

September 6, 2024

Attention: Dr. Michael Klemens Planning & Zoning Commission Town of Salisbury 27 Main Street, P.O. Box 548 Salisbury, CT 06068

SLR Project No.: 22100.00001

RE: Comment Response Letter Third Party Engineering Review of Wake Robin Inn Redevelopment 104 & 106 Sharon Road Salisbury, CT

Dear Dr. Klemens:

SLR International Corporation (SLR) is in receipt of correspondence from Thomas D. Grimaldi, Principal Engineer, and Robert R. Hiltbrand, Principal, dated August 19, 2024, regarding the above-referenced project. We offer the following responses regarding the technical comments provided.

A. <u>Existing Conditions:</u>

- C1. All existing contour labels shall be provided on all maps.
- R1. Existing contour labels have been added to the site plans.

B. <u>Site Plan – Removal:</u>

- C1. Provide temporary dumpster locations to include temporary dumpster pads.
- R1. Temporary dumpster locations/pads have been added to the Removals Plan. Construction Entrance Detail has been revised to also note Temporary Dumpster Pad.

C. <u>Site Plan – Grading:</u>

- C1. Recommend relocating the sag point in the roadway away from the proposed culverts to provide an emergency overflow in the event of the roadway overtopping during large storm events or adding a bypass pipe, (See Drainage comments).
- R1. Culvert has been redesigned from original proposal of twin 15" reinforced concrete pipes (RCPs) to a box culvert or bridge with a clear opening of 2' H x 8' W opening to accommodate the 100-year storm as well as maintain a natural substrate bottom for environmental passage (as requested by the Town's Inland Wetlands and Watercourses Commission (IWWC).

C2. Proposed retaining walls shall require an Engineer's design. Provisions for public safety shall be provided for pedestrian travel ways as well as vehicular parking areas in close proximity to the proposed retaining walls and/or the detention basins, such as handrails and/or guiderails, respectively.

R2. Will comply. Retaining wall callouts now include, "to be designed by Licensed CT Professional Engineer."

C3. The retaining wall Design Engineer shall provide a letter (signed/sealed by a CT Licensed P.E.), which indicates that the proposed underground drainage system located behind the retaining wall has been taken into consideration as part of the wall design and will have no adverse effect on its' long-term functionality.

R3. Comment noted. Letter to be provided by the retaining wall designer Licensed CT Professional Engineer during the building permit process.

D. <u>Site Plan – Layout:</u>

C1. See comment #2 above regarding public safety.

R1. Will Comply. Comment noted.

- C2. With regard to public safety, careful consideration shall be taken into account that all proposed parking areas adjacent to the proposed detention basins may require curb stops and/or curbing.
- R2. Timber guard rail has been added to the proposed parking areas adjacent to the proposed detention basins.
- C3. Provide minimum dimensions from the proposed buildings to property lines in areas where the proposed buildings are in close proximity to the building line setbacks.
- R3. Comment acknowledged; dimensions have been added see revised site plans.
- C4. Provide the closest dimension from proposed buildings, walkways, and parking lots, to the limit of inland wetlands.
- R4. Comment acknowledged; dimensions have been added see revised site plans.
- C5. Provide the types and limits of proposed curbing.
- R5. Curbing is not proposed for the project to maintain the natural/existing character of the property. Drainage has been designed accordingly.
- C6. Provide a detail for pervious surface areas as indicated by hatch. Note: compacted processed aggregate does not constitute a pervious surface.
- R6. A detail for the pervious surface areas as indicated by hatch has been provided in the Site Details.

- C7. Provide all proposed curve radii.
- R7. Comment acknowledged, see revised site plans.

E. <u>Site Plan – Grading:</u>

- C1. Due to the small scale, the proposed contour elevation labels obscure some of the grading within the proposed walkways and roadways. To ensure that the proposed grading is completed properly, i.e. cross-slopes and crowns, we recommend providing a larger scale plan for the proposed grading.
- R1. Proposed contour labels on the Grading Plan have been made smaller for clarity.
- C2. Provide Detail(s) of proposed cross slopes and crowns for proposed roadways and/or walkways.
- R2. Roadway cross section details have been added to the Site Details.
- C3. Provide all off-site grading for Sight-Lines within State of CT and affected private properties.
- R3. All off-site grading for Sight-Lines within the State of CT right-of-way (ROW) has been provided on the Grading Plan. Driveway Entry and Exit onto Sharon Road has been revised to eliminate grading impacts to private properties. See revised plans.
- F. Site Plan Landscaping: No Comment

G. <u>Site Plan – Utilities:</u>

- C1. Grease trap(s) sizing computations and details/appurtenances shall be reviewed/approved by the Town of Salisbury WPCA.
- R1. Comment acknowledged. A note was added to the Utility plans "Grease traps will be sized according to the Town of Salisbury WPCA requirements."
- C2. Provide Grinder Pump Manifold Computations to the Town of Salisbury WPCA for review/approval.
- R2. Comment acknowledged. Computations will be provided and WPCA coordination is on-going.
- C3. The Town of Salisbury WPCA shall notify the Planning & Zoning Commission of the approvals of items #1 & #2 above, with the required conditions of approval.
- R3. Comment acknowledged.

H. <u>Phasing Plan:</u>

- C1. Label red hatch as shown.
- R1. Comment acknowledged, see revised site plans.

I. Phasing Plan Notes: No Comment

J. <u>Sediment & Erosion Control Plan:</u>

C1. Recommend extending the Sediment Filter Fence behind all areas where the Straw Wattle is shown to provide redundancy to the perimeter controls.

R1. Comment acknowledged, see revised site plans.

C2. Recommend the installation of Erosion Control Blankets in all areas which are directly upslope of basins and direct surface run-off to said basins.

R2. Comment acknowledged, see revised site plans.

C3. Recommend the installation of Erosion Control Blankets and/or Turf Reinforced Matting within all swales once topsoil and permanent seeding is installed.

R3. Comment acknowledged, see revised site plans.

- C4. Recommend the utilizations of straw wattles for the check dams within the temporary diversion berms/swales as required based upon field conditions.
- R4. Comment acknowledged, see revised Temporary Diversion Berm and Swale Detail.
- C5. Add a note to indicate that all stockpiles to remain in place for more than thirty consecutive days shall be temporary seeded.
- **R5.** Comment acknowledged, see revised Stockpile Protection Detail.
- C6. We take no exception with the sizing of the temporary sediment traps.
- R6. Comment acknowledged.

K. <u>Site Details, SD-1:</u>

- C1. Dimension joint space in the Permeable Unit Paver Detail
- R1. Joint space will be 1/4". The Permeable Unit Paver Detail has been modified to include this.

L. <u>Drainage Report:</u>

- C1. Provide the 1-Year and 5-Years storm events in the analysis and ensure that a zero increase in run-off is provided.
- R1. The 1-year and 5-year storm events have been provided in the revised Drainage Report.

- C2. On page 45 of the drainage report, "Culvert Report", confirm which storm event was utilized. The 100-Year flow shall be analyzed and a minimum of one foot of freeboard shall be provided.
 - a. Provide inlet and outlet protection.
 - b. Inlet cut-off walls shall be provided.
 - c. Provide a minimum of 1.5 feet of cover over the culverts.
- R2. Culvert has been redesigned from original proposal of twin 15" RCPs to a box culvert or bridge with a clear opening of 2' H x 8' W opening to accommodate the 100-year storm as well as maintain a natural substrate bottom for environmental passage (as requested by the Town's IWWC).
- C3. Recommend relocating the low point away from the watercourse and culverts to provide sufficient cover over the proposed culverts. Note: the current design provides no factor of safety for potential clogging of culverts.
- R3. Culvert has been redesigned from original proposal of twin 15" RCPs to a box culvert or bridge with a clear opening of 2' H x 8' W opening to accommodate the 100-year storm as well as maintain a natural substrate bottom for environmental passage (as requested by the Town's IWWC).
- C4. Culvert computations indicate the culvert pipe slopes of 0.63%, however, the Site Plan indicates 0.54%. Please verify and adjust accordingly.
- R4. Culvert has been redesigned from original proposal of twin 15" RCPs to a box culvert or bridge with a clear opening of 2' H x 8' W opening to accommodate the 100-year storm as well as maintain a natural substrate bottom for environmental passage (as requested by the Town's IWWC).
- C5. Per Site Plan-Layout sheet, it appears that pervious pavement has been utilized in the computations, however, compacted processed aggregate has a CN = 96 as there is no ROW associated with these areas to justify a CN = 91, which takes into account grass within a ROW. Compacted processed aggregate is not considered pervious in nature.
- R5. Gravel was utilized for all pervious pavement areas in the calculations. The computations have been revised to use a CN of 96 for all gravel areas under existing and proposed conditions.
- C6. Per the most recent edition of the State of CT DEEP Storm Water Quality Manual (Revised March 26, 2024), to consider exfiltration on-site, <u>a minimum of two permeability</u> tests are required from soil taken within each proposed basin where HSG C/D soils occur, of which the manual allows for the use of <u>50% of the slowest measured rate</u>.
- R6. We are in the process of obtaining additional requested samples for testing and will provide an updated report.
- C7. Provide all permeability test data for review.
- R7. Will Comply.

C8. Per the most recent edition of the State of CT DEEP Storm Water Quality Manual (Revised March 26, 2024), in areas of the proposed permeable pavement, one test pit or boring is required per 5,000 S.F. of such surface with no fewer than two test pits or borings per location.

R8. We are in the process of obtaining additional requested samples for testing and will provide an updated report.

- C9. How is the calculated water quality volume being treated within Basin 220 and the UG Infiltration System? Please note: Per the most recent edition of the State of CT DEEP Storm Water Quality Manual (Revised March 26, 2024), Pre-Treatment is required prior to stormwater entering the system if field tested permeability results are greater than 8.3 in./hr.
- R9. A riprap filter berm has been added to DET 220. The pretreatment swale leading into the basin will pre-treat surface flow from the parking lot. The field permeability test result for TP-5, which was used for UG 120 and Plunge Pool 120, is only 1.71 in/hr, therefore not meeting the threshold for required pre-treatment.
- C10. How are the roof drains for Units #6-10 and the easterly drains for the Hotel being treated?
- R10. Roof runoff is considered "clean" and does not require treatment. The roof drains for Units 6-10 and the east side of the hotel will discharge to lawn areas before reaching the receiving wetlands.

Please feel free to contact me directly at (475) 224-2252 if you should have any questions.

Regards,

SLR International Corporation

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