their local exhaust ventilation systems to control chemical vapors and more effective controls for reducing exposures to potential human carcinogens such as arsenic and refractory ceramic fibers (RCFs) during selected maintenance operations. In retrofitted and newer semiconductor facilities, exposure to these materials and other chemical hazards are controlled through the combined use of engineering controls, formal work procedures, training courses and appropriately specified personal protective equipment. In addition, where ever possible some of the more toxic chemical agents used in semiconductor fabrication operations have been replaced by less toxic or safer packaged alternative materials.

As discussed at length in Sections 2.4 and 4.9 of the Draft GEIS and its Appendices C and G (AGI and Cox reports, respectively), it is important to note that the semiconductor industry makes use of a broad spectrum of chemical and physical agents in the fabrication of semiconductor devices. Some of the chemical agents used include:

- *Acids and Bases;*
- *Solvents;*
- *Gases;*
- *Gaseous, Liquid and Solid Dopants;*
- *Polymeric Films; and Adhesion Promoters.*

Some of the physical agents used include:

- *Hazardous and High Voltages;*
- *High Electrical Currents;*
- *Ionizing Radiation;*
- *UV / IR / MW / RF Radiation;*
- *Static Magnetic Fields;*
- *Lasers;*
- *High / Low Pressures;*
- *Hot / Cold Temperatures; and*
- *Robots.*

To facilitate the safe, healthful and environmentally sound use of these hazardous energies, the semiconductor industry has adopted a number of building and fire code requirements in the following areas:

- *Fire Protection;*
- *Fire Alarms and Toxic Gas Detection and Control;*
- *Exiting;*
- *Hazardous Production Material Usage;*
- *Chemical Storage Rooms;*
- *Gas Piping and Locally Exhausted Gas Dispensing Cabinets;*
- *Continuous Gas Monitoring;*
- *Local Evacuation Capability;*

- *Emergency Response Team (ERT) Protocols;*
- *Exhaust Ventilation Recommendations;*
- *Emergency Electrical Power; and*
- *Specifications, Policies, Procedures and Protocols.*

In addition the industry has developed and implemented broad-based Facility and Safety Guidelines in the Semiconductor Equipment and Materials International (SEMI) "F" and "S" documents. The USEPA and State environmental regulatory agencies have adopted requirements to manage air emissions, wastewater effluents and hazardous wastes in an effective fashion. Property insurance carriers and other local authorities having jurisdiction (AHJ), such as municipal building inspectors and fire marshals, have adopted Guidelines and Ordinances to promote the safe operation of semiconductor facilities.

Individual companies and the Semiconductor Industry Association (SIA) have funded epidemiological studies to assess associations between the use of certain chemicals and specific adverse health effects. Based upon the results of these studies, the industry has developed safer alternatives for the use of specific chemicals.

International Sematech (ISMT) develops, updates and promulgates the Semiconductor Industry Technology Roadmap (including environmental health and safety issues) which describes the industry technological needs for the next 15 years. ISMT also sponsors research on evaluating the effectiveness of various treatment technologies for handling waste streams from different unit operations and designing sustainable processes that minimize adverse environmental impacts.

The Semiconductor Environmental Safety and Health Association (SESHA) provides a worldwide network for the free and open sharing of environmental health and safety (EH&S) information and solutions by industry EH&S professionals. SESHA publishes an electronic journal and updates and distributes a manual of "best practices" for emergency response team activities at specific semiconductor facilities.

There are many examples of process improvements which have been made over the past 10-20 years as a result of these industry sponsored programs and research. Four (4) examples of such improvements include:

1. *The trend to replace wet etching with dry etching, which has been ongoing over approximately the last 20 years. This reduces the use of aqueous hydrofluoric acid (HF) and replaces this use of HF with much less hazardous fluoride containing gases.*

2. *The broader use of positive photoresists as opposed to negative photoresists, which has occurred over approximately the last 15 years. This has resulted in much less use of solvents (such as naphthalene and phenol) and greater use of less hazardous aqueous developers.*

3. *The replacement of ethylene glycol ethers with less toxic alternative casting solvents, which has occurred over approximately the last ten (10) years.*

4. *The recent replacement of selected pressurized gas cylinders of highly toxic gases with sub atmospheric delivery system containers that operate at less than atmospheric pressure (i.e., vacuum), thereby substantially reducing the potential for these chemicals to leak into the workplace or environment. This latest technology has been integrated into Fabs over approximately the last six (6)years.*

These combined EH&S efforts of codes, guidelines, studies, recommended best practices, communication networks, formal policies and procedures and continuing research have enabled the semiconductor industry to reduce facility emissions and sustain occupational illness and injury rates at less than 1/3 of the rates for manufacturing industries for the past five (5) years.

Over the recent past (i.e., seven (7) to eight (8) years) a number of lawsuits have been filed by IBM and National Semiconductor employees, ex-employees, spouses of employees and off-spring of employees regarding a broad spectrum of adverse health effects. These lawsuits are making their way through the courts and to date no alleged adverse health effects by plaintiffs have been shown to be caused by occupational exposure to chemical agents in semiconductor workplaces. Environmental health and safety professionals and industry trade associations continue to assess semiconductor chemicals, workplaces tools, installations and procedures on an ongoing basis to see what additional improvements can be made to enhance the safety, healthfulness and environmental soundness of semiconductor fabrication facilities.

3. Comment: Several commenters stated that the proposed action would result in vast quantities of chemicals going through our streets every day, posing a safety risk to our community.

Response: The potential use of bulk tanker trucks to deliver chemicals used at the project site will be regulated by NYSDOT regulations, and in part by the NYSDEC Chemical Bulk Storage Requirements once the vehicles had begun the process of loading/unloading. Independently contracted trucking companies will be responsible for complying with the applicable regulations relating to transportation of chemicals to the project site. Vehicle transport routes will include well-established existing corridors such as Interstate 87 and Route 9, as well as the future access roads. These highways are suitable for the transport of such chemicals and will provide for minimal travel time through existing residential areas.

4. Comment: Several local residents expressed a general concern over the safety of their children playing in their yards and on the local streets.

Response: As noted, vehicle transport routes will include well-established existing corridors such as Interstate 87 and Route 9, as well as the future access roads into the project site. These highways are suitable for the transport of such chemicals and will provide for minimal travel time through existing residential areas. Other vehicular traffic is being managed in a manner to

minimize the impact on the surrounding communities. Certain existing routes will experience an increase in vehicular traffic associated with the employee trips. This level of traffic, however, will be within the accepted utilization parameters, once the various traffic improvements have been completed. The risks associated with playing in or near roadways are not unique to the development of the LFTC as proposed.

5. Comment: What contingency plans exist in the case of a disaster?

Response: The development of emergency response, spill response and contingency plans is required by a number of State and federal regulatory programs. These programs are generally applicable on a facility-by-facility basis depending upon the types of processes and the potential hazards. Systems and facilities with a higher level of risk generally require a higher level of planning and coordination. Because these response plans are intended to focus resources on the specific potential hazards, their development is dependant upon site specifics which will not be available until such time as a specific facility and layout are proposed. Development of the site specific plans would then occur contemporaneously with the construction of the facility and be fully implemented prior to the specific chemicals or hazards being brought on-site.

Typical plans prepared for industrial facilities include the following:

- *NYSDEC Chemical Bulk Storage Spill Prevention Report;*
- *USEPA Petroleum Bulk Storage Spill Prevention, Control and Countermeasures (SPCC) Plan;*
- *USEPA Risk Management Plan (RMP);*
- *OSHA Process Safety Management (PSM) Plan;*
- *NYSDEC Hazardous Waste Contingency Plan;*
- *NYSDEC Storm Water Pollution Prevention Plan; and*
- *NYSDEC Best Management Practices Plan.*

Since many of these response plans have overlapping coverage it is common for new facilities to incorporate all such programs into an Integrated Contingency Plan (ICP) which includes a well-organized response procedure for any incident experienced at the facility.

6. Comment: Section 4.9.1, Chemical Use, Storage, Management and Disposal, discusses briefly chemical use and storage, but does not address at all management and disposal of "hazardous waste". The DGEIS and its appendices reference that each facility will generate 1800 TPY of hazardous waste. This is considered a large quantity generator of hazardous waste. Some of the wastes may be considered "acute" hazardous wastes as well which are much more difficult to handle. The regulations and notifications that apply, the appropriate storage and handling of 1800 TPY per facility of hazardous waste, the reduction planning, the training, and the emergency planning that

goes along with this type of generation of hazardous waste have not been addressed at all in the DGEIS.

Response: Based on the projected hazardous waste generation rate it is expected that the Fabs would be subject to the NYSDEC Hazardous Waste Regulations (6 NYCRR Parts 370-375). These regulations govern the generation, storage, transport and disposal of hazardous waste on a cradle-to-grave basis. The manufacturer is responsible for the proper storage, transport and disposal of the waste forever, and can be held responsible should a cleanup of any materials be required in the future.

Hazardous waste regulations are strict, "cradle-to-grave" mandates, addressing identification, labeling, storage, packaging, shipment, inspections, and ultimate disposal of all hazardous waste. Generators are categorized as either large quantity generators (LQG), small quantity generators (SQG) and conditionally exempt small quantity generators (CESQG). The regulatory requirements are more stringent for a LQG than a CESQG. The recordkeeping and reporting requirements for a hazardous waste generator include maintenance of a tracking manifest for each shipment of waste, as well as reporting if any discrepancies are suspected or observed. Requirements also include development of a Hazardous Waste Contingency Plan, as well as annual reporting for all hazardous waste activity.

Other tenants within the LFTC may also be generators of hazardous waste and would be subject to the level of regulation commensurate with the quantity of waste generated.

7. Comment: The storage of the chemicals as indicated in Table 4-10 and Appendix C provides a summary of chemicals and storage; however, a specific discussion on the compatibility, secondary containment, and appropriate design of each storage system was not provided. These facilities typically require miles of process piping. A more detailed discussion of compatibility and containment as well as contingency planning is needed in the DGEIS.

Response: NYSDEC Chemical Bulk Storage regulations (6 NYCRR Parts 595-599) govern the storage and handling of hazardous substances/chemicals in New York State. In particular, 6 NYCRR Part 599 includes standards for new hazardous substance storage facilities. Chemical compatibility between the storage system and the chemical stored, secondary containment for tanks and transfer stations, and requirements for design in conformance with a consensus code are each required by the regulation. Additionally, 6 NYCRR §598.1(k) required regulated facilities to prepare a Spill Prevention Report.

8. Comment: Section 4.9.2, Potential On-site and Off-site Exposure Scenarios, address some typical emergency scenarios but does not identify the major scenarios such as inoperable containment systems, inoperable control technologies, and

inoperable pretreatment systems. Life safety and emergency response are critical components of these facilities and need to be addressed in the DGEIS.

Response: The various regulations requiring the referenced systems also include requirements for contingency planning and emergency procedures. The USEPA Risk Management Program (RMP) requires facilities storing certain hazardous materials to assess the risks associated with catastrophic failures, including those noted in the comment. The results of the assessment must be presented to the USEPA and local response agencies in detail, and a summary assessment is made available for the public's review. In addition, many other regulatory programs include planning and response procedures designed to facilitate an effective response during an emergency. Because these plans are based on the specifics of a site design and layout, it is premature to prepare such a plan at this time. Such plans would be prepared contemporaneously with the site development and be implemented prior to the chemicals being brought on-site.

9. Comment: It should be noted that in some of the appendices to the DGEIS, ion implant equipment is referred to which includes high-voltage and x-ray radiation sources. These types of equipment, their use and regulations and the potential generation of hazardous waste and potential exposure scenarios associated with this equipment needs to be addressed within the DGEIS. Radioactive materials covered by a whole set of regulations not addressed in the DGEIS. If it is the Applicants desire to use these types of equipment, a meaningful evaluation of the potential impacts must be included.

Response: The use of high-voltage and x-ray radiation sources within various manufacturing processes at a Fab is regulated by a number of agencies, including OSHA and the New York State Department of Labor, and the transportation of radioactive materials is regulated by DOT. Employee exposure is limited to levels established as safe by the federal government, primarily through the use of shielding and other engineering controls. Employee monitoring would typically be required in areas where the risk of exposure was a potential concern.

There would be no off-site impacts associated with the use of this equipment. The types and quantities of materials present would be consistent with that expected at a metropolitan hospital or research university.

2.11 Land Use and Zoning

1. Comment: One commenter (Lance Spallholz) stated in the first public hearing that the Village of Round Lake's Master Plan contains no reference to an "access road" and that there are only two comments pertaining to traffic impacts to the Village of Round Lake.

Response: Section 3.6.3.3 of the DGEIS states that an important component of the Village of Round Lake's 2000 Comprehensive Plan is the concept of an alternative access around the Village. The Plan identifies the "overburdened" nature of George Avenue, and states it is not in the best interests of the Village to develop this roadway for increased volume in that such increased traffic would discourage pedestrian access and isolate segments of the Village. No further development of this road linking I-87 and Route 9 is encouraged by the Plan, however the Plan anticipates the need for development of an alternative access route which would effectively "shunt" any increase in traffic volume away from George Avenue and beyond the curve between it and Curry Road.

Pages 17-18 of the Village's 2000 Comprehensive Plan contain specific citation to the access route around the Village. Refer to the Village's 2000 Comprehensive Plan in Appendix K.

2. Comment: The Step 1 access road, or Village Bypass, goes through an area that is designated as open space within the Town Master Plan.

Response: Comment noted. The DGEIS identifies that the Step 1 access road goes through an area within the Town of Malta that is designated as land conservation, corresponding to the Ballston Creek riparian corridor. The first half of the Step 1 access road, starting from Curry Road, passes through the Village of Round Lake, within an area zoned by the village as RV1 Residential as discussed in Response to Comment #2.11.15. The next segment cuts perpendicularly through Malta's Land Conservation (LC) zoning district, and the final segment connecting to Route 9 is within Malta's B-1, Agriculture and/or Residential, zoning district.

See Response to Comment #2.12.4 for an assessment of the visual impacts of the access road within the land conservation district.

3. Comment: The proposed action is inconsistent with surrounding land uses and will dramatically alter land usage patterns. The current zoning does not permit the type of industry being proposed, and is inconsistent with town master plans.

Response: As discussed in detail in the DGEIS, the proposed action is not inconsistent with surrounding land uses or existing zoning. However, it is realized that the proposed uses and

their intensities are greater than those approved within the Town of Malta's PDD #9 or envisioned within the Town's master plans. See Sections 3.6 and 4.6 of the DGEIS.

The proposed action is consistent with the historical R&D land use of the Malta Test Station, as discussed in Section 4.6.1 of the DGEIS.

Surrounding land uses include the NYSERDA STEP, Wright-Malta munitions testing facility, vacant forested land, residential areas, and the Route 9 commercial corridor. The proposed Campus layout will cluster the nanotechnology manufacturing and ancillary uses within the central portions of the 1,350-acre project site and provide ample green and open spaces around the perimeter of the property. The proposed buffers will be consistent with the Town's policy of providing substantial buffer areas as transition areas between non-compatible uses. Development of the proposed LFTC will likely spur the development and redevelopment of the Route 9 South neighborhood, consistent with the Town Master Plan.

As outlined in Section 3.6.2 of the DGEIS, the existing zoning for the project site is Planned Development District #9 (PDD #9) and C-3 Commercial in the Town of Malta, and Business Park (BP) in the Town of Stillwater. The proposed action will modify the current zoning and permitted uses on the project site by creating a PDD within the two Towns.

Refer to Response to Comment #2.9.1 for additional information pertaining to future modifications of local master plans.

4. Comment: The proposed project is unlike any ever proposed in Malta or Stillwater and perhaps in all of Saratoga County both in its size and proposed use. Land use and zoning are important components in the review of the project to identify both benefits and impacts. The size and scale of the project will have far reaching affects on land use patterns in large portions of both Towns and many parts of the County. The following needs to be addressed:

- This section should include the existing site specific PDD Master Plan or zoning for each portion of the project site in both the Town of Malta and the Town of Stillwater.

- The approved acreage for each of the projects allowable uses and their location on the site-specific master plan should be identified to provide a baseline for evaluation of the impacts.

- A map indicating the existing land uses surrounding the project site, as well as the off site improvements should be provided to adequately identify and evaluate the project's compatibility with the existing surrounding land uses.

- The description of surrounding land uses needs to be provided in greater detail. The age, size, condition and location of surrounding development must be included so

that an evaluation of potential impacts to surrounding land use can be completed. The description of Luther Forest as simply "residential" is inadequate.

Response: The existing land uses that surround the project site and the proposed transportation improvements are summarized below and defined in detail in Figure 2.11.4, Land Use Map for the Towns of Malta and Stillwater.

Project Site: To the north and northwest of the project site current land uses consist of undeveloped and residential lands. To the west of the LFTC, land uses are undeveloped, residential, and industrial. To the southwest of the project site existing uses are residential, commercial, and vacant lands. To the south of the LFTC existing land uses consist of agricultural, public services, residential, and vacant lands. To the east of the project site is the Town of Stillwater, existing land uses are agricultural, residential, and vacant/undeveloped land.

Transportation Improvements: Existing land uses along the transportation improvement corridor are predominately vacant lands with residential areas in the Village of Round Lake, commercial use at US Route 9, and agricultural uses west of the Northway.

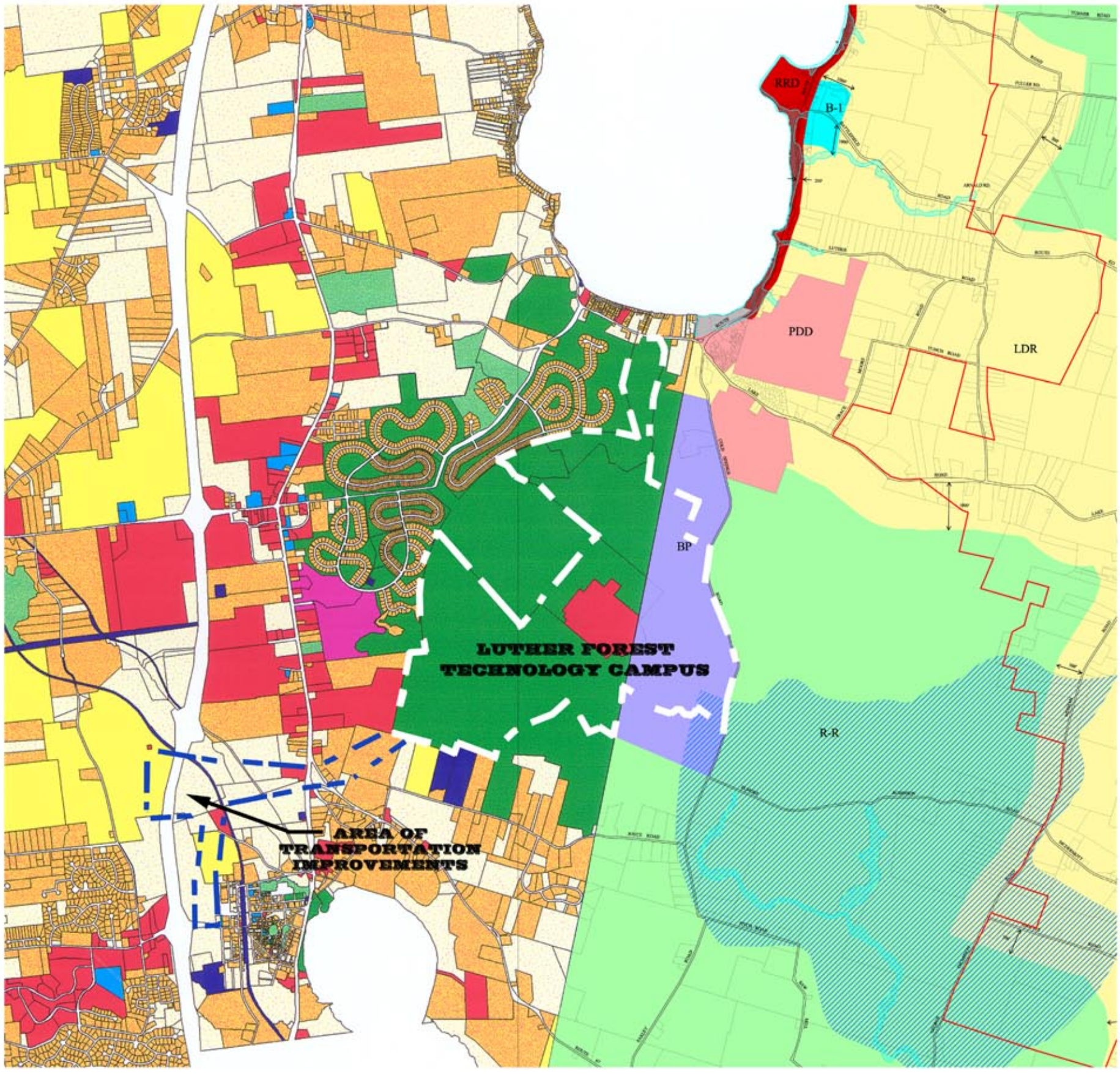
5. Comment: Zoning of the site, the surrounding area and along proposed major transportation improvement corridors needs to be described in detail.

Response: The zoning that surrounds the project site and the proposed transportation improvement corridor are summarized below and defined in detail in Figure 2.11.5: Zoning Map for the Towns of Malta and Stillwater.

Project Site: Lands to the north and west of the site are zoned Planned Development District (PDD) and Commercial (C-3). The PDD zoning reflects the residential portion of the Luther Forest PDD (PDD#9). The C-3 commercial zone is the NYSERDA which is the site of a proposed energy technology park. Lands to the south of the project site are predominately zone Agricultural/Residential (R-1). East of the site is the Town of Stillwater, with lands that are zoned Business Park (BP) and Rural Residential (RR).

Transportation Improvements: Lands along the proposed transportation improvement corridor are zoned residential, Agricultural / Residential (R-1) and Land Conservation (LC) along the Ballston Creek.

6. Comment: A single map showing existing zoning with the site boundaries superimposed must be included. Zoning should be identified both on and off site. The map must be legible and as such should be updated or rescanned to obtain better quality.



Town of Malta
Land Use Map

Legend
- Agricultural
- Residential
- Vacant
- Commercial
- Recreation & Entertainment
- Community Services
- Industrial
- Public Service
- Wild & Forest Lands

LFTC PROJECT BOUNDARY

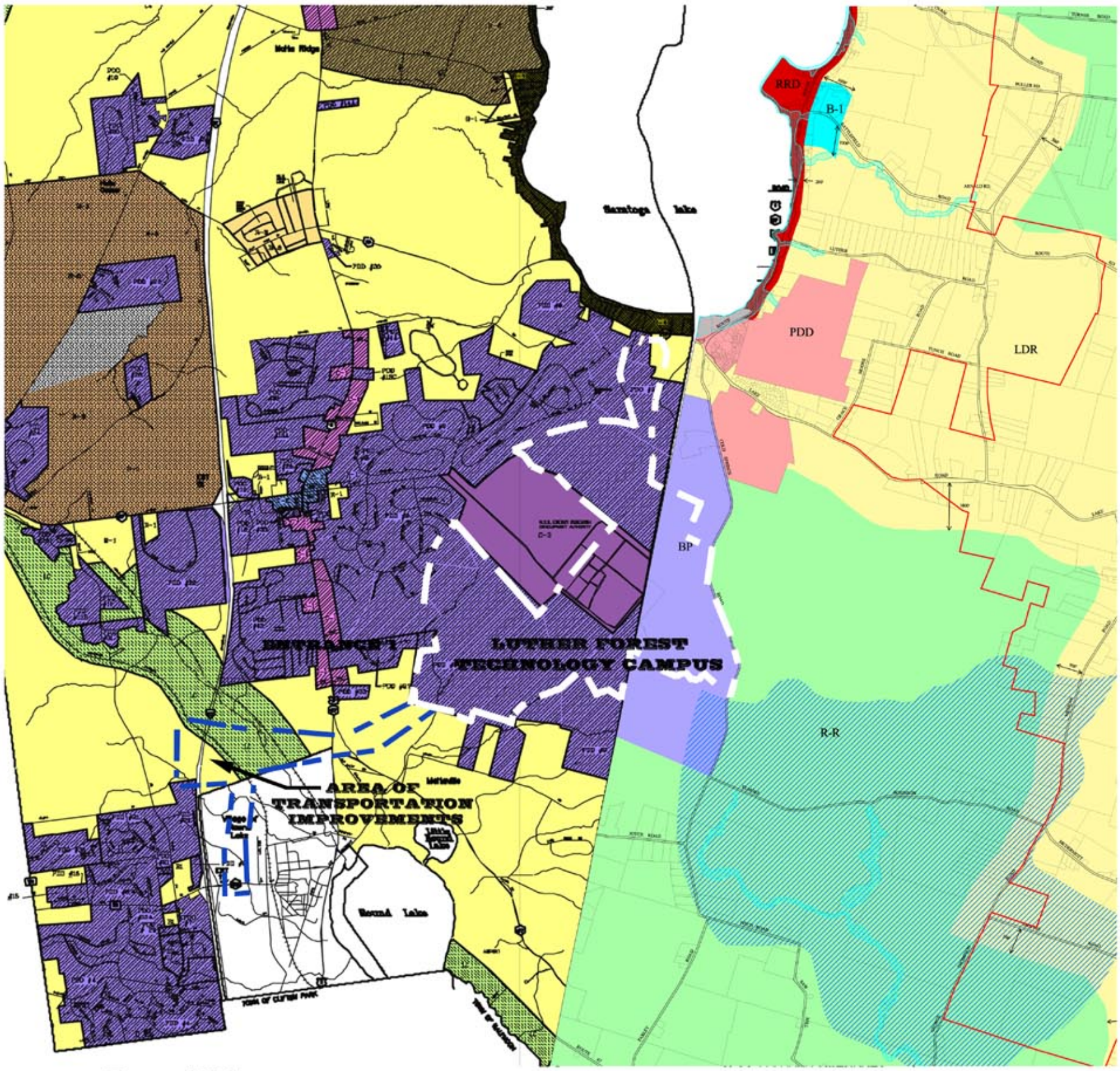
Town of Stillwater
Zoning Map

Legend
- B-1 Neighborhood Business District
- B-2 General Business District
- BP Business Park
- ID Industrial District
- PDD Planned Development District
- LDR Low Density - Residential District
- RM Moderate Density - Residentail District
- R-R Rural - Residential District
- RRD Residential Resort District
- Watershed Protection Overlay District
- 100 Year Floodplain
- Agricultural District

Combined Land Use Map

Town of Malta & Town of Stillwater
Saratoga County, NY

Figure 2.11.4



Town of Malta
Zoning Map

Legend

- B-1 AGRICULTURE AND/OR RESIDENTIAL
- B-2 RESIDENTIAL
- B-4 RESIDENTIAL
- B-6 RESIDENTIAL
- B-8 RESIDENTIAL
- C-1 COMMERCIAL
- C-2 COMMERCIAL
- C-3 COMMERCIAL
- L.C. LAND CONSERVATION
- P-D PLANNED DEVELOPMENT DISTRICT
- BOUNDARY OF HISTORIC OVERLAY DISTRICT
- LFTC PROJECT BOUNDARY

Town of Stillwater
Zoning Map

Legend

- B-1 Neighborhood Business District
- B-2 General Business District
- BP Business Park
- ID Industrial District
- PDD Planned Development District
- LDR Low Density - Residential District
- RM Moderate Density - Residentail District
- R-R Rural - Residential District
- RRD Residential Resort District
- Watershed Protection Overlay District
- 100 Year Floodplain
- Agricultural District

Combined Zoning Map

Town of Malta & Town of Stillwater
Saratoga County, NY

Figure 2.11.5

Response: A single existing zoning map for portions of both towns, centered around the project site, is provided herein as Figure 2.11.5.

7. Comment: This section should include a description of the preferred, proposed, future land uses in and around the site as identified in the Master Plans for both Malta and Stillwater.

Response: Refer to Responses to Comment #2.11.4 and 2.11.5 which addresses this comment.

While it recognized that the Route 9 south corridor in Malta has a potential to change in the future, perhaps in response to the development pressure resulting from the LFTC, such future change would be controlled by the town, in the context of revisions to its master planning effort. See Response to Comment #2.9.1.

8. Comment: A number of specific points from each Master Plan are listed in the DGEIS. The existing conditions section should identify how these items relate to the proposed project and how the project fits in with the specific actions identified in the plan. Additionally, each of the items called out should be addressed in the impacts section of the document.

Response: Section 3.6.3 of the DGEIS describes the general goals and objectives outlined in the Master Plans for Malta, Stillwater, and the Village of Round Lake, whereas Section 4.6.3 of the DGEIS evaluates the impacts of the proposed action on the respective town planning goals and objectives. The following sections serve to summarize and expand upon the information provided in the DGEIS pertaining to this comment.

Town of Malta

Zoning and Land Use Initiatives	***Describe the LFTC Impact***
Establishment of development guidelines for the NYSERDA property (i.e., the STEP Project) pertaining to internal roads, site layout regulations, performance standards to protect groundwater resources, utilities, traffic mitigation (including alternative site access), open space, and lighting, landscaping and architectural standards.	*The proposed action will provide potential alternative site access as well as model architectural, landscaping and lighting guidelines that may be used for the development of NYSERDA's STEP.*
Creation of a new downtown neighborhood zone with shared access, landscaping with sidewalks, use of parallel access roads.	*The development of the LFTC will provide additional planning resources which the Town may use to create, promote and fulfill the vision of a Downtown Malta.*
Limit the use of PDDs to appropriate locations and planned projects that provide something "extra", such as the use of innovate design features, protection of important resources, or providing important community benefits.	*The proposed LFTC PDD provides a number of "extras" including key alternative access roads and transportation improvements, development of an alternative water source, recreational resources, substantial dedicated green space, mitigation for open space, substantial fiscal benefits, and quality jobs.*
Establishment of visual impact procedures to preserve to the extent possible important local visual resources including views to and from Saratoga and Round Lakes, the Ballston Creek Corridor and views from Eastline Road.	*The proposed LFTC will impact views of the Ballston Creek Corridor from I-87, and views from Saratoga Lake as discussed in Section 2.12 of this FGEIS. As noted in Response to Comment #2.9.1, mitigation will be provided to assist with future town planning efforts.*
Transportation Initiatives	***Describe the LFTC Impact***
Develop alternative access to the NYSERDA property from Route 9, such that Dunning Street becomes a secondary access and impacts to the Village of Round Lake are minimized.	*The proposed LFTC provides an alternative access for the NYSERDA property to Route 9 Street and an alternative access around the Village of Round Lake.*
Develop standards for parallel access roads which may be applied to Route 9 North and Route 9 South. The objective of this planning recommendation is to allow development in the Route 9 corridor, while providing safe access, maintaining traffic movement on Route 9, and preserving to the extent practicable the visual appeal of the Route 9 corridor by reducing the number of curb cuts and limiting sign locations.	*Implementation of the proposed action could induce development and redevelopment of the Route 9 North and South corridors. This would allow the Town to implement access management strategies as proposed in the recently completed Linkage Study within the Route 9 and 67 corridor.*
Continue to develop the multi-use trail system by continuing to work on the Zim Smith Trail in cooperation with the Saratoga County Heritage Trail Committee, and identifying other potential extensions of this trail system.	*The LFTC provides a network of trails on the project site with connections to the Route 9 bike trail. The proposed project also creates a potential alternative connection from Route 9 to Route 9P.*
Recreation and Community Resources	***Describe the LFTC Impact***
Undertake a review of active and passive recreational needs for the town in light of existing and future needs, addressing and balancing the needs for both neighborhood based and town-wide facilities.	*The proposed LFTC will provide mitigation to assist with future town planning efforts. This could include a recreational needs assessment.*
Continue to require that developers donate land or fees specifically earmarked for recreation uses. The design of large PDDs should include recreational amenities.	*The proposed LFTC includes recreational trail amenities available to the public, and is consistent with this goal.*
Consider potential new locations for a town library, elementary school or other educational facility.	*The future location of a new school, library, or other educational facility could be within the LFTC project site, if desired by the Town as approximately 18 acres of public use lands are dedicated.*
Undertake a review of important open spaces[1] in the town to identify priority areas that should be afforded additional protection.	*The proposed LFTC provides mitigation to assist with future town planning efforts that may include revisions to the Town's Open Space study.*

[1] Open Space is defined by Malta Town Code (§167-2) as an unoccupied space open to the sky on the same lot with the building.

Town of Stillwater

Land Use Initiatives	***Describe the LFTC Impact***
Develop guidelines for all new development to ensure consistency with the town's goals and objectives.	*The proposed LFTC, as noted in Response to Comment #2.9.1 will provide mitigation to assist with future town planning efforts. Additionally, the architectural, landscaping and lighting guidelines developed for the LFTC may be of assistance to the town.*
Establish land preservation techniques for agricultural land and open space with the assistance from the Conservation Advisory Council.	*As noted in Response to Comment #2.9.1, implementation of the proposed action will provide mitigation to assist with future town planning efforts, including open space preservation.*
Establish site plan review procedures for reviewing visual impacts including recommendations for the preservation of identified visual resources, including views from the Saratoga National Historic Park, as well as major viewsheds associated with lands adjacent to Saratoga Lake and the Hudson River.	*As noted in Response to Comment #2.9.1, implementation of the proposed action will provide mitigation to assist with future town planning efforts, including open space preservation.*
Create a landscape and open space ordinance.	*The landscaping guidelines developed for the LFTC may be of assistance to the town.*
Prepare a Business Park[1] Generic EIS to define boundaries for rezoning, establish SEQR thresholds and design guidelines, and designate mitigation costs.	*This objective is accomplished by the proposed action for a majority of the BP zoning district.*
Create an overlay district for the Plum Brook Watershed to protect the existing water supply and water quality pertaining to potential land use conflicts.	*This objective has been accomplished by the Town, and the development of the LFTC will not have any adverse impact on the Plum Brook Watershed.*
Transportation Initiatives	***Describe the LFTC Impact***
Explore the creation of a transportation improvement district for the development of a Northway connector road and sewer and water improvements within the Business Park zoning district. It is recommended that the town initiate discussions with the Town of Malta, NYSERDA, and Wright Malta Corporation for the potential development of a connector road with linkage to Cold Springs Road.	*This transportation initiative is accomplished by the proposed action.*
Prepare guidelines for the construction of sidewalks and trails within existing and new development with consideration given to adopting a sidewalk and trail ordinance.	*As noted in Response to Comment #2.9.1, implementation of the proposed action will provide mitigation to assist with future town planning efforts.*
Community Facilities	***Describe the LFTC Impact***
Investigate the current and future availability of sewer and water for servicing potential growth areas in the town.	*Implementation of the proposed action will add water and sewer service to the western section of the town, providing future expansion capabilities.*
Recreation and Open Space	***Describe the LFTC Impact***
Undertake a town-wide recreational needs study to determine existing and future recreation resources.	*As noted in Response to Comment #2.9.1, implementation of the proposed action will provide mitigation to assist with future town planning efforts, including open space preservation.*

[1] Project site lands in the western part of the Town have been rezoned BP by the Town of Stillwater.

Village of Round Lake

General Land Use Objectives	Describe the LFTC Impact
Protect the unique character of the Village and ensure that any further development is consistent with the Village's existing character.	*The proposed transportation improvements will serve to protect the Village's unique character. Additionally, the Applicant has proposed to create new entrances to the Village identifying it's history and character.*
Develop alternative access around the Village with no further improvement to Curry Road.	*The proposed action will accomplish this important Village objective.*

9. Comment: The DGEIS limits the comparison of existing and proposed land uses to a comparison of the proposed land uses to the developed portions of the site. It should identify (acreages) how much land will be developed for each use, how much existing undeveloped land will be converted and how much undeveloped land will remain.

Response: Based on the data presented with the initial LFTC PDD application to the Towns of Malta and Stillwater, the existing 1,350-acre project site is presently comprised of approximately:

- *1,326 acres of forest,*
- *9 acres of wetlands, and*
- *15 acres of roads, buildings and other paved surfaces.*

At full LFTC build out, there will be an estimated:

- *609 acres of forest,*
- *9 acres of wetlands,*
- *465 acres of roads, buildings and other paved surfaces, and*
- *267 acres of additional open space including trails, recreation and landscaping.*

For comparison purpose, the original PDD #9, known as the Luther Forest allowed:

- *1,750 housing units on 462 acres,*
- *100 acres for industrial development,*
- *15 to 20 acres for commercial and town purposes,*
- *24 acres for community and institutional center purposes,*
- *20 to 30 acres for neighborhood center purposes,*
- *20 acres for a cemetery,*

- *24 acres for a sanitary landfill,*
- *39 acres for a stable and paddock area, and*
- *the remaining land area to be occupied by roads, road right-of ways and access paths.*

10. Comment: The proposed use has some similarities to the existing uses but it is not the same. This site will primarily be a manufacturing facility not an R&D facility. Historically large portions of this site have remained undeveloped. The size and scale of this project is much larger than what currently exists. This should be acknowledged and clearly outlined.

Response: Comment noted. Refer to Response to Comment #2.11.9, as well as Sections 2.0 and 3.0 of the DGEIS which acknowledge and outline both the historical use of the project site and the scale of the proposed Campus development.

11. Comment: The proposed land use may be in fact a continuation of historical land use to some extent, but a full description of the differences are necessary to provide a full understanding of the project.

Response: As stated in Section 4.6.1 of the DGEIS, the proposed action represents, in part, a continuation of the historical research and development (R&D) which has taken place at the Malta Rocket Test Station and continues to take place in association with Wright-Malta's use of the subject site. Considering the critical nexus between nanotechnology manufacturing and R&D, all nanotechnology manufacturing facilities, support businesses and offices are considered to be a continuation of the stated historical land use. These nanotechnology uses represent the central focus of the planned technology campus, and a majority of the proposed land uses within the LFTC. All other proposed uses (i.e., general office, residential, commercial, and community uses) do not represent a continuation of historical land use.

Refer to Response to Comment #2.11.10 above.

12. Comment: "Highest and Best Use"- This is a misleading term that many people may equate with "as of right". This indeed may be the highest and best use of this site in terms of potential developer profits or potential future tax revenue. Depending on the overall community goals it may not be the best and highest use for the Town, particularly if the Town is not ready to handle the additional ancillary growth that typically accompanies this type of development. The document needs to accurately describe why this use is considered "highest and best use" for this property and to

whose benefit.

Response: The Applicant, believes that the proposed LFTC PDD is the "highest and best use" of the subject property, whose unique site characteristics, within the context of today's global market for semi-conductors, make it highly attractive for nanotechnology manufacturing.

"Highest and best use" is a financial term that can be defined as follows according to the Dictionary of Real Estate Appraisal, 10th Edition:

> *The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value.*

Analysis of a properties' "highest and best use" involves consideration of legal, physical, market, and economic factors, including supply and demand. Based on the Applicant's analysis of the site's characteristics, including its proximity to major transportation modes, its location relative to institutions of higher education, the availability of utilities, its size, and other truly unique factors as presented in Section 2.0 of the DGEIS, and with consideration to the various modes of future development that could take place on the project site, the Applicant has come to the conclusion that the proposed LFTC represents the "highest and best use" of the subject site from an economic valuation and economic development perspective.

13. Comment: What type of development pressure will occur off-site as a result of this project? Will surrounding land uses continue as they are? How will they change? Are the likely land uses consistent with the Master Plans of each town or Village? This needs to be clearly identified.

Response: Refer to Responses to Comments in Section 2.9, Growth Inducement, of this FGEIS.

14. Comment: The NYSERDA facility although not part of this project is clearly linked. Will operations share facilities or access? How will the proposed LFTC affect the ability of NYSERDA to expand? It has been implied that the two-million square feet of ancillary build out includes NYSERDA build out. This needs to be clearly indicated in the document. NYSERDA needs to be included in this part of the discussion.

Response: At a minimum, the LFTC and NYSERDA's STEP will be linked via Hermes Road for the limited purpose of emergency access. At the present time, there is no joint development agreement in place between the two projects. The Applicant has and will continue to pursue mutually beneficial joint site access agreements with NYSERDA, in conjunction with site planners.

Recognizing NYSERDA's need for alternative access across the LFTC project site that does not utilize Dunning Street for the purpose of primary access into their 280-acre facility, the

Applicant analyzed the combined traffic from both projects and derived trigger thresholds for future development between the two projects. Future ancillary development in the LFTC and STEP development that triggers the requirement of alternative access will proceed on a "first come, first serve" basis up to the two-million square feet development threshold. Refer to Response to Comment #2.2.25 for additional information regarding this trip threshold that correspond to the proposed transportation improvements. Future ancillary development in LFTC or STEP beyond this traffic threshold would trigger the need for a supplemental environmental assessment.

The Applicant has previously met with NYSERDA representatives to discuss mutually beneficial joint development between the two projects. Available design information for the LFTC, including but not limited to off-site improvement plans, has been shared with NYSERDA. The Applicant will continue to pursue mutually beneficial development plans with NYSERDA and the Town of Malta to administer or monitor the limitation of the SEQR thresholds established in this GEIS (refer to Table 2.36.7).

15. Comment: Potential impacts to lands within the Village of Round Lake that are adjacent to the proposed Step 1 "by-pass" road need to be identified. Is it likely that they will remain in their current use or will there be development pressure along this corridor? What will be the impacts to land use upon the partial removal and abandonment of the "by-pass" during the step 2 transportation improvements?

Response: Lands along the Step 1 access road within the Village of Round Lake are undeveloped forested lands, some of which is wetland associated with Ballston Creek drainage. There is some nearby residential development along New York Avenue and at the end of Morris Road.

Current village zoning along the Step 1 road corridor is RV1 Residential, which allows a minimum lot size of 14,000 square feet, a 100-foot minimum frontage width, and 15% maximum coverage. Allowable uses in the RV1 district include: residential dwellings, customary agricultural operations, churches, accessory structures, professional offices within a dwelling occupied by the same, customary home occupations, and public utility structures. In the future, zoning could change, depending on what the village desires. With the construction of the Step 1 access road, there would be a resultant natural development pressure along this new corridor. However, future allowable uses would be at the discretion of the Village.

In response to negative public comments regarding the partial removal and abandonment of the access road around the Village of Round Lake during the Step 2 transportation improvements, the Step 1 access road will remain in service even after implementation of the Step 2 improvements.

16. Comment: The Town of Malta Comprehensive Plan did not envision development of this type or scale anywhere in the town, however the Comprehensive Plan has set forth goals and objectives as well as clear visions for various neighborhoods through out the Town. The GEIS must clearly identify how this project impacts the ability of the Town to meet it's goals and maintain the vision for Malta. What mitigation measures will be necessary to ensure the Town's vision is obtained.

Response: See Response to Comment #2.11.9.

17. Comment: An important element of the Town of Malta Comprehensive plan is the "Vision" of a downtown Malta. The GEIS should discuss in detail how the proposed project will help the Town realize this vision.

Response: The proposed LFTC is not inconsistent with Malta's Downtown "vision". However, there is not presently a clear definition or plan for Downtown Malta. Malta Town Boards are in the process of developing a workable vision for the Downtown. The 2000 Master Plan does identify a "vision" for downtown including preliminary guidelines recommended for incorporation in the new zoning district, however a new Downtown Neighborhood zoning district has not been defined to date. The "vision" for Downtown provided in the 2000 Master Plan (See page 15) is to "... create a place where people live and come and go during the process of every day living. Not just a destination to complete a round of errands but an attractive, people friendly place that provides a variety of goods, services, employment and the opportunity to interact with other people in the community. The kind of place where people might come to pass the time on a sunny afternoon. The Parade Ground, gazebo and future streetscape with a landscaped median, period lighting, walkways and trees are at the heart of this vision."

The proposed project will provide an influx of people into the town of Malta. This is an element which is critical for the creation of sustainable downtown district. The master plan update mitigation described in Response to Comment #2.9.1 will provide additional planning guidance that will serve to assist the Town's further definition, refinement, and implementation of the downtown vision.

18. Comment: The original Luther Forest PDD should be outlined and compared to the proposed PDD including acreages and specific uses.

Response: Refer to Response to Comment #2.11.4.

19. Comment: Current zoning does not allow for 110-foot buildings within either the Luther Forest PDD #9 or the C-3 zoning district within the Town of Malta. Existing

zoning within these zoning districts allows for a maximum building height of 30 feet. While the potential visual impacts have been discussed within Appendix O, Visual Impact Assessment, a discussion of the compatibility of this change in zoning with other existing districts should be included within this section.

Response: Comment noted. Fab structures only within Pod 1 will be allowed to have a maximum building height of 110 feet. Pod 1 is secluded and isolated from the surrounding districts, both within Malta and Stillwater. Since these structures will not be able to be seen from the surrounding districts, they are not expected to be incompatible with any other present or future uses in these surrounding districts.

As noted in Response to Comment #2.1.21, the non-nanotechnology production areas will be built to a maximum height of 75 feet. Any Fabs constructed outside of Pod 1 will not be more than 75 feet.

20. Comment: Piecemeal development as an alternative to the proposed action should not be characterized as negative, since it more closely approximates the towns' intended master plan and natural growth.

Response: Most planners, especially those critical of "sprawl" would not agree with the above comment and believe that "planned" development is preferable to "piecemeal" development.

The proposed LFTC is, by definition, a planned development district that clearly fits the definition of a planned development district in both the Towns of Malta and Stillwater. The proposed action herein under review is the creation of a PDD (i.e., the Luther Forest Technology Campus Planned Development District) which essentially proposes zoning changes in the Towns of Malta and Stillwater. These requested zoning changes will allow for a complete planning-level master plan for the full build-out construction and operation of the 1,350-acre project site, including green space; landscaping, architectural, and lighting standards; and location and configuration of development pods for primary and ancillary nanotechnology uses, as presented in Section 2.3 of the Draft GEIS.

It is recognized that piecemeal development fully consistent with the towns' comprehensive master plans is not necessarily "negative", and in theory with certain provisos can provide good long-term growth patterns if properly implemented by the respective town boards. However, in practice, piecemeal development commonly is "unanticipated" and frequently the result of "spot zoning" requests not conforming to the pre-existing zoning ordinance can result in unforecasted growth trends that trigger the need for compensatory mitigation prior to approval on a project-by-project basis, and create the need to update and rethink town comprehensive master planning efforts.

In general, current zoning district classifications anticipate future development in a piecemeal fashion, and provide a basic control mechanism for such similar land uses (e.g., residential,

commercial, etc.) to each happen within its own designated district classifications. Such classifications and related conventional zoning controls are useful from a land management perspective, but do not achieve the higher and better defined development standards of a planned development district, such as the one proposed for the LFTC.

21. Comment: One commenter (Heather Atkinson) pointed out that some of Malta's town goals are in the process of being modified, including sidewalks, pathways, road width, open space development, reducing curb-cuts, shared driveways, alternate access roads, loop roads, architectural style and materials, lighting, and open space goals. These items are outlined in draft documents "in the works" that include: Linkage Study, Downtown Design Guidelines Manual, and Open Space Development Legislation which has been completed. The Open Space Committee is focusing its efforts on maintaining the Horse Farm at Exit 12 as a horse farm, obtaining a linkage or connection to Saratoga Lake, and a northwest open space connection which could possibly be a northern Malta Park. How will the proposed action effect these Town initiatives?

Response: Comment noted. This Project affords the opportunity for these town visions to become reality.

22. Comment: If the existing zoning (PDD#9 and C-3) do not allow a chip fabrication facility or any structures over 30 feet in height, then will the LFTC be granted an exception or will the zoning laws be changed for this to occur? How can a structure 110 feet height be authorized under current zoning?

Response: The PDD legislation process is proposed by the Applicant to create a new zoning district that would allow such uses. This PDD legislative process is essentially a zoning change that will allow a structure 110 feet high to be built within Pod 1 of the proposed Campus. Prior to PDD approval, and as contained in this GEIS, the Town Boards will need to make a SEQR Finding that that structures with a height of 110 feet will not have any significant adverse impact. Refer to Section 2.12, Visual Impact, for a more detailed assessment of the Fab structures having a maximum height of 110 feet.

2.12 Visual Impact

1. Comment: How can a building having a height of 110 feet have no adverse impact? What about mechanical systems and other structures that might be mounted on top of the roofs, are these included in the 110 feet height limit? If not, then shouldn't this incremental visual impact be addressed? Can a building less than 110 feet still work? How high are the on-site storage tanks and where will they be located? Will these structures be visible off-site?

Response: The structural components are included in the 110-foot building height. However, the extent of the Fab building to be built at a full height of 110 feet is unknown. The remainder of the buildings will be 3 to 4 stories high. Refer to Appendix C, Industry Requirements Report, Appendix A.

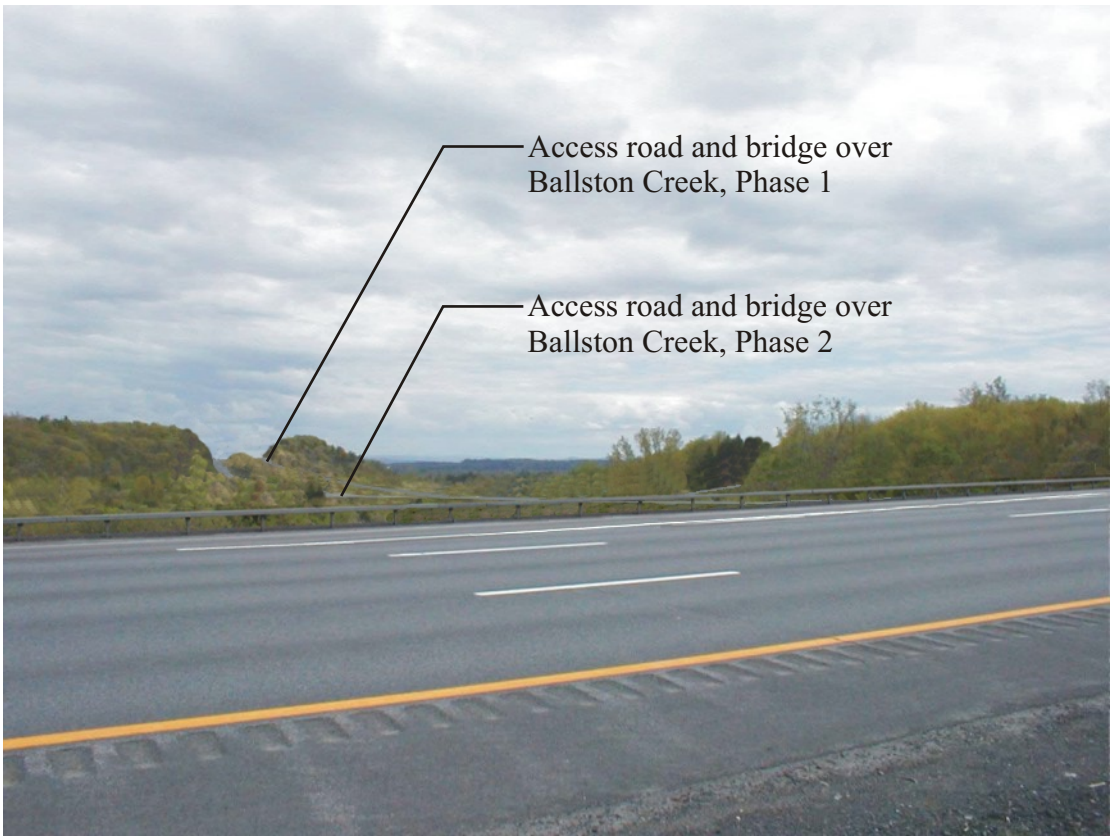
The on-site storage tanks will be located in the southeast corner of LFTC project site. They will have a maximum height of 80-feet and will be no taller than the existing surrounding vegetation. Therefore, they will not be visible off-site. See Figure 2.1.1 of the revised Illustrative Master Plan in the FEIS.

2. Comment: The proposed Step 1 and 2 transportation improvements will have severe visual impact on both the easterly and westerly vistas from I-87, approximately one-mile north of Exit 11. One commenter (Audrey Ball, Malta's Director of the Department of Parks, Recreation & Buildings) stated an opinion that the area east of I-87, north of Exit 11 is the "most scenic section of the Northway, prior to entering the Adirondack Park region." This area is stated to be a natural setting and area of important aesthetic and scenic quality, a critical environmental area in the Town that makes the Zim Smith Trail so beautiful. It is suggested that such local visual resources be preserved, as opposed to "blasting a hole in our scenic vista" and losing "a beautiful piece of our community character."

Response: Based on the concept layout, photographic simulations have been produced to illustrate the typical amount of clearing necessary to accommodate the ramp system for this exit, as well as the amount of vegetation that will remain. New landscaping to be added has not been fully illustrated in order to present a worst case visual simulation. The proposed changes in the vista are in keeping with the character of the interstate highway system and the existing area. Three (3) photographic simulations are described below.

• *Figure 2.12.2A - I-87 Looking East Toward Round Lake. This photograph was taken from the median of the southbound lane looking east. The photographic simulation illustrates the change in the existing view for the proposed access road to the LFTC.*

Existing Conditions: I-87 Looking East Toward Round Lake



Proposed Improvements: I-87 Looking East Toward Round Lake

Figure 2.12.2A

• *Figure 2.12.2B – I 87 Looking East Toward Proposed Route 9 Access. This photograph was taken on the northbound lane at the edge of pavement adjacent to the guide rail. The photographic simulation illustrates the eastbound ramps that connect the southbound lanes and northbound lanes to the interchange. The ramp system will be almost 30 feet below the existing elevation of the I-87 surface. However, the simulation does not illustrate the full extent of landscape materials that would be included in the non-paved areas adjacent to the interchange.*

• *Figure 2.12.2C - I 87 Looking South. This photograph was taken on the southbound lane edge of pavement adjacent to the guardrail. The photographic simulation illustrates the southbound off-ramp and northbound on-ramp for the proposed Exit 11A.*

The Zim Smith trail will need to be traversed by off-site transportation improvements, which include either a wide tunnel or a highway overpass. One of the main design objectives is to preserve and enhance the existing visual character of the trail, which already exists in the interstate corridor.

The ramp system will change the mix of vegetation and roadways in the highway corridor. The character of changes is similar in extent to the types of land uses found in the interstate corridor.

3. Comment: The visual impact summary states that only one location has a medium impact. The validity of this statement is questioned considering the amount of transportation improvements that are being proposed in the vicinity of I-87 and Route 9, where there are presently open space views.

Response: Tables 1 and 2 of Appendix O in the DGEIS present a summary of the potential visual impacts by the transportation improvements. The supporting text in Appendix O (pages 9-14) provided the rationale for the rating. Refer to Responses to Comments #2.12.5 and #2.12.9.

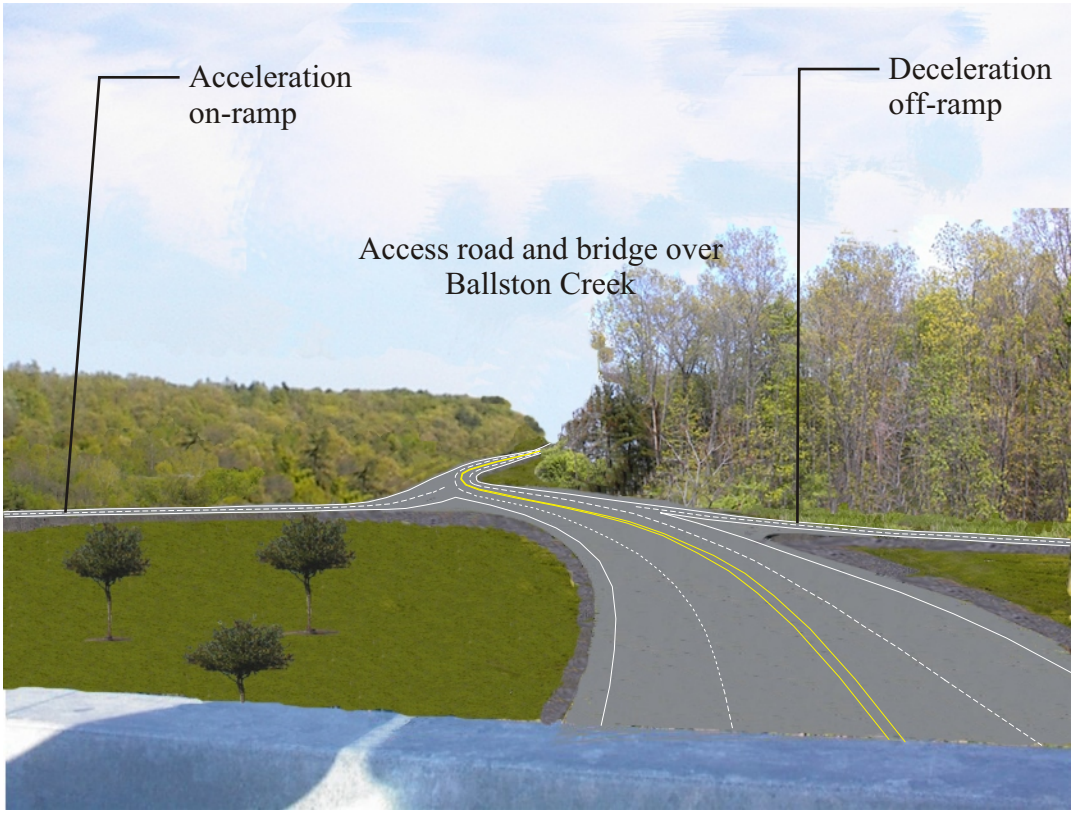
4. Comment: The visual impact along the Ballston Creek corridor and Zim Smith Trail will be high. This area is targeted by the town's master plan as remaining open space. Based on this high impact, alternative routes for the transportation improvements should be used.

Response: See Response to Comment #2.12.2.

5. Comment: Power transmission lines are intrusive and disrupt the viewshed.

Response: The ETL lines have been located in a position that takes advantage of existing vegetation and other similar facilities that minimize visual impact by consolidating visual

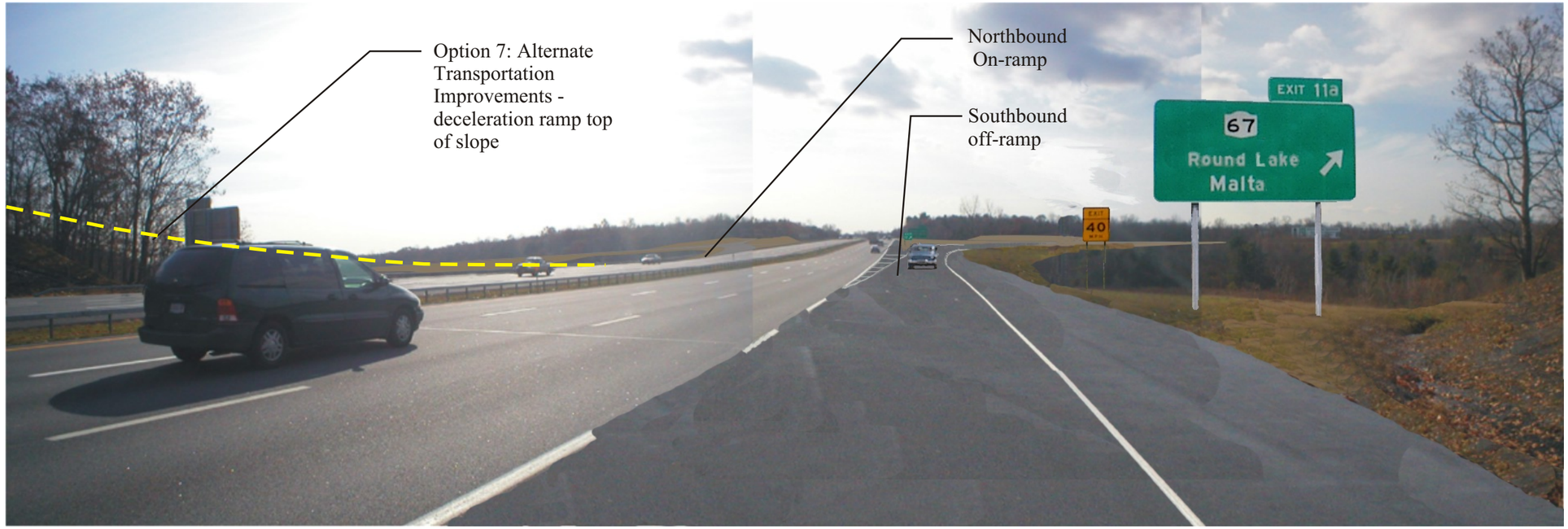
Existing Conditions: I-87 Looking East Toward Proposed Rt. 9 Access



Proposed Improvements: On I-87 Looking East Toward Proposed Rt.9 Access Road

Figure 2.12.2B

Existing condition southbound on the Northway, located approximately one mile south of Exit 12.



Simulation of proposed condition of the new Exit 11A, showing southbound off-ramp and northbound on-ramp.

Figure 2.12.2C

intrusion. Further refinement in the position of the structures that will reduce visual intrusion will take place during the final design. The balance of industry needs, feasible alternative design, and overall impact analysis as it relates to resources including wetlands and visual resources will be examined by the PSC. Below is Table 2.12.5, which is an addition to the Visual Impact Analysis in the DGEIS.

Electric Transmission Line (ETL) Visibility Rating - The same process for visibility rating utilized for LFTC was applied to the ETL corridor and utility lines necessary to serve the project site. Table 2.12.5, ETL Visibility Rating, is the result of the analysis for the previously selected area. In addition, the potential for ETL structure visibility from Canal Locks 3 and 4 in Rensselaer County was added to the assessment.

Table 2.12.5
ETL Visibility Rating

DEIS Photographs	Receptor Name	Project Visibility	Significance	Context	Dominance
4-1	VanNess Road		Low	Compatible	Minor
4-2	County Road 75	Clear	Low	Mix	Major
4-3	George Thompson Road	Clear	Moderate	Mix	Major
4-4	Elmore Robinson Road	Clear	Moderate	Incompatible	Minor
4-5	Route 9-North/South View	Clear	Low	Compatible	Minor
4-6	Route 9	Clear	Low	Compatible	Major
No Photo	Canal Lock 3	Limited	Low	Compatible	Minor
No Photo	Canal Lock 4	None	None	-	-

Van Ness (Brickyard Road)

This is the substation tap point for the start of the ETL. The existing substation is a similar size to the proposed ETL and the switch gear for connection to the utility operated substation has the same bulk and height as the equipment in the substation. The visual impact is low due to the context compatibility and as a component of the viewshed it is minor due to the consolidation of visual intrusions.

County Route 75

The significance rating was low due to the screen effect of the road curves which will limit the view duration to 10 seconds or less. The context of this location includes other utility structures; therefore, a mix rating has been assigned.

The ETL structure may be potentially within the viewshed of the roadway and may also be visible from the homes. Based on a worst-case visibility, a rating of major in the dominance category was selected.

The views along the ETL to the east and west will not create new regional vista due to the turns in the line. Siting the ETL at or near property boundaries will minimize disruption of properties.

George Thompson Road

The visual rating for this location is the same as the prior site on County Route 75. The moderate rating was selected due to home sites in the area. The context rating of mix was selected due to the presence of other utility structures in this area. The number of ETL structures potentially visible in this vista could be three (3) or more depending on types of structures selected. Assuming that three (3) or more structures will be in the vista, a dominance category of major was selected.

Elmore Robinson Road

A significance rating of low is applicable to this location due to its rural location and narrow vista. In the context of this site, the ETL structures will be a new element in the vista and will alter the existing baseline visual characteristics of this rural road. The incompatible rating is a worst-case based on using the H-frame structures. Careful siting of the structures can reduce the visual impact. The ETL structures will be minor components of the vista due to screening provided by the trees. The vistas to the south along the ETL will be limited due to the crook in the ROW. The vista to the north will be limited due to changes in grade and forest cover.

Route 9 North/South View

The significance rating for the site is low due to the number of structures in the Route 9 ROW and pre-existing utilities. A context rating of compatible was assigned due to the existing overhead lines. Additional ETL lines will be a minor component of the vista, therefore, under dominance, a minor rating was selected for the crossing.

Route 9 View East and Photo Simulation

This would be a right angle view from the normal traveling public perspective, therefore, a significance of low was selected. Due to the other types of utility lines in the vista, a compatible rating was selected.

Assuming that either a single-pole double-davit structure or a two single circuit H-frame structure will be utilized as shown in the visual simulation, a dominance rating of major was appropriate. Refer to Figures 2.12.5C and 2.12.5D which show visual simulations for the single-pole double-davit structure at Route 9.

View duration looking to the east or west along the corridor at 40 mph will be less than 3 seconds for the traveling public. Also, the corridor turns to the south approximately 1,000 feet east of Route 9.

Existing conditions - Corridor @ Rt 9 looking East

Proposed conditions - Transmission corridor @ Rt 9
looking East with road side screening

Figure 2.12.5 C

Existing conditions - Corridor @ Rt 9 looking West

Proposed conditions - Transmission corridor @ Rt 9
looking west with road side screening

Figure 2.12.5 D

The additional sites on the Hudson River Champlain Canal were evaluated to determine potential visibility of ETL structures. The Champlain Canal Lock 3 is across the River from Mechanicville. From the lock, the ETL crossing of the River is visible but the substation is fully screened by vegetation and development. The proposed ETL to the LFTC may be visible as a cut on the hillside but will also be screened by vegetation and development.

At canal Lock 4 there is a small canal park with a trail to the point of the peninsula. The canal lock is in a rock cut and surrounded by forest which eliminates views to the east or west. The south view towards the City of Mechanicville is limited and the railroad bridge is the major structure in the view and screens the City as well as the ETL structures. From the point on the peninsula, the rail bridge screens the view of the City and the ETL.

Interchange 11A

The proposed interchange on I-87 north of Exit 11 will primarily be visible from the Northway corridor itself, Ballston Creek Valley and the upland surrounding the interchange. The Northway corridor is dominated by the interstate highway and the associated structures including the overpass, bridges and road embankment (see photographic simulations provided in Figures 2.12.2A, B, and C).

The construction of the interchange will change the visual setting of the Northway corridor and the views to the east will be converted from a wooded hillside to a mix of roads and wooded hillside. The context will have multiple features including a hillside, valley and roads, therefore, a view rating of mixed is applicable (see Figure 2.12.2C). View duration for the driving public will be 6,000 feet for the north bound traveler (63 seconds) and 2,500 feet for the southbound traveler (31 seconds). The total view duration will not be experienced by vehicle drivers; however, passengers may experience the entire view duration.

Given the limited visibility of Exit 11A and that it is restricted to the developed corridor, the context is compatible. Since the Zim Smith trail is a recreational area clearly dominated by the Northway, any changes in the vista that occur due to the construction of Exit 11A are considered to be minor as it relates to dominance due to consolidation of the visual intrusions.

The visual simulation for the Route 9 overpass have been modified to show the necessary signage for ramps onto the interchange road (see Figures 2.12.5A and B).

The overpass structures will be a new visual element within the Route 9 viewshed. These types of structures are commonly seen in the Route 9 corridor and would be within the normal context of the Route 9. The overpass will be a major element in the Route 9 viewshed.

Existing Condition - Traveling Southbound On Route 9

Proposed Condition - Traveling Southbound On Route 9

Figure 2.12.5A

Existing Condition - Northbound On Route 9

Proposed Condition - Overpass Northbound On Route 9

Figure 2.12.5B

6. Comment: Where are the computer viewshed projections for the 3-mile radius and visual simulations? How can they be accessed?

Response: The computer viewshed projections are contained in Appendix O of the DGEIS, and Figure 2 and the visual simulations are also in Appendix O under Photosimulations. The DGEIS is available at the Town Halls of Stillwater and Malta and the local libraries. It is also on the Town of Malta's (www.Malta-town.org) and SEDC's (www.saratogaedc.org) web sites.

7. Comment: A Table of Contents, List of Figures and List of Appendices needs to be included within Appendix "O"- Visual Impact Analysis.

Response: Comment noted. An appendices list was available in the printed copies, and the appendices included their individual table of contents.

8. Comment: Under Viewpoint Selection on Page 3, the statement that the Village of Round Lake is in "support for a new interchange on the Northway" should be removed. This statement is not applicable to the discussion of how the viewpoints were selected.

Response: Comment noted. This reference is not applicable to the discussion and should not have been included.

9. Comment: The report uses an evaluative scale of low, medium and high to assess the potential impacts to the visual environment, however the scale's analytical elements are not identified. The report should include definitions of the types of impacts as well as a discussion as to how they relate to visual impacts.

Response: The overall components of visibility for each element in Tables 1 and 2 have been evaluated according to the criteria below based on aesthetic resource criteria of NYSDEC.

The NYSDEC (DEP 00-02), "Assessing and Mitigating Visual Impacts" states that significant aesthetic impacts are those that may cause a diminishment of the public enjoyment and appreciation of an inventoried resource.

Neither the project site nor the structures are visible from any of the 15 categories of aesthetic resources of state-wide significance. The lack of inventoried aesthetic resources in the viewshed diminished the importance of vista and contributed to the lower overall ratings of the impacts. The expanded Tables 2.12.9A and 2.12.9B take a slightly different approach to the visual

assessment rating that addresses the visual impact on a more local perspective. These are located on the following pages.

Table 2.12.9.A
Technology Campus Viewpoint Summary

Receptor Identified by	#	Receptor name	Distance to centerpoint of project (miles)	Project Visibility	Assessment Method	Estimated # of Potential Viewers (Annual)	Activity of Potential Viewers	Significance of View (If available)	Context	Dominance
Consultant, Pre Scoping	1	West end of Snake Hill Rd.	3.3	YES	Viewshed analysis, Balloon test photo	63,072	Recreation	MODERATE	Mix	Major
	2	Lake Road Condos.	1.9	NO	Viewshed analysis, Balloon test photo	38,544	Residence Recreation	NONE	N/A	N/A
	3	Knapp Road	1.4	NO	Viewshed analysis, Balloon test photo	80,592	Driving	NONE	Mix	Minor
	4	NYS Route 67, near Payne Rd.	1.8	NO	Viewshed analysis, Balloon test photo	977,835	Driving	NONE	N/A	N/A
	5	I-87, 1.5 miles south of Exit 11	2.7	NO	Viewshed analysis, Balloon test photo	22,301,500	Driving	NONE	N/A	N/A
	6	Ruhle Road, Autumn Run Subdivision	2.9	NO	Viewshed analysis, Balloon test photo	115,632	Driving	NONE	N/A	N/A
Scoping	7	Zim Smith Trail	2.3	NO	Viewshed analysis	n/a	Recreation	NONE	N/A	N/A
	8	Dunning St. Historic District	1.5	NO	Viewshed analysis	87,600	Driving Residence	NONE	N/A	N/A
	9	Village of Round Lake	2.2	NO	Viewshed analysis	n/a	Driving Residence	NONE	N/A	N/A
	10	Grace Moore Road	2.0	NONE	Viewshed analysis Photo verification	n/a	Driving Residence	NONE	N/A	N/A
	11	Yunch Road	2.5	NONE	Viewshed analysis Photo verification	31,536	Driving Residence	NONE	N/A	N/A
	12	Dunning St. Park	1.5	NO	Viewshed analysis	n/a	Recreation	NONE	N/A	N/A
Local	13	Riley Cove Area	3.9	YES	Extended Viewshed Analysis	192,720	Driving Residence Recreation	MODERATE	Mix	Minor
Town of Malta	14	Ballston Creek (Ruhle Road Pedestrian Bridge)	2.9	NO	Viewshed analysis	n/a	Recreation	NONE	N/A	N/A
	15	NYS Route 67 @ I-87 Exit 12 (horse farm side)	2.3	NO	Viewshed analysis	5,207,090	Driving Recreation Residence	NONE	N/A	N/A

Table 2.12.9.A (Continued)
Technology Campus Viewpoint Summary

Receptor Identified by	#	Receptor name	Distance to centerpoint of project (miles)	Project Visibility	Assessment Method	Estimated # of Potential Viewers (Annual)	Activity of Potential Viewers	Significance of View (If available)	Context	Dominance
	16	East High St. (Century farm)	5.0	NO	Extended Viewshed Analysis	52,560	Driving Residence	NONE	N/A	N/A
	17	Route 9P (near Villa Luisa)	1.6	NO	Viewshed analysis	954,840	Driving	NONE	N/A	N/A
	18	NYS Rt. 87 (interchange btwn exits 11 & 12)	2.6	NO	Viewshed analysis	22,301,500	Driving	NONE	N/A	N/A
	19	Malta Ridge Area	3.8	NO	Extended Viewshed Analysis	101,616	Driving	NONE	N/A	N/A
	20	Lake Ridge (overlooking Little Round Lake)	1.5	NO	Extended Viewshed Analysis	80,592	Driving Residence	NONE	N/A	N/A
	21	NYS Rt. 9 @ I-87 Exit 13 (near Stewarts)	4.2	NO	Extended Viewshed Analysis	4,816,540	Driving	NONE	N/A	N/A
State/ Federal	22	Ruhle Road Stone Arch Bridge	Identified by Town of Malta						N/A	N/A
	23	Saratoga National Historic Park	5.0	NO	Distance	180,000*	Recreation	NONE	N/A	N/A
	24	Round Lake Historic Building	Identified during scoping						N/A	N/A

*Estimated 80,000 visitors to Visitor center, 180,000 overall, NPS
**Figure by number of dwelling and 9.6 trips/day/dwelling (Urban Land Institute, 1994)
***Not verified by receptor site visit, viewability may be obstructed by mature vegetation and/or other structures

Table 2.12.9.B
U.S. Route 9 Overpass Viewpoint Summary

Receptor Identified by	#	Receptor name	Distance to Proposed Overpass @ Route 9	Project Visibility	Assessment Method	Estimated # of Potential Viewers (Annual)	Activity of Potential Viewers	Significance of View (If available)	Context	Dominance
Consultant, Pre Scoping	3	Knapp Road	0.5	NO	Viewshed Analysis	80,592	Driving	NONE	N/A	N/A
	4	NYS Route 67, near Payne Rd.	1.3	NO	Viewshed Analysis	977,835	Driving	NONE	N/A	N/A
	6	Ruhle Road, Autumn Run Subdivision	1.2	NO	Viewshed Analysis	115,632	Driving	NONE		
Scoping	7	Zim Smith Trail	0.5	I-87 Ramps	Viewshed Analysis	n/a	Recreation	Middleground - Moderate	Mix	Major
	9	Village of Round Lake	0.8	NO	Viewshed Analysis	n/a	Driving Residence	NONE	N/A	N/A
Local,	14	Ballston Creek (Ruhle Road Pedestrian Bridge)	1.5	No	Viewshed Analysis	n/a	Recreation	None	N/A	N/A
Town of Malta	18	I-87 (between exits 11 & 12)	0.7	I-87 Ramps	Viewshed Analysis	22,301,500	Driving	Middleground-Moderate	Compatible	Major
	20	Lake Ridge (overlooking Little Round Lake)	0.9	NO	Viewshed Analysis	80,592	Driving Residence	NONE	N/A	N/A
State/Federal	22	Ruhle Road Stone Arch Bridge	See #14 Above				Recreation			
	24	Round Lake Historic Building	See #9 Above		Viewshed Analysis					

* Estimated 80,000 visitors to Visitor center, 180,000 overall, NPS
**Figure by number of dwelling and 9.6 trips/day/dwelling (Urban Land Institute, 1994)
*** Not verified by receptor site visit, viewability may be obstructed by mature vegetation and/or other structures

This rating considers the level of visibility by additionally evaluating the context of the visual elements and dominance of the structure in the viewshed.

Context is how the structures fit as a component of the vista and is scored as compatible, incompatible or mixed. A compatible evaluation states that the structure is of similar size, color and materials as the other elements in the viewshed. An incompatible rating identifies that the structure is larger, of different color or materials than the other components in the viewshed. A mixed rating identifies that the structure may be larger but similar in color or materials or of similar size yet different color, materials, or texture. Compatibility can also be affected by the amount of screening that surrounds the structure. If a structure is fully screened by local topography or vegetation, it is compatible with the visual settings. If the structure is fully visible, then it may be incompatible, while a rating of mix simply indicates that the structure is partially screened by vegetation.

Dominance provides an evaluation of the overall visibility of the structures. A dominant structure will be clearly visible and be a major component of the viewshed, while a minor structure will not be clearly visible and will not fill a significant portion of the vista.

The word "major" will signify that structure as a major portion of the viewshed, while minor will indicate that the structure is not a significant element in the viewshed.

<u>LFTC Visibility Rating</u>

The significance of view category changes very little once a complete rationalization of the visual impacts is prepared. At the majority of the locations studied, the structures at the LFTC will not be visible. At the following locations, some portions of the proposed 110-foot Fab structure will be visible and warrant further clarification of the assigned ratings:

- *Saratoga Lake North and West of Snake Hill*
- *Riley Cove Area*

The two lake sites, Riley Cove Area and the entire basin north of Snake Hill, will have a view of the upper 10-20% of the proposed Fab if constructed to the maximum allowable height of 110 feet.

The lake surface is considered to have a mixed context due to the numerous shoreline structures that are also in the middle and background portion of the vista. The entire façade of the Fab building will not be visible, and the sloping area between the shoreline and the building will remain forest. The portion of the building above the tree line will be a minor component, since the vista will contain other elements including trees and buildings along the shoreline and the lake in the foreground.

Grace Moore Road and Yunch Road are 2.0 miles and 2.5 miles, respectively, from Pod 1 of the LFTC. Both roads have segments that are at an elevation of 400 feet, which is 70 to 100 feet

higher than the ground elevation at LFTC. The wood lots extend up to the right-of-way preventing views out of the areas. The Saratoga Lake Golf Course clubhouse is not expected to have any views of the roof top of the manufacturing facilities.

The use of neutral colors on the upper portion of the building façade, limiting or eliminating roof top lighting, and selecting an appropriate roof color will minimize the visibility of the structure.

10. Comment: The report should include discussions on elements such as scale, both generic and human, contrast, line and texture as they relate to visual impacts. These elements in combination with visibility define the visual impacts associated with a project.

Response: These elements have been added to 1.B. Data Analysis and Interpretation in Appendix O of the DGEIS, Visual Impact Analysis and in 2.A. Visual Analysis Results. Refer to Response to Comments #2.12.2, #2.12.5, and #2.12.9.

Generic Scale- The proportion of objects based on each other's size.

Human Scale- The proportion of objects based on a human's size.

Contrast- The way an object differs from it's surroundings.

Line- An object's main vertical or horizontal form.

Texture- An object's visual surface can be course, medium or fine.

The visual impact of the LFTC, the transportation improvements and the power line corridor/ electric transmission lines on their surroundings will be based on if and how it is seen from different viewpoints.

<u>LFTC</u>

a. Generic Scale: The tallest structure in the LFTC is the Fab building at a proposed maximum height of 110 feet. There are no similar buildings of this height within the project area. However, due to the 80-feet height of the vegetation, the scale of the building will be in relation to its surroundings. The height, distance from I-87 and US Route 9, architectural style, and vegetative screening contribute to the overall minimal generic visual scale of the structure.

b. Human Scale: Due to the distance and the dense vegetation within the viewpoints, a person's size can not be compared to the Fab building. Therefore, the overall human visual scale of the structure is minimal.

c. Contrast: The Fab building will contrast with the surrounding vegetation. There is proposed to be a low level of reflectivity from the roof and attached support structures. The color selection

will help to provide a sense of unity in the area even though the structure will vary in architectural style and size.

d. Line: Strong linear elements in the LFTC include roof lines and any individual support structures. The edge of the roof will have a strong horizontal line, as well as the expanse of the length and width of the roof. The support structures will have a minimal vertical line based on their height. Depending on the viewpoint, the vegetation creates a strong horizontal line due to the amount, density of crowns and color. It also has a strong vertical line due to the amount, density and repetition of trunks. The surrounding existing vegetation will soften the linear elements of the Fab building.

e. Texture: The building and the dense vegetation will have a coarse texture that will contrast with the underlying base plane fine texture of sidewalks, pavement, grassed areas and the forest floor.

Transportation Improvements

a. Generic Scale: The proposed ramps will be characteristic of ramps along I-87. The proposed overpasses will be characteristic to typical overpasses over US Route 9, as will any overpasses or wide tunnels that are proposed over the Zim Smith trail. The ramps will meet at grade with the existing roadways. Due to the consistency of the design and the height of the vegetation, the scale of the transportation improvements will correspond to their use and have a minimal generic visual scale of the structure.

b. Human Scale: In the locations of the proposed transportation improvements there are no transportation structures that exist now. The height and the visible distance of the overpasses and the width of the ramps are much larger than a person; however, there are similar ramps and overpasses along I-87, US Route 9 and the Zim Smith trail, which make the overall human visual scale of the structure medium.

c. Contrast: The transportation improvements will contrast with the surrounding vegetation, but not with the existing roadways and overpasses.

d. Line: Strong linear elements in the transportation improvements include the ramps, the overpasses and striping. The length and width of the pavement and the striping have a strong horizontal line. The overpasses also have a strong horizontal line. The vegetation has a strong vertical line due to the amount, density and repetition of trunks. The surrounding existing vegetation will soften the linear elements of the ramps and overpasses.

e. Texture: The transportation improvements can be characterized as having a fine texture of pavement, support structures (guardrails, railings), grassed areas and the forest floor framed by coarse textured vegetation.

Power Line Corridor/ Electric Transmission Lines

a. Generic Scale: The proposed electric transmission lines and support structures will be characteristic in design of existing lines and structures in the area. However, the proposed lines and poles will be 80- to 115-feet high and will require a 100- to 150-feet wide cleared right-of-way in areas where there are no existing lines or structures. The height (50- to 80-feet tall) of the existing vegetation will screen a portion of the structures. Overall, the generic visual scale of the lines and structures is high.

b. Human Scale: Due to the height and the visible distance of the lines, and the fact that structures and clearing will be much larger than a person, the overall human visual scale of the structure is high.

c. Contrast: The power line corridor/ electric transmission lines will contrast with the surrounding area, which is primarily dense vegetation.

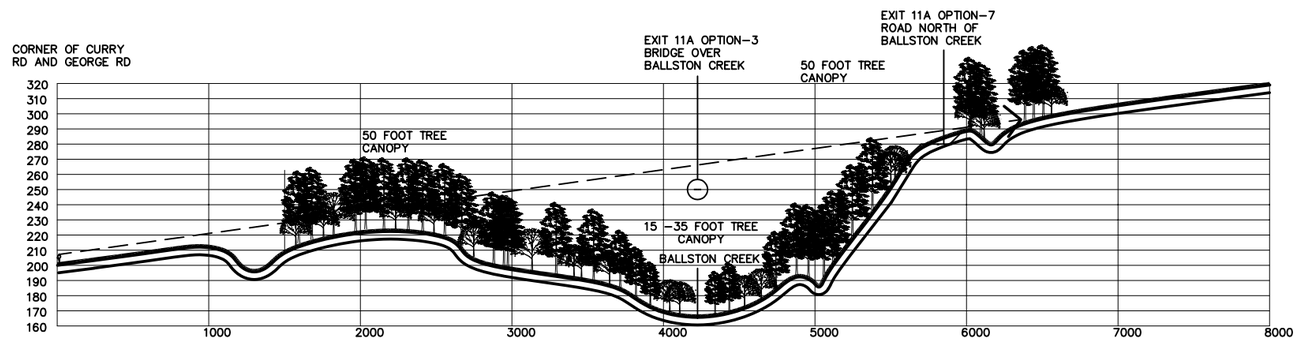
d. Line: Strong linear elements in the power line corridor/ electric transmission lines include the corridor, the lines and the support structures. The length and width of the 100- to 150-feet corridor and lines have a strong horizontal line. The 80- to 115-feet high support structures and the 50-80 feet high vegetation have a strong vertical line. The surrounding existing vegetation will slightly soften the linear elements of the corridor, the lines and the support structures.

e. Texture: The electric transmission lines and support structures can be characterized as having a fine texture of wire, wood and/or metal. The corridor and the surrounding vegetation have a coarse texture.

11. Comment: It appears that portions of the Step 1 and Step 2 transportation improvements would be visible from the Village of Round Lake. Due to the sensitive nature of this historic district, additional cross sections should be provided to accurately determine the potential impacts to the Village. The cross sectional analysis should be performed from the closest residence to each of the proposed improvements within the district and within downtown Round Lake to accurately determine the potential impacts.

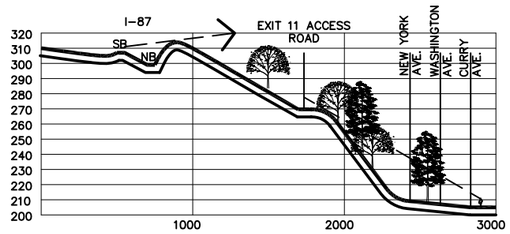
Response: Cross sections have been prepared from Round Lake Shoreline at Route 9 and from the center of the Village in Round Lake. Refer to Appendix O, and Figures 2.12.11A and 2.12.11B which are based on available concept plans superimposed on USGS maps. Based on these cross sections, the transportation improvements will not be visible from either the Village or Round Lake shoreline.

12. Comment: The balloon test and visibility analysis of the campus area are predicated upon a building height of 110 feet. The study indicates that this would be the proposed height of the building structure, exclusive of any roof top mounted



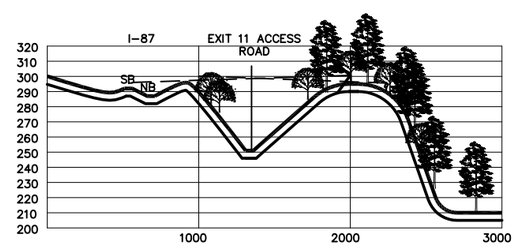
1 CROSS-SECTION ROUND LAKE TO ALTERNATE OPTIONS 3 AND 7

SCALE
VERT. 1" =100'
HORT. 1"=1000'



2A CROSS-SECTION A-A'
I-87 AND EXIT 11
ACCESS ROAD

SCALE
VERT. 1" =100'
HORT. 1"=1000'

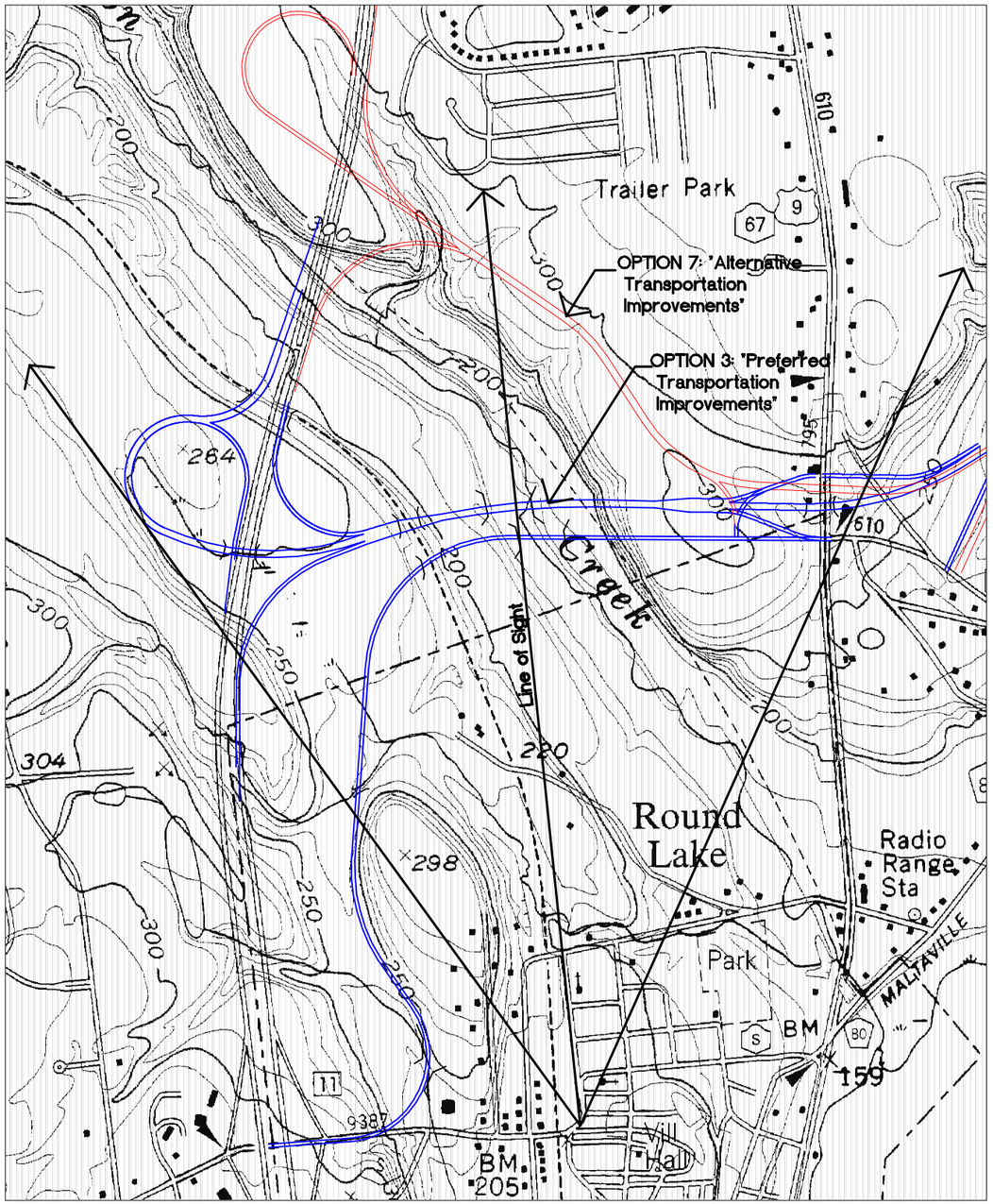


2B CROSS-SECTION B-B'
I-87 AND EXIT 11
ACCESS ROAD

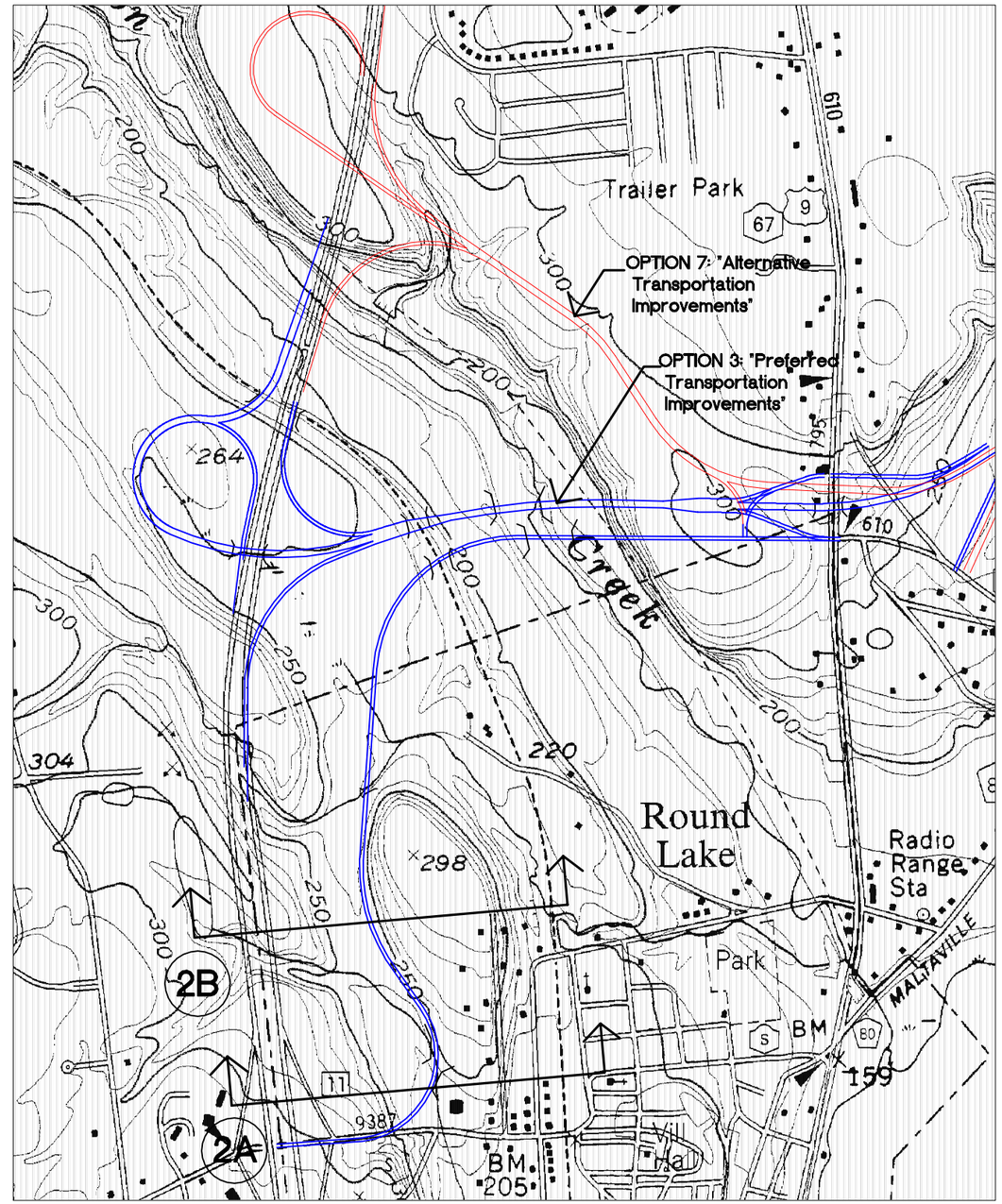
NOTE:
VERTICAL SCALE IS
IS EXAGGERATED BY
A FACTOR OF 10

Line of Sight Cross-Sections

FIGURE 2.12.11A



VIEW SHED OF CROSS-SECTION 1



LOCATION OF CROSS-SECTIONS 2A AND 2B

Cross-Section/Line of Sight Location Plans

FIGURE 2.12.11B

equipment or antennas. The visibility analysis and balloon test should be conducted at that tallest portion of the proposed structures inclusive of any roof top mounted equipment, stacks or antennas. As such the maximum structure height for the project will be 110 feet.

Response: See Response to Comment #2.12.1.

13. Comment: The Industry Requirements Document indicates that the scrubber units could be roof mounted, while the photos provided in the visual assessment indicate scrubber units as ground mounted. If roof top scrubber units are proposed the visual impacts of the vapor plume needs to be evaluated in detail.

Response: The cooling equipment will be ground mounted while the air treatment equipment (scrubbers) may be either ground mounted or within the roof system of building as discussed above in Response to Comment #2.12.1. Pages 8-9 of Appendix O of the DGEIS address the potential visual impact of the vapor plume and conclude that such future vapor plumes associated with the Fabs will not be readily apparent outside of the LFTC project site. No additional visual analysis is required at this time.

14. Comment: The Applicant should provide a view of the proposed Step 1 and Step 2 transportation improvements from I-87 traveling northbound. The view should take be taken approximately 0.8 miles north of Interchange 11 to capture the proposed improvements.

Response: Additional photographic simulations have been prepared as well as line of sight cross-sections to assess the visibility of the various options for Interchange 11A. See additional photographic simulations provided in Figures 2.12.2A, 2.12.2B, 2.12.2C, 2.12.5A and 2.12.5B in Appendix O.

15. Comment: The photo simulations provided within the appendix should indicate all signage and traffic control devices associated with the both Step 1 and Step 2 transportation improvements.

Response: Appropriate signage and traffic control devices have been added to the photographic simulations (See Figures 2.12.2A, 2.12.2B, 2.12.2C, 2.12.5A and 2.12.5B in Appendix O. Refer to Response to Comment #2.12.14.

16. Comment: Mitigation measures for the Step 1 and Step 2 transportation improvements must be included within Appendix O. It is highly unlikely that due to the sensitive nature of the existing visual environment, the potential impacts would be diminished to an insignificant level without mitigation.

Response: See Section 3, Mitigation Measure (pages 12-14) in Appendix O and photographic simulations in Figures 2.12.2A, 2.12.2B, 2.12.2C, 2.12.5A and 2.12.5B in Appendix O of the DGEIS. See Responses to Comments #2.12.2, 2.12.15 and 2.12.14.

17. Comment: Impacts to the residences within the proposed alignment of the future electrical transmission lines have not been evaluated or mitigated. This evaluation should be included within the DGEIS.

Response: See Appendix O of DGEIS, Photo 4-1-4-7, Figure 2 page 11 and 12, and Response to Comment #2.12.3. The electric transmission lines will be subject to further review completed as part of the PSC's Part 102 siting review process. During the more detailed design process, all practicable efforts will be made to lessen the impact of the transmission lines on nearby residences.

18. Comment: Within the conclusion section of Appendix O, it states that such "views will not be significant, as the purpose of the improvements is to alleviate existing and potential traffic concerns and related aesthetic and environmental impacts". While the purpose of the Step 1 and Step 2 transportation improvements is to address these potential impacts, the impacts to the visual environment and their associated significance of these proposed project elements are related to scale, contrast, visibility, texture and line. This conclusion is inaccurate and should be rewritten to base the conclusions on the potential impacts and mitigation measures provided within the report.

Response: Comment noted. See Response to Comment #2.12.10.

19. Comment: The conclusion indicates that the transmission lines are a "standard element in the existing landscape in the area of the project site" and that "Contemporary society recognizes the need to provide electric power to homes and business and acknowledges that the transmission of electric power occurs via transmission lines supported by structures comprised of wood or metal" is not supported by the information included within the report. While it may be true that existing utility poles and electrical lines and the associated cleared rights-of-way exist within the potential alignment, the maximum height of the existing poles is

approximately 40-50 feet. Additionally, the clear area is considerably less. The proposed electrical transmission lines have a height of approximately 80-feet high, nearly double that of the existing utility poles and the clear area associated with this type of installation could be approximately 150-feet wide. These elements of the proposed plans are not in scale with the existing utility poles and clearings within the proposed project alignment. The statement concerning contemporary society should be substantiated. This conclusion is inaccurate and should be rewritten to base the conclusions on the potential impacts and mitigation measures provided within the report.

Response: Comment noted. See Response to Comment #2.12.5. The visual analysis has been updated to address the issues of visual compatibility and dominance from the selected viewpoints. Appropriate mitigation has been identified including clearing minimization, screen plantings at the road sides, as feasible, and locating poles outside of the road ROW to reduce visibility. Consolidation of visual intrusion is a valuable means of reducing visual impact, and it is realized that the different sizes of structures reduces the benefits derived by siting utility structures in the same area when one structure is much larger than the adjacent pre-existing facility.

20. Comment: What will be the visual impact of the planned power lines on the southeast viewshed from the NYSERDA plot?

Response: See Appendix O of DGEIS, Figure 5. The ETL as it approaches the NYSERDA site makes three sets of angle turns in order to avoid proposed building sites on the LFTC project site. These turns limit visibility along the corridor to approximately 1,000 feet, therefore, visibility along or down the electrical transmission line will be limited. The area crossed by the electrical transmission line is within an area that is heavily forested which will screen the view from the north and south directions.

21. Comment: The 80-foot height assumption for mature trees used in the digital elevation model is too great. This visual analysis should be redone with a lower canopy per the Town's direction.

Response: Based on field observations, the 80-foot height is accurate for the trees at the perimeter of the project site which is the critical zone for creating the visual screen.

22. Comment: In Figure 1 in Appendix O, does the blue area to the northeast in the figure illustrate the area of potential visibility? If so, that should be noted in both the

text and on the figure. The location of Grace Moore and Yunch Roads should be noted on Figure 1.

Response: See DGEIS, Appendix O, page 6, Figures 1 and 2, and Table 1.

23. Comment: Figure 2 in Appendix O is not of a tower location, but of a building location.

Response: Comment noted. It will be a building.

24. Comment: Appendix O (page 12) states that the Off-Site Water Treatment

Facility will be one story treatment and control building. Appendix H (page 13) states that the building will be two stories tall.

Response: The water treatment plant as proposed is planned to be a two-story building.

25. Comment: Table 1 in Appendix O states that it is possible that some of the receptors would have views of the project, but then has three asterisks (i.e., "***") with a note that states "not verified by receptor site visit, viewability may be obstructed by mature vegetation or and/or other structures. However, Figure 1 illustrates that a photograph was taken from Receptor 1, West end of Snake Hill Road. This is confusing. It is also unclear why photographs were not taken at Grace Moore Road and Yunch Road, the two receptor locations that the Figure 1 Viewshed Analysis map indicated would have a potential for views.

Response: Comment noted. See Response to Comment #2.12.22.

2.13 Recreation

1. Comment: Several people commented on the existing network of trails on and around the project site, that they already use and enjoy for purposes of snowmobiling, hiking, and horse riding, and that the proposed action will eliminate such uses. Some commenters thought that this network of trails should be preserved. One commenter (Dick Butler) stated that the project site "is private property, and those who use it without approval of the owner are trespassing." Another commenter (Kate and Wayne Bailey) noted that the Stillwater Trailblazers snowmobile and equestrian club currently use the trails on the project site, and that that such public access should be preserved.

Response: Comments noted. Section 3.5 of the DGEIS states that the portion of the project site currently under the ownership of the Luther Forest Corporation contains a network of logging roads that are used as private trails. These logging roads are currently used by permission only for private recreational activities including hunting, horseback riding, snowmobiling, and hiking. Portions of these logging roads are used by the Country Trail Blazers Snowmobile and Equestrian Club, by owner permission. The logging roads are generally accessible by four (4) wheel drive vehicles, but seasonally are impassable. These private roads are maintained by the owner to facilitate ongoing forestry management activities.

There is no existing general public access to the project site – all access is by permission of the property owner. Therefore, it is not possible to preserve public access, which does not currently exist. As stated in Section 4.5.6 of the DGEIS, the network of existing private logging roads used as private trails on the project site will be altered by the proposed action to make way for Campus development. Such loss of private trails does not represent a significant adverse impact.

It is however, important to note that the proposed action includes a network of trails within the park preserve area, as well as multi-use trails in association with access roads into the project site from existing public roads. In addition, the continued forestry management of wooded areas on the project site will require a network of trails in these areas, similar to the existing trails.

2. Comment: Who will be able to use the proposed trails inside the LFTC? What are the costs for development and maintenance of these recreation resources, and who will pay for them? Will security issues constrain or curtail the use of recreation paths?

Response: As proposed in Section 4.5.6 of the DGEIS, the multi-use and preserve area trails inside the LFTC project site will be available for public use, subject to the approval of the Towns of Malta and Stillwater. These trails are proposed to be developed and maintained be by the LFTC management entity and paid for by the companies locating in the Campus. Campus security issues are not expected to constrain or curtail the public use of these recreation paths.

The LFTC public use trails will provide a recreational linkage to existing public roads including Routes 9 and 67, and Cold Spring Road, including the Saratoga County Bike Trail on Route 9.

Further coordination with NYSERDA would be required in order to link the LFTC trails with any similar trails being planned for the STEP project. Such future linkage would be consistent with the Town of Malta's desire to provide connectivity between the Campus and Downtown, as well as this GEIS.

3. Comment: The DGEIS does not address the old trolley line which we would like to see as a passage trail.

Response: The old trolley line that runs parallel and east of Ballston Creek is discussed in Section 3.5.4 of the DGEIS. It is classified as an additional undesignated trail located along the north bank of the Ballston Creek. This unimproved trail runs along an abandoned trolley line, connecting Route 9 (at Goldfoot Road) with Route 67. It is roughly parallel with the Zim Smith Trail, on the opposite bank of the Creek. As stated in Section 3.5.4 of the DGEIS, the Town of Malta is considering plans for designating this abandoned railroad line as an official trail in the future. This undesignated corridor is presently overgrown and not demarcated in the field.

Furthermore, as stated in Section 4.5.6 of the DGEIS, this undesignated trail located along the north bank of Ballston Creek will be traversed by the proposed access road. Despite the fact that this undesignated trail is not in public use, a box culvert will be installed under the road embankment to accommodate future possible use of this former trolley line.

4. Comment: One commenter (Carol Henry) expressed concern that the increased traffic will have on the Route 9 State bike route.

Response: The potential increased traffic on Route 9 associated with the proposed action will have no significant impact above and beyond the no-build conditions of the Route 9 State bike route. There will not be any adverse effects on the function of this existing bike route, which is an improved shoulder of a shared use State highway, whose physical characteristics will be unchanged by the proposed action. The preferred transportation improvements (see Figure 2.2.4.1) will provide a direct connection from the project site to I-87 with a Route 9 overpass. Any proposed improvements on Route 9 will take into account that Route 9 is a bike route and will need to accommodate bicyclists. Additionally, the proposed public multi-use trails associated with the arterial roads of the Campus will provide an important linkage to the Route 9 bike route which will provide alternative bike routes off of this existing north-south corridor.

5. Comment: This proposal does not provide any recreational sources for the Town of Malta. Will the existing town recreation programs be able to handle the increased population? Will the trails on the project site be connected to the Town's existing network of trails? If so, how will this be done?

Response: The statement that the LFTC does not provide any recreation sources for the Town of Malta is inaccurate. The proposed action will provide several recreational sources for the Town of Malta, and the Town of Stillwater, including public use trails and linkages as discussed above in Response to Comment #2.13.2, a 100-acre preserve area, and an 18-acre public access area. All of these recreational amenities were presented within the DGEIS.

Furthermore, the Applicant is willing to amend the current plan to more appropriately address the specific recreational needs of the two Towns, which presently are undefined. In any such negotiations with the two (2) Towns, the existing level of proposed recreational resources will be used as a basis of comparison for future modifications of the proposed recreational aspects of the LFTC.

6. Comment: The Zim Smith Trail, and the vistas available from it, will be impacted during construction of the transportation improvements.

Response: Comment noted. Construction of the proposed transportation improvements will have short-term impacts on the Zim Smith Trail, and the vistas available from it. Such short-term impacts are not considered to be significant adverse impacts, as stated in the DGEIS.

Section 4.5.6 of the DGEIS addresses the short-term construction impacts on the Zim Smith Trail. As stated in the DGEIS, during initial development of the Campus (i.e., Step 1 transportation improvements), the proposed access road around the Village of Round Lake will need to be constructed over the Zim Smith Trail. This construction will take place such that the existing grade of the multi-use trail is unchanged. Either a wide tunnel (i.e., arch culvert) or highway overpass, similar in nature to the existing I-87 overpass, will be incorporated into the final design of the access road. The design objectives for the access road related to the Zim Smith Trail will be: 1.) to provide for public safety during construction and operation, 2.) to preserve and enhance the existing visual character of the trail, 3.) to complete construction as quickly as practicable, such that public use of the trail can be resumed after construction, and 4.) to require that all construction be done in a continuous sequence. It is probable, as a safety precaution, that there will be a temporary, short-term period of trail closure during construction. The duration of this temporary closure could range from one to three weeks. To minimize impacts during this time frame, the construction will strive to provide continuous use of the multi-use trail during weekends, or other periods of non-work, or to provide a detour around the construction work area such that end-to-end use of the trail is possible. The trail will not be used for normal construction access. During construction of the access road, signage will be posted at trail entrances to alert users of the proposed construction schedule. Such postings will occur a minimum of two weeks before construction in proximity to the Zim Smith Trail, and will updated periodically during construction, as needed.

During construction of the new I-87 exit (i.e., Step 2 transportation improvements planned to be implemented before Phase 3 Campus development), there will be a need to traverse the Zim Smith Trail by the northbound on-ramp and southbound off-ramp. The same construction

design and work practices as described above will be employed during this second traversing of the multi-use trail.

7. Comment: Can the power transmission lines accommodate trail access?

Response: It is Niagara Mohawk's policy to discourage any public use on their transmission lines, including but not limited to trail access. This is done because of liability and safety concerns (comparable to any other property owner) and to protect adjacent landowners which might not want to promote public access and attendant environmental impacts (e.g., noise from ATVs or dirt bikes) near their property. It is possible for a trail sponsoring entity to approach Niagara Mohawk and request permission for trail access. In certain circumstances Niagara Mohawk may license such special uses to properly indemnified entities such as a municipality.

8. Comment: One commenter (Deborah Baines) suggested that the LFTC will tax the "already bulging" recreational use of Saratoga Lake.

Response: The potential recreational use of Saratoga Lake is available for use and enjoyment to all. Saratoga Lake is not a private lake and has existing public access available to anyone who desires to launch a boat onto it. The proposed action does not involve any expanded access onto Saratoga Lake and will not, by itself, result in any significant boating use on Saratoga Lake. It is presumed that the existing private and public access points onto Saratoga Lake have built-in "constraints" (e.g. number of boat launches, use fees, available parking, etc.) on the amount of boat traffic allowed onto the Lake, seasonally and on any given day.

9. Comment: The Director of Malta's Department of Parks, Recreation & Buildings (Audrey Ball) stated that the LFTC does not set aside a sufficient amount of good, useable land either in the project site or outside of the project site for community, recreational and open space needs," and asked what such plans are.

Response: The LFTC has proposed to construct, or to set aside for future use, 18 acres of land for park development along with a 100-acre park preserve, as well as the approximately 50% of the site which is designated green space. This combination of future active recreation space and a variety of passive open space uses is believed to be adequate to serve the community.

As noted in Response to Comment #2.9.1 regarding induced growth, the Applicant proposes that open space and recreational needs of the community may potentially be provided in other off-site areas of the Towns identified in the Town(s) Master Plan revision process(es), rather than on the LFTC Campus, in response to the statements of public needs and desires expressed in the Draft GEIS comments in this proceeding.

The Applicant is willing to amend the current plan for recreational resources to more appropriately address the specific recreational needs of the two Towns, which presently are undefined. In any such negotiations with the two (2) Towns, the existing level of proposed recreational resources will be used as a basis of comparison for future modifications of the proposed recreational aspects of the LFTC.

10. Comment: Malta's Town Comptroller (Kevin King) stated that no consideration has been given to the fact that additional recreation areas will need to be constructed to meet the needs of the growing population, and that no consideration has been given to quality of life issues and other services (i.e., public library, public gymnasium, and public pool) that might be expected by this new sector of the population. The Comptroller asked that these concerns be addressed by providing estimated costs for the construction of a new multi-purpose park and for providing additional services to the Town's growing and demanding population, including the effect on the Town's budget and tax rate over at least the next ten years.

Response: As stated above in Response to Comment #2.13.5, the Applicant is willing to work with the Towns, once specific needs have been identified and articulated. The DGEIS proposes specific forms of recreational amenities that are intended to be in harmony with the proposed development, as well as the surrounding communities, giving due consideration to the quality of life of current and future residents of the Towns. Such plans could easily be amended to better address Town plans.

It is however important to point out that, other than the modest amount of residential development included as a logical extension of the Luther Forest residential community in Pod 10, the proposed action is not directly expanding the community population and creating a need for recreational resources. The proposed action is a planned development district with a nanotechnology industry focus that will more importantly provide job opportunities to the surrounding population. In addition, the proposed LFTC provides recreational amenities, as discussed above in Response to Comment #2.13.2 and in the DGEIS, despite the fact that it will not directly create the need for such recreational amenities.

11. Comment: One commenter (Jeff Olson) stated that during WWII, bicycles were extensively used for transportation within the radius of the property, because energy conservation was a priority at the time, and suggested that the same principle should apply to the LFTC. This could be a model for sustainable development, providing bike lanes on all internal roads, and bicycle parking at all site locations, with a complete network of sidewalks and safe street crossings. This commenter further stated that the new utility lines will provide an opportunity for extending and connecting existing trail systems.

Response: Comment noted. An extensive network of trails, as presented above in Response to Comment #2.13.2 is proposed as part of the LFTC development plan, including multi-use trails along all arterial roads in the project site. Potential bicycle parking will be at the discretion of the companies locating in the Campus.

Refer to Response to Comment #2.13.7 for potential trail use within electric power lines corridors. Other utilities (i.e., water, natural gas, telecommunications, and sewer) connecting to the project site will likely be located wholly or substantially adjacent to existing public roads and will not provide such an opportunity for trail use, in comparison to the electric power lines.

2.14 Educational Facilities

1. Comment: Several commenters asked how the existing already overcrowded public schools could accommodate even more students. One commentor (Vince Nagengest) stated that "we are going to pay the taxes to send those kids to school." Another commentor (Kevin King, Malta Town Comptroller) estimated that the proposed LFTC will add 1,200 children in the Ballston Spa School District and asked that the GEIS provide estimated costs for the construction of new school facilities and additional transportation requirements including the effect on the school tax rate over at least the next ten years.

Response: The proposed action is an economic development project that will provide jobs within the semi-conductor manufacturing sector of our economy. It is anticipated that the LFTC will have a positive impact on local real property and school tax revenues.

Sections 2.1.2.4.1 and 4.7.4 and Appendix B (Section 3.E., pages 30-33) of the DGEIS discuss the potential financial benefits to the Stillwater Central and Ballston Spa Central School districts that will result from the development of the LFTC properties. These two school districts will benefit from the increased valuations from the LFTC far in excess of any potential loss in State education aid or enrollment of additional students into the district. Currently, the nine tax map parcels comprising the project site contribute about $42,000 to the town, county and school districts in which they are located ($31,000 to Malta and $11,000 to Stillwater taxing jurisdictions). At full build-out, the estimated annual tax revenues will increase to approximately $50-million ($41-million to Malta and $9-million to Stillwater taxing jurisdictions).

Refer to Response to Comment #2.4.17 for a discussion of the Project's anticipated impact on the two affected School Districts.

As discussed in Response to Comment #2.4.9, growth resulting either directly or indirectly from the LFTC will be determined and controlled by the governments of both Towns through their local zoning and other land use controls. The proposed action, by itself, will not result in any significant increase in the population of public schools, nor require the construction of new schools or additional transportation.

However, should the district(s) experience future growth that requires the construction of additional school facilities, the estimated increase in school tax revenues associated with the proposed action alone can more than meet the financial obligation associated with the additional school facilities. For the purpose of this comparison, it assumed that new school construction would consist of one elementary school (40,000-gross), one junior high school (80,000-gross square feet), and one high school (80,000-gross square feet). Using the RS Means program, a Quik-Cost Estimate range for each of these schools is as follows:

- *Elementary School* *$3.0- to 4.5-million*
- *Junior High School* *$6.2- to 9.0-million*
- *High School* *$6.2- to 9.0-million*

Taking the high-end probable construction cost estimates, the total cost of the new school construction would be approximately $22.5-million. In comparison, as discussed in Response to Comment #2.4.17, at full build-out of the LFTC with 80% of the Fabs in the Town of Malta and 20% of the Fabs in the Town of Stillwater, the estimated annual increase in school tax revenues will be approximately $36.3-million per year in the Town of Malta and $7.3-million per year in the Town of Stillwater. Less than one year of school tax revenue associated with the proposed action in the Town of Malta would fully fund new school construction, if required by future growth. In the Town of Stillwater, just over three (3) years of school tax revenue would fully fund new school construction, if required by future growth.

2. Comment: What benefits do private industry provide to local schools? How can these benefits be guaranteed?

Response: The substantial benefits of private industry to local schools are addressed in detail in Response to Comment #2.4.17 and Appendix B (Section 3.E., pages 30-33) of the DGEIS. Such benefits to the local schools are predicated upon specific companies locating in the LFTC, and until such time as these companies choose to locate their facilities in Malta and Stillwater, as provided by this GEIS, no such guaranteed benefit to local schools can be offered.

3. Comment: Section 4.7.4 states that there is an economic analysis in Sections 3.8.1.3.4 of the document and Appendix B. There is no Section 3.8.1.3.4 in the GEIS, and there is no substantive economic analysis for educational facilities in the main body of the GEIS. Such an analysis should be included in both text and tabular format. This section does not discuss the growth in the number of students in K-12 anticipated as a result of the workers at the LFTC, or resulting from secondary growth, and the need to construction additional educational facilities. The section does not discuss the amount of school tax revenue generated versus the number of new children generated and the costs associated with building schools for the new children and the cost of educating the new children.

Response: Comment noted, there is no Section 3.8.1.3.4 in the GEIS. This citation in Section 4.7.4 of the DGEIS is in error and should have made reference to Section 2.1.2.4.1 of the DGEIS.

Both the text of the DGEIS as well as Appendix B of the DGEIS contain a substantive economic analysis of potential impacts to educational facilities, specifically to the Ballston Spa Central and Stillwater Central School Districts. Additional economic analysis is provided in this FGEIS (refer to Response to Comment #2.4.17) which estimates school tax revenues, projected school population growth, and the cost of education.

Refer to Response to Comment #2.14.1 regarding the potential for population growth in public schools, and the need for construction of new educational facilities.

2.15 Emergency Services

1. Comment: The Malta Ambulance Corps submitted a letter in support of the proposed LFTC, stating that "Malta Ambulance Corps along with our fine EMS neighbors are capable of handling what we perceive would be routine calls to the campus." As a basis for this opinion, three (3) representatives of the Malta Ambulance Corps visited a Fab in Chandler, Arizona, and met with the local fire marshal to better understand health and safety issues unique to nanotechnology and the chip manufacturing industry.

Response: Comment noted.

2. Comment: Several commenters asked who would be taking care of the policing in the project site, and who would pay for such increased police services. Won't the introduction of 10,000 new jobs and associated growth merit a Town Police force? One commenter (Kevin King, Malta Town Comptroller) stated that the Town relies on the New York State Troopers and the Saratoga County Sheriff's Department for police protection, and that the proposed LFTC will require an increased police presence. The additional law enforcement costs for either a local police department or a contractual arrangement with NYS or Saratoga County should be provided in the GEIS including the effect on the Town's budget and tax rate over at least the next ten years.

Response: The larger tenants of the LFTC (i.e., the Fabs) will have their own security personnel for the portions of the site under their control. The public portions of the site will be patrolled by the New York State Police and the Saratoga County Sheriff's Department. A contractual arrangement will not be required with these entities in order to facilitate this arrangement, and no impact on the Town's budget or tax rate is anticipated.

3. Comment: How much funding will the Applicant set aside for fire, chemical/hazardous spill, training and response? Who will pay for the specialized equipment and new emergency facilities that will be required?

Response: It is expected that the Towns will assess the training and equipment requirements with the various local emergency responders as the LFTC is developed. The anchor Fabs will have their own on-site first response teams capable of responding to fire, chemical spill and emergency medical incidences at their facilities. Additional response resources would be summoned only if necessary. The Fabs will be required to coordinate their emergency planning and response functions with the local providers, and fund the additional training for local emergency responders, as necessary and appropriate.

4. Comment: Why wouldn't there be fire alarms and fire prevention systems in every building?

Response: All buildings will be required to meet the applicable State and local building codes. It is expected that fire alarms and fire prevention systems will be required in each occupied building (i.e., a building that is regularly inhabited by one or more people).

5. Comment: The proposed action will have a significant impact on emergency services by creating more traffic accidents, chemical spills, and increasing the demand for fire protection. Are the local emergency groups prepared and able to take care of chemical spills and releases?

Response: Written correspondence received from the Round Lake Hose Company, Arvin Hart Fire Company and Malta Ridge Volunteer Fire Company stated that these responders would be equipped to handle the projected increase in responses related to development of the LFTC. The Malta Ambulance Corps indicated a projected need to increase staffing beginning in 2003 due to a current increasing trend in the number of response calls. As noted above, the Fabs are staffed with their own emergency response teams, including medical staff, so responses to the LFTC for routine incidences are expected to be minimal. Responses requiring advanced life support or transport would require the response of the local providers.

6. Comment: The GEIS should address how an all-volunteer department (Malta Ridge) would be able to address the needs of the proposed action at full build out. Will the proposed action necessitate the addition of full-time professional fire department staff? One commenter (Kevin King, Malta Town Comptroller) stated that the fire department is already experiencing shortages during the day and asked that estimated costs for providing a "paid volunteer fire department during the day" be provided, including the effect on the fire protection tax rate over at least the next ten years.

Response: As noted above, the Fabs will be equipped with their own fire brigades capable of responding to routine incidences at their sites. Because employees at the Fabs will be well-equipped, well-trained and capable of responding to routine incidents, construction of the LFTC is not expected to necessitate the development of a local paid daytime fire department.

7. Comment: The GEIS should provide back-up for the estimated increase in responses for fire and ambulance services. A summary by type and frequency should be provided from other areas of the county that support this type of industry. Will increased tax revenues resulting from the proposed action be sufficient to fund their increased costs?

Response: The Malta Ridge Volunteer Fire Co. estimates an additional 25 to 30 calls per year at full build out, and approximately seven (7) to eight (8) calls per year during development. The Malta Ambulance Corps indicated a projected increase in call volume of 60-85% in 2003 from the 1,200 calls received in 2001, however, much of that is associated with a current upwards trend in responses. The Arvin Hart Fire Company and Round Lake Hose Companies did not provide projections of increased responses. Increased tax revenues associated with the proposed action will be sufficient to fund any additional increase in costs for these agencies.

8. Comment: The GEIS should describe in more detail the type and frequency of training that the industry would provide local responders.

Response: Facilities subject to the EPCRA ("Community Right-to-Know") reporting requirements, including Fabs and any other manufacturers using hazardous substances, will be required to coordinate their responses with the local emergency providers. Periodic drills and joint exercises would occur in order to familiarize the on-site and local responders with the resources and capabilities of the other, and to identify areas where additional training or equipment might be required.

9. Comment: Several commenters claimed that the LFTC would require that the fire department to purchase additional equipment, including an aerial fire truck and a hazardous material response vehicle. The need for additional aerial equipment with an ability to effectively respond to a major incident in a 110-foot high structure should be described in more detail including the required span, costs, and number of units necessary given the 350,000 square foot building footprint. One commenter (Kevin King, Malta Town Comptroller) stated that estimated costs for the purchase of this equipment, including the effect on the fire protection tax rate over at least the next ten years, should be included in the GEIS.

Response: It is expected that increased tax revenues associated with the proposed action will be sufficient to fund any additional equipment which the coordinated training indicates is required in order to provide an effective response to the site.

Over a ten-year period, it is reasonable to expect two (2) Fabs to locate in the LFTC, and that the estimated additional equipment cost to the fire departments is approximately $950,000, correlating to the cost of new aerial vehicle and a hazardous materials response vehicle. Using the fire tax information provided in Table 2.4.12.B, there will be an increased fire tax revenue (measured in 2001 dollars) of approximately $808,000 per year for the two (2) Fabs (assuming both are in Malta). Over a ten-year period this would generate an incremental revenue (measured in 2001 dollars) which would more than offset the cost of additional equipment that may be required.

10. Comment: Current emergency services are provided by an all volunteer fire department. The GEIS should include a discussion on the ability of an all volunteer department to provide adequate protection to the Campus. Will there be a need to consider a paid fire department upon build out?

Response: The development of the LFTC is not expected to necessitate the development of a local paid fire department. A representative group of the local emergency responders visited Fabs in Chandler, Arizona and met with the local fire marshal in order to gain first hand knowledge of the frequency and types of calls to be expected. As a result of this visit, the local emergency responders have indicated that the agencies are capable of responding to the types and frequency of additional calls expected at the Campus.

11. Comment: The Applicant should substantiate the comment that a new fire station is proposed on Dunning St. near Fox Wander. No such proposal is before the Town of Malta.

Response: Chief Travis Croteau of the Malta Ridge Volunteer Fire Co. stated the following in an October 14, 2002 letter to SEDC: "We are also looking at property on Dunning Street to build a new Station #2. This location is just west of Partridge Drum. Partridge Drum is the boulevard that leads to all the streets on the north side of Dunning Street." This potential new station is being planned to accommodate growth unrelated to the proposed LFTC.

2.16 Wetlands

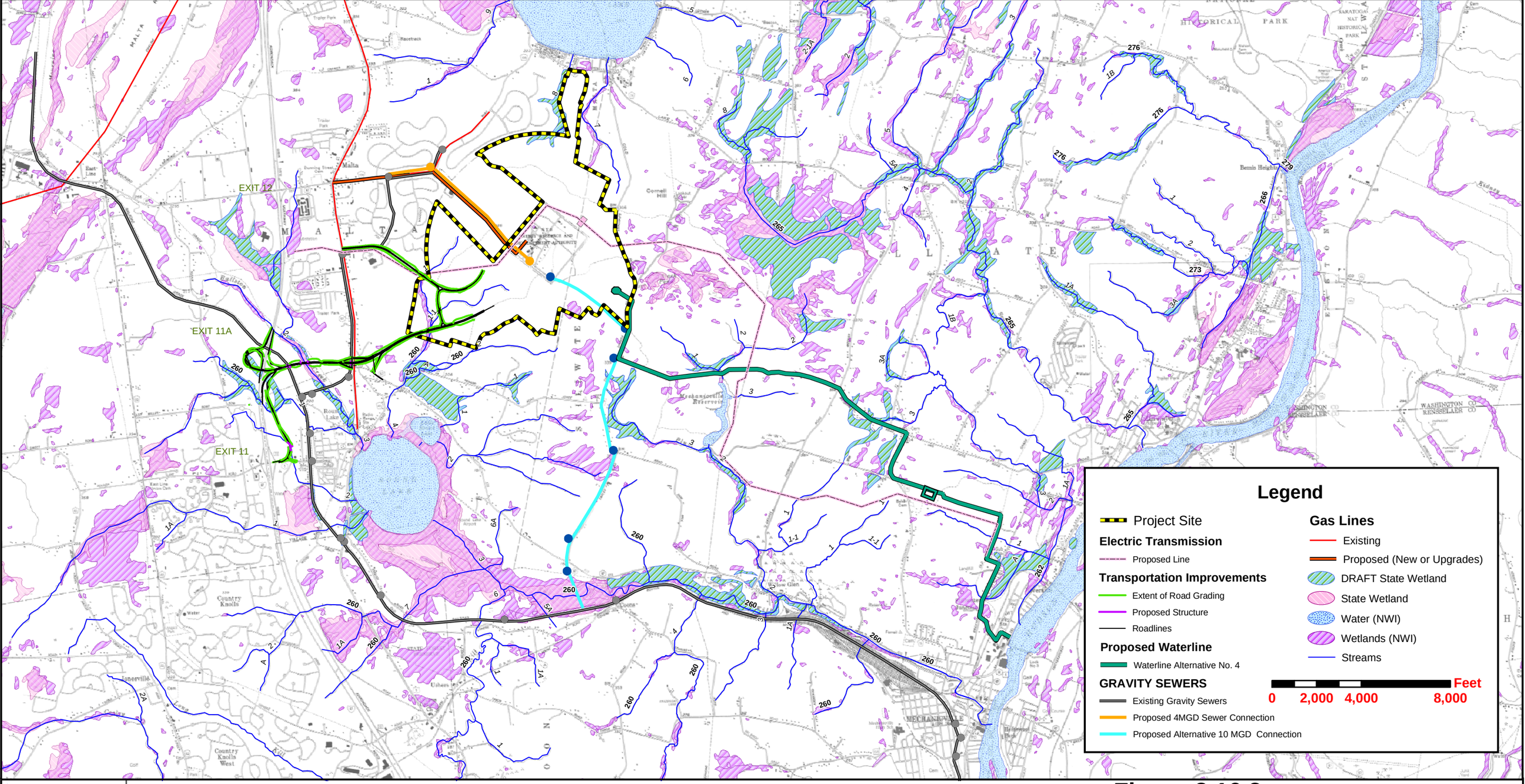
1. Comment: The DGEIS does not address how the Ballston Creek area will be protected as wetland.

Response: Impacts to all wetlands and other waters of the U.S. including those present in the Ballston Creek area, will be avoided and minimized to the maximum extent practicable. During construction, best management practices will be employed to protect the streams and wetlands within the project area. As discussed in Section 4.2.2.3 of the DGEIS, the following BMPs will be employed:

- *Work within streams and other waters of the U.S. will be scheduled during periods of low flow conditions. No work will be conducted during or immediately after storm events;*
- *Work within streams will be conducted in one continuous operation. Stream bed and banks will be stabilized immediately following construction activities using rip-rap or mulching and revegetation techniques;*
- *Silt fence and/or straw bales will be installed along the edges of the stream to prevent the flow of sediment into the stream and to minimize erosion of the stream banks;*
- *Flume pipes or the dam and pump method will be used to divert water flow during construction activities. All work will be done "in the dry";*
- *Spoil piles and construction debris will be temporarily stored outside of the stream corridor and associated floodplain area;*
- *Equipment will cross streams using temporary bridges. No streams will be forded by construction equipment;*
- *When possible, within designated trout streams, work will be scheduled outside of known fish spawning periods;*
- *No permanent structures other than the underground utilities will be placed below the 100-year flood elevation; and*
- *Construction staging areas will be located at least 50 feet away from all streams, and storage of chemicals, washing or refueling equipment, and mixing concrete will be conducted more than 100 feet away from streams.*

2. Comment: The GEIS should provide a map showing wetlands, transportation improvements and wetland impacts as identified in Table 4-3. A similar map should be provided for off site utilities showing the location of wetland impacts identified in Table 4-4. A description of the transportation improvement impact areas should be provided in enough detail to back-up the areas provided in Table 4-3. The GEIS should clearly indicate if any of the temporary wetland impacts for off site utilities will become permanent to provide access to the utility system.

Response: A new figure has been created that depicts wetland and stream impacts as a result of off-site utility and proposed transportation improvements (refer to Figure 2.16.2). A similar



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Map Note: Improvement data is from a variety of sources -
Transportation from Creighton Manning Engineering , LLP
Electric Transmission from C.T. Male Associates, P.C.
Sewer Alternatives and Proposed Waterlines from C.T. Male Associates, P.C.
Proposed and Actual Natural Gas lines from Niagara Mohawk

Figure 2.16.2
Wetlands & Streams Impact
Saratoga Economic Development Corporation
LUTHER FOREST TECHNOLOGY CAMPUS

Towns of Malta and Stillwater — **Saratoga County, New York**

Approved:	
Drafted: C. Secor	
Checked: K. Gaidasz	
Project No: 02.8049	
Scale: 1" = 4,000'	
Date: April 25, 2003	

Data Source: CUGIR; CT Male; NYS GIS Clearinghouse; USGS (ALSO - See Map Note)
Projection: UTM NAD 83 Zone 18N

NORTH

C.T. Male Associates, P.C.
50 Century Hill Drive, Latham, NY 12110
Phone: 518-786-7400 Fax: 518-786-7299

SHEET : 1 OF 1
DWG. NO:

overlay map was used to compute the stream and wetland impacts that are represented in Tables 4-2 and 4-3 of the DGEIS.

As described in Section 4.2.3.2 of the DGEIS, the proposed transportation improvements will result in permanent impacts to wetlands within the project area. These permanent impacts were calculated based on the estimated extent of the proposed roads and ramps and the extent of disturbance proposed for construction.

Permanent access roads will likely be installed to provide access to the proposed off-site utilities. To the extent possible, existing roads will be utilized. If a new access road is proposed, it will be placed in an upland area where possible. In the unlikely event that a permanent access road will cross a wetland or stream, impacts will be minimized to the maximum extent practicable and the proper permits and approvals will be obtained prior to construction initiation.

3. Comment: It appears that the document has provided information regarding on-site wetlands and their potential jurisdiction, however, no information regarding potential wetlands in the locations of the offsite improvements has been provided in this section. To adequately assess the potential impacts of the entire project the location of all potentially affected wetlands, including cover type, jurisdiction and value must be established. A map indicating all potentially affected wetlands overlaid on a USGS map would be appropriate.

Response: The jurisdiction of the wetlands that will be impacted by transportation improvements and off-site utilities is provided in DGEIS Tables 4-3 and 4-4, respectively. A new map has been prepared as Figure 2.16.2 depicting the proposed impacts to wetlands and other waters of the U.S. from off-site utilities and transportation improvements.

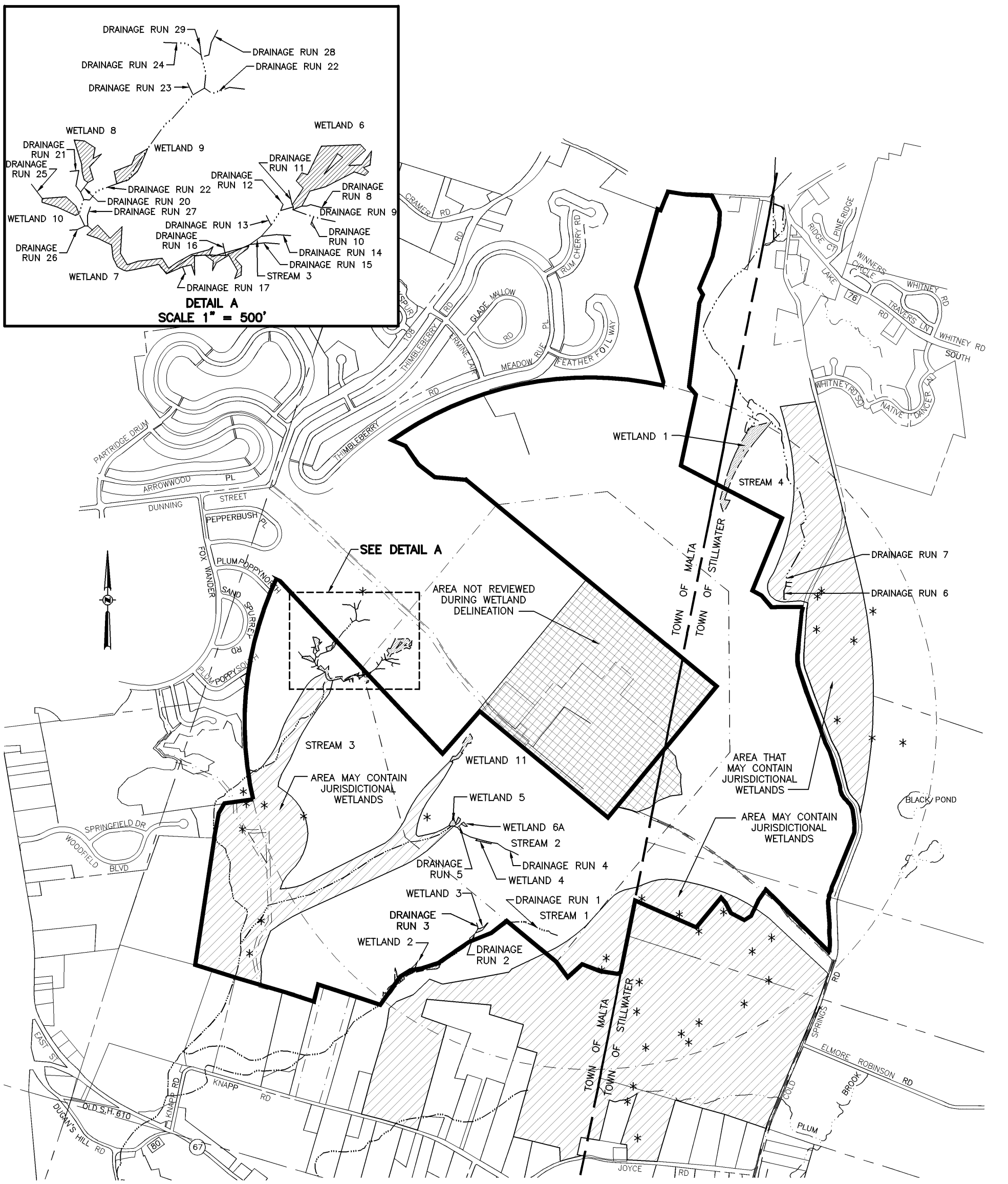
4. Comment: The drainage runs identified in Table 3-4 should be shown on a map similar to Figure 3-2. This figure should also show the approximate locations of the streams flowing through the wetlands (e.g., area southwest of Wetland 10 and southwest of Wetland 11 and 5).

Response: Figure 3-2 has been revised to show the drainage runs depicted in Table 3-4. This new Figure 2.16.4 was also revised to show the approximate centerline of the streams located within the project site boundaries.

5. Comment: Applicant should address how mowing of the permanent right-of-ways will affect wetlands on a permanent basis.

CAD DWG. FILE NAME:028049-FIG3-2.DWG

NO XREFS



NOTE: STREAM LOCATIONS ARE APPROXIMATE.

(* INDICATES WETLANDS WERE OBSERVED AT THIS POINT)

- WETLAND
- AREA MAY CONTAIN JURISDICTIONAL WETLANDS
- AREA NOT REVIEWED DURING WETLAND DELINIATION

BAR SCALE

1500 0 750 1500 3000

1 inch = 1500ft.

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APPROVED:

DRAFTED : J. WHITE

CHECKED :

PROJ. NO: 02.8049

SCALE : 1" = 1500'

DATE : REV. 4/21/03

FIGURE 2.16.4

WETLAND DELINEATION MAP (PARTIAL)

SARATOGA ECONOMIC DEVELOPMENT CORPORATION

LUTHER FOREST TECHNOLOGY CAMPUS

TOWNS OF MALTA AND STILLWATER

SARATOGA COUNTY, NEW YORK

C.T. MALE ASSOCIATES, P.C.

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ARCHITECTURE & BUILDING SYSTEMS ENGINEERING * CIVIL ENGINEERING
ENVIRONMENTAL SERVICES * SURVEY & LAND INFORMATION SERVICES

SHEET 1 OF 1

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Response: The installation and maintenance of utility right-of-ways will permanently impact scrub-shrub and forested wetlands within the proposed permanent and temporary rights-of-way. Permanent impacts will be limited to the removal of trees and shrubs from the right-of-way, and do not involve the placement of fill materials. The permanent right-of-way, which will be maintained by mowing and other Integrative Vegetation Management (IVM) measures, will remain in a state of early succession. Those areas that are not maintained are expected to revert to pre-construction conditions through secondary succession. Forested and scrub-shrub wetlands traversed by the permanent right-of-way will be maintained as emergent wetlands and thus will become permanently vegetated with herbaceous wetland species.

6. Comment: One commenter (NYSDEC) suggested that the GEIS identify an area or areas that are suitable for wetlands mitigation, with such areas set aside and used as needed to mitigate for wetland loss or, in the alternative, be developed now as wetlands to offset future wetland impact. Another commenter (Chazen) stated that given the sandy nature of the soils on the site, wetland mitigation on-site may be difficult.

Response: As a result of the permanent impacts to wetlands and other waters of the U.S. (estimated to be approximately 0.97 acres for the transportation improvements and 3.98 acres for other utilities associated with the conversion of forested wetlands to scrub-shrub or emergent wetlands), it is likely that a wetland mitigation plan will be developed which will call for creation of wetlands (conservatively estimated to be approximately 6 acres) within the project area. This wetland mitigation plan will require review and approval from both the NYSDEC and Corps.

A potential wetland mitigation area was identified in the southwest corner of the project site, as depicted on Figures 2.1.1 and 2.1.2. This mitigation area was chosen based on its proximity to existing wetlands and other waters of the U.S. and the relatively flat topography. Based on field reviews of this area, it appears that wetlands can be created within upland pockets adjacent to existing wetlands and streams. This would provide for a connection to jurisdictional waters of the U.S. and would serve as a water source. If soils are determined to be too sandy to support wetlands and groundwater is too far below the surface, a liner may be necessary to retain water.

7. Comment: The wetland delineation has not been approved by the Corps, and the extent of isolated wetlands on the project site could modify, or increase, the actual impact. Applicant should develop a wetland mitigation plan and seek a wetlands permit prior to seeking the town's approval for the LFTC.

Response: The DGEIS documents that few wetlands may be potentially impacted because of the extent to which adequate upland areas exist for development and that any potential impacts to small or isolated wetlands or other waters of the U.S. will be avoided and minimized to the maximum extent practicable. During the site plan approval process, wetlands and other waters of the U.S. will be delineated within the rest of the project site and along proposed off-site utility

corridors and transportation improvements. The newly delineated wetlands will be added to the current wetland delineation mapping. A wetland mitigation plan will be developed for the proposed wetland impacts and a joint permit application package will be submitted to the U.S. Army Corps of Engineers and the New York State Department of Environmental Conservation. In the absence of more detailed development plans, preliminary permitting would not be productive since actual impacts could change, requiring more mitigation or less.

8. Comment: How will wetlands be protected? What will be the buffer areas around the wetlands?

Response: As discussed in Section 4.2.3.4 of the DGEIS, special measures will be used in wetland areas to minimize impacts to wetland soils, hydrology and hydrophytic vegetation. Mitigation of wetland impacts will include the following BMPs:

- *Appropriately sized silt fencing and/or straw bales will be placed around wetlands and other waters of the U.S. in and adjacent to work areas prior to any grading activities to effectively control siltation in these areas;*
- *Construction staging areas will be located at least 50 feet away from all wetlands, and storage of chemicals, washing or refueling equipment, and mixing concrete will be conducted more than 100 feet away from wetlands and other waters of the U.S.*
- *Prefabricated mats or timber mats will be used, as needed, to provide a firm surface for construction equipment and crossing;*
- *Tree and shrub stumps will be left at ground level within wetland areas, where possible, to leave root systems intact and therefore minimizing disturbance of wetland soils;*
- *The top 6 to 12 inches of topsoil in wetland areas will be segregated and sidecast temporarily during trench excavation. Once the utility installation is completed, topsoil will be replaced in its original layer. This measure will be undertaken to preserve the wetland seed bank in the soils and facilitate recolonization of the wetland area with herbaceous wetland plants;*
- *Low-weight to surface area equipment will be used within wetlands with standing water and/or saturated soils;*
- *Flume pipes will be installed to maintain wetland drainage patterns during installation of utilities;*
- *Sediment filter devices will be installed to prevent the flow of trench spoil off-site (i.e. silt fence);*
- *Trench plugs will be installed within wetlands and other waters of the U.S. to maintain the wetland hydrology; and*
- *Following the completion of construction activities, the wetland area and surrounding uplands will be seeded with annual rye and mulched (i.e., weed-free straw) to stabilize the soils. All exposed soils in wetland areas will be stabilized at the earliest practicable. If slope stabilization is difficult due to the time of year or steepness of the slopes, straw or jute matting may be placed to stabilize slopes adjacent to wetlands.*

2.17 Flooding

1. Comment: The DGEIS does not address flooding caused by the access round within the Village of Round Lake which has a tremendous flooding problem.

Response: The increase in the rate of runoff resulting from the construction of any and all road improvements will be addressed in the design of the road improvements. The design of the road improvements will not be accepted by reviewing authorities, unless it is demonstrated that the proposed access road will not increase existing flooding conditions. It is important to note that the current and historical flooding problem that may occur in the Village of Round Lake is an existing baseline condition which is unrelated to the proposed action.

2.18 Cumulative Impacts

1. Comment: The DGEIS needs to consider future development that is happening in other towns including Ballston, Milton, and Stillwater. Several developments going on right now include the On Clave[1] and some condos along Route 67.

Response: The proposed project has the potential to induce growth in the region. In order to comprehensively address this issue and provide appropriate mitigation, the Applicant has agreed to assist in the preparation of future plans and implementation measures to provide communities with appropriate growth management tools to maintain their quality of life. Greater detail on this mitigation package is presented in FGEIS Section 2.5 and 2.9.

The DGEIS, consistent with the Final Scoping Outline, addressed all known pending development projects within the Village of Round Lake, and the Towns of both Malta and Stillwater (refer to DGEIS, Sections 3.6.3.4 and 4.6.3.4), including but not limited to, The Enclave at Malta PDD and several residential development projects. It was concluded in the DGEIS that the proposed LFTC will be compatible with the projects in the study area that have been approved or are seeking approval.

During the DGEIS public comment period, no "other" Towns provided any comments on the proposed LFTC expressing concern over the growth that might take place in their community. Further, it is important to note that "other" towns are not precluded from updating their own master plans as a direct method of controlling growth within their jurisdiction. The Town of Ballston, for example, is in the process of doing just that. In February 2003, in response to increased development pressure related in part to the expansion of water service along Route 50, the Ballston Town Board passed a six-month moratorium on building applications exceeding four (4) lots and planned unit developments (PUDs). The purpose of this temporary moratorium was to provide the Town a period of time in order to adequately study, review and plan for land use regulation and zoning ordinance changes and potential revisions to the Town's comprehensive plan. The Town of Ballston is in the process of making zoning amendments, consistent with the spirit and intent of their existing comprehensive plan which identifies farming as an "essential" activity in the Town, as well as a strong desire to preserve the rural character of the community.

2. Comment: The DGEIS states that this project will spur new development within a six-county area which is significant. But the DGEIS does not indicate where this new development will take place and how much we can expect. What will be the impacts of this cumulative development on school services, community services, emergency services, traffic, open space, etc. There are models that can be used to assess this

[1] Presumably The Enclave, now known as Park Place.

cumulative impact on our communities, as well as neighboring communities. Residential growth will result from this project in surrounding communities which will increase these communities needs for schools and other services and raise taxes.

Response: Section 5.3 of the DGEIS addressed the growth inducing impact of the proposed LFTC, and Section 2.9 of this FGEIS serves to supplement the DGEIS's discussions of growth inducement. Refer to Response to Comment #2.9.1 for an assessment of the models and proposed mitigation measures pertaining to growth inducement.

Growth in New York State is controlled at the local level. All future development both within the Towns of Malta and Stillwater, as well as other neighboring towns, villages, and cities is subject to local approvals and a demonstration that the proposed development is consistent with local zoning. The amount of future development that theoretically could take place within any municipality is limited by the municipality's Master Plan, as well as other physical and regulatory constraints (e.g., steep slopes, lack of water, wetlands, protected habitat, etc.). While Stillwater and Malta will see the fiscal benefits of the LFTC, including money to allow for future updates of their respective comprehensive master plans, other neighboring municipalities will have a potential for growth, however it's incumbent on those municipalities to chart their own course for land use controls that serve to limit future or allow future growth. For example, the Town of Ballston is currently amending its zoning as discussed in Response to Comment #2.18.1.

3. <u>Comment</u>: The DGEIS should address the impacts related to the build out of the NYSERDA site. One commentor (E. Graham Thompson) questioned the impact of this project on the NYSERDA STEP.

Response: The commentor is referred to Section 5.2.1 of the DGEIS which addresses the cumulative impact of NYSERDA's Saratoga Technology Energy Park (STEP). This DGEIS Section concluded that the proposed development of the LFTC will not have any adverse impact on NYSERDA's development of STEP, and the combined development of both STEP and LFTC will not have any significant adverse impact.

NYSERDA is currently developing a master plan for STEP. As part of this master planning effort, NYSERDA consultants met with both SEDC and the Town of Malta in order to more fully understand the proposed development of the LFTC. It is anticipated based on this consultation that both of these economic development projects will be compatible with each other.

As noted in Section 5.2.1 of the DGEIS, potential transportation impacts of the STEP project, in addition to the LFTC have been evaluated in Section 4.5 and Appendix F of the DGEIS. It is assumed that alternative access proposed by the LFTC will be appropriately shared with STEP, due to the constraints of the Dunning Street corridor. Similarly, utility plans between STEP and LFTC will be coordinated to eliminate duplication and minimize potential environmental impacts, while at the same time optimizing development between the two projects.

4. Comment: What impact will the proposed Campus Commercial have on existing related business in Malta, including the town's central business districts, and what protections will be in place to prevent these existing businesses from being "squeezed out"?

Response: During the public comment period for the DGEIS, several local businesses and business community representatives expressed their endorsement for the proposed LFTC. Such commentors included: Joe Dalton of the Saratoga County Chamber of Commerce, Peter Aust of the Southern Saratoga County Chamber of Commerce, Harry McDonough of Round Lake, Joe Frederick of Malta, Peter Quartaro of Malta, Mike Carly of Malta, Robert R. Roback of Stillwater, and others who expressed their support for the Campus. No local business owners expressed a concern that the proposed LFTC would hurt or "squeeze out" their private enterprise. In addition, SEDC has experienced a strong level of support by local businesses who are in favor of the proposed action.

The commercial development proposed within the Campus Center, Development Pods 6, 7, and 8, as noted in DGEIS Section 2.3.1.2, is office and retail convenience and similar uses which do not compete with general business areas of the Towns, but provide goods and services primarily to tenants and employees at the Campus. Examples of such uses might be cleaners, newsstands/bookstores, restaurants, hotels and similar uses.

The proposed LFTC is expected to benefit local businesses. No protections that will serve to prevent these existing businesses from being "squeezed out" are either necessary or appropriate.

In addition, as part of the future planning mitigation, opportunities to link/integrate the LFTC with Downtown Malta will continue to be sought. Such future measures may also serve to support local businesses.

5. Comment: Section 5.1 should state what the background level of growth has been over the past 10 to 20 years for the population demographic in the Towns of Malta and Stillwater, as well as Saratoga County.

Response: The requested information is provided in the DGEIS. Appendix B of DGEIS provides information related to the background growth level in Malta, Stillwater and Saratoga County. As noted in Section II.A of Appendix B, both the Towns of Malta and Stillwater experienced rapid growth during the period from 1970 to 1990, with a significant decline in growth rates in the past decade.

2.19 Air Resources

1. Comment: Several people made general comments that the proposed action would impact or degrade air quality. Some people felt that the scale of the emissions from the proposed Fabs were not large, while others thought to the contrary, claiming that the proposed action would have a significant adverse air impact. One commenter (E. Graham Thompson) stated that the air certainly will be polluted since all the chemicals can't be "scrubbed", and simply stating that the companies will comply with NYSDEC standards is "laughable at best."

Response: Prior to commencing construction, each facility will be required to assess whether their activities will necessitate receipt of an air emission source permit from the NYSDEC. If an air permit is required then the permit will need to be applied for during construction. In order to obtain a permit, each facility will be required to present calculations for facility-wide emissions of contaminants, and to demonstrate that they are able to satisfy all applicable State and federal Clean Air Act regulations, including the installation and use of air pollution control devices. The various State and federal regulations have been developed to be protective of the environment and to prevent the degradation of air quality.

2. Comment: One commenter (Sandra Sanduski who lives on Bell Flower Road) stated that she had a chemical sensitivity. She stated that she is concerned with air quality, and in fact is already impacted by air quality, and further that she is concerned about others like herself that are already compromised by asthma, allergies, emphysema, and other respiratory illnesses. Another commenter (Stacey Jedynak) stated that the GEIS did not address sensitive human sub-populations for pregnant women, infants, children, elderly and those suffering from pulmonary and cardiopulmonary illnesses, and suggested that an inventory of such subpopulations be developed.

Response: State and federal air quality regulations have been promulgated in order to protect human health and the environment, and this includes protection of sensitive receptors. NYSDEC requires that air dispersion modeling be completed at the time an air permit application is submitted. The sophisticated air dispersion modeling programs have the capability to assess the impacts of air emissions at discrete physical locations and elevations, and during specific weather conditions. This allows NYSDEC to identify sensitive receptors such as schools or nursing homes and to specifically assess the impacts at such locations during the permitting process.

The results of the air dispersion modeling are subsequently compared against the NYSDEC allowable short term (24–hour) and annual ambient air concentrations for each chemical. The Applicant must demonstrate that the standards are being met not only at specific sensitive receptors, but at all locations to which the public has unrestricted access.

No sensitive institutional receptors such as schools, hospitals or nursing homes are located near the project site. Residential populations are dynamic, and a study of such receptors is beyond the scope of this GEIS.

3. Comment: Carpools as a form of mitigation for automobile exhaust is an ineffective mitigation measure.

Response: The results of the microscale air quality analysis conducted for the LFTC (refer to Appendix G of this FGEIS) indicates that the project will not increase traffic volumes, reduce source-receptor distances or change other existing conditions to such a degree as to jeopardize attainment of the New York State and National Ambient Air Quality Standards. Therefore, air quality related mitigation is not required for this project. However, encouraging employees to commute and reduce the number of vehicles travelling to and from the project site will provide an overall benefit to the project corridor by reducing the vehicle emissions, although it not required as part of this project. NYSDEC advocates utilizing carpools as a means of reducing air emissions from motor vehicles. According to the NYSDEC's Division of Air Resources website, car exhaust is stated to be a major contributor to ozone pollution, and alternative measures to get to work are generally recommended, you may want to consider biking, walking, using public transit or forming a carpool to get to work." See Response to Comment #2.19.5 below for a further discussion of air emissions from mobile sources.

4. Comment: The LFTC will increase the amount of "bad air days," defined by the American Heart and Lung Association. Ozone levels seasonally are listed on the local news channels as "unhealthy for our area." The additional traffic will just make matters worse.

Response: One of the many purposes of the various State and federal regulations is to prevent the degradation of air quality. In particular, New York State must demonstrate to the USEPA through the State Implementation Plan (SIP) that programs are in place for achieving or maintaining compliance with the federal air quality standards. The SIP describes the macro scale approach which NYSDEC is proposing for maintaining the air quality in those areas currently meeting the national standards and for improving the air quality and meeting the standards for those areas which are not in compliance. The SIP addresses emissions from stationary sources (e.g., factories) as well as mobile sources such as automobiles and construction equipment. The specific automobile emission standards required by the SIP are intended to ensure that NYS meets the applicable air quality standards.

A microscale air quality analysis was conducted for the LFTC to assess the potential air quality impacts resulting from traffic generation and proposed roadway and intersection improvements (refer to Appendix G). The results of the analysis indicated that the proposed LFTC will not

substantially impact carbon monoxide concentrations, and the project area will remain in compliance with the New York State and National Ambient Air Quality Standards.

In addition, as the NYSDEC reviews air permit applications for the facility, a cumulative air impact analysis will be performed to ensure the protection of air quality in the area and State of New York.

5. Comment: The DGEIS has not adequately discussed impacts to regional air quality from automobiles, such as providing estimated emissions and comparison to regional air quality levels; it only states that there will be no significant impact.

The screening processes set forth by the New York State Department of Transportation Environmental Analysis Bureau need to be adhered to in determining the air quality impacts resulting from the increase in traffic. The NYSDOT Environmental Procedures Manual, Chapter 1.1, uses a three part screening process to determine if a microscale air quality analysis is required. This screening process should be completed for the traffic corridors and associated intersections leading to the proposed project site to determine if an air quality analysis is warranted. If warranted, this analysis will predict carbon monoxide (CO) concentrations on a localized or microscale basis. Based on the above information appropriate mitigation measures can be analyzed and implemented.

Response: A microscale air quality analysis was conducted based on the procedures outlined in Chapter 1.1 of the NYSDOT Environmental Procedures Manual. The results of this analysis are summarized in an Air Quality Study Report, Appendix G. The screening procedures analysis conducted indicates that a detailed air quality analysis is not necessary. Therefore, by definition the proposed LFTC is not expected to increase traffic volumes, reduce source-receptor distances, or change other existing conditions to such a degree as to jeopardize attainment of the New York State and National Ambient Air Quality Standards. The results of this air quality analysis serve to support the position that if the proposed LFTC and associated roadway mitigation are constructed, the carbon monoxide emissions will remain in compliance with the standards.

6. Comment: Section 4.3.2.3, Manufacturing Related Impacts provides a great overview of the existing regulations, but does not discuss the specific submittal of an application to the NYSDEC for a State or Title V Facility Permit (air permit), nor does it address how compliance with State and federal regulations would be presented in that application. The application for the permit is covered in 6 NYCRR 201; however, compliance with many of the 6 NYCRR 200 series regulations needs to be discussed in the permit and in the DGEIS.

Response: Prior to commencing construction, each facility locating in the LFTC will be required to assess whether their activities will necessitate receipt of an air permit from the NYSDEC. If the activity is not exempt then the Applicant will be required to submit an air permit application to the NYSDEC in order to obtain either a Minor Facility Registration, State Facility Permit or Title V Facility Permit, based on the calculated facility-wide potential to emit. As part of the application, the Applicant will be required to identify applicable regulations on both a State and federal level, and also include a compliance certification for applicable requirements. The application would provide specific emission calculations for each source at the facility, as well as on a total facility-wide basis.

7. Comment: Air emissions and control technologies are presented in Appendix C; however, all potential emissions provided are post-abatement. The actual emissions of each contaminant prior to treatment and the appropriate control/treatment technology associated with each contaminant have not been presented. It is important to know the pre-abatement numbers in the event that the abatement/control technology becomes unoperational or inefficient, and to understand the permitting level that will be required.

Response: Pollution abatement through control technologies is legally mandated by the CAA, so theoretical "pre-abatement" emissions have little relevance to air quality impacts. The applicable air permitting level and type of permit required is based upon the potential to emit (PTE) air contaminants, and the PTE is determined post abatement for federally enforceable permits (such as in NYS). The air permit application will require the facility to list the actual emissions on an hourly and annual basis; potential to emit on an hourly and annual basis; and emission rate potential (assuming emissions in the absence of control devices) on an annual basis. Therefore, it is premature at this point to consider the specific types of control devices until such time as a specific facility is being engineered and its associated air permit application is being prepared.

In addition, emergency response manuals will review emergency scenarios such as air emissions and have the appropriate response prepared.

8. Comment: A general discussion of control technologies is presented, however, it is unclear if these control technologies are proven or what their basis for design is for the level and type of actual emissions proposed. This section discusses sources of regulated air emissions; however, it needs to be clear that all facility-wide sources are covered in a NYSDEC air permit; a potential list of facility-wide sources should be provided with potential to emit calculations prior to treatment. Depending on which permit is necessary (State or Title V), there are other regulations that need to be addressed, specifically, New Source Review (a State regulation) and Prevention of Significant Deterioration (PSD) (its federal equivalent). Maximum Achievable Control

Technology (MACT) is referred to; however, Lowest Achievable Emission Rate (LAER) could apply and is not addressed. There are other NYSDEC air regulations that, although minor, have not been addressed including, 6 NYCRR Parts 211 (covering opacity issues), 225 (cover sulfur content of fuels used onsite), and 227 (covering NOx control), as well as the specifics of Part 212 (process emissions) compliance.

Response: As part of the air permit application, the facility will be required to identify applicable regulations on both a State and federal level (including those programs mentioned above), and also include a compliance certification for applicable requirements. The application would provide a list of emission sources, rates, particular air contaminants, and control devices that would be utilized at the facility, among other information. Therefore, it is premature at this point to consider the specific design parameters or types of control devices until such time as the application is being prepared.

9. Comment: What guarantee is there that emission control equipment will be beyond the minimum regulatory requirements?

Response: While there is no guarantee that emission control equipment will be beyond the minimum regulatory requirements, it is routine for facilities to operate emission control equipment at a level comfortably above the minimum thresholds in order to avoid inadvertent excursions and permit violations. Moreover, the "minimum" federal and State requirements typically require that the best practicable emissions control equipment be used for new sources such as the LFTC tenants.

10. Comment: NYSDEC commented that the DGEIS makes no mention of impacts related to the contaminants emitted in the exhaust from construction equipment. Assuming that much of this equipment will be powered by diesel engines, these impacts can be relatively large. There should be a discussion of how they will be minimized or mitigated. In addition, the DGEIS should address potential PM 2.5 impacts. This is needed for all three categories outline: construction, transportation, and manufacturing related impacts.

Response: In accordance with the NYSDEC Proposed Draft policy for Assessing and Mitigating Impacts of Fine Particulate Matter Emissions, PM_{10} emissions shall be considered as $PM_{2.5}$ during an assessment of impacts. The NYSDEC Draft Policy states that sources with emissions of less than 15 tpy of PM_{10} shall be deemed to be insignificant and no further action shall be required. Sources of PM_{10} in excess of 15 tpy would require air dispersion modeling in order to assess whether the impacts are significant and should be mitigated.

Per the Industry Requirements Document (DGEIS, Appendix C), emissions of PM_{10} from the operation of a single nanotechnology manufacturing are less than 5 tpy. Therefore, the operation

of each nanotechnology manufacturing facility may be presumed to be an insignificant impact with regards to $PM_{2.5}$.

At full build-out, the construction and operation of four nanotechnology manufacturing facilities and other ancillary activities may exceed the draft 15 tpy criteria. However, during this long term period the NYSDEC may finalize the evaluation criteria for $PM_{2.5}$. The finalization of the guidance criteria as well as the future availability of site specific design plans would allow for these impacts to be further assessed and/or modeled, as appropriate, during the life of the project.

Appropriate mitigation measures will be implemented if a potentially significant impact is identified during future phases. NYSDEC recommends the following mitigation measures, as appropriate:

- *Stationary Sources:*
  - *implementation of an emission level compatible with the lowest achievable emission rate;*
  - *obtaining emission offsets; and*
  - *fuel or operational limitations.*
- *Mobile Sources:*
  - *transportation demand reduction measures;*
  - *off-peak delivery schedules;*
  - *choice of fuel;*
  - *encourage carpooling; and*
  - *employer-subsidized public transportation.*

11. Comment: NYSDEC commented that the projected emissions of air contaminants from a single, stand-alone Fab are all well below major source levels. Only when all four Fabs are operational would emissions of any contaminant (VOCs) reach the level of a major source. Per the DGEIS, this would not occur for at least 12 to 18 years. Permitting guidance from the USEPA states that phased construction projects should be treated as individual projects when there is substantial time between issuance of the permit and actual construction. The appropriate air permit for one Fab would be a State Facility Permit. An additional Fab would be addressed separately within 18 months of projected start of construction, either as a modification to the existing permit or as a new permit, as appropriate. As a minor source permit, this would not be a delegated permit. That is, it would not be subject to either Title V of the Clean Air Act Amendments of 1991 or Federal New Source Review (NSR) requirements.

Response: Until such time as the facility is a major source of air pollution (based on the facility-wide potential to emit), the requirements of the Title V and NSR regulations would not apply. If the facility becomes a major source of air pollution, it would then be required to comply with these federal regulations.

12. Comment: NYSDEC noted that based on the relatively low projected emissions of toxic contaminants and criteria pollutants, it is reasonable to conclude that the project will likely not adversely impact ambient air quality. However, when detailed information on contaminant emission rates and exhaust vent specifics become available, ambient air impact modeling will be performed to confirm these projections. The DGEIS addresses this issue and states that the facilities will need to satisfy the requirements of the NYSDEC Guidelines for the Control of Toxic Ambient Air Contaminants. DEC concurs with this statement. It should be noted, however, that the DGEIS indicates that "…applicable short-term and annual guidance concentrations must be achieved at the property line…" This is true only if there is no public access to the property in question. If the public has free access to the property, applicable guidance concentrations (primarily short-term guidance concentrations) must be met on-site as well.

Response: Comment noted.

13. Comment: NYSDEC noted that the DGEIS identifies the expected quantities of chemicals to be stored and addresses the hazardous assessment, prevention programs and emergency response and training required by applicable federal air regulations.

Response: Comment noted. No response required.

14. Comment: NYSDEC commented that the DGEIS discusses a number of emission control devices with proposed applications and removal efficiency rates. All appear to be technically feasible. When specific information becomes available, it will be reviewed in detail and stack testing will be required, as appropriate, to confirm removal efficiency rates.

Response: Comment noted.

15. Comment: Other similar semiconductor facilities are known to accidentally release hazardous chemicals on a periodic basis. Such accidental air releases have not been characterized in the GEIS. The catastrophic results of any unexpected release which certainly could occur at any time would blow clouds of chemicals down wind towards the Saratoga Race Track, the Saratoga Performing Arts Center, Saratoga Lake, the City of Mechanicville, the Village of Stillwater and anywhere in the Town of Malta.

This would be a constant source of worry that could affect the lives of thousands of people.

Response: USEPA has established and mandates the Risk Management Program under 40 CFR Part 68 for facilities using extremely hazardous substances to prepare a chemical accident prevention program. The regulation requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n):

- *Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases;*
- *Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and*
- *Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g., the fire department) should an accident occur.*

2.20 Malta Rocket Fuel Area

1. Comment: One commenter (Terry Penesso) expressed a general concern over the Malta Rocket Fuel Area and asked if this site was okay? It was stated that the site had not been totally cleaned up and that there's still rocket fuel buried there, so that this site still needs to be monitored for another hundred years. Can this area be developed? If so, what will happen to the contaminants that are still there?

Response: Investigations and remedial actions to date have addressed "buried" wastes at the Malta Rocket Fuel Area, though groundwater contamination still exists. The EPA has called for continued monitoring of groundwater at the Malta Rocket Fuel Area, and monitoring will likely continue into the future until contaminate levels are below EPA thresholds. Development of the Malta Rocket Fuel Area is restricted to commercial and industrial use. Groundwater contamination is being addressed through natural attenuation. Development of the project site, as proposed, is not anticipated to have a significant impact to the concentration of contaminates. Groundwater and surface water monitoring will continue to be conducted to assess any potential change in the distribution of contaminants.

2. Comment: Approval of the Applicant's master plan should be based on actual confirmation from the USEPA regarding the abandonment or replacement of monitoring wells for the MRFA.

Response: Based on conversations with USEPA representatives as well as experience with other similar projects, USEPA approval will be required for any changes to the existing monitoring program for the MRFA. It is anticipated that much of the development on the project site can be done without any modification to the existing monitoring program. But, until specific design plans are in place that could warrant changes to this existing monitoring program, it would be premature to request "confirmation" from USEPA. As stated in section 4.2.1 of the DGEIS, "The PDD Master Development plan proposes development within the MRFA site. Proposed development "inside the fence" of the Malta Test Station will be limited in extent and, if authorized, will occur after the initial phase of project development. It will be important for the Campus development to progress in a fashion that allows the continued monitoring of groundwater around the MRFA site. This will be done in consultation with the USEPA and the responsible party."

3. Comment: The Malta Test Station is an inactive hazardous waste site, which by definition is not a Brownfield Site as referenced in the executive summary.

Response: The term "brownfield" is used in its popular meaning rather than the stricter State regulatory definition within the executive summary. Because the MRFA is listed as an inactive hazardous waste site it does not meet New York State's technical definition of a Brownfield Site,

and would not qualify for funding under this State program. However, the idea of putting to use a contaminated property that is otherwise suitable for commercial or industrial purposes meets the spirit of the brownfield, redevelopment programs.

4. Comment: If groundwater is to be used as a point of discharge for stormwater, consideration should be given to how the discharge will affect the existing groundwater contamination. Could increased elevations of local groundwater cause an increase in the rate of groundwater movement and spread the existing plume farther than it would have spread without this external influence?

Response: Consideration has been made for stormwater discharges within the MRFA. As stated in Section 4.21.1 of the DGEIS, for the portion of the project site in the vicinity of the existing contaminant plume associated with the MRFA, an additional goal of the stormwater management measures is to maintain "equivalent" pre-development infiltration rates into the lacustrine sand. This additional measure will allow the existing contaminant plume to be unaffected by the proposed action, subject to verification testing by future MRFA monitoring.

5. Comment: Based on the extremely sensitive nature of the MRFA, its location adjacent to several thousand residents, and its location on top of a groundwater aquifer, the current one-mile easement around the site should be maintained.

Response: Maintaining the one-mile easement for the proposed action would serve no purpose. The U.S. Government in 1955 originally established the one-mile perpetual restrictive safety easement. This safety easement covers approximately 1,800 acres of a circular area centered in the middle of the Test Station. The holder of the easement has the right to prohibit hunting and human habitation, remove buildings being used for human habitation, post signs, and enter the easement area to exercise these rights. The purpose of this easement was to provide a safety buffer around the Test Station for experimental rocket testing and ordinance firing. Construction and operation of the LFTC will preclude any and all experimental rocket testing and ordinance firing. With the discontinuance of these activities, the safety easement will provide no protection or purpose.

In 1964, this safety easement transferred to NYSERDA's predecessor with its purchase of the 165-acre Test Station. In 1968, NYSERDA's predecessor purchased an additional 280 acres within the easement (the current NYSERDA property), and extinguished the restrictions on this 280 acres, which allows STEP development. In 1984, NYSERDA sold the Test Station and safety easement (which now affects approximately 1,520 acres) to the Wright-Malta Corporation, which continues to own the Test Station and hold the safety easement. SEDC currently has a purchase option with Wright-Malta Corporation for the Test Station and safety easement. The holder of the easement has the power to extinguish the habitation restrictions once the two parcels are under common ownership and the easement ceases to provide any purpose.

6. Comment: In Section 4.7.3, the GEIS states that site buildings, drainage structures, and other structures and appurtenances located within the Malta Test Station are proposed to be demolished and removed as part of the full build-out of the Campus. When performing such work in areas where contaminated soil or residual deposition wastes may still be present in shallow soil, it is unclear as to how much of this material will be encountered and disturbed and specifically, how the health and safety of workers and the environment will be protected. Prior to the on-set of this site work, a work plan (which may have to be reviewed and approved by the NYSDEC and possibly the USEPA) should be presented to the town for review and consideration. This step will allow the town to consider how these issues may affect the site during development and what measures are to be implemented to assure protection of human health and the environment.

Response: Comment noted and agreed. Both Health & Safety Plans and Work Plans will be developed and provided to review to the NYSDEC and/or USEPA prior to work being conducted within the MRFA.

7. Comment: The term PID (on page 31 in Appendix L) does not appear to have been defined previously, nor is it in the acronym list.

Response: The term PID has been added to the acronym list. PID is an abbreviation for photo-ionization detector, a field surveying instrument commonly used to measure the presence of certain organic vapors.

8. Comment: It is unclear if the second spill (9807317) was closed by the NYSDEC (refer to Appendix L, page 43). Section 4.3, which the report refers back to, only discusses one tank closure report.

Response: Spill No. 9807317 was closed on June 27, 2002 by the NYSDEC.

2.21 Open Space

1. Comment: One resident of Halfmoon (Rosemary Wysocki) indicated that she is concerned about preservation of open space and the potential impact of the proposed action on open space in the Town of Halfmoon where there has been and continues to be a lot of residential development. Another commentor (Larry Benton) asked, in view of the very substantial public and private investment, if the proposed action provides an opportunity to broaden local, county and State land preservation programs.

Response: The direct impacts of the proposed action will not have any impact on open space within the Town of Halfmoon. The indirect, growth inducing impacts of the proposed LFTC will potentially increase the demand for residential development in the Town of Halfmoon which is located within a convenient commuting distance to the project site, and has a high quality of life, nice parks, and excellent local schools which would be desirable for the future employees of the Campus. However, future development within the Town of Halfmoon can most appropriately be controlled at the local level by the Town of Halfmoon.

Refer to Response to Comment #2.9.1 regarding open space mitigation which will serve to broaden local land preservation programs.

2. Comment: The DGEIS does not address the loss of open space resulting from the proposed action. The proposed action will destroy of over 1,300 acres of forested lands, transmission lines will tower over the landscape, and large portions of the Zim Smith Trail will be obliterated. The additional development pressures will also have an attendant loss in open space. Stating the proposed action will increase open space is false, since it will decrease open space. This proposed action will accelerate the Town to deal with open space, recreational and community needs.

Response: Section 4.7.5 of the DGEIS incorrectly states that the proposed action will increase open space on the project site. The proposed development of the LFTC provides for the retention of more than 50% of open space on the 1,350-acre project site, as well as for off-site open space mitigation as noted in Response to Comment #2.9.1, which will assist the towns' future open space and recreational planning efforts. Additional open space will likely be provided within the development pods, even after full build out, but this acreage can only be quantified at the site plan application phase. Refer to Response to Comment #2.11.9.

As presented, it is expected that implementation of the proposed mitigation measures will increase open space in the future in the project area, despite the fact that there will be a net decrease in open space on the project site.

No portion of the Zim Smith trail will be obliterated by the proposed action.

3. Comment: Will mitigation fees be set aside for the development and upkeep of open space?

Response: No mitigation fees are proposed for the development and upkeep of open space. The management entity will be responsible for the development and upkeep of open space outside the development pods, in the "common areas" of the Campus.

Refer to Response to Comment #2.9.1 regarding LFTC mitigation for the potential loss of open space outside the project site, within Malta and Stillwater.

4. Comment: The Town of Malta should determine a required open space percentage and calculation method for the LFTC for inclusion in the PDD layout design. Open space is calculated after deducing streams, stream setbacks, steep slopes, and wetlands pursuant to the Town's new open space preservation guidelines for subdivision. Using these guidelines, there is not 50% green space, since the project develops nearly all of the project site's uplands.

Response: The proposed design of the LFTC sets aside approximately 50% of the total ±1,350-acres as green space. A vast majority of this green space is uplands, and a minor component is potential wetlands, stormwater management, and wetlands mitigation. It is estimated that approximately 5 to 10% of the proposed green space is comprised of streams, stream setbacks, wetlands and steep slopes. This "reduction" in green space will be more than offset by the green space that is anticipated to be provided inside the development pods. The full build-out of the LFTC will preserve approximately 50% green space, consistent with the town guidelines.

5. Comment: It is unclear how a 200-foot wide buffer strip creates a building set back of at least 400 feet (Section 2.3.12). The GEIS should state whether the Park Preserve Area and other buffer spaces on the property will be accessible by the public, and whether the public will be allowed to use the bike paths in the Campus.

Response: The setback distances for the LFTC are variable and range from 200 to 1,200 feet, as measured from the pod boundaries to the boundaries of the project site. In the neighbor areas, the set-back distances are a minimum of 400 feet. There is no reference to a 200-foot wide buffer strip in Section 2.3.12.

The Park Preserve area and the bike trails will be accessible by the public. It is not anticipated that areas outside these would be accessible to the public.

6. Comment: The GEIS should state that the 50% open space is compliant with the Town of Stillwater's regulations, which requires 40% of land retained as open space. The GEIS should state whether it is compliant with the Town of Malta's open space regulations.

Response: The proposed LFTC has been designed to be in compliance with both the Towns of Malta's and Stillwater's green space regulations.

2.22 Vegetative Impacts

1. Comment: Will areas of the project site dedicated as open space continue to be managed as a forest? If so, what is the reason for this continued timbering?

Response: As discussed in Section 2.3.13 of the DGEIS, forestry management will be continued at the Campus in the green space and buffer areas that will be maintained as forested areas. The Lumac Company and its predecessors have been managing the Luther Forest for timber, wildlife and recreational uses for over 100 years. Lumac is planning on continuing their forest management practices within the designated open space areas following development of the LFTC. The reasons for the continued forest management are multi-fold. First, the management of the forest has historical value to Lumac and its founding families. Second, the forest management practices will continue to provide fire protection, manage for wildlife habitat, and produce timber. Lastly, forest management encourages healthy tree growth, provides better protection against disease, and promotes good land stewardship.

2. Comment: Where will all the stumps and related debris (i.e., wood chips) from the 650 acres of clear cutting be disposed of, and what protection will be put in place to keep them from being buried on the site?

Response: Stumps and excess woody material will most likely be disposed of off-site, away from any existing or proposed structures in an approved upland location. Alternatively, stumps and excess woody debris may be buried on site in upland locations away from any proposed structures or paved areas. The location of the proposed disposal area will be indicated on the approved construction plans during site plan approval. It is expected that clearing activities will be monitoring during construction to verify compliance with the approved construction plans.

Any burying of stumps on the project site will be done at the initiation of the companies locating within the LFTC, as approved by the locality during the site plan review phase of the project. This method of burying stumps will have no adverse environmental impact. No additional protection measures are warranted.

3. Comment: As indicated within the DGEIS, a majority of the site is forested by a mixed deciduous–conifer forest and pine plantation yet the limits and boundaries of each type of community has not been identified. Each community type and it boundaries both on site and off site should be identified and a map provided to determine each communities specific boundaries. Additionally, vegetative communities along the transmission line, proposed bypass and interchange should be identified and quantified to adequately determine the proposed impacts to each of the communities.

Response: A Forest Covertype Map was created that depicts the different forest communities within the project site (refer to Figure 2.22.3). Four main forest types were delineated, including mixed softwoods, mixed hardwoods, pine plantations and mixed hardwood/mixed softwood. The mixed softwoods covertype is generally composed of American larch (Larix laricina), white pine (Pinus strobus), red pine (Pinus resinosa), and eastern hemlock (Tsuga canadensis). The mixed hardwood covertype is composed mostly of red oak (Quercus rubra), white oak (Quercus alba), American beech (Fagus grandifolia), yellow birch (Betula alleghaniensis), black birch (Betula lenta), and maples (Acer spp.). The pine plantation covertype identifies areas that were originally old farmland that were planted with red pine and white pine in the early 1900's. Finally, the mixed hardwood/mixed softwood covertype are areas that contain a mix of various evergreen and deciduous trees.

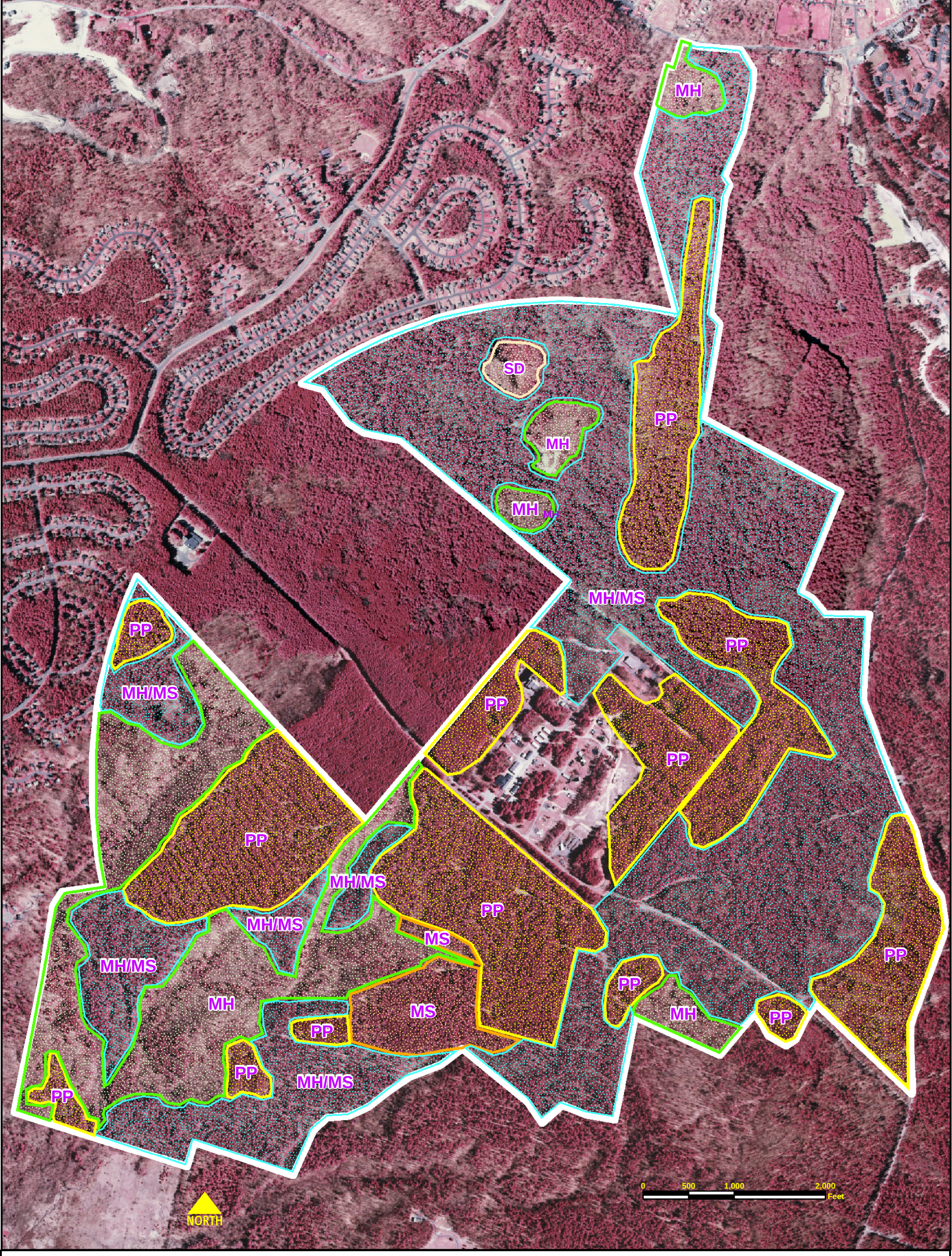
Land use covertypes were also determined along the proposed transportation improvement areas. The following Table 2.22.3.A presents a breakdown of each covertype along the proposed transportation improvements and summarizes the approximate area of impact.

Table 2.22.3.A
Covertypes Permanently Impacted by Proposed Transportation Improvements[1]

Covertype	Stage of Transportation Improvements	Area of Permanent Impact (ft^2)
Forested	Step 1	356,800
Agricultural	Step 1	13,725
Existing Road Edge	Step 1	28,650
	Total Impacts of Step 1 Improvements	399,175ft^2 (9.16 acres)
Forested	Step 2	15,525
Agricultural	Step 2	34,475
Existing Road Edge	Step 2	1,450
	Total Impacts of Step 2 Improvements	51,450ft^2 (1.18 acres)

[1]Covertypes calculated using orthoimagery maps and ArcView GIS.

Land use covertypes were also determined along the proposed off-site utilities. The following Table 2.22.3.B presents a breakdown of the linear footage of each land use type that is traversed by the proposed utilities.



Map Note: Forest cover type boundaries are approximate and are based on interpretations of the orthoimagery mapping, information provided by the Lumac Company, and field reviews conducted by C.T. Male Associates, P.C. Aerialphoto (orthoimagery) were flown in April 2001 and has a 1 foot resolution.

FIGURE 2.22.3
Forest Covertype Map
Saratoga Economic Development Corporation
Luther Forest Technology Campus

Forest Covertype

- MH — Mixed Harwood (red oak, white oak, beech, black birch, maples)
- MS — Mixed Softwood (larch, white pine, red pine, hemlock)
- PP — Pine Plantation (white pine, red pine)
- SD — Existing Stump Dump
- MH/MS — Mixed Harwood/Mixed Softwood
- Project Site Boundary

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Approved:	
Drafted:	C. Secor
Checked:	K. Gaidasz
Project No:	02.8049
Scale:	1" = 1,000'
Date:	May 15, 2003

Town of Malta & Stillwater — **Saratoga County, New York**

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Data Source: C.T. Male, NYSGIS Clearinghouse

Projection: State Plane NAD83 NYE

SHEET: 1 of 1

DWG. NO :

Table 2.22.3.B
Covertypes Traversed by Proposed Off-site Utility Improvements[1]

Proposed Off-site Improvement	Covertype	Linear Footage of Crossing (feet)	Acreage of Impact[4]
Electrical Transmission Line	Forested	42,225[3]	145.4[3]
Electrical Transmission Line	Agricultural	2,775[2]	9.5[2]
Electrical Transmission Line	Urban	1,450[2]	5.0[2]
Waterline	Forested	17,300[3]	9.9[3]
Waterline	Agricultural	6,350[2]	3.6[2]
Waterline	Rural Residential	7,725[2]	4.4[2]
Waterline	Industrial	1,450[2]	0.8[2]
4MGD Sewer Line	Forested	7,400[3]	4.2[3]
4MGD Sewer Line	Industrial	600[2]	0.3[2]
10MGD Sewer Line	Forested	11,800[3]	6.7[3]
10MGD Sewer Line	Agricultural	3,300[2]	1.9[2]
10MGD Sewer Line	Rural Residential	2,625[2]	1.5[2]
Natural Gas	Forested	7,250[3]	4.1[3]
Natural Gas	Urban	1,400[2]	0.8[2]
Natural Gas	Industrial	725[2]	0.4[2]

[1]Linear footage of land use covertypes were calculated using orthoimagery maps and ArcView GIS.
[2]These impacts will be temporary in nature since the land uses (i.e., agricultural, urban, rural residential (lawns), and industrial) are already significantly disturbed or cleared for development.
[3]Impacts to forested areas will be permanent within the maintained right-of-ways. Temporary construction right-of-ways will be allowed to revert back to natural conditions.
[4]Areas of impact are conservatively high and assume that the entire right-of-way will be impacted. Right-of-way widths for the gas, sewer and waterlines are assumed to 25' since the majority of the lines will be placed adjacent to existing roads. The right-of-way width for the electrical transmission line is assumed to be 150 feet since most of the line will be cross-country.

Refer to Response to Comment #2.22.4 for an assessment of the forest covertype impacts on the project site.

4. Comment: As identified within the DGEIS, percentages are an acceptable way to define the breakdown of the different communities however these percentages should be applied to the acreage to set the baseline for which the proposed impacts could be measured against. A table identifying the impact to each natural community should be provided. At a minimum the table should include the acreage present prior to development the acreage lost to development and the acreage remaining after development.

Response: The following table provides a breakdown of the forest covertypes within the project site as depicted in Map 12. This table takes into account only the vegetative portions of the site, and therefore does not include areas of development that are proposed within the MRFA.

Table 2.22.4
Summary of Forest Covertypes within the Project Site

Vegetative Covertype	Total Acres	Acreage of Impact	Total Remaining Acres
Pine Plantation	374	278	96
Mixed Softwood	32	14	18
Mixed Hardwood	190	5	185
Mixed Hardwood/Mixed Softwood	576	344	232
Total	1,172	641	531

The additional quantification provided in Responses to Comments #2.22.3 and #2.22.4 serves to further support the overall conclusion of the DGEIS, Section 4.4.1. Loss of forest cover is an unavoidable development impact, but such loss is not considered to be a significant adverse impact. The full implementation of the proposed action will save more than 50% green space of the project site, in compliance with Town Master Plans, and designated buffer areas will be maintained in perpetuity as forest cover. Proposed development of the project site has been designed to minimize impacts to the existing forest cover, to the maximum extent practicable, given the project development objective. Considering the magnitude of the proposed action, the amount of open space preservation, and the amount of similar forested habitat in the project area, the combined loss and transformation of existing vegetation is not considered to be a significant adverse impact.

5. Comment: While the goal of forestry is to harvest trees providing the greatest amount of timber, it is inaccurate to conclude that no unique or old growth trees will be impacted by development simply because the forests are managed for timber. This statement should be substantiated with information from a timber management plan, or the results of a quantitative field study (tree inventory, etc.), and included within the DGEIS.

Response: The production of timber is only one of the many goals of forest management. Other goals may include recreation, creation of wildlife habitat, and improving water quality. Within the Luther Forest, Lumac and its predecessors have been managing the forests for multiple uses for over 100 years. Throughout this timeframe, a comprehensive management program has been developed. Tree stands and types have been inventoried and based on this information and Lumac's foresters' knowledge of the Luther Forest, no unique or old-growth trees have been identified within the project area. Appendix H of this FGEIS contains correspondence from Lumac that provides substantiation for this statement based on this company's extensive knowledge of the project site.

Furthermore, since there are no trees in the Luther Forest that are known to be much more than 100 years old, it is highly unlikely that any of the trees would be considered "old-growth". According to Bookhout (1994), re-growth of old-growth stands on lands devoted primarily to

timber production is unlikely because rotation lengths generally vary from 25 to 120 years, and most forest types require at least 200 year to develop old-growth characteristics. In addition, no trees that would be considered "unique" were observed within the Luther Forest during C.T. Male field investigation of the project site; all observed tree species are known to be common throughout New York State.

6. Comment: There should be a break down of natural communities impacted by rights-of-way and roadways. This breakdown should provide acreages of each natural community type lost to rights-of-way, and to roadways separately. Rights-of-way offer some mitigation to vegetation and wildlife through their continued provision of a natural cover-type whereas roads do not. For this reason the two impacts should be detailed and quantified.

Response: This additional quantification is provide in the tables in Response to Comment #2.22.3.

7. Comment: As stated within the DGEIS the utility and roadway corridors will fragment the forest, such that the remaining forest fragments will be larger than the cleared corridors. The acreage affected should be quantified to determine its potential impact on resident wildlife species. It is important to quantify the acreage of impact and to characterize the effect of impact on resident species of wildlife.

Response: The acreage of forest areas that will be impacted by the proposed utilities and transportation improvements are provided within the tables in Response to Comment #2.22.3. Wildlife will be displaced for a short time during construction of utility right-of-ways and maintenance activities within these corridors, however this will be a temporary displacement. Following revegetation of the corridors, many wildlife species will utilize this newly formed edge habitat and the surrounding remaining forested areas. The transportation improvements are primarily proposed contiguous to existing road corridors which provide minimal habitat for wildlife at the present time. Any wildlife that are residing along the roadways will likely migrate to other comparable habitat in the vicinity of the project area.

8. Comment: The creation of more edge habitat is not a benefit to forest dwelling wildlife, and in fact causes habitat destruction and displacement of species requiring a fully developed forest canopy (e.g., red shouldered hawk). This statement is not substantiated by the data provided in the DGEIS, nor in the literature concerning forest ecology, or species management. The GEIS should substantiate the statement by providing reports or other studies that clearly show that edge habitat provides a benefit for forest dwelling species.

Response: The creation of edge habitat is beneficial for many wildlife species, including some forest dwelling species since it promotes diversity within large contiguous forest tracts. Forest openings such as utility right-of-ways, are often key components of the habitat of many forest dwelling species (Chambers, 1983). According to Bookhout (1994), the edges of (forest) stands having different structural characteristics are important to some forest animals because they provide access to different kinds of resources essential to their survival and reproduction. Grassy openings that are maintained by mowing or clearing on a rotational basis provide enhanced opportunities for foraging by birds and other wildlife.

However, it is recognized that the fragmentation of forests may negatively impact some interior forest species like the red-shouldered hawk (Buteo lineatus). Interior forest species like the red-shouldered hawk are typically found in fully developed forests which have not been managed for timber (NYSDEC, 2003). Red-shouldered hawks are not likely to be residents in the Luther Forest due to its long history of timber management practices. Other more common forest interior species such as the barred owl (Strix varia) and wood thrush (Hylocichla mustelina) likely live within the project site. During construction and following development of the LFTC, these species will likely seek refuge in the remaining forested tracts on the project site and within the large tracts of forested land east of Cold Spring Road and south of the project site.

9. Comment: The DGEIS indicates that "creating more edge habitat…is desirable for a variety of wildlife species". According to the management activities described for the rights-of-way, the habitat will be in line with terrestrial-cultural community types described in the literature. It should be noted that terrestrial-cultural community types, select for a very narrow range of vegetative and wildlife species due to the high degree of human interference involved in managing their vegetative cover. Even if vegetation were mowed on a yearly basis, the quality of the remaining edge habitat would not be nearly as high as that of the existing forested habitats and therefore additional mitigation measures may be necessary to minimize the impacts to the greatest extent practical.

Response: Utility right-of-ways can be classified as terrestrial-cultural community types since they are maintained by human activities. However, while many terrestrial-cultural community types may select for a narrow range of vegetation and wildlife species (i.e., maintained lawns), right-of-ways often serve as wildlife corridors, provide beneficial edge habitat for a variety of wildlife and promote biodiversity within large contiguous forest tracts (Chambers, 1983).

The maintenance of utility right-of-ways will be conducted using Integrative Vegetation Management (IVM) techniques. IVM techniques use a combination of manual, mechanical, chemical, cultural and biological control measures to promote desirable vegetation (i.e., low growing shrubs and grasses) within the maintained right-of-ways. With the use of IVM techniques, vegetation is not usually limited to just grasses and instead includes a number of shrubs and wildflowers that may provide cover and nectar sources for wildlife.

The edge habitat created by the right-of-ways will provide habitat that is different from the forested land that is currently present and therefore will select for a larger number of different species, besides just forest-dwelling wildlife. For these reasons, additional mitigative measures above and beyond re-vegetation and maintenance are not deemed necessary.

10. Comment: The GEIS should substantiate the conclusion that the loss of approximately 650 acres of forestland is not significant. Compliance with the Town's master plan does not qualify or mitigate the impacts to the natural communities. For this conclusion to be substantiated, the impacts to vegetation must be quantified in terms of the acreage of natural communities lost versus the acreage of natural communities remaining. Further, there must be some form of substantiation for the assessment of natural communities. Typical species observed within each natural community must be provided. A discussion of the character of natural communities on site versus community types defined in the literature should be provided.

Response: The assessment of the natural communities was conducted by reviewing aerial photographs, conducting on-site field reviews and information provided by Lumac Company, including a forest stand map. Tables 2.22.3.A, 2.22.3.B, and 2.22.4 provide breakdowns of the impact on vegetation within the project site and project area (off-site improvements), including the existing covertypes, proposed impacts and the remaining acreage of each forest covertype. In addition, Figure 2.22.3 provides a description of the typical species found in each vegetative covertype.

Considering the magnitude of the proposed action, the surrounding forest areas, and the ample set-asides for green and open space in general conformance with recommended minimum Town standards, the loss of 650 acres of forest is not considered to be a significant adverse impact.

2.23 Private Water Wells

1. Comment: Several local residents expressed concern that the proposed action could impact private water wells, either drying them up or their becoming contaminated.

Response: Section 3.2.5 of the Draft GEIS recognizes the presence of private wells north, east and southeast of the project site. These private wells are characterized as shallow wells within permeable sand and gravel deposits, and deep bedrock wells. Additionally, private wells may be located along or near the alignment of off-site utilities. None of these private wells are anticipated to be adversely impacted by the proposed action (i.e., drying up or becoming contaminated) based on the following criteria:

- *Private water wells are located remote relative to the location of the project site.*
- *There will be no wastewater discharge into streams or groundwater.*
- *There will be no uncontained storage or any chemicals or other leachable constituents allowed on the project site.*
- *BMPs will used during construction, including controlled blasting operations that might be required on the east Bank of Ballston Creek.*

2.24 Noise Impacts

1. Comment: The DGEIS contains information regarding background noise levels, but fails to discuss potential problems and solutions.

Response: Noise mitigation Best Management Practices (BMPs) are discussed in the Summary of Impact Analysis within Section 1.0 and in Section 4.8.1.2 on page 212 within the DGEIS.

2. Comment: How much noise is generated from a typical Fab? What is 55 dBA noise like and how far away can it be heard? What guarantees are there that that resulting noise will not exceed 55 dBA? How will noise impacts be enforced?

Response: Table 4-9 on Page 207 of the DGEIS depicts several sources that would be in the general range of 50-60 dB(A), which is the expected noise level at the property line. Such typical noise levels include a suburban area with medium density population, background noise in an office, and light car traffic.

A community participation program will be implemented at the Campus in order to foster public trust and to seek active dialogue with community members and employ appropriate community response mechanisms. During construction and operation, any noise complaints by neighbors will be addressed in an environmentally responsible fashion and appropriate mitigation measures will be implemented to address valid complaints, as required by the corporate "Guiding Principles" of the PDD Regulations applicable to the LFTC tenants.

3. Comment: The report misquotes the NYSDEC Guidance by reporting and comparing the 24-hour sound level measurements to a 55 dBA threshold. This 55 dBA threshold is for day-night sound levels (Ldn). See the EPA reference within the DEC guidance. The 24-hour sound level measurements need to be converted to Ldn noise levels in order to compare the results to the EPA guidance.

Response: Based on the Industry Requirements Report (Appendix C of the DGEIS), operation of the nanotechnology campus will be subject to a property line threshold of 55 dB(A) during the day, and 45 dB(A) at night. The NYSDEC policy, Assessing and Mitigating Noise Impacts, states that ambient noise levels less than or equal to 55 dB(A) L_{dn} are sufficient to promote public health and welfare, while not being an annoyance. Based on the property line noise limits anticipated, noise levels associated with operation of the Campus will not be perceptible to the surrounding area, and there will be no significant adverse impact to surrounding receptors.

The projected sound levels have been converted to L_{dn} noise levels in order to be compared to the 55 dB(A) threshold. The calculated L_{dn} noise levels are presented on page 5 of the Second Baseline Noise Survey (refer to Appendix I).

4. Comment: Except for Location #5 on Knapp Road, the noise measurements need to be redone because the CEL-460 Dosimeter and Noise Level Meter was programmed to measure noise levels between 50 – 120 dB. The measurement results show that the noise level often fell below 50 dBA, meaning that the noise measurement results are inaccurate.

Response: Comment noted. A second baseline noise study was performed on May 15-16, 2003, with the noise level meters at each location programmed to measure noise levels between 30-100 dB(A). The revised baseline line study is presented herein as Appendix I.

5. Comment: There is no analysis to confirm whether the noise level thresholds will be met or exceeded in regards to the nanotechnology campus. This analysis is necessary to confirm the statements presented in Chapter 4.8.1.2 Noise Levels – Nanotechnology Campus Operations (p. 208).

Response: Noise analyses of the nanotechnology campus were not performed because based on the Industry Requirements Report (Appendix C of the DGEIS), operation of the nanotechnology Campus will be subject to a property line threshold of 55 dB(A) during the day, and 45 dB(A) at night. See additional Response to Comment #2.24.3 for more detailed information. As noted in Response to Comment #2.24.2, a community participation program will be required to be implemented by companies seeking to locate within the LFTC. This program will include response mechanisms and mitigation measures in the event that a noise complaint were received.

6. Comment: Traffic data needs to be used to analyze the traffic noise for the site access roads instead of using representative sound levels.

Response: Potential impacts due to traffic were modeled for Driveway 1 and the Step 1 access road in the vicinity of Morris Road on pages 209-210 of the DGEIS. Also, see Response to Comment #2.24.7 for further discussion of traffic noise impacts.

Representative sound levels are appropriate for the estimation of traffic noise in the vicinity of the proposed access roads, as actual traffic data is not available. The sound source levels utilized in the calculations are commonly accepted values, including a representation of "freeway traffic at 50 feet" at 70 dBA in the NYSDEC document titled "Assessing and Mitigating Noise Impacts, dated October 2000; and "passenger car at 50 mph at 15m" at 65 dBA in Figure 2.2 of Noise & Hearing Conservation Manual, 4th Edition, 1986. As these access roads do not currently exist, traffic data used to determine traffic noise would also rely primarily on assumptions.

7. Comment: Representative traffic noise levels can not be compared to Leq(24h). Traffic data should be analyzed to predict the traffic noise levels to compare against NYSDEC Guidance thresholds.

Response: Noise monitoring location #1 (relocated since first baseline noise survey) was selected as a representative neighborhood location based on the location of the proposed Driveway 1 relative to Bellflower Court residences. The proposed Driveway 1 will be located approximately 400 feet from monitoring location #1. Noise generated from Driveway 1 during operation will vary daily depending on traffic movements. For the purpose of assessing noise impact a peak noise level of 65 to 70 dB at 50 feet (the high end of the range between light car noise and highway traffic) is assumed on Driveway 1. Without adjustment for screening, the projected noise level at location #1 due to vehicular traffic on Driveway 1 is estimated to be in the range of 51.5 to 56.5 dB(A), which corresponds to an L_{dn} of 57.9 to 62.9 dB(A).

The baseline noise survey had an L_{dn} of 64.5 dB(A) and an L_{eq} of 55.1 dB(A) at location #1. The cumulative impact to the L_{dn} at Location #1 would be approximately 1-3 dB(A), with a projected L_{dn} of 65.5 to 67.5 dB(A). The cumulative impact to the L_{eq} at Location #1 would be approximately 1.6 to 4.4 dB(A), with a projected L_{eq} of 57.1 to 59.5 dB(A). With proper design and screening, no adverse noise impact is anticipated by Driveway 1.

Noise monitoring location #6 was selected based on the location of the proposed transportation improvements relative to several existing residences on Morris Road. The proposed Step 1 improvements will be located approximately 400 feet from monitoring location #6. Noise generated on this new access road will vary daily depending on traffic movements. For the purpose of assessing noise impact a peak noise level of 70 dB at 50 feet (highway traffic) is assumed along the Step 1 access road around the Village. Without adjustment for screening, the projected noise level at location #6 due to highway traffic is estimated to be approximately 56.5 dB(A), which corresponds to an L_{dn} of 62.9 dB(A).

The baseline noise survey had an L_{dn} of 57.9 dB(A) and an L_{eq} of 53.9 dB(A) at location #6. The cumulative impact to the L_{dn} at Location #6 would be approximately 6 dB(A), with a projected L_{dn} of 63.9 dB(A). The cumulative impact to the L_{eq} at Location #6 would be approximately 4.6 dB(A), with a projected L_{eq} of 58.5 dB(A). With proper design and screening, no adverse noise impact is anticipated by the Step 1 transportation improvements.

Noise monitoring location #7 (relocated since first baseline noise survey) was selected as a representative neighborhood location based on the location of the proposed Step 1 improvements. relative to New York Avenue residences. The proposed Step 1 improvements will be located approximately 400 feet from monitoring location #7. Noise generated from the proposed Step 1 improvements during operation will vary daily depending on traffic movements. For the purpose of assessing noise impact a peak noise level of 70 dB at 50 feet (highway traffic) is assumed along the Step 1 access road around the Village. Without adjustment for screening, the

projected noise level at location #7 due to highway traffic is estimated to be approximately 56.5 dB(A), which corresponds to an L_{dn} of 62.9 dB(A).

The baseline noise survey had an L_{dn} of 65.3 dB(A) and an L_{eq} of 60.2 dB(A) at location #7. The cumulative impact to the L_{dn} at Location #7 would be approximately 2 dB(A), with a projected L_{dn} of 67.3 dB(A). The cumulative impact to the L_{eq} at Location #7 would be approximately 2 dB(A), with a projected L_{eq} of 62.2 dB(A). With proper design and screening, no adverse noise impact is anticipated by Driveway 1.

Even though the cumulative impacts as presented for both L_{eq} and L_{dn} are less than the mitigation threshold of 6 dB(A) as set forth in the NYSDEC Program Policy (Assessing and Mitigating Noise Impacts, dated February 2001), the proposed Step 1 and Driveway 1 transportation improvements warrant the further consideration of mitigation measures during the design stage. Potential noise mitigation measures will be evaluated prior to the Town's approval of the road construction, and will be incorporated into the design as appropriate, consistent with Section 4.8.1.2 of the draft GEIS.

See Response to Comment #2.24.7. The calculated L_{dn} noise levels are presented on page 5 of the Second Baseline Noise Survey (refer to Appendix I).

8. Comment: The wrong distance reduction formula was used when calculating the traffic noise levels at the receptors. In calculating the traffic noise levels, the formula that was used treats traffic as a point source. Traffic is a line source which has a different rate for noise reduction due to distance. The predicted traffic noise levels need to be updated using the correct formula.

Response: The estimates presented above in Response to Comment #2.24.7 have been recalculated using the correct noise reduction value of 4.5 dB(A) each time the distance is doubled, according to the NYSDOT Environmental Procedures Manual (1995).

9. Comment: Noise measurement sites do not represent the residences that have the highest potential for noise impacts from the proposed facility or access routes to the proposed project site. Noise impacts need to be analyzed and predicted at the following locations:

- Location #1 is a residence that is 800 feet from the Stonebreak Road Extension. There are properties located closer than 800 feet from this access road. Noise levels need to be analyzed and predicted at the closest residence to the proposed access road.

- Location #6 is a residence that is 400 feet from the I-87 connector to Route 9. This doesn't appear to be the closest residential property that could encounter traffic from this drive. The closest residence needs to be analyzed.
- Location # 7 is intended to represent the Exit 11 area. An additional location needs to be analyzed in the area of the STEP 1 Initial Access Road that is running parallel to I-87. The closest residential property to this STEP 1 Initial Access Road needs to be analyzed.
- Other locations at the property boundaries need to be analyzed and noise levels predicted to ensure noise level thresholds are not exceeded by proposed manufacturing facility. Specifically on the northeast property line adjacent to Cold Springs Road.

Response: Noise monitoring locations were specified in the Final Scoping Outline for the Generic Environmental Impact Statement. Based on the above comments, locations #1 and #7 were modified for the second baseline noise survey completed in May 2003. Location #6 was determined in consultation with Malta Town Engineering representatives to be the closest residential property to the I-87 connector to Route 9, and thus was not relocated for the revised study. The revised baseline noise survey is included in Appendix I of this FGEIS (the calculated L_{dn} noise levels are presented on page 5).

2.25 Construction Impacts

1. Comment: The GEIS should identify the type and estimated duration of potential night construction. The type of construction activities and potential impacts (i.e. noise, lighting) to the surrounding residential neighborhood should be analyzed and mitigation measures proposed. For example, the DGEIS identifies the potential for continuous concrete pours; however the noise impacts (back-up beepers, concrete pumps, ECT.) associated with this activity have not been addressed.

Response: The type and duration of construction is described in Section 2.5 of the DGEIS. Construction-related impacts associated with air quality are addressed in Section 4.3.2.1 of the DGEIS. Section 2.3.10 of the DGEIS provides detailed information on the lighting plan for the Campus, and details of the nighttime lighting for construction are in Section 2.5.5 of the DGEIS. Construction noise is addressed in Sections 3.8.1.2 and 4.8.1.2.

These existing DGEIS sections fully address this comment.

2. Comment: Adjacent residential areas will be adversely impacted by constant, ongoing construction and related congestion over a 25-year time frame. This is not a short-term impact. How will this affect the health of children and asthmatic individuals?

Response: By definition, construction impacts are considered to be short-term, non-constant impacts. Construction impacts will not occur continuously over a 25-year period, but rather intermittently over portions of this period, with most outside construction taking place during non-winter periods. While it is recognized that this intermittent construction has the potential to impact adjacent residential areas, the mitigation measures provided in the GEIS are reasonable and appropriate for minimizing these impacts to generally acceptable thresholds that will not constitute a significant adverse impact.

Provided that BMPs are properly implemented during construction and based on past experience, construction will not have any significant impacts to public health.

3. Comment: During construction, what security personnel and security systems will be used to enforce authorized access? Who will patrol the fences, and how often?

Response: Enforcement of authorized access during construction will be done consistent with past practice. Natural barriers to access will be augmented with construction fencing to control unauthorized access. The main construction access road into the authorized construction zone will be gated. During active construction, the gates will be open and actively monitored by construction supervisory staff to prevent unauthorized access. The gates will be locked during

periods of non construction. No security systems or fence patrolling by the LFTC management entity is currently planned.

4. Comment: The DGEIS does not adequately address the impact of nighttime lighting for the period of proposed construction, 1 to 2 years for each of the four phases. One commenter (Anne Garrity) suggested that nighttime construction not be permitted.

Response: Nighttime construction is a required component of the proposed action due to the time-sensitive nature of the nanotechnology industry. The impact of nighttime construction is addressed in Section 4.8.1.1 and Appendix O of the Draft GEIS. As stated above in Response to Comment #2.25.2, construction impacts are temporary in nature, and by definition do not represent a significant adverse impact. Moreover, outside night-time construction that requires lighting will not be required for the entire two (2) years of construction. Once the exterior shell of the building is erected, outside night-time construction would not be necessary. Additionally, it is important to point out that only selected portions of the outside night-time construction have the potential to create off-site impacts due to the secluded location and buffering capabilities of the project site.

Construction lighting will be limited in duration and aerial extent. Construction lighting is intended to illuminate a work area and such lights will not face down. There will be the potential for reflective glares within the construction area, however the extensive vegetative buffer will serve to mitigate any off-site light reflection to acceptable levels. Additionally, some construction lighting could be directed inward, particularly near the boundaries of residential areas.

For the Fab construction, most of the construction takes place inside. Once the exterior shell of the facility is completed, no additional outdoor lights during construction will be required. The duration of the shell construction is estimated to be two (2) to three (3) months per Fab.

5. Comment: The DGEIS should identify the magnitude and location of staging areas (see Section 2.5.3) for both on and off-site improvements.

Response: For construction work on the project site, all construction staging areas will be within the 1,350-acre project site, and within the Authorized Development Areas ("pods") and not within designated green space.

Temporary construction staging areas will be required for off-site improvements. Such temporary staging areas not on the project site will include construction yards, stream crossing extra work areas, and road/rail road crossing extra work areas. Such construction staging areas are temporary and the crossing staging areas are required to accommodate construction in special work areas. The typical size of a construction yard or staging area is five (5) to 10 acres;

stream and road/rail staging areas generally are less than 250 feet by 250 feet, located on either side of the crossed feature.

It is premature to identify the location of such off-site staging areas within this GEIS. In general, the construction staging areas, as necessary, will be located close to the actual construction zone within a rural or industrial area, and not proximal to any residential areas, and the stream and road/rail crossings to be located at the actual crossing locations. The exact location of staging areas is more appropriately determined during the construction design phase. For the purpose of this GEIS, it is fair to conclude that these temporary staging areas will not cause a significant environmental impact, due to their temporary nature and considering the siting flexibility for construction yards.

6. Comment: In consideration of the safety of workers, audible back-up alarms should be allowed and will not be a significant nuisance to neighbors.

Response: Comment noted. The safety of workers is of paramount importance, and is not anticipated to be compromised by the use of strobe back-up lights instead of audible beepers during nighttime construction. This mitigation measure will both eliminate potential noise nuisance issues during nighttime construction and be protective of worker safety.

7. Comment: The GEIS should state clearly the need for the site construction plan to propose the traversing of ravines by construction equipment, describing how often and where this will occur.

Response: The traversing of ravines by construction equipment will be limited in duration. Waters of the U.S. and/or wetlands regulated by the NYSDEC and Corps are associated with these ravines, and as required by regulation, all construction activity must seek to avoid, minimize or otherwise mitigate for potential impacts. Only required ravine crossings are proposed for on-site roads, traffic mitigation, and other utility improvements. No random traversing of ravines by construction equipment will be allowed, other than those specified in this GEIS and refined during the site plan application process.

2.26 Geology

1. Comment: Due to the vibration sensitive nature of the nanotechnology industry the GEIS should discuss the type of foundations which would be required to achieve the vibration criteria. What are the foundation requirements for a building of 110 feet in height?

Response: Prior test borings on the project site have characterized the subsurface materials as consisting of relatively firm sand deposits with a thickness in excess of approximately 60 to 70 feet. Based on C.T. Male's geotechnical investigation experience in this glacial sand deposit, project site soils are typically not sensitive to disturbance from vibrations. The use of conventional spread footing foundations proportioned for bearing pressures of between 3,000 and 4,000 pounds per square foot are anticipated for the Fab structures.

2. Comment: A balanced cut-fill approach will significantly alter the site's topography. Filling ravines will also alter site topography. Will there be any off-site disposal of excess earth materials? What will be the magnitude of earthwork quantities? Why can't impacts to ravines be avoided?

Response: No significant alteration to the project site's topography is anticipated based on the relative flatness of the developable portions of the project site, as well as experience with similarly large construction projects. Grading costs for large structures can be very expensive. A cost-effective grading plan minimizes the amount of earth movement, as well as import quantities. There is no advantage to do otherwise. The design objective of the grading plan is to create a flat area corresponding to the building and parking areas, which generally are at approximately the same elevation, and to minimize the amount of grading required with a balanced cut-fill approach. This cost-effective nature of design obviates off-site disposal of excess earth materials.

Filling ravines will alter site topography, but this fact by itself does not constitute a significant impact. In fact, the partial or "headward" filling of ravines is a common occurrence within former glacial Lake Albany unconsolidated sediments. Such partial filling is frequently required owing to the geometric limitations associated with "fitting" a recti-linear structure onto a site plan, and for linear crossings, such as roads. All ravine filling cannot be totally avoided, but they can be minimized. Some amount of ravine filling will be required, but only within the constraints of the estimated impacts to any regulated Waters of the U.S. described in Section 3.2.3 of the GEIS.

The magnitude of earthwork quantities for a conceptual PDD design cannot be accurately estimated. Such project specific calculations can readily be provided during the site plan approval phase of the project.

3. Comment: A fully developed blasting plan should be developed and provided as part of the GEIS to provide a full assessment of the potential impacts of the proposed action, including impacts to Ballston Creek.

Response: It is premature to conclude that blasting will definitively be required for any of the off-site construction associated with the LFTC. Based on the geologic mapping of the project area, potential bedrock excavation may be necessary for the off-site transportation improvements in the vicinity of the Ballston Creek and the Northway where shale bedrock is exposed But this does not mean that blasting will be required. Conventional excavation equipment has the ability to rip some forms of rock, including shale. A blasting determination can only be made with detailed information pertaining or relating to the strength characteristics of the rock formations in question. Such criteria will be determined by a geotechnical investigation, possibly involving seismic refraction or other geophysical methods, during the design phase of the transportation improvements. At that time, and if necessary, a blasting plan will be provided to permitting entities, including both the DOT and the Town for review and approval. Any and all blasting that may be required will be controlled blasting.

4. Comment: What are the geologic impacts associated with the off-site improvements?

Response: There are no significant geologic impacts associated with the off-site improvements. Potential non-significant impacts include excavation and filling to achieve design grades for the transportation improvements. Other off-site improvements will essentially restore pre-construction contours, and not involve more than minor amounts of cutting or filling in localized areas.

5. Comment: Soils, page 140. First bullet item. There should also be a requirement that the silt captured by silt fences be removed when its height is equal to or more than 1/3rd the height of the silt fence.

Response: Comment noted. The first bullet item of Section 4.1.4 is revised to read as follows:

- *Temporary erosion and sediment controls such as silt fences and haybales will be installed at the perimeter of the construction area, and around any wetland and other waters of the U.S. that is to remain undisturbed. Silt fence will be monitored regularly, and reinforced with haybales in areas where water flow is observed to be concentrated, and captured silt will be removed when its height is equal to or more than 1/3rd the height of the silt fence. (refer to Section 2.5.2.1 for more detail).*

2.27 Public Water Supplies

1. Comment: The Knapp Road Well Field is a relatively shallow aquifer system that appears to be highly dependent on direct recharge over the aquifer. Any changes in surface water runoff from the project site could have a significant impact on the recharge of the Knapp Road Aquifer and the Knapp Road Well Field, especially considering the shallow nature of the wells. A water budget for the existing site conditions should be calculated and include cover type, amount of infiltration occurring on-site amount of water reaching the recharge areas from the site and anticipated volume of water entering the aquifer from the site. Best Management Practices (BMPs) for maintenance of the well field and associated recharge areas should then be developed with this information to protect the integrity of both the volume and quality of the runoff reaching the well field.

Response: Comment noted. The potential for having an impact on Knapp Road well field which provides public water for the Luther Forest residential community is stated in the DGEIS which proposes several mitigation measures that will effectively control and/or avoid such impacts to this important local groundwater resource (refer to DGEIS, Sections 3.2.4 and 4.2.4).

It is recognized and agreed that "significant" changes in surface water runoff from the project site, or those related to the off-site improvements, indeed have the "potential" for an impact on the shallow, water table aquifer system. Such potential impacts include general construction impacts (i.e., turbidity and sedimentation, chemical impact via spills or other unauthorized discharge, and alteration of the surface water flows and infiltration capacity within the aquifer recharge area. However, an extensive array of operational and construction best management practices (BMPs) have been presented in the DGEIS to effectively control these potential impacts. Refer to DGEIS Sections 4.2.2.3, 4.2.3.4, and 4.2.4 for construction related controls, and Section 4.9.1 and 4.9.3 for relevant operational controls. Such BMPs include, most importantly, erosion and sedimentation control measures, stormwater management, petroleum and chemical bulk storage provisions, construction phasing, and distance limitation (i.e., no access or work within 100 feet of the Knapp Road aquifer).

In addition, further and more detailed stormwater management requirements will be incumbent upon the companies seeking to locate within the Campus, as well as the on the development entity and utility companies connecting to the project site. As discussed in Section 2.3.8, stormwater will be managed on a "pod by pod" basis, subject to site plan review and approval, with the goal of maintaining pre-development stormwater runoff conditions. Prior to starting any construction, detailed engineering plans, including stormwater management measures (i.e. a Stormwater Pollution Prevention Plan (SWPPP)), will be required to be submitted to the local planning board for site plan approval, NYSDEC for several permits that include a SPDES construction activity permit, the U.S. Army Corps of Engineers (Corps) for impacts to regulated Waters of the U.S., and other agencies as listed in Table 2-3, Permits and Approvals, of the DGEIS. At that time, detailed plans, stormwater reports, and water budget calculations will be prepared for the proposed development.

Refer to Response to Comment #2.28.3 for additional information regarding the required content of SWPPPs. Additionally, it is important to note that the new stormwater regulations require a 90% capture or treatment rate for the average annual stormwater runoff volume associated with a specific project. This new requirement will serve to further enhance water treatment and infiltration at the location of the proposed construction activity with less direct runoff allowed off of any given project site.

The performance objective for all development associated with the LFTC, consistent with Section 4.2.4 of the DGEIS, and the above discussion, is to not have any adverse impact to the Knapp Road aquifer. At this time, and as part of a Generic EIS, it is premature to require detailed stormwater plans or water budget calculations. These more detailed plans will however be required prior to any construction activities on the project site.

2. Comment: Due to the fact that the Knapp Road Aquifer is a shallow water table aquifer, the aquifer is highly susceptible to contamination from runoff, spills, etc. The DGEIS references potential distance limitations (i.e., no access or work within 100 feet of Knapp Road Aquifer) relative to said aquifer. The basis for establishing the 100-foot buffer should be provided and the approximate aquifer boundaries with in the site should be provided on a site plan to better understand its relationship with the proposed project.

Response: As stated in the Draft GEIS, the Knapp Road Aquifer is a shallow water table aquifer that is susceptible to contamination from a variety of anthropogenic sources. In recognition of this susceptibility factor, the Draft GEIS proposes a variety of impact avoidance and mitigation measures, including the establishment of a distance limitation, i.e., no access or work within 100 feet of Knapp Road aquifer (refer to Section 4.2.4 of Draft GEIS). A 100-foot protection buffer was selected based on consistency with existing regulations and guidance including, NYSDEC's buffer distance for State freshwater wetlands, and Federal Energy Regulatory Commission (FERC) construction work separation distance guidelines for streams, wetlands, and wells.

Refer to Figure 2.1.2 which shows the approximate Knapp Road aquifer boundaries in the vicinity of the project site's southern extent. At the present time the only work that may be required in the vicinity of the Knapp Road well field is the construction and/or enhancement of wetlands within the identified potential wetland mitigation area. Such wetlands mitigation activities will increase water retention and increase infiltration rates which could serve to increase recharge rates into the shallow water table aquifer, thus providing a net potential benefit to groundwater resources. Such future wetlands mitigation work would be subject to the review and approval of NYSDEC and the U.S. Army Corps of Engineers.

3. Comment: The GEIS indicates that "impacts to the deep confined aquifer as a result of project site development is a virtual impossibility considering the depth of the

clay confining unit". However, published reports indicate that groundwater recharge relative to confined aquifer systems, such as the Colonie Channel, often occurs through exposures along valley walls and the fringes of the aquifer. The GEIS should identify and include the mapping and/or the evaluations which have been performed to determine that the site runoff will not impact the deep aquifer system, including recharge areas for the deep aquifer. The GEIS should identify if there are any site tributaries or drainage areas that recharge the deep aquifer and if contaminated, could potentially impact the deep aquifer?

Response: The determination that impacts to the deep confined aquifer by project development are a "virtual impossibility" was not based on geologic mapping, but rather upon the detailed investigative results of the Remedial Investigation (RI) for the Malta Rocket Fuel Area (MRFA). The RI included an extremely detailed hydrogeologic study performed over a period of several years, that included over a hundred test borings and monitoring wells, numerous rounds of sampling and chemical analytical laboratory testing of installed monitoring wells and existing public water supplies (including both the deep wells of the Colonie Channel along Cold Spring Road and the Knapp Road well field), and chemical fate and transport modeling. In essence, the groundwater contamination that historically occurred at the MRFA, followed by the ensuing site characterization activities of the RI, served as a real-life tracer study that defined the groundwater flow paths beneath the project site. These RI results demonstrate and support the conclusion that future LFTC development will not adversely impact the deep aquifer of the Colonie Channel.

As discussed in Section 3.2.1 of the DGEIS, the lacustrine sand which underlies the project site is hydrogeologically disconnected from both the deep gravel aquifer and the shallow terrace gravel (i.e., Knapp Road well field). The thick sequence of glaciolacustrine silt and clay deposits serve to isolate the lacustrine sand from these more productive formations, with the deep ice-contact sand and gravel deposits associated with the Colonie Channel being a confined aquifer.

As discussed in Section 3.2.1.1 of the DGEIS, the results of the RI show that groundwater is contaminated with volatile organic compounds (VOCs) and metals in an area localized within and immediately adjacent to the properties owned by Wright–Malta Corporation and within the shallow sandy overburden unit only. The selected and implemented remedy was chosen in substantial part due to the fact that groundwater contamination from the MRFA site was never detected near or within any of the public water supplies in the vicinity of the project site.

4. <u>Comment</u>: The GEIS should identify if there are any site tributaries or drainage areas that recharge the deep aquifer and if contaminated, could potentially impact the deep aquifer?

Response: Contamination of the deep aquifer by the proposed action is an extremely remote possibility as discussed above in Response to Comment #2.27.3. Based on the hydrogeologic

information contained in the RI for the MRFA, site tributaries and drainage areas do not serve as a principal recharge to the deep, confined aquifer.

5. Comment: The groundwater section should identify who is currently responsible for groundwater sampling at the former Malta Rocket Test Site, the frequency of sampling and reporting requirements. Who will be responsible for maintaining the ground water sampling program and monitoring the early warning system on the property? Who will responsible for enforcement?

Response: General Electric Co. is legally responsible for groundwater sampling at the Malta Rocket Test Site as liable under federal Superfund laws and the USEPA, "Record of Decision" findings relative to the MRTS. Currently, quarterly sampling and reporting are provided to USEPA. General Electric will be responsible for maintaining the groundwater sampling program and monitoring the early warning system. Enforcement falls with the USEPA and NYSDEC.

2.28 Surface Water Impact

1. Comment: A map should be included in the GEIS identifying the location of each stream impact. A description of each impact area should be provided in enough detail to back-up the linear footage of impact shown in Tables 4-1 and 4-2. In addition, streams on the project site should be classified as either perennial, intermittent, or ephemeral. Figure 3-2 appears to be incorrect since it doesn't show 2 of the 6 NYSDEC streams.

Response: Proposed waters of the U.S. impacts were calculated using existing wetland mapping (i.e., draft and final NYS Freshwater Wetland Maps, and National Wetland Inventory maps), wetland delineation field data for the project site, and plans showing the proposed location of off-site utilities and transportation improvements. This information was overlaid on one map and linear footage and area of impacts were calculated using a Geographic Information System program called ArcView. Figure 2.16.2 shows the location of proposed waters of the U.S. impacts including wetlands and streams.

All streams on the project site are perennial streams based on observations in the field and as indicated on the United States Geological Survey topographic maps for the area.

Figure 3-2 in the DGEIS has been revised to show the approximate centerline of streams within the project area. This new figure is provided herein as Figure 2.16.4.

2. Comment: The GEIS should provide the methodology and back up used to establish a 50-foot stream buffer for all construction staging areas and a 100-foot buffer for all chemical storage, refueling equipment, mixing concrete and washing. The stream buffers should be shown on a site map.

Response: The DGEIS states that "Construction staging areas will be located at least 50 feet away from all streams, and storage of chemicals, washing or refueling equipment, and mixing concrete will be conducted more than 100 feet away from streams."

The proposed construction buffers are based on guidelines established in the Federal Energy Regulatory Commission's Wetland and Waterbody Construction and Mitigation Procedures. The FERC procedures identify baseline mitigation measures for minimizing the extent and duration of project-related disturbance on wetlands and other waters of the U.S. FERC oversees environmental matters related to interstate energy transmission and hydroelectric projects. These FERC standards were used for two reasons. First, there aren't any applicable local, regional, or State buffer regulations for streams, and all such above activities are essentially unregulated except within the bed or banks or rivers. Second, these FERC guidelines, although not applicable to the proposed action, represent excellent management protocols that work well in practice.

In addition to the prescribed setbacks, appropriate best management practices will be used during construction to minimize the potential impacts on water quality. These practices include silt fence, straw bales, revegetation and mulching, sediment ponds, and various other measures that will serve to either keep the soil in place, or at least prevent the soil that moves from entering waters of the U.S.

It is inappropriate to show stream buffers on available project mapping at the present time. Stream buffers will be shown on the construction drawings, which will be reviewed during the site plan approval process by each Town. All stream buffers on the project site will be totally avoided by development activities within the "pods", while roads and utilities will need to cross stream buffers.

3. Comment: A draft stormwater management ordinance for the LFTC should be included in the GEIS, which establishes specific project goals, analysis methodologies and submission requirements for future site plan review applications.

Response: A draft storm water management ordinance will be created during the PDD legislative process that is in strict conformance with the "New York Guidelines for Urban Erosion and Sediment Control " and the "New York State Stormwater Management Design Manual". Adherence to the requirements set forth in these documents will be required for site plan approval from the reviewing Town. A SWPPP will be developed for each project, on a pod by pod basis, and will include a construction phasing sequence, prescribed water quality and quantity protection measures and the supporting analysis. Stormwater management measures (i.e., stormwater BMPs) will also be incorporated into the PDD legislation.

4. Comment: Applicant should describe more fully how it intends to meet the newly implemented stormwater regulations.

Response: As discussed in Section 2.3.8 of the DGEIS stormwater will be managed on a pod by pod basis within each individual development pod on the proposed LFTC. An administratively and technically complete SWPPP will be prepared for each development pod as required by the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-02-01). The SWPPP's will be prepared in accordance with the NYSDEC recommended technical standards for erosion and sediment control, including methods described in the NYS Stormwater Management Design Manual. Selection of the most appropriate water quality and quantity control methods is premature at this time due to the lack of detailed site development plans, however, details for each development pod will be provided at the site plan review stage of the project.

In accordance with the new SPDES permit, inspection and monitoring of the project site during construction will be conducted by a qualified professional at least every seven (7) calendar days

and within 24 hours at the end of a storm event of 0.5 inches or greater. The inspection reports will be maintained on the project site within the approved SWPPP.

5. Comment: Stream impacts due to construction of off-site utilities and transportation improvements are not temporary given that construction will take place over a 10- to 15-year period. What impacts will be permanent?

Response: Impacts to streams from off-site utilities and transportation improvements (on and off the project site) will occur only during the initial stages of the construction activities with most of these improvements made as part of phase 1 development. Stream impacts due to the installation of off-site utilities will be temporary in nature. Work in the streams will be conducted in one continuous operation – the impacts will be limited to construction which by definition are temporary impacts, and operation of the constructed facilities will have no further stream impact, except as may be required as part of future maintenance. Streams and other waters of the U.S. will be restored to pre-construction contours following construction activities.

Impacts to streams resulting from the proposed transportation improvements will be conducted in two steps, with each individual step being a continuous operation. Some of the stream impacts resulting form the transportation improvements may be permanent. As discussed in the Draft GEIS, Section 4.2.2.1, permanent impacts to streams may include the addition of rip-rap or concrete box culverts to stabilize stream banks, alteration of stream morphology, or a change in stream substrate to allow for construction of roadways.

6. Comment: BMP's are unenforceable and do not provide adequate mitigation for potential surface water impacts.

Response: The Phase II stormwater regulations require inspection and reporting of all erosion protection and sediment control measures during construction. Deviation from the permit requirements is enforceable by NYSDEC or other designated agent by issuance of fines. Best Management Practices (BMPs) include all measures taken during construction and after construction to protect against erosion, sedimentation, and increased water flow. These measures include structural and non-structural measures such as detention basins and revegetation of disturbed areas and also include practices such as monitoring and inspection of construction sites. The proper use of BMPs will adequately protect against potential water quality and quantity impacts that may result from construction activities.

7. Comment: Since herbicides will be used to maintain right-of-ways, the Applicant should fully address the potential harmful impact of run-off from herbicide application on the existing wetlands and classified streams, including fish and wildlife.

Response: The maintenance of utility right-of-ways will be conducted using Integrative Vegetation Management (IVM) techniques. IVM uses a combination of manual, mechanical, chemical, cultural and biological control measures. Chemical control measures such as herbicides or growth regulators are selectively used in low application rates to promote the growth of preferred plant species. Within the LFTC project area, herbicides may be selectively used along the right-of-ways to control undesirable vegetative growth. According to McLoughlin (1997), buffer zones of only 10 to 25 feet can be effective to curtail the movement of herbicides into adjacent surface water resources. Where buffer zones can not be utilized, herbicides that have been approved for use within waters of the U.S., such as Rodeo® (glyphosate), will be applied in and adjacent to surface waters, where necessary. Aquatic approved herbicides have been specially formulated to breakdown quickly and therefore have minimal harmful effects to fish and wildlife.

8. Comment: NYSDEC commented that given the early stage of the LFTC, the discussion of storm water contained in the DGEIS is sufficient and appropriate.

Response: Comment noted.

2.29 Fish and Wildlife

1. Comment: No data concerning the size and diversity of the resident wildlife population appears in this assessment of impacts to fish and wildlife. Before an impact can be assessed, the size and character of the resource must be defined. The Applicant should provide representative species and their anticipated populations to be used as a baseline for analysis.

Response: Section 3.4.2 of the DGEIS provides a discussion of representative species that are anticipated to occur within the project site as follows, "These terrestrial upland forested communities typically support passerines, including wood warblers and black capped chickadees (Parus atricapillus), and other birds including pileated woodpeckers (Dryocopus pileatus), red-tail hawks (Buteo jamaicensis), and wild turkey (Meleagris gallopavo). Typical mammals found within upland forested communities include white-tailed deer (Odocoileus virginianus), raccoon (Procyon lotor), skunks (Mephitis mephetis), and smaller mammals including eastern chipmunks (Tamias striatus), voles, moles and shrews. In addition to birds and mammals, the forests on the project site likely support various terrestrial herpetofauna and insects. Palustrine wetlands typically support amphibians such as red-spotted newts (Notophthalmus viridescens), northern redback salamanders (Plethodon cinereus), various frogs, turtles and birds."

A population analysis generally involves the study of the population dynamics of a particular species. No unique or significant habitats exist on the project site and therefore the site supports wildlife species that are common to this region of New York State. Since no threatened or endangered species were observed or known to occur on the project site, a population analysis was not undertaken nor warranted. Population numbers of the wildlife species found on the project site are anticipated to be consistent with the other ubiquitous forested areas within the State.

2. Comment: The assumption that wildlife will re-inhabit the temporarily disturbed areas is inaccurate. Wildlife will use the areas; however, the species using the areas will be selected for by the type of vegetation and the management practices occurring in these areas. Clearly, species requiring a forested cover type will not inhabit an area in which the cover type is controlled by mowing. Species inhabiting these mowed areas will be species tolerant of such disturbances. Further, due to the degree of disturbance, the utility of such area to any species is likely limited to resting, and foraging activities. Therefore, the forest dwelling species displaced by construction may not re-inhabit these areas. The identification of similar offsite habitat needs to be identified to determine if there is additional capacity within the habitat to adequately support the influx of additional resident species.

Response: Openings in the forest will provide habitat that is different from what is currently provided by the managed forest areas on the LFTC. Forest openings such as maintained utility

right-of-ways are often key components of the habitat of many forest dwelling species. Grassy openings that are maintained by mowing or clearing on a rotational basis provide enhanced opportunities for foraging by birds and other wildlife. Often the Integrative Vegetation Management practices that are conducted along utility right-of-ways promote desirable shrub growth which provides browse for herbivores, fruit for a variety of wildlife, and nesting, shelter, or escape cover for many species of wildlife. Wildlife will be displaced for a short time during construction and maintenance of the forest openings, however this a temporary displacement.

It is recognized that not all species will utilize forest openings, such as interior forest species. However, grassy and shrubby openings do contribute to the diversity of a forest overall. Interior forest species such as the barred owl (Strix varia) and wood thrush (Hylocichla mustelina) will likely seek refuge in the remaining forested tracts on the LFTC and within the large tracts of forested land east of Cold Spring Road and south of the project site.

3. Comment: While revegetation will provide cover for wildlife, the cover offered will be different than the cover currently on site. Early successional forests, as the text implies will occupy the cleared areas (corridors), select for a wildlife community other than that which currently exists. Therefore, the impacts to the size and diversity of wildlife populations currently on site must be defined. The increase in structural diversity caused by revegetation is not mitigation for the impact. It is, in itself, a secondary impact associated with the fragmentation of an existing contiguous forested cover type and needs to be evaluated.

Response: The fragmentation of a forest will result in temporary and permanent impacts to wildlife species. Temporary impacts include the displacement of wildlife during construction and prior to revegetation. Permanent impacts may be both positive and negative depending on the wildlife species. A positive impact of the creation of cleared forest openings, such as right-of-ways, is the creation of edge habitat and a grassy/shrubby openings which benefit a large variety of wildlife and increase biodiversity. Conversely, some forest interior species may be adversely impacted due to fragmentation of the forest. However, these few impacted species can seek refuge in the remaining forested tracts on the LFTC and within the large tracts of forested land east of Cold Spring Road and south of the project site.

4. Comment: In this first mention of species of wildlife, no information concerning current populations is provided. Therefore, the use of the revegetated corridors by these species is an unsubstantiated argument. Unless this usage is linked to a net increase or decrease in these species, the impact of the project remains undefined. The provision of additional habitat to a species as ubiquitous as the field sparrow is not mitigation for impacts.

Response: As mentioned in the response to Comment 1 above, a population analysis is neither necessary nor appropriate for this project. Fish and wildlife species that currently inhabit the Luther Forest are species common to New York State and their continued existence is not considered threatened or endangered. The habitat provided on the LFTC project site is not unique to this area and wildlife that will be temporarily displaced during construction activities will find similar habitat to migrate to. Once temporarily disturbed areas are revegetated, wildlife species will migrate from similar adjacent habitats to fill this niche. It is not anticipated that there will be an overall net increase or decrease in one particular species, rather their will be a temporary displacement of wildlife during construction. Following construction, the revegetated areas in early successional stages will increase the overall biodiversity of the project area, which may result in a benefit for certain wildlife species.

5. Comment: The document does not address species of fish and other aquatic wildlife expected to exist in the streams within the project area. A listing of existing species should be included to determine the impacts to the habitat for each of the species.

Response: Fish and wildlife species found within the uplands and waterbodies on the project site are common to New York State. In Section 3.4.2 of the DGEIS, fish species that are expected to be found in the on-site streams are described as follows, "The cold headwater streams that flow through the ravines on the site are likely home to trout species, blacknose dace (Rhinichthys atrarulus), creek chubs (Semolitus atromaculatus) and numerous invertebrates". Section 3.4.2 further states that the palustrine wetlands within the project area typically support amphibians such as red-spotted newts (Notophthalmus viridescens), northern redback salamanders (Plethodon cinereus), and various frogs, turtles and birds." No threatened or endangered species were identified within the streams or wetlands within the project area.

6. Comment: The document should provide an evaluation of the potential effects of sedimentation on streams within the project limits to determine the impact to existing spawning habitat.

Response: Proper Best Management Practices (BMPs) will be employed to minimize impacts to streams and other waters of the U.S. during construction and final stabilization activities. Silt fence and/or straw bales will be installed along the edges of the stream to prevent the flow of sediment into the stream and to minimize erosion of the stream banks. Success of this erosion control measure will depend on proper installation and periodic inspection and maintenance. During construction, regularly scheduled progress reports will be provided to the towns, and the towns will conduct periodic inspections of the BMPs to ensure compliance.

Stream beds and banks will be stabilized immediately following construction activities using rip-rap or mulching and revegetation techniques. When possible, within designated trout streams,

work will be scheduled outside of known fish spawning periods as permitted by NYSDEC. In addition, all work will be done in accordance with the conditions of the stream crossing and wetlands permits that will be obtained for the project. By employing these and other proper BMPs, it is not anticipated that there will be an adverse impact to fish and/or spawning habitat as a result of this project.

7. Comment: The project site is one of the last remaining forested areas in the town. Bird and wildlife populations cannot easily find replacement habitat. The green space within the Campus is not conducive to movement and support of wildlife, nor will 200 foot buffers provide the amount of territory required to support such wildlife.

Response: Approximately half of the project site will be designated as open space, and therefore a significant portion of the existing forest will be preserved. The remaining forested areas will continue to be managed for timber, wildlife and recreational uses and therefore will provide similar habitat as is currently available. The LFTC is surrounded by large tracts of forest to the east and south of the project site within the Towns of Malta and Stillwater. These forested areas are similar in composition to the Luther Forest and therefore some birds and wildlife may migrate to these adjacent areas to seek refuge.

2.30 Historic and Archeological Resources

1. Comment: The Applicant has indicated that there may be a number of cultural and historic sites which may be impacted as a result of the proposed development and NYS OPRHP will be consulted prior to the project and that they are developing an avoidance, minimization and mitigation plan which will satisfy OPRHP. This is the general strategy that OPRHP proposes on all projects and the agency should be contacted to determine if additional specific measure need to be included within this project. Additionally, it would appear that there are a few areas within Pod 1 which may be significant. As such, we would recommend a Phase IB Investigation to determine the significance and extent of historic and archeological resources in this location.

Response: Comment noted.

During the course of planning the Phase IA and preparing the GEIS, OPRHP has been consulted and their input has specifically been requested in regard to future implementation of field investigations to address site-specific issues, both on and off the project site. The scope and magnitude of future archeological investigations, with consideration to OPRHP's input, is presented in the Draft GEIS which specifically recommends future Phase IB investigations for high and moderate sensitivity areas throughout the project site, including, but not limited to portions of Pod 1.

2. Comment: Field testing for Phase 1A sensitive areas should be completed as part of the GEIS, since findings of such studies could affect the town's review of construction and site design.

Response: The intent of the GEIS for the LFTC is to generically evaluate potential environmental impacts associated with the proposed action, including but not necessarily limited to historic and archeological resources. Adopting a general strategy for environmental compliance is consistent with SEQR. As specified in 6 NYCRR Part 617, section 617.10 Generic EISs may be broader, and more general than site or project specific EISs, discussing the logic and rationale for the choices advances, and may be based on conceptual information or discuss in general terms the constraints and consequences of any narrowing of future options.

The Final Scoping Document (Appendix A of the Draft GEIS) specifically defined the issues to be studied and analyzed in the GEIS. Under Section 3.8.3 of the Final Scope, Historic and Archaeological Resources, it states that "this section will summarize a Phase IA investigation to be completed for the project site." This Phase IA investigation is contained in the Draft GEIS as Appendix Q, and it importantly provides a framework for the future assessment of archeological resources as explained in Section 4.8.3 of the Draft GEIS. No further archeological investigations have been completed as part of the GEIS, nor are such investigations warranted in

order to make an appropriate SEQR findings on historic and archeological issues, as well as providing a conceptual historic and archeological development plan for the Campus. Provided that the three-pronged framework set forth in the Draft GEIS (see Section 4.8.3) is followed, implementation of the proposed action will not have a significant adverse impact on historic or archeological resources.

Additional historic and archeological investigations, including correspondence from OPRHP providing "clearance" for the proposed development will be provided to the respective Towns as part of the site plan approval application process. This information will assist the Towns in their review of the proposed construction and site design as part of the site plan process.

3. Comment: Appendix Q does not discuss how the Stage 1B archeological investigation will be conducted relative to the phasing of the project, nor what the impact would be on development at the site if the Malta Rocket Test Station were determined eligible for listing on the National Register of Historic Places.

Response: Stage IB archeological testing will be done before any site plan applications are brought before either the Towns of Malta or Stillwater. It is anticipated that the first phase of Stage IB archeological testing will be done for Pod 1 and the other areas of the project site requiring infrastructure, including roads, electric power lines and station, water/sewer, natural gas, and telecommunications. Subsequent Stage IB archeological testing will be dependent upon the sequence of development for the project site.

Initial project site development can occur independent of any formal eligibility determination by OPRHP on the Malta Rocket Test Station, provided that such development takes place "outside of the fence." Any and all development inside the fence, at the Malta Rocket Test Station, will be subject to OPRHP's concurrence. It is possible that portions of the Malta Rocket Test Station may need to be totally avoided by site development. Alternatively, it is also possible that all of the Malta Rocket Test Station could be developed for the intended purpose of the LFTC. The proposed master development plans provide flexibility for such future determinations. It is important to note that all structures presently located at the Malta Rocket Test Station are designated as either green space or as a "future development area" on the Illustrative Master Plan, Figure 2-1.

2.31 Waste Management

1. Comment: The Applicant should provide more specific information regarding hazardous and solid waste disposal including the transporter companies, and treatment and disposal facilities that will handle the high volumes of waste associated with the proposed action. Will such facilities have sufficient capacity for the duration of the proposed action?

Response: Information pertaining to hazardous and solid waste management at the Campus is provided in Sections 3.7.3 and 4.7.3, as well as in Appendix C (see Sections 16, Hazardous Waste Generation Rate/Waste Minimization Programs, and 17, Solid Waste Generation Rate) of the Draft GEIS. At full build-out of the Campus, an estimated 16,000 tons per year of solid Waste and 7,000 tons per year of hazardous waste will be required to be managed off-site by permitted waste transporters at permitted facilities. These estimates are considered to be "peak" generation rates that likely will be reduced by future implementation of proactive waste reduction techniques, consistent with the waste management performance criteria of the "Guiding Principles of Development" contained within the proposed PDD regulations. This waste management guiding principle requires that all companies abide by New York State's hierarchy of solid waste management goals regarding reuse and recycle objectives, and that they proactively seek innovative ways to reuse and recycle waste, thereby minimizing solid and hazardous waste materials that require landfilling.

As a method of comparison, the total hazardous waste generation rate in New York State was 73.6-million tons in 1998 (NYSDEC, 2000). Thus, the high-side estimate of 7,000 tons per year of hazardous waste at full build-out would theoretically account for only a small fraction of the hazardous waste generated in the State, less than one-hundredth of one percent. For solid waste, the total waste generation rate in New York State was 29.7-million tons during 1998 (NYSDEC, 2000), correlating to less than one-tenth of one percent of the total amount of solid waste generated in New York State, again, only a small fraction of the total waste stream. From these comparisons it is apparent that the existing hazardous and solid waste management systems currently in place both in New York State, as well as outside of New York State, can readily manage the quantities of such waste estimated to be generated at the Campus.

2.32 Critical Environmental Areas

1. Comment: The Zim Smith Trail and Ballston Creek are critical environmental areas that have not been identified.

Response: As stated in the Draft GEIS (see Section 3.4.4) a Critical Environmental Area (CEA) is defined by the SEQR regulations at 6 NYCRR 617.14. A list of CEAs is maintained by NYSDEC. Neither the Zim Smith Trail nor Ballston Creek are currently identified as a CEA. The only listed CEA in Saratoga County is the Loughberry Lake Watershed Area in Saratoga Springs. It is recognized that both the Zim Smith Trail and Ballston Creek are very important at a local and county level and the potential impacts to both of these resources are presented in Sections 4.5.6 and 4.4.4, respectively of the Draft GEIS.

2.33 Petroleum and Chemical Bulk Storage

Comments #1 through #5 in this section were made by NYSDEC in their March 24, 2003 technical review letter.

1. Comment: If petroleum bulk storage (PBS) tanks will be used during construction, such tanks should be installed in accordance with the PBS regulations 6 NYCRR Parts 612-614 and local codes.

Response: Comment noted. PBS tanks, if used during construction, will be installed in accordance with the PBS regulations 6 NYCRR Parts 612-614 and local codes.

2. Comment: If chemical bulk storage (CBS) tanks will be used during construction, such tanks should be installed in accordance with the CBS regulations 6 NYCRR Parts 595-599 and local codes. Delivery systems for chemical tanks must meet 6 NYCRR 599.12-599.18.

Response: Comment noted. The use of CBS tanks during construction is not anticipated.

3. Comment: The NYSDEC spill hotline (1-800-457-7362) should be included in the GEIS as a required contact if petroleum or other materials are spilled at the project site. The specific reporting requirements for chemical releases at CBS facilities is given by 6 NYCRR 595. All other spills should be called in within two hours of their discovery.

Response: Comment noted. Reporting of chemical and petroleum spills at the LFTC both during and after construction is required by the State's PBS and CBS programs, with petroleum reporting requirements included in 6 NYCRR Part 613.8, and chemical reporting requirements included in 6 NYCRR Part 595.3.

4. Comment: The offices of the Saratoga County Disaster Preparedness, local fire companies, EMS, and Haz. Mat. should be made aware of the type, location and quantity of materials stored at the LFTC. These offices should also receive copies of all pertinent response/contingency plans, relevant Material Safety Data Sheets (MSDS) and "as built" plans for the constructed facilities.

Response: SEDC has already been in contact with local fire companies and EMS providers regarding the proposed action. They have been provided with chemical use and accident data pertaining to the semi-conductor industry, and several emergency responder representatives have been provided with the opportunity to visit an operating Fab. Continued communications

with these and other emergency responders will need to be conducted prior to operation of any facilities as discussed below. Additionally, all companies that locate in the LFTC will be required to continue to work cooperatively with emergency responders consistent with the Guiding Principles of the PDD regulations.

USEPA has established reporting requirements for the use and storage of certain hazardous chemicals. These requirements are generally known as the Emergency Planning and Community Right to Know Act (EPCRA) Section 311 and 312 requirements, and have been codified as 40 CFR Part 370. EPCRA Section 311 requires facilities which store listed chemicals above the applicable threshold quantity to submit copies of the Material Safety Data Sheets (MSDS) for such chemicals to the State Emergency Response Commission (SERC), local emergency planning committee (LEPC) and local fire department(s). In addition, such facilities must also report the storage quantities and locations of these chemicals on an annual basis to the same entities. These programs allow the local responders to become familiar with the chemicals being utilized at the site.

5. Comment: The description of spill number 9504346 on page 44 of Appendix L shows two different closed dates. This is confusing and should be explained.

Response: Spill No. 9807317 was closed on July 23, 1996 by the NYSDEC. The second closure date (June 27, 2002) is incorrect and should have been deleted.

2.34 Energy Conservation

1. Comment: The LFTC should include solar and wind energy as features of the project.

Response: Green power, including solar and wind energy, are not precluded electric power sources, and could be added to the electric power system at any time (Niagara Mohawk, 2003). It is important to note however that the proposed electric power service plan provides for the "wheeling" or delivery of such power to the project site, not the generation of electric power. Electric deregulation has split the combined electric services previously provided by the utilities into production and delivery. This deregulation is thought to foster new products and services, and provide better value (i.e., lower electric costs) to the customer. Electric power will be purchased competitively by the customers of LFTC from Energy Service Companies (ESCOs) with connectivity to Niagara Mohawk's electric grid. No green power is presently planned to be generated on the project site.

2.35 Unavoidable Adverse Impacts

1. Comment: An impact does not need to be significant to be unavoidable. For example, this proposed action will result in the loss of forested habitat on the project site, the loss of stream corridors for road crossings, and the construction of some buildings that will be visible to the outside that did not exist before.

Response: Comment noted. The proposed Campus will have some unavoidable adverse impacts. These unavoidable adverse impacts include the loss of forested habitat and loss of indigenous wildlife associated with the proposed action; transportation improvements within the Ballston Creek corridor which will detract from its visual character; an increase in traffic on local roads; the creation of additional noise sources both on the project site and off the project site associated with the proposed transportation improvements and driveways; the construction of new electric transmission lines to the project site; and the loss of wetlands and other waters of the U.S.

The Applicant maintains that the proposed Campus, as it has and continues to be modified in response to substantive public comments, has minimized unavoidable adverse impacts to the maximum extent practicable. Further mitigation measures will continue to be employed as final engineering plans are prepared for the required local, State and Federal permits and approvals, consistent with this GEIS and the SEQR Findings Statement.

2. Comment: Several commenters questioned how a project of this magnitude could not have any unavoidable adverse impact?

Response: As noted within the response to comment 1 of this section, it is agreed upon that there will be unavoidable impacts. These impacts have been mitigated to the extent practicable, pursuant with SEQR. Each individual impact associated with the proposed action has been carefully evaluated in the GEIS, and design modifications and mitigative measures have been incorporated into the overall design of the Campus.

2.36 General and Miscellaneous Comments

1. Comment: Several residents, business owners and representatives, economic development agency representatives, chamber representatives and others stated their endorsement for this project and gave either general or specific reasons or opinions that supported their position of support for the LFTC, or stating how important this project would be to the overall economy of the region, without specifically making comment to any environmental impact. Similarly, several commenters stated their opposition to the proposed LFTC without specifically making comment to any substantive environmental impact. In addition, a total of 54 post cards (i.e., written comments) endorsing the proposed LFTC were received during the public comment period, including 21 from residences or businesses in the Towns of Malta and Stillwater, and 33 from residences/businesses out of town. These pre-printed post cards read as follows and were signed by individuals with addresses and phone numbers provided:

> Dear Supervisor Meager and Town Board Members:
>
> As a local resident, I realize the benefits associated with the proposal to locate a nanotechnology manufacturing facility in the Luther Forest Technology Campus. The project will indeed create new high-salary jobs, increase the tax base and raise residential property values.
>
> I wish to express my support for the project and urge your approval on the proposal.

Response: Such statements in general support or opposition of the Project are noted, but do not represent "substantive comments" which require a response in a Final GEIS, according to SEQR rules (6 NYCRR 617.9(b)(8)).

2. Comment: Several commenters made reference to the DGEIS as misrepresenting the potential environmental impacts associated with the proposed LFTC or not addressing the potential impacts in a serious or thorough way, claiming that it was either a "white wash at best" (Andrea Austin); full of "omissions, inaccuracies or rhetoric" (Stacey Jedynak); "lacks objectivity or is less than thorough" (Paul Sausville); "sketchy and full of wiggle room" (Carol Henry); or more of a marketing tool than a credible analysis of the environmental impacts.

Response: The DGEIS attempted to provide a complete and objective assessment of the impacts and benefits of the proposed Project, supported by competent technical analysis, per the scope and methods established in the DGEIS scoping statement (August 2002, DGEIS Appendix A).

The potentially significant impacts and benefits of the Project were disclosed and evaluated in the DGEIS, although it recognizes, based on the public and agency comments, that several potential impacts, such as "induced growth", may not have been evaluated in sufficient depth in the Draft GEIS and further information and studies have been provided within the Final GEIS in response to those comments.

Although the commenters may disagree with some or all of the conclusions contained in the Draft GEIS, the EIS is supported by credible and appropriate scientific facts, data and analysis. If the Draft GEIS were as fundamentally deficient as these comments would suggest, the lead agency would not have deemed the draft EIS adequate and complete for initial public review in January 2003, as SEQR required them to do (6 NYCRR 617.9.(a)(2)).

3. Comment: The created manufacturing jobs will not be nine to five jobs, they will be "24/7" jobs, with manufacturing around the clock, seven days per week, located in the middle of a residential area. This project is not a campus, it is a factory or an industrial park.

Response: The Draft GEIS fully acknowledges that the anchor Fabs will operate continuously. The Draft GEIS however also establishes that the Project will not significantly adversely impact residential neighbors in Luther Forest from potential traffic, nuisance (noise, light) and safety impacts.

Given the large size of the project site and its significant buffers and distances separating the Campus facilities from adjacent residential uses, and lack of Dunning Street access to the site, the "no significant impact" findings of the Draft GEIS analysis would seem consistent with the circumstances.

The statement that the proposed Campus is "in the middle of a residential neighborhood" is not accurate or exaggerates the proximity of the project elements to established Luther Forest residential neighborhoods. Further, the concern or opinion that LFTC operations would adversely affect Luther Forest neighborhoods was by no means unanimous or necessarily a dominant opinion among Luther Forest residents, several of which expressed support for the proposed action.

Whether the Project is a "campus" or an "industrial park" is to some extent a matter of semantics. However, the proposed Master Plan, PDD regulations and concept drawings envision a "campus-like" facility where development is interspersed with forest and landscaped areas in a planned, integrated development. This is unlike the typical industrial park where a site is subdivided, cleared and developed by several different industrial tenants in an uncoordinated,

haphazard manner. The Applicant recommended a "campus" rather than "industrial park" design because of the known preferences of information-based industries such as nanotech and its employees prefer to work in more aesthetically pleasing environments than the typical "industrial park" developed for manufacturing, assembly, warehousing or like uses.

4. Comment: The GEIS should clarify if the project site itself is or is not specifically within an agricultural district within the Town of Stillwater.

Response: No part of the project site (proposed PDD) is in a designated agricultural district; however as discussed in Section 4.6.2 of the Draft GEIS, a portion of the proposed water line and electric transmission power line in Stillwater will run through an agricultural district. If the Project and those proposed utility improvements proceed, notice will have to be provided per the Agriculture and Markets Law, as identified in DGEIS Table 2-3 involving future permits and approvals required for the Project.

5. Comment: There is no accounting spread sheets of who is going to pay for all the improvement costs. Where will the capital for this project and all its required infrastructure come from, what are the funding sources, and how much of it will be tax-funded versus privately-funded? One commenter (Harold Howe) speculated of a "build it and they will come" mentality in which millions and millions of dollars would be spent for required improvement, before even a tenant is identified. Several commenters questioned the availability of State or federal money in our current economy.

Response: There appears to be a misperception among many commenters that costs for road and utility improvements for the Project will be borne by local taxpayers. This will absolutely <u>not</u> be the case. The Project as currently planned will not seek Town funds for any improvements or infrastructure related to the Project.

The road improvements, including the access roads and proposed "Step 2" Interstate exit, will be paid for by a combination of State and federal grants and funds from the Project site developer and tenants. The project sponsor believes such development funds are available for major economic development projects such as the LFTC which are actively being marketed by the Center for Economic Growth, Empire State Development Corporation, and the Governor's Office.

Other utility improvements such as electric, gas and telephone line extensions and facilities will be funded by the Campus tenants who require such utilities, not by the general ratepayer.

Similarly, the capital costs of new water and sewer improvements will be borne by the on-site users through the usual device of long-term financing through a public sewer and water district.

Those costs will be apportioned among all of the properties benefited by such new water and sewer line extensions. Preliminary cost and engineering estimates contained in the Draft GEIS (Appendix H) indicate that the potential rates and charges for water and sewer service will be within the typical range experienced for such utilities in the area. Additionally, final plans and specifications for those public utility improvements will also be subject to review and approval by the State Comptroller's office under applicable procedures relative to water/sewer district formation. This subsequent review by the Comptroller helps to insure that the rates and charges for all properties within the extended water/sewer district as ultimately built will be just and reasonable.

6. Comment: The DGEIS does not substantiate the claim that what's being proposed is consistent with sustainable development and smart growth. Sustainable development has no bearing on the proposed action. The proposed action is not "sustainable" development. Nor is the proposed action "consistent with good, long-range land planning."

Response: The Draft GEIS used the term "sustainable development" to indicate that the LFTC site could be built out with ample room for expansion and new facilities over a 15- to 25-year period. Given the size of the project site and the "pod" design and phasing as set forth in the LFTC Master Plan contained in the Draft EIS, this proposal does legitimately qualify as "sustainable development", at least in terms that planning periods more than 10 years into the future are appropriately considered "long-term". (Further, this will be a long-term development due to the fact that there is ample room for expansion as compared to other potential 1-3 Fab sites and that is a part of the reason that companies have left "prematurely" at other sites).

Most development in the region is typically the accumulation of many unplanned, small lot projects undertaken by different developers at different times and in accordance with no particular plan other than the Town's Master Plans and zoning requirements. Such typically uncoordinated, incremental land development often results in "sprawl" development and a visually cluttered, chaotic built environment.

It cannot be denied that a planning proposal for a 1,350-acre site which proposes a coordinated scheme of development encompassing a 15- to 25-year period in the future is certainly consistent with "good, long-range planning principles", as compared to the typical type of uncoordinated development which occurs under the normal zoning regulation of towns within the region. Additionally, long range site planning provides the public with the goals and objectives of the project over a longer period of time than one would normally expect.

Also, long-range conceptual plans are <u>not</u> required for projects such as LFTC, even those on large sites which would obviously be built out in phases. The Applicant could have approached the Town with plans for the first facility with the rest of the site just vaguely designated "for further development" (like the STEP project). The Applicant chose not to do this here, but to

conceptualize a plan that would work for many years in the future and give predictability to both industry and local residents.

The comment apparently disagrees with the Applicant's conclusion that the proposed long-rang plan is a "good" plan. However, it can not seriously be contended that the LFTC Master Plan as proposed is not a "long-range plan" and a good faith attempt to comply with a fundamental planning principle that development done in accordance with an approved long-range plan is better than uncoordinated, ad hoc, small lot development.

7. Comment: The DGEIS does not set forth specific conditions and criteria under which future actions will be undertaken and approved, and lacks thresholds and performance standards which should be clearly defined as prerequisites for future project approvals. One commenter (NYSDEC) suggested that thresholds be established for noise, wastewater, stormwater, traffic and certain air emission (i.e., dust, VOCs), and that performance standards be applied to a variety of activities including BMPs for dust, noise and/or storm water discharges, waste recycling, energy conservation and pesticide usage. Such data could be consolidated into a chart or table for ease of reference and determining whether a Supplemental EIS might be needed in the future.

Response: The Draft GEIS does contain some specific conditions and criteria, thresholds and performance standards in certain critical areas, in particular, for the major potential impact of traffic. The four-phase phasing of the development on the project site in connection with the "Step 1" and "Step 2" transportation improvements and the 500/trip/phase threshold are clear thresholds for future development approval and impact mitigation. Similarly, the development of all associated off-site water, sewer and gas and electric facilities must be developed and available in accordance with the threshold-driven phasing plan.

In other areas of impact, such as potential dust, noise, storm water management, waste recycling, energy conservation and the like, it was assumed that any major facility within the LFTC, and the Campus as a whole, would comply with "Best Management Practices" ("BMPs") for various environmental parameters which have been developed by the NYSDEC, USEPA, and other environmental agencies. NYSDEC standards and policy statements were used in the DGEIS' assessment of noise, visual and ecological impacts. Compliance with BMPs for many program areas such as storm water management, and hazardous waste reduction, for instance, is typically required by law for any facility which requires a NYSDEC major source permit, such as any nanotech "Fab" to be sited at the LFTC.

However, the commenter is correct that the Draft GEIS contains no comprehensive, complete list or table of all the various thresholds, performance standards, BMPs and the like to serve as a reference. A proposed table (FGEIS Table 2.36.7) is provided which attempts to list all explicit, assumed and potential standards, which can be assumed to be applicable. (The Findings Statement would also set forth the ultimate criteria and summation for the mitigation measures within the EIS process; however, typically Findings Statements do not list all thresholds and

conditions in a single unified table or list as requested by the Commentor, but rather throughout a lengthy decisional document which is organized by environmental topics or issues in a discussion format).

Table 2.36.7
SEQR Thresholds for LFTC GEIS[1]

Section#	Subject	SEQR Thresholds
2.1	Master Plan and PDD Regulations	• Conformance with Master Plan and PDD Regulations. • Conformance with architectural guidelines. • Conformance with landscaping guidelines. • All companies seeking to locate in the LFTC must comply with the "Guiding Principles" set forth in the PDD regulations. • Building height limited to 110 feet in Pod 1, and 75 feet in all other non-residential Pods. • Minimum 400-feet setback from neighborhoods. • Minimum 100-feet setback from Cold Springs Road. • Nanotech facilities need to either use materials, representative chemicals or processes which are similar to those involving silicon-based semi-conductor devices, <u>or</u> they must demonstrate that proposed variations will not create significant environmental or health and safety impacts or concerns. • Nanotechnology development limited to four (4) Fabs and 500 peak hour trips per phase for ancillary development.
2.2	Transportation	• Four (4) Fabs subject to off-peak uses. • Step 1 transportation improvements required for Phase 1 Fab development. • Step 2 transportation improvements required for Phase 3 Fab development. • Truck traffic will not use Cold Springs Road. • Transportation improvements, including the traffic lights, will be paid for through a combination of private investment and public financing through State and federal programs and revenue streams. • Use of Dunning Street is restricted to emergency access only. • No road connection to Fox Wander. • As development progresses, traffic counts will be monitored during the peak hours of adjacent street traffic at the four access points to identify when the trip thresholds are met and to determine what improvements are required before a certificate of occupancy can be issued for the next building. • The use of bulk tanker trucks to deliver chemicals used at the project site will be monitored by USDOT and NYSDOT regulations.
2.3.1	Water	• The water source is the Hudson River. • Total water usage estimated at 6 to 15 MGD. The first phase estimated water usage is 3.0 to 4.0 MGD. • Low profile water storage tanks are required, as may be necessary for Pod development. • There will be one (1), 5± million gallon tank installed on the south portion of the project site, having a height of 70 to 80± feet.

[1] Exceedance of any one of these SEQR Thresholds triggers the need for a supplemental environmental assessment to evaluate the potential significance of the proposed development. Consistent with SEQR, this significance evaluation will be done in accordance with 6 NYCRR 617.7.

Table 2.36.7
SEQR Thresholds for LFTC GEIS
(Continued)

Section#	Subject	SEQR Thresholds
2.3.2	Sewer	• All waste waters will be managed by SCSD#1. • It is anticipated that the Dunning Street alternative (4 MGD) will be constructed to service the first phase. As warranted to support future phases beyond phase one, the new trunk sewer (10 MGD) will be installed along Cold Springs Road to the main trunk sewer line. • Total sewer usage estimated at 4 to 10 MGD. The first phase estimated sewer usage is 2.5 MGD.
2.3.3	Electric Power	• Full build-out electric power need is estimated at 140±MW, with 60± MW required for the first phase. • Fabs require steady state power without interruption provided by a minimum of two (2) separate transmission supplies. • 150-feet wide electric power line right-of-way. • Poles heights ranging from 80 to 115 feet. • Temporary electric service using existing pole lines of up to 7 MW is required for the first phase of Fab construction. • Substation work and extensions of two (2) interconnection facilities (115 kV) required for first phase, the 2.5 mile double circuit line from Malta, and the 5.5 mile line from Mulberry.
2.3.4	Natural Gas	• Full build-out load of 360,000 cubic feet per hour (cfh). The first phase load is 200,000 cfh. • There are two phases of natural gas upgrades proposed to meet the full build-out load.
2.3.5	Telecommunications	• All construction to the project site within existing public rights-of-way.
2.4	Socioeconomic Impacts	• No abatement of local property taxes.* • No abatement of school taxes.*
2.5	Quality of Life Issues	• The proposed action will provide quality, intellect-based manufacturing jobs located within a campus setting, having ample amounts of green and open spaces, excellent accessibility, and substantial fiscal benefits to the hosting localities, including mitigation for open space preservation with the hosting localities, and funding for future amendments to Town zoning.
2.6	Threatened and Endangered Species	• No threatened or endangered species have been identified either on the project site or project area.
2.7	Alternatives	• There is no alternative development scenario on the 1,350-acre project site that would not require any infrastructure development.
2.8	Semi-Conductor Industry	• A minimum presence of 25± years should be expected. • Fabs will be engineered using modular design elements. • The primary reuse of old Fab structures is for them to be refurbished into new Fabs using the latest technologies.
2.9	Growth Inducing Impacts	• Implementation of the proposed action will avoid or mitigate the adverse impacts of induced growth by providing funds for updating local comprehensive master plans and open space preservation initiatives.

* This assumes a continued Empire Zone program, or State equivalent.

Table 2.36.7
SEQR Thresholds for LFTC GEIS
(Continued)

Section#	Subject	SEQR Thresholds
2.10	Health and Safety	• The use of chemicals at the project site will be regulated by NYSDEC Chemical Bulk Storage regulations (6 NYCRR Parts 595-599). • The potential for an accidental release of chemicals will controlled and minimized through the application of various State and federal regulations, including the NYSDEC Chemical Bulk Storage regulations, OSHA Process Safety Management, USEPA Risk Management Plan, petroleum bulk storage programs, and hazardous waste Contingency Plans. • Companies will have integrated contingency plans which include a well organized response procedure for any incident experienced at the facility. • Fabs will be subject to the NYSDEC Hazardous Waste Regulations (6 NYCRR Parts 370-375).
2.11	Land Use and Zoning	• At the present time, there is no joint development agreement in place between LFTC and STEP. Applicant SEDC has and will continue to pursue mutually beneficial joint site access agreements with NYSERDA and the Town of Malta, in conjunction with site planners. • Implementation of the proposed action will provide additional planning guidance that will serve to assist the Town's further definition, refinement, and implementation of the downtown vision.
2.12	Visual Impact	• Further refinement in the position of the electrical transmission line structures that reduces visual intrusion will take place during final design. • The water treatment plant is planned to be a two-story building. • The Fab's cooling equipment will be ground mounted while the air treatment equipment (scrubbers) may be either ground mounted or within the roof system of building. • Neutral colors will be used on at least the upper portion of the Fab's building façade, roof top lighting will be limited or eliminated, and the selected roof color will minimize structure visibility. • With the exception of the Fabs, all other structures will be lower than the surrounding tree height of 80± feet. In Pod 1, the Fab structures will have a maximum height of 110 feet.
2.13	Recreation	• A network of public use trails within the 100± acre park will be created, as well as public multi-use trails in association with roads inside the project. • The continued forestry management of wooded areas on the project site will require a network of trails in these areas, similar to the existing trails. • Trails will be developed and maintained by the development entity, and paid for by the companies located in the LFTC. • Further consideration will be given to linking the LFTC trails with the possible trails inside the STEP project. • There will be an 18-acre public access area on the project site. • At the discretion of the Towns, the current plan for recreational resources could be modified to more appropriately address their specific recreational needs. • The Zim Smith Trail and old trolley line will not be blocked, except for short durations during construction.

Table 2.36.7
SEQR Thresholds for LFTC GEIS
(Continued)

Section#	Subject	SEQR Thresholds
2.14	Educational Facilities	• It is anticipated that the implementation of the proposed action will have a positive impact on school tax revenues.
2.15	Emergency Services	• The Fabs will have their own security, fire/chemical, and spill/emergency response personnel. • The Fabs will be required to coordinate their emergency planning and response functions with the local providers, and fund the additional training for local emergency responders, as necessary. • All buildings will be required to meet the applicable State and local building codes. • Fabs will be subject to the EPCRA "Community Right-to Know" reporting requirements.
2.16	Wetlands	• Impacts to all wetlands and other waters of the U.S. including those present in the Ballston Creek area, will be avoided and minimized to the maximum extent practicable. • During construction, best management practices (BMPs) will be employed to protect the streams and wetlands within the project area. • Permits will be required from the Corps and NYSDEC. It is anticipated that approximately 6 acres of wetlands will be constructed.
2.17	Flooding	• No increase in existing flooding conditions.
2.18	Cumulative Impacts	• Development of up to 2 million square feet of ancillary development, inclusive of the NYSERDA site.
2.19	Air Resources	• Prior to commencing construction, each facility will be required to assess whether its activities will necessitate receipt of an air permit from the NYSDEC and USEPA. • Pollution abatement mandated by the CAA, and subject to permitting by NYSDEC.
2.20	Malta Rocket Fuel Area	• Groundwater and surface water monitoring will continue to be done at the MRFA. • Any modification to the MRFA's monitoring plan triggered by the proposed action will require USEPA approval. • Work inside the MRFA will require the preparation of Health and Safety and Work Plans subject to NYSDEC and USEPA approval. • In the vicinity of the contaminant plume, an additional goal of the stormwater management measures is to maintain "equivalent" pre-development infiltration rates into the lacustrine sand.
2.21	Open Space	• Implementation of the proposed action will avoid or mitigate the adverse impacts of induced growth by providing funds for updating local comprehensive master plans, open space preservation initiatives, and recreational planning efforts. • Full build-out will preserve approximately 50% green space on the project site, consistent with the town guidelines.
2.22	Vegetative Impacts	• All open space outside of pod boundaries will be subject to forestry management practices.
2.23	Private Water Wells	• BMPs will used during construction, including controlled blasting operations that might be required on the east Bank of Ballston Creek.

Table 2.36.7
SEQR Thresholds for LFTC GEIS
(Continued)

Section#	Subject	SEQR Thresholds
2.24	Noise Impacts	• All operations will be subject to a property line threshold of 55 dB(A) during the day, and 45 dB(A) at night. • During construction and operation, any noise complaints by neighbors will be addressed in an environmentally responsible fashion and appropriate mitigation measures will be implemented to address valid complaints. • A community participation program will be required to be implemented by companies seeking to locate within the LFTC. This program will include response mechanisms and mitigation measures in the event that a noise complaint were received. • Proper design and screening will be required for the Step 1 transportation improvements (near monitoring location #6) and Driveway 1 (near monitoring location #1).
2.25	Construction Impacts	• Construction impacts will not occur continuously over a 25-year period, but rather intermittently over portions of this period, with most outside construction taking place during non-winter periods. • BMPs will implemented during construction, including the uses of strobe back-up lights during nighttime construction. • Nighttime construction is a required component of the proposed action. Required outdoor lighting will be limited to the period before the exterior shell of the buildings are completed. Outside lighting will illuminate a work area and face downward.
2.26	Geology	• Site design will employ a balanced cut-fill approach. • Blasting, if required, will be done using controlled blasting techniques. • Off-site improvements will restore pre-construction contours to the maximum extent practicable. • BMPs will be used to stabilize soils.
2.27	Public Water Supplies	• No adverse impact to Plum Brook watershed, Cold Springs Road wells, or Knapp Road well field. • No work allowed within 100 feet of Knapp Road well field.
2.28	Surface Water Impact	• Develop and implement stormwater pollution prevention plans (SWPPP) in accordance with NYSDEC and USEPA Phase II stormwater regulations, on a pod-by-pod basis. • All work in the streams will be conducted in one continuous operation in compliance with Corps and NYSDEC permits. • The maintenance of utility right-of-ways will be conducted using Integrative Vegetation Management (IVM) techniques.
2.29	Fish and Wildlife	• No specific thresholds, no significant impacts to critical habitat.
2.30	Historic and Archeological Resources	• Additional historic and archeological investigations, including correspondence from OPRHP providing "clearance" for the proposed development will be provided to the respective Towns as part of the site plan approval application process.
2.31	Waste Management	• All wastes will be managed off the project site in permitted facilities.
2.32	Critical Environmental Areas	• No specific thresholds, no designated CEAs within either project site or project area.

Table 2.36.7
SEQR Thresholds for LFTC GEIS
(Continued)

Section#	Subject	SEQR Thresholds
2.33	Petroleum and Chemical Bulk Storage	• PBS tanks, if used during construction, will be installed in accordance with the PBS regulations 6 NYCRR Parts 612-614 and local codes. • Reporting of chemical and petroleum spills both during and after construction is required by the State's PBS and CBS programs, with petroleum reporting requirements included in 6 NYCRR Part 613.8, and chemical reporting requirements included in 6 NYCRR Part 595.3. • Emergency Planning and Community Right to Know Act (EPCRA) Section 311 and 312 require facilities which store listed chemicals above the applicable threshold quantity to submit copies of the Material Safety Data Sheets (MSDS) for such chemicals to the State Emergency Response Commission (SERC), local emergency planning committee (LEPC) and local fire department(s).
2.34	Energy Conservation	• Energy conservation will be achieved by using high-efficiency and cost-effective equipment and lighting. • It is expected that all buildings will conform to the energy standards recommended by the NYS Building Construction Code. • Electric power will be purchased competitively by the customers of LFTC from Energy Service Companies (ESCOs) with connectivity to Niagara Mohawk's electric grid.
2.35	Unavoidable Adverse Impacts	• There will be no significant unavoidable adverse impacts.
2.36	General And Miscellaneous Comments	• The proposed action will not significantly adversely impact residential neighbors in Luther Forest from potential traffic, nuisance (noise, light) and safety impacts. • No improvements or infrastructure will be built "on spec". • If property or easements are required, the Applicant or a successor development entity will offer a landowner fair market value based on a certified appraisal of any such property required.

8. Comment: One commenter (Bill Koebbeman) stated that the impacts associated with water and sewer improvements need to be included in the DGEIS, and that anything else would be segmentation.

Response: The impacts of the potential sewer improvements and lower Hudson alternative water source have been included in both the Draft GEIS and the Final GEIS. The impacts associated with the use of the upper Hudson water source have not been evaluated within either the DGEIS or the FGEIS due to the fact that the Applicant does not have control over that proposed project. As noted within the DGEIS and FGEIS, Saratoga County is progressing that alternative and is currently in the process of the evaluating different options. Should the county move forward with the project, the county would be responsible to conduct a separate SEQR proceeding to fully evaluate the potential impacts of their preferred alternative.

9. Comment: One commenter (Harold Howe) questioned why the Town of Malta could not let the voters decide by having a voter referendum on the proposed action, while another commenter (E. Graham Thompson) asked if Town approvals were even necessary for the proposed action, suggesting that it might be a "done deal."

Response: As a matter of State law, permissive or mandatory referenda are allowed only in a few, enumerated instances, which do not include the proposed action. Permissive referenda are allowed for residents of municipalities or taxing districts, for instance, which seek to issue bonds for new utility construction. However, there are no permissive referenda available regarding the power of towns under Town Law Article 16 to prescribe zoning ordinances or review proposed zoning changes/PDDs under that law.

The action of construction and operation of the LFTC as proposed by the Applicant requires Town approval of the pending application for PDD district establishment filed with the Town in June 2002 and completion of all associated SEQR requirements, including this Final DGEIS.

10. Comment: Given the range of the comments received to date on the DGEIS, it is recommended that the FGEIS include a new executive summary for the proposed action which clearly describes the project and quantifies potential impacts, mitigation measures, and impacts that are unavoidable. The executive summary should be objective and provide easily understood summaries (in tabular format where appropriate) of information, impacts and mitigation measures. One commenter (Paul Sausville) commented on the scope and content of the executive summary, and suggested that it should:

- Remove sales talk and overstatements.
- Remove discussions of the approval process, purposes, scope of EIS, etc.
- Be quantitative, using tabulations and maps.
- Describe and tabulate the project succinctly, by phases and at full build out, including time lines, proposed uses, acreage of each use, building square footage, and corresponding tabulation by township.
- Include maps of the development plan, master site plan and master Town Plan at build out.
- Identify and tabulate needs and costs for all off-site infrastructure.
- Tabulate economic impacts (jobs, valuation, taxes to be paid, costs to school districts and local government).

- Tabulate and discuss pros and cons.
- Discuss mechanisms that the Town can use to recover costs of municipal services to support the Campus.

Response: A revised executive summary which incorporates many of these suggestions has been prepared, consistent with the revised discussions of impacts and mitigation in this Final GEIS. Refer to FGEIS Sections 1.3 and 1.4.

11. Comment: One commenter (Paul Sausville) suggested that a third party expert or team of experts be used to complete additional "follow-up analyses" and master planning efforts.

Response: This Final GEIS concludes that the principal mitigation measure for the potential of adverse off-site induced growth would be an update of the Town Master Plan and Zoning Ordinance which would respond appropriately to the new potential for growth on account of the LFTC. It would certainly seem desirable and be within the power of the Town to engage qualified consultants in such areas as landscape architecture and planning to advise the Board and public as to the cutting-edge practices and zoning techniques, such as open space and "working landscape" preservation and clustering in revising their Master Plan and proposing implementing zoning amendments.

12. Comment: What are the comments of Malta's and Stillwater's town engineers on the DGEIS? When will the Final GEIS be available for public review?

Response: The comments of the reviewing Town Engineers for both Towns were formally filed with the lead agency as official written public comments near the end of the public comment period established for review of the Draft GEIS in March 2003. Those comments, as well as all other substantive agency and public comments, are provided and responded to in this Final GEIS.

Under SEQR's rules, a Final GEIS such as this document is officially made available for public review once it is approved by the lead agency and the corresponding Notice of Completion is filed and published. 6 NYCRR 617.12. However, the Town may, in its discretion, make a pre-approval draft or drafts of this document available on its website or at its offices prior to official approval and issuance of this Final GEIS, as it did while the proposed Draft GEIS was undergoing "completeness" review.

13. Comment: Are there any legal mechanisms associated with the property being proposed for development that would prevent or allow the proposed LFTC operation?

Response: No, we know of no such "mechanisms" which would prevent or allow the LFTC, other than the required permits for rezoning from the Town and such other permits as are proposed from other involved agencies.

14. Comment: Where are the studies stating the positive and negative impacts related to the proposed action? What, if any, mitigation has been proposed to correct any negative impact?

Response: As required by the provisions of the SEQR statute and regulations and the scoping statement adopted for this project by the lead agency Malta Town Board, the Draft GEIS, Section 4.0 contains a systematic, interdisciplinary analysis of the potential beneficial and adverse impacts of and mitigation for the proposed LFTC, together with supporting technical studies as appendices.

Proposed mitigation measures include phasing, traffic improvements, construction management practices and other proposed mitigation is set forth in detail in Section 4.0 of the DGEIS.

15. Comment: What are the amounts of the performance bonds or letters of credit that are to be secured by LFTC and remain in place for a year after construction completion?

Response: The amounts of performance bonds are unknown at this time.

The amounts of such performance bonds, if required to guarantee completion of infrastructure or mitigation will be set in the future after site plan approval for a specific facility or improvement, depending on the dollar value of the specific improvements or associated obligations which need to be secured.

16. Comment: The Applicant should provide a schedule for events and approvals that would follow approval of the PDD rezoning, including the timing of the required off site improvements (including the Step 1 and 2 transportation improvements, water service for either upper or lower Hudson River, natural gas and electrical transmission) in relation to construction initiation for the first Fab. One commenter (Andrea Austin) referenced the Applicant's timeline for a 2003 approval as "an arrogant attempt to bully the town into rushing to judgement." Other commenters mentioned that the Towns

should review the proposed action based not on SEDC's imposed schedule which was characterized as unrealistic.

Response: The Draft GEIS does provide a detailed timing scenario for the off-site infrastructure improvements associated with the first Fab. Draft GEIS Section 2.3 and Fig. 2-1 show the phasing plans for infrastructure required for the first Fab (and potential three additional "anchor" Fabs in Pod 1).

The DGEIS discusses "timeliness" of zoning decisions in the context of explaining the cyclical timing of nanotech industry plant siting and the need to have basic "conceptual" or "generic" approvals in place on a "pre-permitted" basis, thereafter only requiring a fairly simple review of site plans for a specific facility within the reasonable statutory timeframes prescribed in Town Law Section 274-a for site plan review. See Draft GEIS, Section 2.3, discussion at pages 35-38.

With respect to this overall PDD rezoning application however, and this associated SEQR review process for the LFTC, Applicant has not requested the towns to "rush" their decision or expedite the process any more rapidly than is prescribed by the SEQR procedural regulations. The Draft GEIS was subject to a 67-day formal review and comment period, far in excess of the minimum 30 days prescribed by SEQR. (6 NYCRR 617.9(a)(4)). Additionally, a substantially similar pre-acceptance draft of the Draft GEIS document was available on the Town of Malta website on December 13, 2002, over a month prior to its formal release by Notice issued January 22, 2003, and on the Applicant's web site.

17. Comment: The project site is not a relic of the Cold War, or any other type of war, it's a relatively unspoiled wilderness area.

Response: The characterization of the former rocket fuel test area portion of the site as a "cold war relic" is historically accurate. See the discussion of the historical significance of the site in Draft GEIS Appendix Q, "Phase IA Cultural Resource Survey, Volume 2: Malta Rocket Test Station." As discussed in that report, the former Malta Rocket Fuel Site (near the proposed center of the LFTC campus) was developed by the U.S. Army as a top-secret testing facility at the end of World War II, to allow the United States military to duplicate the technological advances of German scientists in rocket technology, and likewise deny such technology to the Soviet Union. As discussed in the report, "Operation Paperclip", the effort to bring surrendered German rocket scientists, records and equipment to the United States and set up a "clone" of the Peenemünde German rocket R&D site in Luther Forest is well-documented in the Draft GEIS studies and sources cited therein.

With respect to the characterization of the project site as "relatively unspoiled wilderness", while other areas of the LFTC site in the former "safety easement" area are indeed forested, most of this Luther Forest tracts are managed second-growth forests with even-aged planted row crops. That type of active land use, a "tree farm" essentially, would not meet with either the popular or statutory definition of a "wilderness", which consists of wild, large forest tracts also required to

be far from roads or human settlement, such as designated portions of the Adirondack and certain National Parks and recreation areas. Moreover, the PDD Master Development Plan preserves about 50% of the site as large tracts of forested "green space", including plans for public recreation and trails on the more scenic and topographically varied northwestern portions of the site which are less well-suited to the manufacturing and other development proposed within the "development pods".

18. Comment: How can the statement be made that the proposed action does not have any unavoidable adverse impacts?

Response: The statement is intended to mean that beyond the expected impacts, such as the loss of forest habitat for buildings, temporary construction impacts such as stormwater management and the like, the construction and operation of the LFTC will not have any significant unavoidable adverse impacts that cannot ultimately be avoided or substantially mitigated through the application of BMPs or project conditions.

19. Comment: One commenter (NYSDEC) suggested that the Towns of Malta and Stillwater may want to require land use protections beyond what currently exist to protect significant local resources. Creation of Overlay Districts or similar land use planning techniques may be desirable considering the amount of potential induced growth.

Response: As discussed in the responses to the "induced growth" comments, particularly the Response to Comment #2.9.1, the Final GEIS recommends as a project condition that the master plans and zoning ordinances be formally reviewed if development of the LFTC proceeds, which review might possibly establish growth overlay districts or other feasible land use-control measures.

20. Comment: One commenter (NYSDEC) suggested that a Citizens Advisory Committee (CAC) could be an appropriate way to enhance public understanding and acceptance of the LFTC, and that the GEIS be used to discuss the relative merits of a CAC.

Response: Applicant agrees that forming citizens advisory committee or committees as suggested by the DEC as a way of continuing public input into the LFTC planning process could well be fruitful, especially on issues where public concerns have been expressed in the SEQR process. Applicant would be pleased to participate in or assist in organizing such a Citizens Advisory Committee.

This comment is also discussed further in the Response to Comment #2.9.1 regarding mitigation strategies for "induced growth" and a possible revision of Town master plans and zoning ordinances in light of the "growth" issues raised by the LFTC as suggested to by many of these comments.

21. Comment: A number of residents (33 of the total 104 written comments) submitted an identical written comment form that simply questioned the accuracy and completeness of the DGEIS, and asked for the "revised GEIS to be issued again in draft from rather than final form," to allow for more public review and comment on the proposed action.

Response: When questions are raised about the accuracy and completeness of a draft GEIS, as here, the proper procedure under SEQR is to respond to such comments in the Final GEIS, and to augment or change as required any discussions of the Draft GEIS which are affected by the public comments made during the review period on the Draft GEIS. Refer to SEQR rules at 6 NYCRR 617.9.

The SEQR Part 617 procedures written by NYSDEC implemented the statutory requirement [of Environmental Conservation Law §8-0109] for "an environmental impact statement" to be prepared and considered in the review of certain actions by creating the familiar two-step process by which draft EISs are issued for public review, to possibly be modified following public and agency comments as a "final" EIS. The SEQR rules do not contemplate the procedure suggested by these commenters of beginning at "square one" with a new Draft EIS , because of unspecified deficiencies.

To the contrary, the SEQR rules are clear that "only one" Draft EIS and Final EIS be prepared for a given action, that a supplemental DEIS is only required where "changed circumstances" regarding a project arise during the review process, and that the SEQR review process must be consolidated and coordinated with other pre-existing review to keep procedural delay at a minimum. See, 6 NYCRR §§ 617.3(g)(2), 617.9(a)(7), 617.3(h). Requiring another Draft EIS would therefore not conform with any of SEQR's clear procedures.

Moreover, many technically knowledgeable commenters, including State agencies such as NYSDEC, the agency with general responsibility for administering SEQR, and DOT, an agency also with significant technical expertise and experience in reviewing SEQR impact statements for large projects, did not agree with these commenters' basic premise that the Draft GEIS was extensively flawed and did not comply with SEQR's substantive requirements for a Draft EIS. Indeed, NYSDEC's comments were prefaced by the observation that, "In general [DEC] staff finds the DGEIS to be well-prepared. In particular, the document's discussion of environmental impacts anticipated to occur within the proposed technology campus is comprehensive and relevant."

22. Comment: What is the Applicant's option period on the LFTC project site? What were the amounts of money paid for the option and are they refundable?

Response: The period of the options, including authorized renewals, extends through the anticipated review period of this PDD application(s) to the Towns. The other requested information relating to the financial terms of the options is confidential business information of the Applicant and is not relevant to environmental impacts or mitigation which is germane to this SEQR EIS regarding the proposed action. The limited relevance of options to this rezoning application, if any, is the legal requirement that Applicant SEDC demonstrate a legal right, interest or standing with respect to the project property (commonly referred to by developers as "site control"), so it can act as an authorized agent of the current owners in applying for a PDD or rezoning of the property.

23. Comment: If this project is approved, the town master plans will need to be updated?

Response: Yes, the existing Town Master Plans did not contemplate a large-scale development in the Luther Forest as proposed by this Project. As discussed in the responses to comments on the "induced growth" topic (See, Response to Comment 2.9.1), development of the LFTC could act as a magnet for "induced growth" throughout the towns and region. It is therefore very logical that reviewing the towns' Master Plans in light of this unforeseen change in a potential increase in the value of property and potentially unwelcome development would be warranted.

Updating the Town(s) Master Plans is therefore recommended in this Final GEIS as one of the mitigation measures for dealing with the potential impact of the unanticipated induced off-site growth not provided for in current master plans. See the further discussion of this issue in the Response to Comment #2.9.1.

24. Comment: There were several comments from existing residents on Easy Street in the Town of Malta whose property may be impacted by the proposed off-site improvements, including the construction of new roadways. These residents expressed a concern over their ability to plan in the future (i.e., sell or add on), and stated that no one has approached them over the sale of their property. These residents asked: What will be the process for acquiring land and who will be the agent? Will such lands be taken by eminent domain? How will compensation be given? Have steps been taken to avoid impacting any residents? How close might existing homes be to new roads? Will all impacted homes be acquired at once, or phased with the improvements?

Response: At a planning phase of a project such as the LFTC evaluated in this Final GEIS, off-site improvements such as the access roads and utilities are not specifically designed or laid out. Rather, for environmental assessment purposes, a broader corridor is looked at in which it would

be possible to site the improvements, recognizing that the final layout of the road should be designed to avoid environmental impacts (such as, for instance, wetlands, multiple stream crossings, slopes, archeological resources, or critical habitat) disclosed in the generic corridor evaluations and that final siting decisions incorporate those environmental concerns and potential mitigation/avoidance measures as indicated in the EIS and not be based simply on economics. Therefore, it is not possible to say at the present time whether the particular properties or portions thereof on Easy Street with which residents are concerned will be required or impacted by the access roads for the project. If property or easements were required, the Applicant or a successor development entity would offer a landowner fair market value based on a certified appraisal of any such property required.

25. Comment: The glow of lights at night and the noise of alarms will have permanent negative impacts on the surrounding community.

Response: As discussed in Draft GEIS Section 2.5 concerning potential "nuisance" impacts to residential neighbors in the Luther Forest of the construction and operation of the project site, neither noise or lighting glare impacts from the LFTC would be significant at the nearest residences. The lack of potential noise impacts was supported by the technical noise study and on-site monitoring in Appendix P of the Draft GEIS, as supplemented by the additional noise data contained in Section 2.24 of this Final GEIS. Similarly, the lighting portion of the proposed LFTC PDD Master Development plan calls for low intensity site lighting for security, a prohibition on building lighting and the use of sharp cutoff fixtures to direct lighting downward and avoid creating glare.

With respect to alarms, the only known potential alarms at the project site studied in the Draft GEIS were audible OSHA backup safety horns for construction equipment. This impact will be mitigated by substituting strobe lights for the backup alarms during nighttime construction.

Audible alarms are not used to "broadcast" upsets or safety/operating conditions within or outside of a "Fab". Unlike other "heavy" industrial production facilities the Commenter may have been referring to with respect to a concern over alarms, such as chemical or paper production facilities, the semiconductor industry does not use audible alarms, outdoor paging loudspeakers or similar types of audible devices to communicate operating or hazard information to its plant personnel. Any such alarms are silent and transmitted automatically to the operating personnel as required by pagers, cellular telephones, "wi-fi" computer networks, two-way radios and similar portable personal electronic communications devices.

26. Comment: Malta's Town Comptroller (Kevin King) stated that, "due to the magnitude of the proposed project, I believe projected financial information should be prepared relating to the impact of the project over at least the next ten years that provides for increased revenues as well as additional direct and indirect costs

associated with the project using 2003 budgets numbers as a basis. These projections, including the effect on the various tax rates, should consider the financial implications with and without the approval of a PILOT payment."

Response: As stated in Response to Comment #2.4.13, the revised fiscal benefits discussion assumes that the anchor Fabs will be located in an Empire Zone.

Under the preferred Empire Zone approach, the municipal taxing districts receive full tax payments from the Fab owner (which are reimbursed to the owner by the State of New York as a tax credit). Thus, considering the large proportion of the Town's taxable property which development of even one anchor Fab at the LFTC would represent, it is logical that the significant new tax revenues from the project to taxing jurisdictions will far outweigh any incremental costs of public services to support LFTC development.

Any specific forecasts, however, of precise levels of the positive new benefits over a ten-year period as requested by the commenter is not readily capable of being accurately calculated.

27. Comment: The GEIS is unclear about impacts at the project site related to ancillary development, especially for utility uses.

Response: As discussed in Draft GEIS Section 2.3, the development pods will contain both the "anchor" Fabs in Pod 1 as well as "ancillary development" in Pods 2 through 11. The development pods were placed in those uplands areas of the project site which have the best soils for development and avoid potentially environmentally sensitive areas such as ravines and wetlands. There should therefore be no significant impacts for ancillary development within the LFTC, including related utility uses.

Utility requirements for on-site ancillary development will be comfortably served within the "envelope" of the utility infrastructure needed for the Pod 1 anchor Fabs for each phase of the development. The limiting factor for the build-out of ancillary development on the campus will be the 500 trips/phase mitigation threshold suggested by the Applicant, rather than any inherent shortage of developable land on the Campus or utilities available to serve that development.

28. Comment: The text of the GEIS should define the term, "Fab", of the anchor nanotechnology, and clarify whether the Malta Test Station is the same as the Malta Rocket Fuel Area. Define the term "outside the fence" the first time the term is used, as being the area proposed not in the Malta Test Station.

Response: The Draft GEIS contains an extensive discussion of the special building designs and simplified process descriptions of "Fabs". See Draft GEIS Sections 2.3.2, 2.3.2.1, 2.3.1.1, 2.4 and 6.4, as well as Appendixes C and J. For the sake of providing a simple, functional definition,

the proposed PDD regulations define "Fab" as a manufacturing facility which uses cleanroom(s) to manufacture small devices.

As used in the Draft GEIS and referenced in several reports in the Draft GEIS Appendices [Appendix L, Malta Rocket Fuel Area Report and Appendix Q, Phase IA Archaeological Study], the Malta Test Station is distinct from the Malta Rocket Fuel Area, although the two sites extensively overlap and contain common lands. The "Malta Test Station" is the term used to indicate the area historically used by the U.S. Army from 1944 to the late 1950s for research and development of rocket engines. The Malta Rocket Fuel Area is the site designation adopted by the U.S. Environmental Protection Agency in designating certain portions of the LFTC site as an inactive hazardous waste site on the National Priorities List (NPL, popularly referred to as the Superfund list) of contaminated hazardous waste sites requiring remediation.

The "Malta Rocket Fuel Area" (i.e., NPL site) is somewhat larger than the historical Malta Test Station site, because the hazardous waste site includes some other formerly contaminated property to the north of the Malta Test Station, where some additional lands were later used by NYSERDA for research and development projects not involving rockets or rocket fuel.

The sentences containing the phrase "outside the fence" or "inside the fence" as used in two sections of the Draft GEIS (DGEIS Sections 3.1.1, 4.8.3) are not ambiguous as to their meaning with the above clarification that the "fence" mentioned relates specifically to the perimeter fencing of the former Malta Test Station (e.g., that is, rather than the Malta Rocket Fuel Area or some other descriptive term for a portion of the proposed LFTC project site). All of the sentences in the Draft GEIS in which the perimeter chain-link fence is used as a reference point or geographical descriptor correctly refer to the Malta Test Station and not the Malta Rocket Fuel Area.

29. Comment: It might be noted that the Corps completes their own review of federal activity under NEPA, and that the PSC undertakes their own environmental review under Article 7 of the Public Service Law.

Response: The Draft GEIS table of "Permits and Approvals" (Table 2-3) already acknowledges that the Army Corps of Engineers and the State Public Service Commission may need to undertake a future environmental review of certain aspects of the project under other environmental laws such as NEPA and Article 7 of the Public Service Law.

Additionally, Table 2–3 also indicates that some agencies such as the State PSC may perform environmental review under both SEQR (the two shorter transmission lines, Malta - LFTC and Mayberry - LFTC) and also potentially under their own SEQR-equivalent laws (e.g., PSC Article 7 with respect to the potential future third 115 kV line from Waterford - LFTC).

30. Comment: The RIMS acronym (on page 26) is not defined and there is no description of this economic model, nor is it contained in the acronym list.

Response: The RIMS acronym is defined in the detailed "Economic Impact Analysis" report which is included in full in Draft GEIS Appendix B and which summarized in the cited Section 2.1.2.4 of the Draft GEIS. DGEIS Appendix B at pages 35 - 37 contains a detailed description of the RIMS model and its methodology, assumptions and output results relative to the LFTC. As noted in that discussion, "RIMS" is an acronym for "Regional Input-Output Modeling System II" which is a computer model patented by the Bureau of Economic Analysis of the U.S. Department of Commerce.

31. Comment: A figure should be provided in the GEIS showing the boundaries of the tax map parcels identified on Table 2-2.

Response: A figure showing the approximate boundaries of the tax map parcels overlaid with the PDD/Project site boundaries is provided as Final GEIS Figure 2.36.31.

32. Comment: The following additions and revisions should be made to Table 2-3, Permits and Approvals. Historic Preservation should be Section 106 Federal Historic Preservation Law, since federal reviews are required. The USEPA also provides input during the federal wetlands permitting. The Federal Highway Administration's role might be clarified by mentioning I-87 Interchange Design Approval. The Corps would also need to issue a permit under Section 10 of the Rivers and Harbors Act for the intake structure at the Hudson River for the 10 MGD water line. Authorization may also be required from NYS Office of General Services and/or the New York State Canal Corporation for locating an intake structure on the bed/banks/underwater lands of the Hudson River.

Response: With respect to each of the above proposed "additions and revisions" to Draft GEIS Table 2–3, "Permits and Approvals":

a. <u>Historic Preservation/Section 106 approvals</u>: Applicant believes that these provisions relate to the possible approvals under NEPA of the Federal Highway Administration for I-87 interchange design approval for the possible Step 2 transportation mitigation measures relative to a new Northway Exit 11A.

Under the cited laws, the possible "takings" and use of publicly-financed public parklands, historic "register-eligible" sites and similar enumerated resources for highway purposes is subject to stricter review and special approval by the federal Department of Transportation. However, based on the corridor inventories and evaluations of sensitive resources such as public parklands and cultural resources in the Draft GEIS, it is not expected

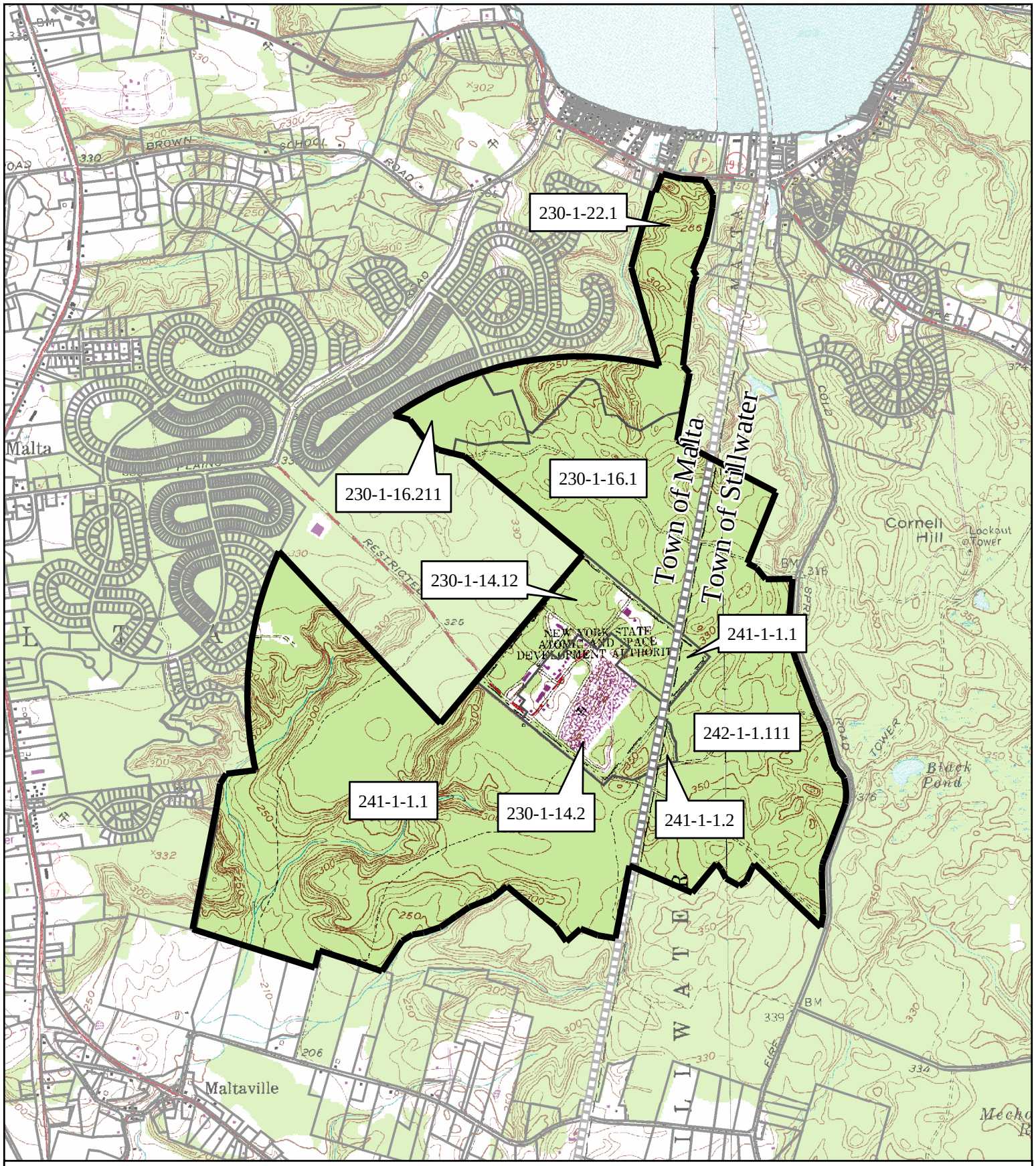

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Figure 2.36.31
Tax Parcel Map

Saratoga Economic Development Corporation
Luther Forest Technology Campus
Towns of Malta and Stillwater
Saratoga County, New York

North
1:24,000
Scale: 1" = 2000'

0 0.125 0.25 0.5 Miles

0 1,000 2,000 4,000 Feet

that the Exit 11A improvements will require the permanent appropriation and use of any public parklands or other enumerated resources. As noted in Response to Comment #2.13.6, there may be temporary construction impacts during construction of off-site improvements which may require brief temporary closures or impacts to the Zim Smith trail in the immediate vicinity of the construction zone.

Since FHWA is already listed on Schedule III of Table 2–3 as a potential "Other federal and State Reviewing Agency (non-SEQR)", the "Permit/Approval" column of that table should be amended by adding the phrase "...including associated NEPA and "Section 106/6(f)" review and approvals" following the current "Interchange Design Approval".

b. Federal Wetlands Permitting: As suggested by the comment, Table 2-3 of the DGEIS should be amended by including, in the U.S. Environmental Protection Agency row, an additional "permit/approval", as follows "...and consultative review on federal Army Corps of Engineers federal wetlands permits".

c. Hudson River Water Intake Structure issues: The Applicant proposes to install a new intake structure at the NYSE&G Hydroelectric Dam in Mechanicville in association with the Lower Hudson River water source option. This will likely require a Section 10 permit from the U.S. Army Corps of Engineers, as well as approvals from NYS OGS, if "State lands"(on the bed and banks of the Hudson River) are to be used. A permit from the NYSCC is not anticipated to be required.

33. Comment: Several commenters made the statement that there are far too many unanswered questions and that the Applicant must satisfactorily address all issues, questions, and concerns expressed during the comment period.

Response: The Final GEIS has been prepared in response to the comments received during the public comment period, as required by SEQR, so that any and all potentially significant adverse environmental impacts can be fairly evaluated, mitigated and properly balanced with other economic and social concerns in the Towns' decision-making process concerning the Project PDD rezoning applications, as the SEQR statute (ECL §8-0109) and Part 617 implementing regulations clearly require.

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APPENDIX A

TRANSCRIPTS OF PUBLIC HEARINGS

(Refer to Volume 2)

APPENDIX B

COPIES OF WRITTEN COMMENTS

(Refer to Volume 2)

APPENDIX C

SUMMARY OF COMMENTERS

(Refer to Volume 3)

APPENDIX D

CONCEPTUAL ACCESS MODIFICATION PROPOSAL (CAMP)

(Refer to Volume 3)

APPENDIX E

FHWA CORRESPONDENCE

(Refer to Volume 3)

APPENDIX F

CORRESPONDENCE FROM SCSD#1

(Refer to Volume 3)

APPENDIX G

AIR QUALITY STUDY REPORT

(Refer to Volume 3)

APPENDIX H

CORRESPONDENCE FROM LUMAC

(Refer to Volume 3)

APPENDIX I

SECOND BASELINE NOISE STUDY

(Refer to Volume 3)

APPENDIX J

REVISED PDD REGULATIONS

(Refer to Volume 3)

APPENDIX K

VILLAGE'S 2000 COMPREHENSIVE PLAN

(Refer to Volume 3)