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MEMORANDUM

To: Adam Cummings, PE

From: BME Associates

Date: September 29, 2015

Re: **Lago Resort & Casino** **2392A**

Following is a revised summary of the existing and proposed offsite infrastructure relative to the water supply and sanitary sewer systems that serves the proposed Lago Resort & Casino project.

Water Supply System

The project will be served with water supplied by the Town of Tyre public watermain. Water to the Town of Tyre is supplied from the Village of Waterloo water treatment plant. A letter from the Village of Waterloo confirming their ability to provide water was received February 12, 2014, and states that the Village of Waterloo treatment plant has a capacity of up to 4 million gallons per day (MGD). In the letter it was noted that the plant currently operated between 1.2 to 1.3 MGD. The proposed Lago Resort & Casino is anticipated to utilize approximately 145,000 gallons per day (0.145 MGD).

The public watermain will be extended under the NYS Thruway, and if desired, will provide an opportunity for the Town of Tyre to extend the watermain in the future to serve existing residents of the Town north of the NYS Thruway. An easement along the project site adjacent to NYS Route 414 will be provided for future watermain extension by others should the Town decide to extend its potable water supply to residents north of the project site.

As is typical of new development, any future users will need to evaluate the water supply and pressures at the location of any proposed development to determine that the existing system could supply the additional demands. Based on Part 1 of the Full Environmental Assessment Form provided with the concept plan for the 3S Gateway Development project (review of which was suspended in January 2015), total anticipated water usage/demand for that project would be 133,000 gallons per day (0.133 MGD). The Pine View Circle project would have a water demand of 13,650 gallons per day (0.014 MGD) according to Part 1 of the Environmental Assessment Form that was submitted to the Town Planning Board with the site plan application for the project. Additional future development was also identified along the NYS Route 318 Corridor in the Engineering Feasibility Study prepared by Barton & Loguidice, dated November 2013. The projected demand for all potential future users along Route 318 totaled approximately 59,500 gpd (0.060 MGD). Thus, taking into account the anticipated water usage of the proposed Casino project (0.145 MGD), the possible 3S Gateway Development project (0.133 MGD), the Pine View Circle project (0.014 MGD), and the projected future users along the 318 Development Corridor (0.060 MGD), there would still be approximately 2.346 MGD of capacity available in the Village of Waterloo's treatment plant for future users.

Sanitary Sewer System

No treatment of wastewater will occur on the project site. All wastewater will ultimately be conveyed to the Seneca Falls Wastewater Treatment Plant for treatment. The wastewater from the Lago Resort & Casino will be discharged via a 6" forcemain to the south, under the NYS Thruway and into an existing 12" sanitary sewer located adjacent to the Petro Stopping Center along the east side of NYS Route 414. The proposed forcemain will be considered and treated as a private lateral until the connection point into the public sanitary sewer. As this forcemain will remain private, it will not provide an opportunity for the Town of Tyre to extend its sanitary sewer system to residents north of the project site.

The capacity of the existing 12" gravity sewer located along NYS Route 414 was evaluated by Barton & Loguidice, D.P.C. and summarized in a letter dated September 1, 2014. The limiting capacity was determined to be approximately 750 gallons per minute (gpm) in this section of the sewer. The peak projected flow from the Lago Resort & Casino is projected to be 300 gpm, the peak flow from the Pine View Circle project is projected to be 43 gpm and with the other existing and future (Route 318 Development Corridor) development listed in the Barton & Loguidice letter, the peak project flow would be 621 gpm, leaving approximately 86 gpm for future users not anticipated at this time.

Additional offsite sanitary sewer improvements will be constructed to the existing conveyance system in connection with the project. These improvements have been identified in an Engineering Feasibility Study prepared by Barton & Loguidice, dated November 2013. These improvements will include pump station upgrades and the installation of a new 8" sanitary sewer forcemain to facilitate conveyance of wastewater to the Seneca Falls Treatment Plant.

All wastewater will ultimately be conveyed to the Seneca Falls Waste Water Treatment Plant for treatment. The estimated demand from the Casino project was estimated to be 145,000 gallons per day (0.145 MGD) based upon the water usage rates listed in the *2014 Design Standards for Intermediate – Sized Wastewater Treatment Systems (NYSDEC)*, *U.S. Fire Administration Water Supply Systems and Evaluation Methods*. If built, the 3S Gateway Development project's total anticipated sewage usage would be about 133,000 gallons per day (0.133 MGD), and the Pine View Circle anticipated sewage usage would be about 13,650 gallons per day (0.014 MGD). With the proposed modifications to the sanitary sewer conveyance system as identified in the Engineering Feasibility Study, prepared by Barton & Loguidice, dated November 2013 (Alternative #1), additional wastewater flows, including both existing and potential future development, would be directed to the Town of Seneca Falls Wastewater Treatment Plant from the Route 318 Development Corridor. Per the study, these existing and future flows total approximately 54,500 gpd (0.055 MGD).

Information was provided regarding the Seneca Falls Waste Water Treatment Plant's design loadings by Michael Pickard, the Chief Operator of the plant. This information shows that the plant had approximately 1.82 MGD capacity available, which would leave approximately 1.473 MGD capacity for future users after the proposed Lago Resort & Casino, 3S Gateway, Pine View Circle and 318 Corridor developments are constructed.

Conclusion

Based upon the information provided, there is sufficient capacity in both the Village of Waterloo Water Treatment Plant and the Town of Seneca Falls Wastewater Treatment Plant to serve the Lago Resort & Casino, the 3S Gateway Project concept, and all identified future Route 318 Development. Additionally, there is still ample capacity in both facilities to provide water and sanitary treatment services to future potential development in the respective service areas.