Jacobson

September 16, 2024

Mr. James Ventres, Land Use Administrator
Town Office Building
1 Plains Road, P.O. Box 385
Moodus, Connecticut 06469

RE: Goodspeed Musicals
Opera House Renovations and Parking Lot Rehabilitation
6 Main Street
Inland Wetlands and Watercourses Permit Application
NLJA PN 0957-0066

Dear Mr. Ventres:

Our office has conducted an engineering review of design drawings and reports for the portion of the project associated with rehabilitation of the Goodspeed Opera House parking lot, located on Lumberyard Road. The application was reviewed in accordance with the engineering requirements of the East Haddam Inland Wetlands and Watercourses Regulations.

Application drawings and a technical memorandum were received at our office via email on August 26, 2024, with revised information submitted on September 12, 2024. Our review was based on the following civil engineering design documents prepared by SLR International Corporation, with offices located in Cheshire, Connecticut.

Description	Drawing	Date	Revision
Cover Sheet	-	8/13/24	-
Existing Conditions and Removals Plan	EX	8/13/24	-
Site Plan	SP	8/13/24	-
Sediment and Erosion Control Plan	SE-1	8/13/24	-
Sediment and Erosion Control Details and Specifications	SE-2	8/13/24	-
Site Details	SD-1	8/13/24	-
Site Details	SD-2	8/13/24	-
Drainage Memo	-	8/13/24	-

The following comments and recommendations are provided for consideration.

A. General

1. In general, rehabilitation of the parking lot is proposed to maintain current surface grades, with minor plus and minus grading changes to improve and formalize drainage patterns. The existing pavement will be reclaimed to a depth of 9-inches with the reclaimed material used as a base course for new bituminous concrete pavement. Any excess reclaimed material is proposed to be removed from the site.

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As noted in the drainage memo provided with the application, surface flow from the current paved parking lot drains primarily to the west towards the Connecticut River, and also to a minor extent to the north towards Succor Brook. Currently no stormwater treatment measures are provided for parking lot runoff, aside from travel over relatively short stretches of vegetated surfaces between the parking lot pavement and watercourses. The proposed plan refines parking lot grading and provides stormwater treatment measures that will allow for infiltration of parking lot runoff from frequent intensity precipitation events. These treatment measures include a central infiltration strip and a westerly infiltration strip. These infiltration measures will provide an improvement in stormwater treatment as compared to existing conditions. A formalized stormwater detention basin is not currently provided with the existing parking lot, and one is not proposed with the proposed parking lot rehabilitation, aside from the aforementioned infiltration measures. In this setting adjacent to the Connecticut River, as opposed to a setting in the upper reaches of local waterways, stormwater detention is not warranted from a hydrology/hydraulics standpoint.

B. Sheet EX – Existing Conditions and Removals Plan

1. The drawings should provide an elevation datum reference to the topographic information and date of the topographic survey.

2. A 100 ft. upland review area boundary is shown in reference to a line generally bordering the Connecticut River and Succor Brook. Information should be provided describing the reference line and if it is a normal water surface line, inland wetlands line, etc.

C. Sheet SP – Site Plan

1. The plan indicates that the existing parking lot contains 162 parking spaces and the proposed parking lot includes a 10 space reduction to 152 parking spaces. The 152 spaces include the 15 alternate parking spaces shown to the south. These 15 alternate parking spaces generally extend approximately 15 ft. to 18 ft. into a current lawn area. The application is seeking approval for the full 152 parking spaces.

2. The 152 proposed parking spaces include 6 handicap accessible parking spaces located at the northwesterly portion of the parking lot. The HC parking space dimensions shown on the site plan do not all reflect the HC parking space dimensions provided on the detail sheet. For example the third space from the east end has a width dimension of 10 ft. with no cross hatched side area. This should be clarified and revised as required.

3. Length dimensions for the proposed westerly angled parking stalls should be labeled.

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4. It is recommended that a number of proposed spot elevations be provided in corner areas of the parking stall sections to clarify grading and drainage patterns.

5. The center permeable paver strip with 18" perforated infiltration pipe is proposed with a pipe invert elevation of 4.0 and surface grade 7.5 to 8.0 +/-. Has any soil testing and groundwater elevation monitoring been performed to verify that elevation 4.0 will be above the typical groundwater elevation in this area so infiltration can be accomplished?

6. Information on height of parking lot lighting and shielding provisions for parking lot lighting should be provided to demonstrate control of off-site glare.

D. Sediment and Erosion Control Plan

1. The plan proposes to encircle the entire south, west and north sides (downslope slides) of the work area with erosion control fence, with maintenance of the same during construction.

2. For the two proposed stormwater infiltration systems to function effectively, it will be important to prevent sediment laden construction runoff from entering the infiltration strips until such time that site has been stabilized. The engineer should address how this will be accomplished.

E. Details

1. A detail for an acceptable metal beam guide rail end treatment should be provided for the end of the guide rail adjacent to the parking lot entry drive (other than a bull-nose end treatment).

Should you have any questions or require additional information, please feel free to call.

Sincerely,
NATHAN L. JACOBSON & ASSOCIATES, INC.

Brian C. Curtis, P.E.

cc: Michele M. Velez, East Haddam Public Works Director
Andrew Goralski, P.E., SLR

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