Submit as Exhibit VIII.C.16. a brief description of plans for mechanical systems and on-site infrastructure, with particular emphasis on unique features (e.g. district hot or cold water, on-site power generation, on-site water or waste treatment, etc.). Indicate whether the project relies on distributed or building HVAC, chilled and hot water, and other systems. Describe plans for systems redundancy, if any. Describe significant dedicated physical plant spaces by location and approximate square footage. Describe plans for emergency power generation and uninterruptable power supply.

ON-SITE INFRASTRUCTURE

The Tioga Downs Casino and future Casino Resort are served by onsite water and wastewater systems.

The existing water system consists of two wells, a pump house, storage tank, and water distribution system. The water system has been classified as Transient Noncommunity (TNC) by Tioga County Health Department (NYS PWS ID#NY5330037), which currently requires a Grade C certified operator.

The water supply system consists of two groundwater supply wells. Both wells are currently connected to an automated level control system with the water storage tank.

Well #1 shall be defined as the pre-existing well that has served the property since the 1970's. There are no known records for the development of Well #1 but field measurements indicate a well depth of 81 feet and a static water depth of 45 feet below the adjacent ground surface. The well pump for Well #1 is known to pump at 90 gallons per minute (GPM).

Well #2 shall be defined as secondary well supply installed in the summer of 2012. . Well #2 is an 8" well with a 10" casing and 3" discharge. Well #2 has a static, non-pumping water level of 48.72 feet below the top of the well casing and has a total depth of 99 feet and screened over the depth interval of 84 to 99 feet.

Well #1 and #2 are located in close proximity to each other, approximately 16 feet away from each other. A pump test report from the installation of Pump #2 indicates the aquifer serving the two wells has "sufficient available drawdown to support an intended rate of extraction of up to

100,000 gallons per day". An extraction rate of 100,000 gallons per day (roughly 70 GPM); can be served by one of the existing individual wells.

The existing water storage tank is a 200,000 gallon steel tank is twenty feet (20') in diameter and 85 feet tall. During the redevelopment project in 2005, the tank was cleaned of any sediment and recoated.

The water distribution system consists of primarily 10" and 8" PVC pipe installed as part of the 2005 redevelopment project. Cross contamination protection with the horse barns is provided via a double check valve assembly. A 10" mainline runs from the control building to western edge of the grandstand apron. From there, an 8" watermain loops around the existing casino facility and down to the east around the proposed hotel area. Gate valves and hydrants are located along the watermain routing for maintenance, operation and fire protection.

Only the water distribution system will require modifications for development of the Tioga Downs Casino Resort. Watermain and appurtenances will be relocated outside of the building walls and therefore maintain a looped effect for efficient water system operation.

Sanitary sewerage generated by Tioga Downs Casino and future Casino Resort are and will be directed to an onsite wastewater treatment facility built and approved for operation in 2011/2012. The wastewater treatment facility for built on the premise of future development.

The onsite wastewater collection and treatment system consists of the following infrastructure:

A main duplex pumping station with submersible, variable frequency drive (VFD) pumps is located in the infield of the horseracing track. The pump station is comprised of a 6' diameter wet well and 6'x6' valve vault. The pumps will run in parallel and will be set as a lead / lag type system with pumping capabilities up to 300 gpm. A separate valve vault is designed to be placed adjacent to the wet well for easy access to valves. A 4" HDPE force main carries all raw wastewater from the influent pump station to the headworks of the wastewater treatment facility. The barn, paddock and maintenance areas of the Project Site are served through an individual pump station connected to the headworks of the treatment facility.

The wastewater treatment facility has a design capacity of 75,000 gallons per day and operates under the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) Discharge Permit Number NY0244881. The treatment train consists of the following:

- Primary sedimentation tanks, aka septic tank, will remove from 50 to 70 percent of the suspended solids and from 25-40 percent of the BOD. There will be two tanks sized at 37,000 gallons each. Gases generated from digestion of the organics are vented out to atmosphere. The inlet and outlet structures shall be designed to limit short circuiting and retain sludge and scum layers. Manways are provided in the tank cover to allow access for periodically removing the contents, including the accumulated scum and sludge. The septic tanks are pumped on a regular basis.

- Flow Equalization Tanks, two (2) 20,000 gallon tanks, accommodates the wide variations in flow rates and organic mass loadings faced in design of the wastewater treatment facility. Because the naturally occurring variations in the generation of wastewater, specifically for a facility of this type that has events such as races, gaming events and concerts, the wastewater treatment facility must process unsteady wastewater flows. The flow equalization tank dampens the diurnal flow variation and thus achieves a constant or nearly constant flow rate. An additional benefit is a reduction in the variability of the concentration and mass flow of wastewater constituents by blending in the equalization basin. This more uniformly loads downstream processes with organics, nutrients, and other suspended and dissolved constituents.

- A Rotating Biological Contactor (RBC) coupled with a secondary clarification provides the secondary biological treatment required. The process consists of a series of disks mounted on a horizontal shaft and placed in a tank with a contoured bottom. Rotating reactors use a fixed film biomass on rotating media for biological treatment. The rotating medium, typically made from sheets of high-density plastic, provides a surface on which organisms grow and contact organic wastewater constituents and oxygen from the air. The rotating reactor carries a film of wastewater into the air. The wastewater trickles down the surfaces of the contactor and absorbs oxygen from the air. Organisms in the biomass remove both dissolved (DO) and organic materials from the wastewater.

With the ability to recycle the effluent downstream of the RBC, this treatment process is able to operate at variable loadings. This is an important characteristic due to the seasonal and diurnal flow conditions at Tioga Downs.

The system has two secondary clarifiers that process effluent from the RBC's. The side wall depth of the clarifiers is 10 ft and the weir over flow rate is 3,575 gallons per day per lineal foot.

- Continuous disinfection is provided through ultraviolet light.

- Final outfall of the treated effluent stream is to the Susquehanna River

The existing wastewater treatment facility will require expansion of one full treatment train to handle the full Tioga Downs Casino Resort. It is projected the full Casino Resort will generate greater than 75,000 gallons of wastewater per day. A full evaluation can be found in Exhibit VIII.C.17.a.

MECHANICAL SYSTEMS

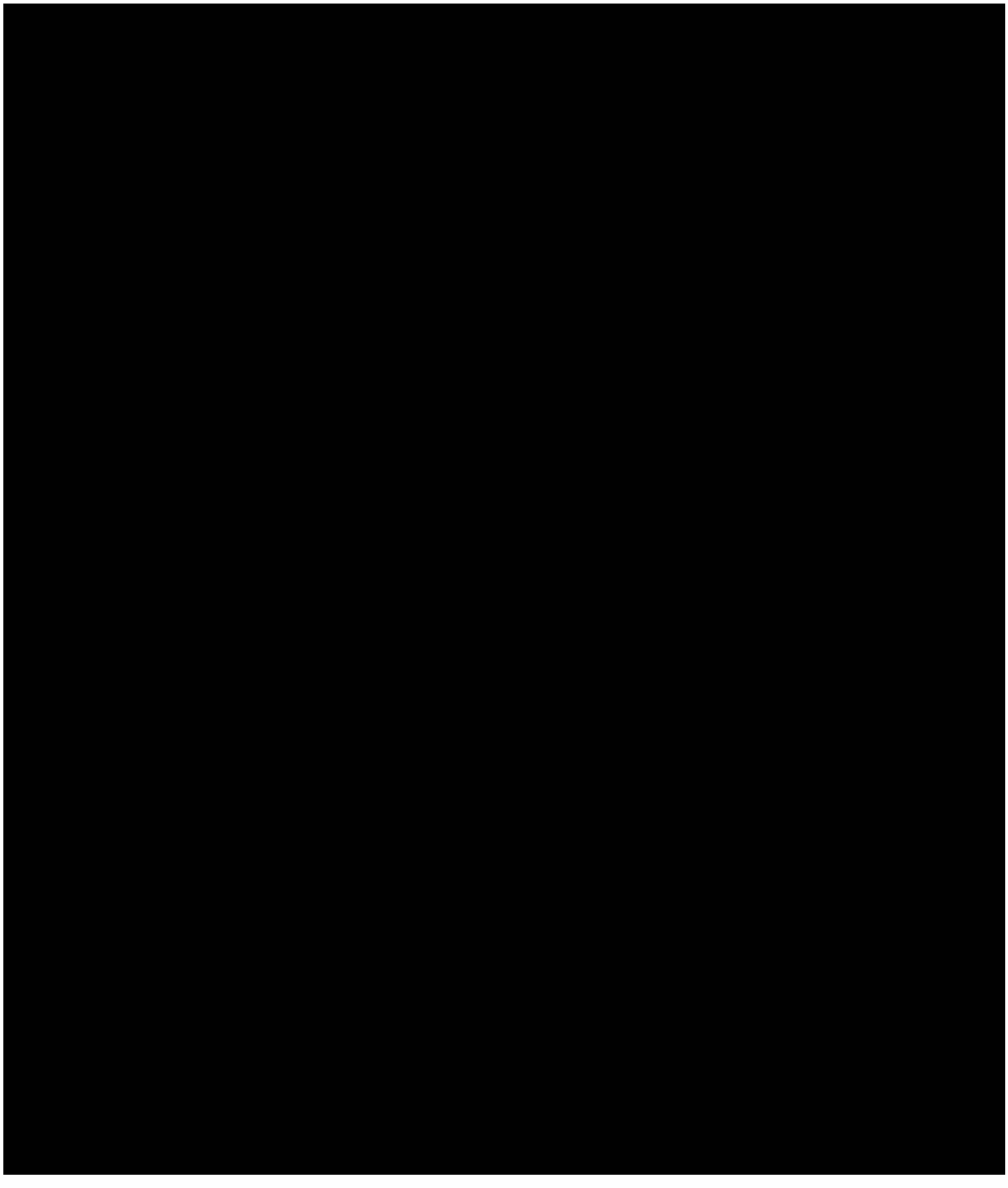
Mechanical systems design will incorporate concepts geared toward providing cost effective, energy saving and sustainable systems. Systems design will include use of variable frequency drives, economizers and controls with the capability of optimizing performance. High efficiency equipment, to meet or exceed the requirement by code will be provided to assist the overall design in achieving compliance with the New York Energy Code, as well as 20% reduction in energy usage when compared to ASHRAE 90.1-2007 baseline model and to achieve LEED Silver Certification.

[redacted]

equipment monitoring and control, and complete energy management system and subsystems. Energy saving control schemes shall be incorporated into the design including demand controlled ventilation, transfer of casino ventilation to kitchens for make-up air and night setback to shut down equipment when areas of the facility are not in use. [redacted]

[redacted]

TIOGA DOWNS Casino Racing & Entertainment



Tioga Downs Works For The Southern Tier