Technical Memorandum

To:	James Ventres	**From:**	Andrew Goralski, PE
Company:	East Haddam Land Use Office		**SLR International Corporation**
cc:		**Date:**	August 13, 2024
		Project No.	141.11179.00101

RE: Drainage Memo
Goodspeed Musicals Opera House Renovations and Parking Lot Rehabilitation

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This drainage memo has been prepared in support of a proposed parking lot rehabilitation located at 0 Lumberyard Road in East Haddam, Connecticut. As part of the parking lot rehabilitation, the parking lot will be brought up to code including handicap spaces and interior islands, and several improvement measures are proposed.

Stormwater Management Approach

Existing Conditions

Under existing conditions, the parking lot sheet flows toward the Connecticut River. No storm drainage structures or piping currently exist on site. The impervious parking lot area is 54,196 sq. ft.

Proposed Conditions

All existing drainage patterns for the parking lot toward the Connecticut River will be retained. Under proposed conditions, the impervious parking lot is 53,594 sq. ft. (including the pervious pavers as impervious as recommended in the Town of East Haddam zoning regulations). There is a decrease in impervious area on site, therefore ant improvements on site will be an improvement to the storm drainage flowing toward the Connecticut River.

In addition to the decrease in impervious on site, several measures are proposed to promote the infiltration of stormwater before sheet flowing into the Connecticut River. A strip of pervious pavers is proposed in the middle of the parking lot to break up the sheet flow. During smaller storms, stormwater will infiltrate through the permeable pavers and be stored in a flat 18” perforated pipe underneath. Additionally, a 3’ wide gravel strip is proposed along the outer edge of the parking lot bordering the Connecticut River to further promote infiltration. These measures will lower the amount of surface water sheet flowing into the river.

Conclusion

The decrease in impervious and the proposed measures to increase infiltration on site will result in a decrease in peak runoff rates. This will be a net positive impact to the site and the stormwater entering the Connecticut River.

Regards,

SLR International Corporation



Andrew Goralski, PE
Associate Civil Engineer