#### R.R. Hiltbrand Engineers & Surveyors, L.L.C.

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August 19, 2024

Mr. Larry Burcroff, Chairman Inland Wetlands Commission Dr. Michael Klemens Planning & Zoning Commission 27 Main Street P.O. Box 0548 Salisbury, CT 06068

Re: Wake Robin Inn Redevelopment 104 & 106 Sharon Road Salisbury, CT

Dear Mr. Chairman:

We have reviewed the following information provided to our firm:

- Engineering drawings entitled, "Wake Robin Inn Redevelopment, 104 & 106 Sharon Road, Salisbury, Connecticut" as submitted by SLR, Scale: As noted on plans, Dated July 29, 2024, Revised August 1, 2024, to include the following sheets:
  - a. Title Sheet, Sheet 01
  - b. Existing Conditions Plan, Sheet 02
  - c. Site Plan-Removals, Sheet 03
  - d. Site Plan-Layout, Sheet 04
  - e. Site Plan-Landscaping, Sheet 05
  - f. Site Plan-Grading, Sheet 06
  - g. Site Plan-Utilities, Sheet 07
  - h. Phasing Plan, Sheet 08
  - i. Phasing Plan Notes, Sheet 09
  - j. Sediment & Erosion Control Plan, Sheet 10

- k. Sediment & Erosion Control Notes & Details, Sheet 11
- l. Site Details, Sheet 12-17

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- 2. Drainage Report (207 Pages), Wake Robin Inn Redevelopment, 104 & 106 Sharon Road, Salisbury, Connecticut, Dated July 19, 2024, Revised August 1, 2024, Prepared by SLR International Corporation.
- 3. Soil Scientist Report (21 Pages), Wake Robin Inn Redevelopment, 104 & 106 Sharon Road, Salisbury, Connecticut, Dated July 17, 2024, Prepared by SLR International Corporation.
- 4. Application Documents, (15 pages), no date.

## **Engineering Comments**

# Existing Conditions:

1. All existing contour labels shall be provided on all maps.

## Site Plan – Removals:

1. Provide temporary dumpster locations to include temporary dumpster pads.

## Site Plan – Grading:

- 1. 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).
- 2. 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.
- 3. 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.

## Site Plan – Layout:

- 1. See comment #2 above regarding public safety.
- 2. 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.

- 3. 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.
- 4. Provide the closest dimension from proposed buildings, walkways, and parking lots, to the limit of inland wetlands.
- 5. Provide the types and limits of proposed curbing.
- 6. Provide a detail for pervious surface areas as indicated by hatch. Note: compacted processed aggregate does not constitute a pervious surface.
- 7. Provide all proposed curve radii.

#### Site Plan - Grading:

- 1. 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.
- 2. Provide Detail(s) of proposed cross slopes and crowns for proposed roadways and/or walkways.
- 3. Provide all off-site grading for Sight-Lines within State of CT and affected private properties.

#### Site Plan - Landscaping: No Comment

#### Site Plan – Utilities:

- 1. Grease trap(s) sizing computations and details/appurtenances shall be reviewed/approved by the Town of Salisbury WPCA.
- 2. Provide Grinder Pump Manifold Computations to the Town of Salisbury WPCA for review/approval.
- 3. 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.

#### Phasing Plan:

1. Label red hatch as shown.

#### Phasing Plan Notes: No comment

#### Sediment & Erosion Control Plan:

- 1. Recommend extending the Sediment Filter Fence behind all areas where the Straw Wattle is shown to provide redundancy to the perimeter controls.
- 2. Recommend the installation of Erosion Control Blankets in all areas which are directly upslope of basins and direct surface run-off to said basins.
- 3. Recommend the installation of Erosion Control Blankets and/or Turf Reinforced Matting within all swales once topsoil and permanent seeding is installed.
- 4. Recommend the utilizations of straw wattles for the check dams within the temporary diversion berms/swales as required based upon field conditions.
- 5. Add a note to indicate that all stockpiles to remain in place for more than thirty consecutive days shall be temporary seeded.
- 6. We take no exception with the sizing of the temporary sediment traps.

### Site Details, SD-1:

1. Dimension joint space in Permeable Unit Paver Detail.

## Drainage Report:

- 1. Provide the 1-Year and 5-Years storm events in the analysis and ensure that a zero increase in run-off is provided.
- 2. 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.
- 3. 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.
- 4. Culvert computations indicate the culvert pipe slopes of 0.63%, however, the Site Plan indicates 0.54%. Please verify and adjust accordingly.
- 5. 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.

- 6. 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 tests are required from soil taken</u> within each proposed basin where HSG C/D soils occur, of which the manual allows for the use of 50% of the slowest measured rate.
- 7. Provide all permeability test data for review.
- 8. 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.
- 9. 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.
- 10. How are the roof drains for Units #6-10 and the easterly drains for the Hotel being treated?

Sincerely,

Thomas D. Grimaldi Principal Engineer

Robert R. Hiltbrand Principal