CHEMUNG COUNTY STORMWATER COALITION

851 Chemung Street
Horseheads, New York 14845

September 12, 2022

Mr. Greg Larnard, Code Enforcement Officer
Town of Horseheads Code Enforcement Department
150 Wygant Road
Horseheads, New York 14845

Re: 607 Pro Sports Complex, LLC
61 Philo Road, Horseheads, New York
Review of Stormwater Management Plan

Mr. Larnard:

I have completed a review of the following submitted information for the above-referenced project regarding the Stormwater Pollution Prevention Plan (SWPPP) and stormwater management system design for that project.

- Stormwater Pollution Prevention Plan for 607 Pro Sports Complex, Stamped by a NYS Licensed Professional Engineer, Prepared by Fagan Engineers, Revision dated August 22, 2022, Received on August 23, 2022
- Project Drawings for 607 Pro Sports Complex, LLC, Not stamped by a NYS Licensed Professional Engineer, Prepared by Fagan Engineers, Revision dated August 22, 2022, Received on August 23, 2022
- Preliminary Stormwater Control Facility Maintenance Agreement (with a preliminary Stormwater Operation and Maintenance Plan), dated June 18, 2022, Received on August 23, 2022

My review comments and questions regarding the SWPPP and stormwater management system for the above-referenced project, based upon the submitted information, are as follows.

HYDROLOGY

1. Upon a recent on-site discussion with the adjacent property owner to the west of the project property, the following items were noted.

   a) The existing drainage ditch along the existing driveway at times conveys a considerable amount of stormwater to the existing depressions on the project property.

   b) The existing 12-inch diameter culvert is presently functional, although its performance is reduced by the deformation of the ends of the pipe that has reduced the open area of the pipe ends. The property owner is aware of this damage (which was caused during lawn mowing) and noted that it is planned to repair this culvert. Furthermore, the property owner noted that a diversion swale is located along the based of the hill to the west that directs flows to the existing 12-inch dia. culvert.

   Given this information, it is requested that the hydrologic analysis considers the tributary area to the ditch along the driveway and to the existing 12-inch diameter culvert.

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2. Why were the boundaries (and the associated areas) of the drainage sub-areas on the hillside to the south of the project site changed from the first submittal to the current submittal?

STORMWATER MANAGEMENT, COLLECTION & CONVEYANCE

1. Details for the proposed rock outlet protection should be provided on the plans.

2. Details for the rock protection for the spillway (from the forebay to the infiltration basin) should be provided on the plans. Is the rock protection intended to extend from the spillway down the slope of the infiltration basin?

3. The proposed 6-inch dia. storm sewer that would discharge to the forebay is undersized, given that it is immediately downstream of an existing 12-inch dia. culvert and a drainage ditch from the adjacent drive. If a culvert is proposed at this location, it should be sized to accommodate peak flows from the associated watershed.

4. In regards to the proposed 4' Dia. Catch Basin Detail on Sheet C6, will the proposed Catch Basin Traps function properly within a round manhole? Are traps proposed for each of the catch basins? Will this style of catch basin work well, given the shallow nature of the proposed storm sewer?

5. In regards to the submitted storm sewer sizing calculations, it appears that junction losses were not included in the surcharged hydraulics. Also, what is the basis for utilizing a water surface elevation within the forebay of 907.03 for the 100-year storm event?

6. In regards to the proposed 300 LF (approx.) 8-inch dia. storm sewer that shall receive and convey roof runoff from the rear portion of the roof, a significant headloss is noted in the submitted calculations. Does this storm sewer need to be a larger diameter?

7. Specifics regarding the preparation of the bottom (and sides) of the proposed infiltration basin should be included on the plans. Care should be taken not to create a layer that impedes infiltration.

8. In regards to the proposed "Depression Area", the following questions are provided.

    a) Will the proposed depth of the Depression Area result in highly permeable gravel being exposed? Is additional depth warranted?

    b) Specifics regarding the preparation of the bottom of the Depression Area should be included in the plans. Care should be taken not to create a layer that impedes infiltration.

EROSION & SEDIMENT CONTROL

1. When will the proposed "Depression Area" be constructed in relation to other construction items for this project? Information regarding the proposed Depression Area should be noted in the proposed Construction Sequence.

MISCELLANEOUS

1. The existing topography on Sheets C1, C3, and C7 appears to consist of two different sets of elevation contours that are overlapped.

2. This review pertains to stormwater management. The Applicant is responsible to obtaining all necessary approvals, including those from the Town of Horseheads, the Chemung County DPW, and the Chemung County Sewer District.

OPERATION & MAINTENANCE AGREEMENT

1. A preliminary review of the preliminary Stormwater Operation & Maintenance Plan, provided on August 23, 2022, was completed. The following comments are provided.

   Stormwater Infiltration

   - It appears that a StormTech infiltration system (including an Isolater Row) is referenced in the preliminary O & M Plan, although a StormTech system is not proposed for this project.
   - In addition to the proposed Infiltration Basin, the proposed Stormwater Depression Area should be included in the O & M Plan.
   - How often is shall the Infiltration Basin and Stormwater Depression Area be cleaned and mowed? How often shall the forebay be cleaned? How will woody growth be managed? How will rodent burrowing be managed? What are the thresholds for these maintenance items?

   Maintenance of Catch Basins

   - Procedures for removal of trapped oils, gasoline, and other floatables should be provided.

   Maintenance of Diversion Berm/Diversion Ditch

   - Procedures for the maintenance of the proposed Diversion Berm/Drainage Ditch should be provided.

   Roof Drains, Downspouts, and Storm Drains

   - Proposed dry wells are included in this section, although not proposed for this project.

2. Tables should be included in the O & M Plan that shall be used to document the date of inspections, the findings of the inspections, and maintenance completed to the stormwater system. These completed tables shall be maintained by the Owner on-site and shall be made available upon request by Town of Horseheads personnel for their review.

If you have any questions regarding these comments, please do not hesitate to contact me. Furthermore, I would be happy to meet to discuss this project.

Sincerely,

Jimmie Joe Carl, P.E.

Cc: Fagan Engineers