Tioga County Industrial Development Agency 56 Main Street, Owego NY 13827 Tel 607-687-8259 Web IDA.tiogacountyny.com



ESITE MASTER PLAN UPDATE

SPRING 2018

An update to the 2003 <u>Route 434 Site Mixed Use Concept Development Plan</u> and associated 2005 Route 434 E=MT³ Mixed Use Office Park Project DGEIS and 2006 FGEIS

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BACKGROUND

PROJECT ORIGIN

In 2003 the Tioga County Department of Economic Development and Planning (TCEDP) commissioned a market analysis and mixed-use concept plan for an 85-acre site on State Route 434 (Southside Drive) on the south side of the Village of Owego extending southward into the Town of Owego to Strong Road. The Tioga County Industrial Development Agency (TCIDA) acquired this hillside site from the Tioga County government in 2002 as a means of facilitating flexible private investment and development that was pre-planned and therefore easier to obtain local approvals and permitting. The contracted consultant hired was The Saratoga Associates.

The Saratoga Associates completed <u>Mixed Use Concept Development Plan and & Market Analysis</u> (hereto referred as "the Plan" or "Plan") for the Route 434 Property in December of 2003, and proceeded to develop and complete the accompanying Generic Environmental Impact Statement (GEIS). The Draft GEIS was completed in September 2005 and the Final GEIS was completed and adopted by the Tioga County IDA in October 2006.

PREVIOUS PLAN HIGHLIGHTS

The Plan called for several different types of mixed uses to be built in phases, starting at the roadside of Route 434 (Southside Drive) and moving southward, up the hillside. This phased development was outlined in four (4) phases. Phase 1A included two (2) Class A office buildings of 45,000 square feet each, located on seven (7) acres at the foot or northern-most portion of the site, adjacent to Southside Drive. Phase 1B would be three (3) flex tech or light industrial buildings totaling 110,000 square feet on 11.5 acres. Phase 2 would contain retail uses to service the community residences consisting of three (3) buildings at 10,000 square feet each. Phase 3 would contain residential uses further up the hill consisting of senior housing and other multi-family high-density housing in various building types totaling 193,000 square feet. Phase 3 also included a 15,000 square foot health care facility on 12.5 acres, along with 11 acres open space for and outdoor low-intensity park area. The final phase, Phase 4, would consist of a 36-acre park and recreation area at the top of the hill, plus a large-lot single-family residential community on the southern-most 36 acres, in the Town of Owego. (See the DGEIS, page 2-5 for a detailed chart on this mixed use, phasing plan)

The main access to the mixed use development was designated on State Route 434 (Southside Drive) in the Village of Owego, with the main road extending southward through the single family homes, and connecting with Strong Road in the Town of Owego.

Several specialized studies pertinent to the site were performed during the DGEIS development. There was an in-depth traffic impact study completed for full build-out scenario that included Level of Service analyses at several intersections in and around this mixed use development site. Phase 1A and 1B archeological investigations were completed for the first eight and a quarter (8.25) acres from State Route 434 which resulted

BACKGROUND

in the NY State Historic Preservation Office (NYSHPO) issuing an opinion of No Effect. A Phase I Environmental Site Assessment was conducted which revealed no impacts to soil or groundwater quality and no present environmental concerns. Wetlands were preliminarily identified and those areas were recommended to avoid with development or if not avoidable, to delineate and get a determination from the US Army Corps of Engineers on jurisdiction and mitigation. Different scenarios for the extension of municipal sanitary sewer and community water were preliminarily investigated and identified.

The largest challenge revealed with all of these studies in connection with the GEIS process was the logistics and cost of extending and building capacity in the community water system that will be able to service multiple sprinklered buildings. Just the fact that the water system is owned and operated by a private entity, Suez, and is not a municipally-owned system causes difficulties in and of itself. Add to that the sheer amount of improvements needed in the aging water infrastructure to handle significant future development resulted in an exponential hurdle to overcome to provide sufficient water service.

The Findings Statement of this GEIS effort concluded that there were no adverse environmental impacts posed by the proposed phased, mixed-use development that could not be mitigated. The Village of Owego accordingly rezoned the 36 acres of the site within village limits by creating a new zoning district called Office Park in which a mix of uses from single-family residential to light manufacturing is allowed. The TCIDA then proceeded to market the mixed use development with a sign on the property and through digital media.

DEVELOPMENT PROGRESS

Due to challenging and virtually static economic conditions in Upstate New York and particularly in the Southern Tier, the property remained undeveloped for 10 years. There were many proposals and inquiries of interest, but most of these requests did not result in an actual project. Many of the inquiries and proposals that were received were residential in nature; one was for an extended stay facility. All requests had been relevant to the Village portion of the property on Southside Drive.

Based on this experience, it became apparent to the TCEDP and TCIDA staff that a course correction for the overall plan development was needed. The first determination was that the southern portion of the mixed use development containing the large single-family homes in the Town of Owego should be split from the Village portion in terms of marketing and project development. This was a natural split since they are two different municipalities, requiring two different municipal regulations, and local approvals and permitting. Additionally it was discovered that both the Town and Village of Owego have subdivision codes restricting local streets without intersections or that have cul-de-sacs exceeding 500 linear feet. Furthermore, the proposed main road that was designed to run over the hill and connect the site between State Route 434 (Southside Drive) in the Village of Owego and Strong Road in the Town of Owego was not possible. Three factors prohibit this street connection including the major expense of constructing such a long road, the significant grade at which it needs to be designed and constructed, and the prominent presence of wetlands in that particular area of the site.

BACKGROUND

The second directional change was for the Village of Owego portion, TCEDP and TCIDA would focus on attracting mainly higher-density residential units, and other types of multi-family housing such as town houses. It was also determined that while a mix of uses was still possible and desirable, it should be at a lower intensity and less numerous than the original Plan detailed. Uses other than multi-family residential to be retained were determined by past market interest including a health care facility, one office building, and an extended stay facility.

CURRENT CONDITIONS

EXISTING DEVELOPMENT

Tioga County EDP and IDA secured the first development project for the ESite in 2015 with Home Leasing, LLC who develops HUD-subsidized senior and affordable independent living rental multi-family housing. In 2016 they constructed Owego Gardens, the existing two-story, 62-unit, 65,000 square foot, 55+ independent living apartment complex on six acres along State Route 434. This project was so successful given the current market demand for senior housing and rental units of any type, that Home Leasing has expressed interest in constructing another 62-unit, 65,000 square foot apartment complex, intended for general occupancy, just up the hill from their current facility. Additionally, Home Leasing plans to construct a number of four-unit townhouse dwellings.



Owego Gardens

FUTURE LAND DEVELOPMENT CONSIDERATIONS

Due-diligence efforts conducted to date have revealed several factors that require careful consideration before future development occurs on the remaining 30-acre Village of Owego portion of the ESite.

<u>Wetlands</u> - An engineering firm contracted by the TCIDA identified in a wetland and stream delineation report many small, naturally-occurring wetlands on the 30 acres. The firm believed that the majority of these wetlands were isolated and unconnected to the Susquehanna River, and therefore did not require mitigation. A couple wetlands were classified as unknown. Their overall conclusion was that the fifteen wetlands, two intermittent streams and one ephemeral ditch, did not contribute to the ecological health and were not beneficial to the

CURRENT CONDITIONS

watershed. The Tioga County IDA then submitted this report to the US Army Corps of Engineers (USACE) for their determination if these unknown wetlands are jurisdictional and therefore require mitigation or avoidance. The USACE followed up with a field visit for delineation and made an official determination that all wetlands are jurisdictional. This determination changed the direction and focus of all future development plans on the 3-acre Esite. Future development would now be limited to one apartment complex, the minimum option of four townhouses with four units each, and one general two-story office building. All future development would have to avoid, minimize and mitigate impacts on these jurisdictional wetlands per the map shown in Appendix D.

<u>Archeological Investigation</u> – The TCIDA commissioned an archeological firm to conduct a Phase 1A and 1B archeological investigation for the 30 acres. This investigation was completed in February 2017, with a SHPO No Effect letter issued in March 2017.

<u>Traffic</u> - NYS DOT Region 9 officials have been consulted about this ESite Master Plan update. DOT's response indicates that an updated traffic impact study must be conducted and requires inclusion of NYS Route 17 Exits 64 west bound and Exit 65 at Hiawatha Bridge. The original traffic impact study did not include NYS Route 17 Exit 65, which is approximately one mile east of the project site. This study is pending.

<u>Topography / Hill Grade</u> – Due to the hilly topography of the site, considerable earthwork will be required for construction of the main street, loop, and at individual development sites as well. Strategic placement of retaining walls will likely be required. A preliminary earthwork balance software scenario showed that approximately 150,000 cubic yards of earth would need to be moved on the site for full-build out. Furthermore, the proposed main road that runs along the western border of the property will exceed the Village of Owego's grade percentage maximum of 10% for minor streets, which would mean cuts as deep as 6 to 7 feet below existing grade. A solution would be to request of a variance to this specific regulation, pursuant to Village Code.

<u>Streets</u> - As previously stated in the Background section of this document, both the Town and Village of Owego subdivision codes restrict local streets without intersections or that have cul-de-sacs exceeding 500 linear feet. Furthermore, the Village of Owego's street code restricts the number of dwellings on a cul-de-sac to twenty (20). These two code factors greatly influenced the layout of various program elements on the site. The length restriction causes the street network to be looped, which connects the various proposed uses, and the cul-de-sac dwelling unit restriction puts a limitation on the number of units placed around the cul-de-sac.

<u>Water</u> –Extending water infrastructure and building system capacity for building sprinklers is still the main challenge facing further development of the ESite. Suez Owego has been contacted to confirm their ability to provide water service to this proposed updated future mixed-use plan and associated requirements. Clark Patterson Lee has developed two possibilities for sufficient water pressure. The first is an elevated storage tank located within the Village boundary at the top of the hill. The second and more affordable possibility is a ground tank located in the Town and positioned further up the hill. Suez officials have determined that it is possible for their infrastructure to be located outside the Village of Owego boundaries, if customers to be serviced by this water supply are located only in the Village of Owego.

UPDATED CONCEPT AND USES

SCOPE OF MASTER PLAN UPDATE

Given the amount of time that has passed from the original plan completion, and the change in market trends for new development in the area, Tioga County EDP and IDA determined that it would be beneficial to secure another contracted consultant to identify options for layout of the reduced mixed uses, factoring in the situational considerations described in the previous section. In December 2016, Clark Patterson Lee Associates (CPL) was hired to perform this work and was tasked with estimating costs of this future development.

UPDATED CONCEPT

As previously explained in the Background section of this document, the program elements of this mixed use development concept have been reconsidered at a much smaller scale given market demands and previous inquiries of interest that occurred over a decade's time period. The consultant limited the updated plan to the 30 remaining acres in the Village of Owego portion of the development site and updated the options to include various types of multi-family units, a satellite health care facility, one office space building, and an extended stay hotel. As previously stated, the USACE jurisdictional wetland determination in May, 2017 then even further limited the amount and types of uses and future development that could be pursued on this site. The following table details the composition of these uses in the overall concept.

USES MATRIX

The table below details the different mixed use types, maximum number units, square footages and approximate acreage for each use at maximum build out.

ESITE USES MATRIX			
Program Element / Use	# Units	Size (square feet)	Approx. Acreage
Multi-Family Apartment Building	62	65,000	6
Twelve Four-Unit Townhomes	48	2,200 (each)	10
Office Building, Two-Story	1	10,000	2

MASTER PLAN LAYOUT

MASTER PLAN LAYOUT

Due to the further constraints and restrictions that the USACE jurisdictional wetlands pose, only one preferred master plan layout is feasible to avoid and minimize environmental impacts.

PREFERRED OPTION

There is only one preferred option because it contains the reduction in mixed uses explained previously, while avoiding and minimizing impact to the existing USACE jurisdictional wetlands.

A matrix that summarizes the mix of uses for the master layout follows.

LAYOUT MATRIX			
	MULTI- FAMILY APT BLDG	TOWN HOMES	OFFICE BUILDING
MIXED USES	1	4	1

SEQR EVALUATION

SEQR DETERMINATION OF SIGNIFICANCE

Since USACE has made a jurisdictional determination of wetlands on the ESite, this ESite Master Plan update must reflect that determination. The Lead Agency is the Tioga County Industrial Development Agency, has determined that an Amendment to the 2006 Findings Statement is necessary. This specific change should be to the end of section 2.1.3.2 SURFACE WATER AND WETLANDS, so the last sentence should now read "The direct and potential indirect impacts are not anticipated to be significant, with only about one acre of wetlands being impacted.

It also should be noted that any future developer proposing construction impacting these wetlands will have the flexibility to mitigate with an in-lieu fee of at least 1.4 per acre, with a \$93,000 per acre value via the Upper Susquehanna Coalition's The Wetland Trust Program.

On this basis, the Tioga County IDA proceeded to evaluate the action of this ESite Master Plan Update as an Unlisted Action under SEQRA, using a Short Environmental Assessment Form. The Tioga County IDA Board approved the above stated amended 2006 Findings Statement, and made a Negative Declaration on June 6, 2018.

PRELIMINARY COST ESTIMATES

PRELIMINARY COST ESTIMATES

GROUND WATER TANK

Infrastructure Costs

Item	Description	Quantity	Unit	Unit Price	Total
1	Install New 8" Sanitary Sewer	2,900	LF	\$125.00	\$ 362,500
2	Install Precast Concrete Sanitary Manhole	9	EA	\$5,500.00	\$ 49,500
3	Install New 8" Water Main - Class 52 DIP	3,800	LF	\$75.00	\$ 285,000
4	Install New 250,000 Gallon Ground Storage Tank	1	EA	\$375,000.00	\$ 375,000
5	Install New Natural Gas Main	2,900	LF	\$50.00	\$ 145,000
6	Install New Electric Service	2,900	LF	\$50.00	\$ 145,000
7	Roadway Construction with Curbs	2,900	LF	\$325.00	\$ 942,500
8	Install New Storm Sewer & Structures	1,700	LF	\$125.00	\$ 212,500
9	Roadway Stormwater Management	1	LS	\$250,000.00	\$ 250,000
	CONSTRUCTION SUBTOTAL				\$ 2,767,000
	CONTINGENCY (15%))			\$ 415,050
	LEGAL, ENGINEERING AND ADMINISTRATION (25%))			\$ 691,750
	TOTAL				\$ 3,873,800
	TOTAL PROJECT COST	г			\$ 3,900,000

ELEVATED WATER TANK

Infrastructure Costs

Item	Description	Quantity	Unit	Unit Price	Total
1	Install New 8" Sanitary Sewer	2,900	LF	\$125.00	\$ 362,500
2	Install Precast Concrete Sanitary Manhole	9	EA	\$5,500.00	\$ 49,500
3	Install New 8" Water Main - Class 52 DIP	3,100	LF	\$75.00	\$ 232,500
4	Install New 250,000 Gallon Ground Storage Tank	1	EA	\$1,265,000.00	\$ 375,000
5	Install New Natural Gas Main	2,900	LF	\$50.00	\$ 145,000
6	Install New Electric Service	2,900	LF	\$50.00	\$ 145,000
7	Roadway Construction with Curbs	2,900	LF	\$325.00	\$ 942,500
8	Install New Storm Sewer & Structures	1,700	LF	\$125.00	\$ 212,500
9	Roadway Stormwater Management	1	LS	\$250,000.00	\$ 250,000
	CONSTRUCTION SUBTOTAL				\$ 3,604,500
	CONTINGENCY (15%	.)			\$ 540,675
	LEGAL, ENGINEERING AND ADMINISTRATION (25%))			\$ 901,125
	TOTAL				\$ 5,046,300
	TOTAL PROJECT COST				\$ 5 ,100,000

VILLAGE OF OWEGO SANITARY SEWER EXTENSION

ROAD – BELVA LOCKWOOD LANE AND UTILITY ROAD TO WATER TANK

REFERENCES

REFERENCES

The following documents were referenced in the writing of this ESite Master Plan Update:

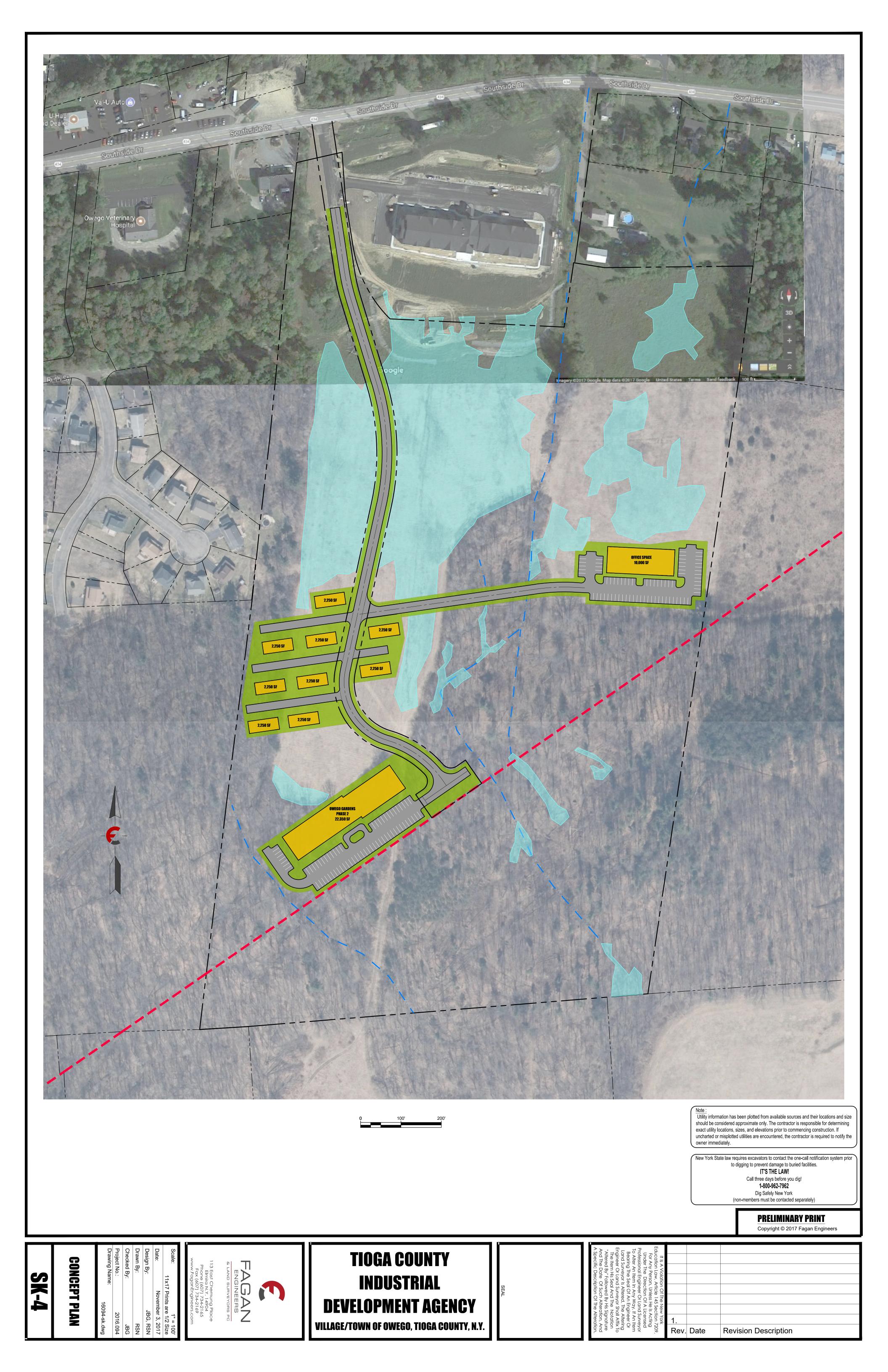
- Route 434 Site Mixed Use Concept Development and Market Analysis, The Saratoga Associates, December 2003
- Route 434 e=mt³ Mixed Use Office Park Project Draft Generic Environmental Impact Statement (DGEIS), The Saratoga Associates, September 2005
- Route 434 e=mt³ Mixed Use Office Park Project Final GEIS and Findings Statement, The Saratoga Associates, October 2006
- Wetland & Stream Delineation Report, Fagan Engineers and Land Surveyors, PC, October 2016
- TCIDA ESite Parcel USACE Wetland Site Visit memorandum to TCIDA, May 31, 2017
- NYS Route 434 ESite Master Plan Update letter, Clark Patterson Lee Associates, May 2017

APPENDICES

APPENDICES

- A. ESite Master Plan Layout Preferred Option
- B. Clark Patterson Lee ESite Master Plan Update engineering letter
- C. NY SHPO No Effect Letter
- D. US ACE wetland delineation map and letter
- E. Suez water service/system capacity letter
- F. Traffic Impact Study
- G. SEQR Forms and Findings Statement Amendment

APPENDIX A – Esite Master Plan Preferred Option Layout



APPENDIX B - Clark Patterson Lee ESite Master Plan Update engineering letter



May 3, 2017

LeeAnn Tinney, Director Tioga County Economic Development and Planning Ronald E. Dougherty County Office Building 56 Main Street Owego, New York 13827

RE: Tioga County NYS Route 434 E-Site REVISED Master Plan Map Update

Dear Ms. Tinney:

We have completed the Master Plan Map Update for the E-Site and have attached four Concept Plan drawings, identified as Concept Plan Options 1 through 4. These are ordered based on recommended level of preference, with Option 1 being the most preferred.

Program Elements

During the development of the options, the following were indicated to us as the desired minimum program elements:

- A second 62-unit apartment building (approximately 65,500 square feet) to match the existing apartment building on the E-Site
- A minimum of four 4-unit townhomes (2 story, 2 bedrooms per unit, each unit with a garage, overall building size approximately 72' by 30').
- A 12,000 square foot Wellness Center/Medical Office.
- A 10,000 square foot, 2-story Office Building (5,000 square feet/floor).
- An Extended-Stay Hotel (Residence Inn or similar; approximately 58,000 square feet).

Options 1 through 3 include all of these elements, with varying numbers of townhomes, while Option 4 does not include the Extended-Stay Hotel. Parking for all of these elements has been shown in accordance with Village Code requirements.

All of these options presume that the US Army Corps of Engineers (USACE) will make the jurisdictional determinations anticipated by Fagan Engineers for the various wetland areas they delineated on the site. The proposed layouts avoid those wetlands over which Fagan anticipates the USACE will take jurisdiction. It is our understanding that wetlands over which USACE does not take jurisdiction will not be regulated and can be impacted.

Code Considerations

Cul-de-sac streets

All layouts provided comply with the Village Code limitation on cul-de-sac lengths of 500' maximum (reference Village Code 175-12.A), by providing a loop in the core of the site. However, the referenced Code paragraph also places a limitation of 20 dwelling units on a cul-de-sac. Option 1 meets this requirement. Option 2 may require a variance pursuant to Chapter 175 Section 175-22 of the Village Code,

ARCHITECTURE ENGINEERING PLANNING



depending on how the Village would construe the Office Building in addition to the 16 dwelling units on the cul-de-sac. Options 3 and 4 would require a variance as the number of dwelling units exceeds 20.

Street design and intersections

In order to provide the aforementioned loop in the core of the site, it appears it would be necessary to obtain a variance to not meet the intersection road grade leveling requirements (reference Village Code 175-11.H.) for the road along the west side of the site, as a constant grade of 10% (the maximum allowed by Village Code for Minor Streets) would be required for this roadway. This roadway would be constructed with cuts as deep as 6' to 7' below existing grade (which is also the condition at the end of the existing roadway). An option if the Village is unwilling to grant this variance may be to construct a connector road to Strong Road as shown on the Concept Plans, which would allow the elimination of the west side of the "loop" and thus eliminate the intersections. We performed a preliminary assessment of extending a connector road and it appears to be feasible with the topography, while meeting the 10% maximum street grade requirement.

Site Earthwork

Due to the topography of the site, considerable earthwork will be required for construction of the roadway and the individual development sites, with retaining walls likely required in places. We performed a preliminary earthwork balance for Option 1 using SiteOps software, and estimate that approximately 150,000 cubic yards of earth would need to be moved on the site for the full development.

Traffic Considerations

We provided a letter with estimated vehicle trip generation for the proposed development based on Option 1 to NYSDOT on April 18, 2017. NYSDOT subsequently advised us on April 28 that they will require a Traffic Impact Study, which should consider impacts to NYS Route 434 in the vicinity of the development, including the NYS Route 434/SR 962G (Exit 64 WB access) and NYS Route 434/SR 960J (Exit 65 Access) intersections.

Water Considerations

We are providing a letter with estimated water requirements for the proposed development based on Option 1 to Suez Water today, for them to confirm their ability to service the proposed development and associated requirements. In that letter we identify two possible options for the tank location, one being an approximately 100' tall elevated tank adjacent to the townhomes, and the other, which is preferred, being an approximately 24' tall ground storage tank located farther uphill to the south, outside the Village limits but still on TCIDA property within the Town of Owego. These locations are also indicated on the attached Concept Plans. As indicated below, the ground storage tank option results in a considerably lower project cost, but there may be considerations based on the Suez Water/Village agreement as to whether the tank can be located outside the Village limits.

Cost Estimate

Preliminary estimates of total project costs for the roadway and site utility infrastructure based on Option 1 are \$5,100,000 if an elevated water storage tank is required, or \$3,900,000 if a ground storage tank can be utilized. Detailed breakdowns of these cost estimates are attached. These estimates are also applicable



LeeAnn Tinney Tioga County ED&P May 3, 2017 Page 3 of 3

to the other Concept Plan options. Note that the cost estimates do not include sitework for the individual development sites, addition of a turn lane or other modifications at Route 434 (if required by NYSDOT based on the aforementioned Traffic Impact Study), nor other water system upgrades which may be required by Suez Water.

Please feel free to contact me if you have any questions or need additional information.

Very truly yours,

Clark Patterson Lee

David A. Chase, PE, LEED AP Principal Associate

Encl: Concept Plan Options 1-4 Preliminary Cost Estimates **APPENDIX C - NY SHPO No Effect Letter**



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO Governor ROSE HARVEY Commissioner

March 27, 2017

Ms. Shannon Wright Hartgen Archeological Associates, Inc. 1744 Washington Ave, Ext. Rensselaer, NY 12144

Re: USACE Owego Gardens Senior Housing 17PR01112

Dear Ms. Wright:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

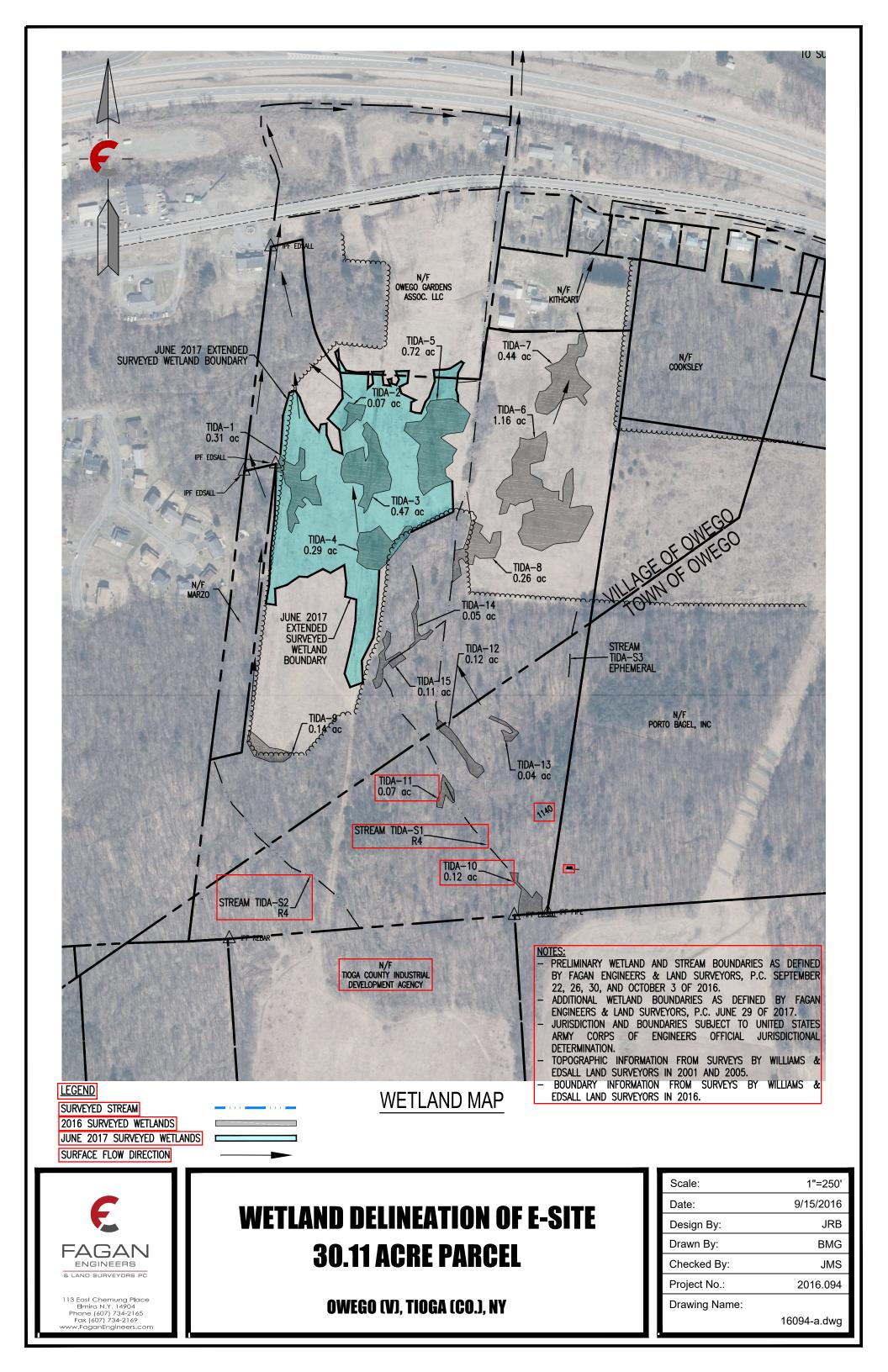
Based upon this review, the New York SHPO has determined that no historic properties will be affected by this undertaking.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Michael F. Lynch, P.E., AIA Director, Division for Historic Preservation

APPENDIX D – USACE Wetland Delineation Map



APPENDIX E - Suez Owego water service/system capacity letter



May 3, 2017

Ms. Paula McEvoy, Director of Engineering NY Division SUEZ Water Owego-Nichols 700 Kinderkamack Road Oradell, NJ 07649

Re: Tioga County E-Site Master Plan Map Update – Water Requirements NYS Route 434, Owego, New York

Dear Ms. McEvoy:

On behalf of the Tioga County Office of Economic Development & Planning and the Tioga County IDA (TCIDA), Clark Patterson Lee (CPL) has prepared a Master Plan Map Update for the remainder of the E-Site located within the Village of Owego municipal boundaries, based on potential anticipated development of the site.

We have attached the preferred development plan for the site, identified as "Concept Plan - Option 1". This plan includes the following proposed additional development:

- A second 62-unit apartment building to match the existing apartment building on the E-Site. This building is anticipated to be general occupancy, versus the existing building which is senior housing.
- Four 4-unit townhomes.
- A 12,000 square foot Wellness Center/Medical Office.
- A 10,000 square foot, 2-story Office Building (5,000 square feet/floor).
- An Extended-Stay Hotel (Residence Inn or similar).

It is anticipated that all of these buildings will be sprinklered, with the exception of the townhomes. We have attached two tables with the estimated domestic and fire flow demands for the proposed development, summarized below:

Avg. Daily Demand:	30,000 gpd
Max. Daily Demand:	60,000 gpd
Needed Fire Flow:	500-1,500 gpm (depending on user) at 20 psi for 2 hours.

These demands are in addition to the existing BS2 Pressure District demands, which we understand to be approximately 18,000 gpd average daily demand for the Hallstead Development (based on an average BS2 pump station flow of 12.5 gpm per your February 4, 2016 memo to Jeff VanWagenen) plus 3,500 gpd average daily demand for the recently-completed Owego Gardens 1 apartment building, for a total of 21,500 gpd existing average daily demand.

It is our understanding that a water storage tank will be required to serve the proposed development (and therefore the entire BS2 Pressure District). Based on the proposed and



Ms. Paula McEvoy SUEZ Water Owego-Nichols May 3, 2017 Page 2 of 2

existing average daily demands, plus the largest fire flow requirement, we estimate a required tank volume of 231,500 gallons, with a likely tank size of 250,000 gallons.

As indicated in your August 4, 2016 Model Simulation Report, the maximum HGL of the BS2 service area is 1,124'. The highest ground elevation in the proposed development is at the townhomes, with a maximum ground elevation of approximately 1,020'. In order to provide a minimum pressure of 35 psi at this location, this would require a minimum tank water elevation of approximately 1,101'. Therefore, it appears that a tank with an operating range of 1,101' or greater to 1,124' would be appropriate.

We have shown two alternate locations for the tank on the attached drawing:

- Adjacent to the townhomes at a grade elevation of approximately 1,024'. This would require an elevated storage tank approximately 100' tall.
- A preferred location farther uphill to the south, at a grade elevation of approximately 1,101'. This would allow a ground storage tank approximately 24' tall to be used. It would require approximately 700' more piping to the tank than the elevated tank option, but the added piping cost would be more than offset by the considerable savings in tank construction. It should be noted that in this option, the tank would be located outside of the Village limits, but still on TCIDA property within the Town of Owego.

Please review this information and confirm SWON's ability to service the proposed development at your earliest convenience. Should you have any questions or require additional information, please do not hesitate to contact me at (607) 304-9968, or <u>dchase@clarkpatterson.com</u>.

Very truly yours,

Clark Patterson Lee

David A. Chase, P.E., LEED AP Principal Associate

Attachments

cc: LeeAnn Tinney, TCEDP Bryant Myers, TCIDA Jeff VanWagenen, SWON file





Domestic Flow Requirements

	Estimated Average Daily	Calculation
	Demand	
Proposed User	(gpd)	
Apartment Building (General Occupancy)	13,640	62 units, assumed worst-case all 2-bedroom at 110 gpd/bedroom
Townhouses (4 buildings with 4 units each)	3,520	16 units, all 2-bedroom at 110 gpd/bedroom
Extended Stay Hotel	9,360	78 units at 120 gpd/unit (110 gpd/sleeping unit + 10 gpd/unit for in-room kitchens)
Office Building	500	10,000 sf x 5 gpd/100 sf
Wellness Center/Medical Office	2,400	12,000 sf x 20 gpd/100 sf
Total for Proposed Development	29,420	
Average Daily Demand	30,000	gpd
Max. Day Peaking Factor	2.0	
Maximum Daily Demand	60,000	gpd



Tioga County E-Site Proposed Development Fire Flow Calculations May 3, 2017

Fire Flow Requirements

Proposed Building	Estimated Building Sprinkler Demand (gpm)	ISO Minimum Needed Fire Flow (gpm)	Comments
Apartment Building	500	1000	
Townhouse	Non-Sprinklered	1500	Calculated based on assumed frame construction, could be reduced if fire-resistive construction.
Extended Stay Hotel	500	1000	
Office Building	500	500	
Wellness Center/Medical Office	500	500	
Ма	x. Needed Fire Flow =	1500	gpm at 20 psi for 2 hours

APPENDIX F - Traffic Impact Study



April 18, 2017

Ms. Christine Klein NYSDOT Region 9 Planning and Program Management 44 Hawley Street, 13th Floor Binghamton, New York 13091

Re: Trip Generation Volumes Associated with Tioga County E-Site NYS Route 434, Owego, New York

Dear Ms. Klein:

Clark Patterson Lee (CPL) performed trip generation estimates for the proposed "E=MT3" Site on Route 434 (see attached concept plan). The Development will include several new buildings with different land uses. Traffic generated by the proposed development was estimated using the 9th Edition of the Institute of Transportation Engineers (ITE) <u>Trip Generation Manual</u>. The building parameters are summarized in the table below. These trips include the existing 62 unit Owego Gardens Phase I Apartment complex.

Table 1 Proposed Development Parameters												
Description	ITE Land Use Description (Code)	Metric										
<i>Existing</i> Owego Gardens Apartments Phase I	Senior Adult Housing – Attached (252)	62 Units										
Owego Gardens Apartments Phase II	Apartment (220)	62 Units										
Townhouses	Residential Condominium/Townhouse (230)	16 Units										
Extended Stay Hotel	Hotel (310)	78 guest rooms										
General Office	General Office Building (710)	10,000 SF										
Wellness Center/Medical Office	Medical-Dental Office Building (720)	12,000 SF										

A "trip" is defined as a single or one-direction vehicular movement with either the origin or destination inside the study area. "Pass-by" trips are made as an intermediate stop by existing traffic passing the site on the adjacent roadway, in this case, Route 434. "Non-Pass-by" trips are all trips generated that are not "pass-by" trips and are essentially new trips made for the specific purpose of entering or exiting the development. The pass-by trips for the current development proposal are assumed to be zero. Internal "combined use" trips between the land uses are also assumed to be zero.

Trip generation volumes were estimated for five time periods and are summarized in the table on the following page. AADT data was gathered for Route 434 and is attached.

	Trip	Table 2 Distribution					
Land Use	Total Number	Direc	tional tion (%)		ctional ion (Trips)		
	of Trips	Enter	Exit	Enter	Exit		
	AN	I Peak Hour					
Senior Housing (LU 252)	13	34	66	4	9		
Apartment (LU 220)	35	20	80	7	28		
Townhouses (LU 230)	21	17	83	4	17		
Hotel (LU 310)	42	59	41	25	17		
General Office (LU 710)	31	88	12	27	4		
Wellness/MOB (LU 720)	29	79	21	22	7		
Total AM Peak Hour	171			89	82		
	PM	Peak Hour	•				
Senior Housing (LU 252)	17	54	46	9	8		
Apartment (LU 220)	52	65	35	34	18		
Townhouses (LU 230)	14	67	33	9	5		
Hotel (LU 310)	47	51	49	24	23		
General Office (LU 710)	90	17	83	15	75		
Wellness/MOB (LU 720)	44	28	72	13	31		
Total PM Peak Hour	264			104	160		
	1	Weekday					
Senior Housing (LU 252)	206	50	50	103	103		
Apartment (LU 220)	500	50	50	250	250		
Townhouses (LU 230)	131	50	50	66	65		
Hotel (LU 310)	325	50	50	163	162		
General Office (LU 710)	229	50	50	115	114		
Wellness/MOB (LU 720)	276	50	50	138	138		
Total Weekday	1,667			835	832		
1. 1 . 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Sature	day Peak Hou	r				
Senior Housing (LU 252)	20	57	43	11	9		
Apartment (LU 220)	45	50 (assmd)	50 (assmd)	23	22		
Townhouses (LU 230)	8	54	46	4	4		
Hotel (LU 310)	59	56	44	33	26		
General Office (LU 710)	5	54	46	3	2		
Wellness/MOB (LU 720)	44	57	43	25	19		
Total Saturday Peak Hour	181		-	99	82		
	1	Saturday					
Senior Housing (LU 252)	154	50	50	77	77		
Apartment (LU 220)	231	50	50	116	115		
Townhouses (LU 230)	91	50	50	46	45		
Hotel (LU 310)	456	50	50	228	228		
General Office (LU 710)	52	50	50	26	26		
Wellness/MOB (LU 720)	108	50	50	54	54		
Total Saturday	1,092			547	545		



Ms. Christine Klein NYSDOT Region 9 April 18, 2017 Page 3 of 3

Please advise us as to whether a Traffic Impact Study would be required for the development.

Should you have any questions or require additional information, please do not hesitate to contact me at (800) 274-9000, ext. 3012 or <u>jmichniewicz@clarkpatterson.com</u>; or David Chase at (607) 304-9968 or <u>dchase@clarkpatterson.com</u>.

Very truly yours,

Clark Patterson Lee

A. Michning Indu

Jennifer L. Michniewicz, P.E., PTOE Principal Associate

Attachments

cc: file



New York State Department of Transportation Traffic Count Hourly Report

DIREC STATE DATE NOTES	ROUTE #: NY 434 ROAD NAME: DIRECTION: Eastbound FACTOR GROUP: 40 STATE DIR CODE: 6 WK OF YR: 42 DATE OF COUNT: 10/14/2015 42 NOTES LANE 1: Eb travel lane 43 COUNT TAKEN BY: ORG CODE: TST INITIALS:									D F 2 F (0 /	FROM: ACC RT 17 WB RT 962G REC. SERIAL #: JV42 PLACEMENT: 68.5 Yds E of Store Entrance @ REF MARKER: ADDL DATA: Class Speed COUNT TYPE: AXLE PAIRS PROCESSED BY: ORG CODE: DOT INITIALS:								TO: ACC RT 17 EXIT 65 RT 960J FUNC, CLASS: 16 NHS: no JURIS: City CC Stn: BATCH ID: DOT-R09C42aTS							TOWN: LION#: BIN: RR CROSSING:					
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New York State Department of Transportation Traffic Count Hourly Report

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Appendix G – SEQR Forms and Findings Statement Amendment

Short Environmental Assessment Form Part 1 - Project Information

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information					
Name of Action or Project:					
Project Location (describe, and attach a location map):					
Brief Description of Proposed Action:					
Name of Applicant or Sponsor:	Telepl	Telephone:			
	E-Mai	-Mail:			
Address:					
City/PO:		State: Zip Code:			
1. Does the proposed action only involve the legislative adoption of a plan,	local law	v, ordinance,	1	NO	YES
administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action an may be affected in the municipality and proceed to Part 2. If no, continue t			that		
2. Does the proposed action require a permit, approval or funding from an			I	NO	YES
If Yes, list agency(s) name and permit or approval:	-				
3.a. Total acreage of the site of the proposed action?					
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		acres			
4. Check all land uses that occur on, adjoining and near the proposed actio	n.				
□ Urban □ Rural (non-agriculture) □ Industrial □ Com		□ Residential (subur	ban)		
	(specify):			
□ Parkland					

5. Is the proposed action,	NO	YES	N/A
a. A permitted use under the zoning regulations?			
b. Consistent with the adopted comprehensive plan?			
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?		NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental A If Yes, identify:	rea?	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?		NO	YES
b. Are public transportation service(s) available at or near the site of the proposed action?			
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed ac	tion?		
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies:		NO	YES
10. Will the proposed action connect to an existing public/private water supply?		NO	YES
If No, describe method for providing potable water:			
11. Will the proposed action connect to existing wastewater utilities?		NO	YES
If No, describe method for providing wastewater treatment:			
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?		NO	YES
b. Is the proposed action located in an archeological sensitive area?			
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	n	NO	YES
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres:			
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check □ Shoreline □ Forest □ Agricultural/grasslands □ Early mid-success		apply:	
□ Wetland □ Urban □ Suburban		NO	VEC
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?		NO	YES
16. Is the project site located in the 100 year flood plain?		NO	YES
17. Will the proposed action create storm water discharge, either from point or non-point sources?		NO	YES
If Yes, a. Will storm water discharges flow to adjacent properties?			
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drain If Yes, briefly describe:	1s)?		

18. Does the proposed action include construction or other activities that result in the impoundment of	NO	YES
water or other liquids (e.g. retention pond, waste lagoon, dam)?		
If Yes, explain purpose and size:		
19. Has the site of the proposed action or an adjoining property been the location of an active or closed	NO	YES
solid waste management facility?		
If Yes, describe:		
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or	NO	YES
completed) for hazardous waste?	110	110
If Yes, describe:		
I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE I	REST O	FMV
KNOWLEDGE		
Applicant/sponsor name: Date:		
Signature:		

Short Environmental Assessment Form Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.

Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

		No, or small impact may occur	Moderate to large impact may occur
1.	Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?		
2.	Will the proposed action result in a change in the use or intensity of use of land?		
3.	Will the proposed action impair the character or quality of the existing community?		
4.	Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?		
5.	Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?		
6.	Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?		
7.	Will the proposed action impact existing: a. public / private water supplies?		
	b. public / private wastewater treatment utilities?		
8.	Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?		
9.	Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?		
10.	Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?		
11.	Will the proposed action create a hazard to environmental resources or human health?		

Short Environmental Assessment Form Part 3 Determination of Significance

For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

 Name of Lead Agency
 Date

 Print or Type Name of Responsible Officer in Lead Agency
 Title of Responsible Officer

 Signature of Responsible Officer in Lead Agency
 Signature of Preparer (if different from Responsible Officer)

E=mt³ Office Park

Retail Housing Commercial



Statement of Findings For The Route 434 $E=mt^3$ Mixed Use Office Park Project

Town and Village of Owego, Tioga County, New York September 2006

LEAD AGENCY Tioga County Industrial Development Agency 56 Main Street, Owego, NY 13827 Contact: Aaron Gowan, Chairman Ph.: 607-687-8259

Prepared by

SARATOGA ASSOCIATES

443 Broadway, Saratoga Springs, New York, 12866 Contact: Daniel Sitler, ASLA 518.587.2550

ISSUED BY LEAD AGENCY

No impacts on groundwater infiltration are anticipated from the increase in impervious areas due to the proposed use of stormwater detention, which will promote infiltration into the soil.

<u>Contaminants in Runoff</u>: The increase in impervious areas particularly associated with roads and driveways may increase the potential for runoff contaminated with automobile-related pollutants such as oil, grease, and other petroleum products. This could be a long-term impact. There is also the potential for groundwater to be adversely affected post-construction if pesticides, herbicides, or fertilizers are used to maintain lawns and landscaped areas.

The potential impacts related to the proposed increase in impervious areas and related stormwater runoff that may contain automobile pollutants, while considered longer in duration, are not anticipated to result in significant nor permanent adverse impacts to groundwater quality, combined with the natural filtration provided as surface water infiltrates through the soil to the groundwater.

2.1.3.2 SURFACE WATER AND WETLANDS

Avoidable Indirect Impacts Related to Proposed Filling of Wetlands and Tributaries:

The potential for indirect impacts related to the temporary disturbances to wetlands and tributaries during the installation of the utility crossings, and the permanent filling of wetlands and tributaries during the construction of the Project site roads will be mitigated to the maximum extent practicable through the Project design and any mitigative measures required through the ACOE permitting process. The direct and potential indirect impacts are not anticipated to be significant, **and will impact only about 1 acre of wetlands**.

Unavoidable Increase in Impervious Areas and Related Runoff:

The potential for erosion and sedimentation during construction (a short-term impact), the increase in stormwater runoff from impervious surfaces and the potential for this runoff to introduce petroleum and other contaminants (a potential long-term impact) would minimally impact the Project sites or off-site surface waterbodies or wetlands due to the proposed Project design, implementation and compliance with and associated provisions and mitigation measures; and therefore, such impacts are not anticipated to be significant.

2.1.3.3 Floodplain

Although there is a potential for indirect adverse impacts related to erosion and sedimentation during construction and stormwater runoff, post-construction. Mitigation measures will include construction of detention and/or retention basins to limit peak runoff from the Project to pre-development rates; and construction of wet ponds, grass-lined ditches or other water quality protection measures to mitigate impacts on the quality of stormwater runoff. Further, proper construction techniques will be employed during construction and in accordance with industry standards and BMP, and the SWPPP will be fully implemented and complied with. Therefore, potential impacts are not expected to be significant.