Responses to comments from Boundaries review dated April 16, 2024:

The following comments and questions are based on review of the above documents:

General Comments

- 1502 Hartford-New London Turnpike appears to be the proposed access point during construction given the location of the anti-tracking pad. This property should be included in the application materials and the access route identified if that is intended to be the case. Proposed grading is also shown on 1502 Hartford-New London Turnpike and appears to be the emergency overflow location for the proposed stormwater basin. Drainage rights should be identified on the site plan since the properties may not always remain in common ownership if stormwater runoff is intended to be directed to the adjacent property.
  A temporary access drive thru 1502 Hartford-New London Turnpike has been shown on sheet 2, which will be used during construction. The lot 1502 has been added to the survey plan, sheet 1. Drainage rights will not be needed, I am connecting a new oulet structure in the water quality basin to the drainage system in Route 85, see sheet 3.
- Please provide documentation for the project file that New London Public Utilities has reviewed and approved the site plan due to its location in the public drinking water supply watershed.
  A copy of the referral letter to New London has been attached. This letter and a set of plans was emailed to Joe Lanzafame on April 24, 2024.
- Please provide the Uncas Health District approval letter for the proposed subsurface disposal system for the project file.
  - Please review the elevations of the proposed septic tank and leaching field, the septic tank is lower than the distribution box.
  - Please review the slope of the building sewer, it does not appear to comply with minimum slope requirements for a 4-inch pipe.

  Uncas Health District Conditional Approval letter is attached.
- Please provide a bond estimate for erosion controls and site restoration for evaluation per ZR Section 15.1.3.
  A bond estimate is attached.

Site Plans

- Please include the narrative and other applicable required elements for the proposed processing operation in the site plans as stated in ZR Section 4.11.11.3.2.a and 4.11.11.3.2.b. including certification of the topographic survey to T-2 or T-3 accuracy standards, spill control plan, hours of operation, etc.
  The applicable information has been added on sheet 5. The topo has been certified as T-2 on sheet 2. This is a processing facility not an excavation site, therefore test holes and quantities of excavated materials are not applicable (8,9,10,11).
- Please verify that the approximate location of off-site structures within 100 feet of the subject property lines are included on the site plans (ZR Section 17.4.8).
  The location of the existing buildings have been added for the 2 lots that have permanent structures on them, on sheet 2.
- Please confirm if any business signs are desired and add the locations to the site plan (ZR Section

17.4.13).

No signs proposed.

- Please verify the abutting property owners are identified correctly. Some of the owners appear to have changed since the date of the original survey.

  Sheet 1 has been revised to update the abutting property owners.
- Please provide an estimate of the number of employees and parking spaces required and designate an employee parking area (ZR Section 18.2.1).

  Shown on sheet 3
- Please provide additional information for the need or purpose of the driveway connection through the easement over Lot 13. It appears that the proposed access point could be problematic for the following reasons:
  - The proposed driveway crosses a swale that appears to be intended to direct runoff from Lot 13 to the stormwater basin. If the swale is still an active component of the stormwater management infrastructure for Lot 13 filling the swale would negatively impact the operation of the system and divert excess runoff into the subject property.

    A catch basin has been added to collect the small amount of runoff from the swale that runs along the outside of the existing drive. There are curbs on the drive, therefore runoff from the paved areas on the adjacent drive are collected in a separate catch basin system in the drive, as shown on sheet 3. There is about 0.3 acres draining to the new catch basin.
  - The angle of intersection between the proposed driveway and existing driveway is approximately 25-degrees and may negatively impact the sight line of exiting vehicles since there is no stop control on the existing driveway at the proposed intersection.

    The radius and the orientation has been modified. A stop sign and stop bar has been added on sheet 3.
  - Given the public nature of the use of Lot 13 (Supercharged Racing) it seems that inadvertent access to the subject property, especially after normal operating hours, could be a risk given the shared driveway entrance.

    A sign has been added at the entrance to deter the entrance. A gate will be added if this is an issue.
  - The 226 contour and some of the proposed pavement extends outside the limits of the easement.

    The grading and orientation has been modified to be within the easement.
- Please show the location of the proposed or feasible electrical connection.

  Phase II, when the office goes in, underground electrical will be installed from Sachatello Industrial Drive. This is shown on sheet 3
- Please provide information on proposed site lighting and a photometrics plan if lighting is proposed.

  No site lighting is proposed.
- The proposed curtain drain discharges directly to the Town of Montville's drainage easement. Please confirm with the Department of Public Works that a direct stormwater discharge to the Town's stormwater basin is acceptable

  The curtain drain outlet has been relocated to the forebay, which the Town does not own or have an easement over.

- The proposed perimeter diversion swale directs runoff over the proposed gravel driveway prior to entering the stormwater basin. The concentrated flow across the gravel driveway surface may lead to erosion problems and could result in stormwater running down the driveway instead of across the driveway and into the stormwater basin. Please evaluate an alternate method for directing runoff to the stormwater basin.

  The gravel drive and access to Route 85, is to be installed in phase II. Also in Phase II, the plans have been revised to show a pipe and flared end units, to transport the runoff in the swale, under the drive, and to the forebay. It has been noted on sheet 3, that in phase I the vegetated swale will extend to the forebay.
- The Water Quality Basin is proposed to be used as a temporary sediment trap during construction. The Stormwater Quality Manual recommends not using infiltration basins as temporary sediment traps due to the negative impact of construction equipment and sedimentation on the long-term infiltration rate. Since there is no low-level outlet from the basin and the stormwater model indicates that the basin will drain between storm events, the basin appears to be intended to operate as an infiltration basin. Please identify an alternate location for the sediment trap or incorporate procedures that will protect the long-term infiltration rate of the Water Quality Basin in accordance with the recommendations of the Stormwater Quality Manual.
  The water quality basin has not been designed as an infiltration basin. An outlet structure has been added to drain the basin to elevation 206 between storms. The basin will have a permanent pool below elevation 206.
- Pre-treatment of stormwater runoff is recommended for all primary treatment practices in the Stormwater Quality Manual. Please incorporate a sediment forebay or other pre-treatment practice to comply with this recommendation.
  A forebay has been added to provide pre-treatment.
- Please review the level spreader detail versus the elevations and notes called for on the site plan, they appear to be inconsistent.
  The detail has been revised.
- Based on the proposed grading it appears that the level spreader is intended to operate as an emergency overflow and direct excess runoff to the retention pond on 1502 Hartford-New London Turnpike. Please provide information to evaluate the excess capacity of the retention pond and the sizing of the outlet to control the flow of excess runoff to the DOT right-of-way in an emergency situation.
  As drainage outlet structure has been added which will drain the basin down to elevation 206 between storm events. The calculations have been revised to reflect this new outlet structure. The level spreader is an emergency overflow only and is directed towards the drainage system in Route 85 not the pond on 1502 Hartford- New London Turnpike.
- The Water Quality Basin embankment should have a top width of 8 feet to comply with the Connecticut Guidelines for Soil Erosion and Sediment Control.
  The embankment has been revised to provide the 8 foot width.

<u>Stormwater Management Report</u>

- The proposed bottom of the Water Quality Basin (elevation 204) is below the elevation of the wetland system on site and below the elevation of the retention pond on the adjacent property which is noted on the site plan as having a water level that obscures topography below elevation 208. The nearest test holes to the Water Quality Basin indicate a restrictive layer between 21 inches and 24 inches below former existing grades with groundwater encountered in each hole at

a depth of between 67 inches and 84 inches below former existing grades. Based on the above factors it appears that the Water Quality Basin may not drain (infiltrate) between storm events. The stormwater modeling results indicate that there will be no discharge of stormwater from the stormwater basin because the basin is modeled as empty at the beginning of each storm event. Please provide additional information regarding how the Water Quality Basin will drain between storm events.

The proposed water quality basin will drain down to 206 between storm events, with the addition of the new outlet structure. The drainage calculations have been revised to include the new outlet sturcure. The calculations have also been revised to assume the forebay and water quality basin, are all full up to elevation 206 when the storm event commences.

- The runoff coefficients for both pre-development and post-development conditions are identified as 0.2. This does not appear to reflect the post-development conditions since the majority of the property will be a compacted gravel surface. Please review and update the stormwater modeling to reflect the proposed surface conditions.

  In the past the project site has been used by Lombardi Excavaton as a temporary stockpile area, during construction on both 1 and 2 Sachatello Industrial drive. Therefore, it has already become very well compacted. The stormwater model has been revised to use a runoof coefficient of 0.3 for the existing conditions and of 0.8 for the proposed conditions.

- The time of concentration for Drainage Area 2 increases from 9 minutes under pre-development conditions to 22 minutes under post-development conditions even though the size of Drainage Area 2 is reduced as a result of the proposed grading. Time of concentration flow paths are not shown on the drainage plans. Please add the time of concentration flow paths to the Drainage Area Plans and confirm the length of time for each scenario.

  The 22 minutes Tc was an error. The Drainage are 2, post development Tc has been revised to 7 minutes.

- The Water Quality Volume calculation is based on an impervious area of 2,133 square feet. Section 7.4 of the Connecticut Stormwater Quality Manual includes gravel roads in its definition of impervious cover. Since the site is intended to be a material processing facility and no areas of proposed vegetative cover are indicated on the site plan it could be assumed that the operating area of the processing facility will consist of a compacted gravel surface and should be included in the Water Quality Volume calculation. Please update as appropriate.

  The WQV calculation has been revised to show 3.8 acres of the 4.08 acre drainage area, as impervious cover.

- Please evaluate the velocity and freeboard in the perimeter swale to confirm that the discharge does not exceed the allowable velocity for a vegetated surface and that adequate freeboard is maintained during the design storm.

  Calculations have been provided in the revised report, for the vegetated swale.