

To: Kim Townsend  
From: Jim Napoli  
CC: Steve Grogg  
Joe Perini  
  
Date: 5/28/2014  
Re: Live NY Orange County – Off-Site Improvements

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We had a conversation today with Steve Grogg of McLaren Engineering Group regarding potential Off-Site Improvements required for the development of this project. Based on our discussion, a summary potential line items of cost is as follows:

**1. Widening of 208 to accommodate left turning lanes**

Steve is planning to have some preliminary sketches ready by the end of this week. Based on the sketches, we can begin to develop some costs.

**2. Overhead Utility Relocations along 208**

Due to the widening of 208, it will be necessary to deal with the existing utility poles. It is believed that the poles carry primary and secondary electrical service (O&R), telephone (Verizon), and cable lines (Comcast is listed online as serving area). The poles and related utilities may be addressed by either:

- a) Relocating the poles and maintaining overhead service.
- b) Eliminate the poles and relocate the utilities underground.

The cost of a) will be significantly less than b). In either case, the cost of relocation will be determined by the utility company. It is suggested that either GSA or McLaren engage the appropriate utilities to discuss this issue. GSA is currently working with O & R for electrical service to the site, so they may be best to advance the discussions regarding the electrical relocations.

**3. Gas main relocation**

Will require cost input from the gas provider. The main is currently in shoulder and will be under pavement with the anticipated road widening.

**4. Water main relocation**

It is believed that the water main along 208 runs through the current driving range. It is anticipated that fill will be required in this area as part of the

grading plan and road widening. It may be necessary to raise and/or relocate the water main to allow the fill to be placed and not have excessive cover.

**5. Traffic Signalization at the site entry**

Along with the 208 improvements it is anticipated that the entry to the site be signalized.

**6. Signal at Museum Village Drive and 208**

Pending further traffic review it may be necessary to signalize this intersection.

**7. Interchange modifications at 208/17**

It is anticipated that the addition of turning lanes will be required for southbound traffic at both ramp terminus.

**8. The approval process may require other offsite intersection improvements.**

It is suggested that an additional contingency dollar amount be carried at this time.

**9. Sewage pump station**

Onsite Sewage Pump Station (to be dedicated to the public utility) to transfer sewage to the existing force main in 208.

**10. Water Service**

The water consumption required for the project necessitates construction of 2 or 3 wells with water treatment, interconnection to the municipal system, and appurtenant pumping. An onsite storage tank for domestic and fire (250-300k domestic plus fire (180K+, 1500 gpm for 2 hours) will be required. Use 400K to 500K gallon tank for estimating purposes.

Steve anticipates that he will have some further design development done by the end of this week so that we can begin to estimate the costs of these improvements. This work will also include some spot elevations, based on which we will be able to calculate earthwork volumes.