



Environmental, Planning, and Engineering Consultants

34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

Memorandum

To: The Town of Cortlandt Planning Board
From: Marissa Tarallo, P.E., PTOE and Anthony Russo
Date: September 5, 2019
Re: Gas Land – Review of Response to Comment Letter (June 14, 2019)
cc: Michael Preziosi, P.E. and Chris Kehoe, AICP

AKRF has reviewed the Response to Comments letter dated August 27, 2019 prepared by Maser Consulting P.A for the Gas Land project.

Based on our review of the submitted materials, AKRF provides conditional approval of the findings of the TIS analysis. There are several options for improvement measures discussed throughout the TIS which will require NYSDOT approval. As such, it is recommended that a meeting be conducted with NYSDOT to determine the preferred improvement measures to be presented in a revised TIS.

In addition, the following items should be included in a revised TIS and provided to the Town for confirmation.

1. The discussion of the analysis results and summary/conclusion of the TIS should indicate that while the northbound left-turn movement and southbound approach at the intersection of Route 6 and Bear Mountain Parkway westbound on/off-ramps/Sinclair gas station currently operate at poor levels of service during all peak periods, with the Proposed Project these significant impacts would be unmitigated without the installation of a traffic signal.
2. There are discrepancies between the proposed striping at the intersection of Route 6 and the Bear Mountain Parkway eastbound ramp/site driveway. The site plan shows three exclusive lanes (left-turn, through, right-turn) exiting the site. However, the capacity analysis analyzes either a left-turn, and shared through/right-turn configuration or a left-turn, shared left-turn/through, and right-turn configuration. In addition, the southbound Bear Mountain Parkway ramp approach is striped as a left-turn only and right-turn only lane, however there are through movements proposed to the gas station.
3. It should be noted that if dual left-turns are proposed out of either the site driveway, or from the off-ramp as discussed as potential improvements in the TIS, split phasing would be necessary.
4. A truck turn analysis should be conducted showing the southbound and northbound left-turns occurring concurrently as would be the case with the potential removal of split phasing. In addition,

if a dual left-turn is desired out of the site driveway, a truck turn analysis should be conducted to confirm the movements can occur concurrently with the proposed site driveway geometry.

5. There are discrepancies between the NYSDOT signal timing plan and the Synchro inputs at the intersection of Jacobs Hill Road and Route 6. Please confirm the offsets for all peak hours. In addition, there should be no recall for the southbound Jacobs Plaza approach. It should be noted that these revisions do not affect the findings of the report.
6. The proposed striping and crosswalks shown on the conceptual improvement plans should be included in the revised site plans. In addition, the sidewalk and crosswalk across the entrance only right-turn driveway should be parallel to Route 6 and located directly adjacent to the roadway to provide better sight distance of crossing pedestrians to motorists. Truck turning diagrams for all feasible movements to/from the site as well as within the site for fueling trucks/refuse should be provided with the revised site plans.

In addition, AKRF defers to the Town and NYSDOT on the following items:

7. The extension of the Route 6 ATCS system to include the intersections of Route 6 with Locust Avenue, the Bear Mountain Parkway eastbound ramps/site driveway and Jacobs Hill Road/Parkway Drive in order to provide one continuous ATCS system.
8. The inclusion of three driveways to access the site, two of which are located in close proximity along Route 6. The site driveways provide optimum flexibility and access to the site for various vehicles, however, does not align with NYSDOT's access management initiative.
9. The use of Synchro Percentile Delay Methodology to evaluate the existing signalized intersections and the proposed improvements in the study area. Synchro Percentile Delay Methodology is designed to model coordination and actuation in detail and is therefore recommended as actuation and/or coordination improvements are proposed.