

June 12, 2026

Mark Arienti

Town of Windham – Town Engineer
8 School Road
Windham, ME 04062

**Subject: Windham Washville Car Wash
770 Roosevelt Trail – Windham, ME
Request for Ability to Serve**

Dear Mark:

On behalf of **GR Development, LLC** we would like to verify the Town of Windham’s ability to provide sewer service capacity for an approximate 5,970-square-foot car wash building located on Tandberg & Roosevelt Trail in Windham, Maine. Along with the Washville Car Wash Development, we would like to verify the Town of Windham’s ability to provide sewer service capacity for future developments located on the site although there are no specific plans at this time. A location map is included with this letter for reference. The Applicant is pursuing approval for a Major Site Plan Review Application from the Town of Windham for this development.

ANTICIPATED FLOWS

The anticipated peak design flow for the car wash is based off the water recycling system that was designed for the project. Please see the Water and Wastewater Projections and Treatment System Narrative provided by Washville Car Wash attached. The design flow below includes the future development projects located on the site.

Use	Design Flow (GPD)
Washville Car Wash	10,450
Other Development	12,000
Total	22,450

EXISTING AND PROPOSED SERVICE

Public sewer service is available via the Shaw’s access road located along the westerly property boundary. It is anticipated that the existing public sewer service will be used to service the proposed development. A location map has been provided with this letter.

It is anticipated that the Washville Car Wash will have a water recycling system designed to reduce potable water usage, minimize wastewater discharge, and maintain sanitary wash conditions through physical separation and advanced oxidation treatment. The general process of the water recycling system includes an initial bar screening and trash collection, a primary sedimentation tank, a secondary sedimentation tank, a tertiary treatment tank, and an oil/water separator. More details regarding the water recycling system can be found in



STRUCTURAL



FALL PROTECTION
SAFETY



TRANSPORTATION



SITE DESIGN



SURVEY



WATER
RESOURCES



TECHNOLOGY
& INNOVATION

Attachment 2 – Water and Wastewater Projections and Treatment System, provided by Washville Car Wash. All supplies and chemicals utilized for the car wash are environmentally friendly and appropriate for car wash applications. Those chemicals include:

- Blue Coral AHS Wheel Cleaner
- Blair Ceramic Shine Plus Graphene
- Clean Touch Blue Foam Low pH Detergent
- Clean Touch Clear Coat Protectant
- NCS Ultra Concentrate Ultra Presoak 222
- Blair Ceramics, Ceramic Shine
- Mast Solutions Total Tire Shine
- Clean Touch Red Foam Low pH Detergent
- Proline Revenge Bug Dissolver & Degreaser
- Topline Essence Low pH Presoak & Foamed
- Proline Performance Hi pH Wheel & Tire Cleaner
- Ultraflex Carnauga Wax
- Topline Outreach Presoak

We would like to confirm the size and location of the existing sewer main in Shaw's access road and any existing sewer service stubs or mains that may extend into the project site.

CLOSURE

We are writing to request a letter indicating the ability of the Town of Windham's ability to serve this project. Specifically, our office is interested in a letter from you indicating the following:

- The ability of the Town of Windham's facilities to serve the project
- Any other factors which may affect the sanitary sewer to the site.
- Any connection service or impact fees.

If you have any questions on the information submitted, please contact our office.

Regards,

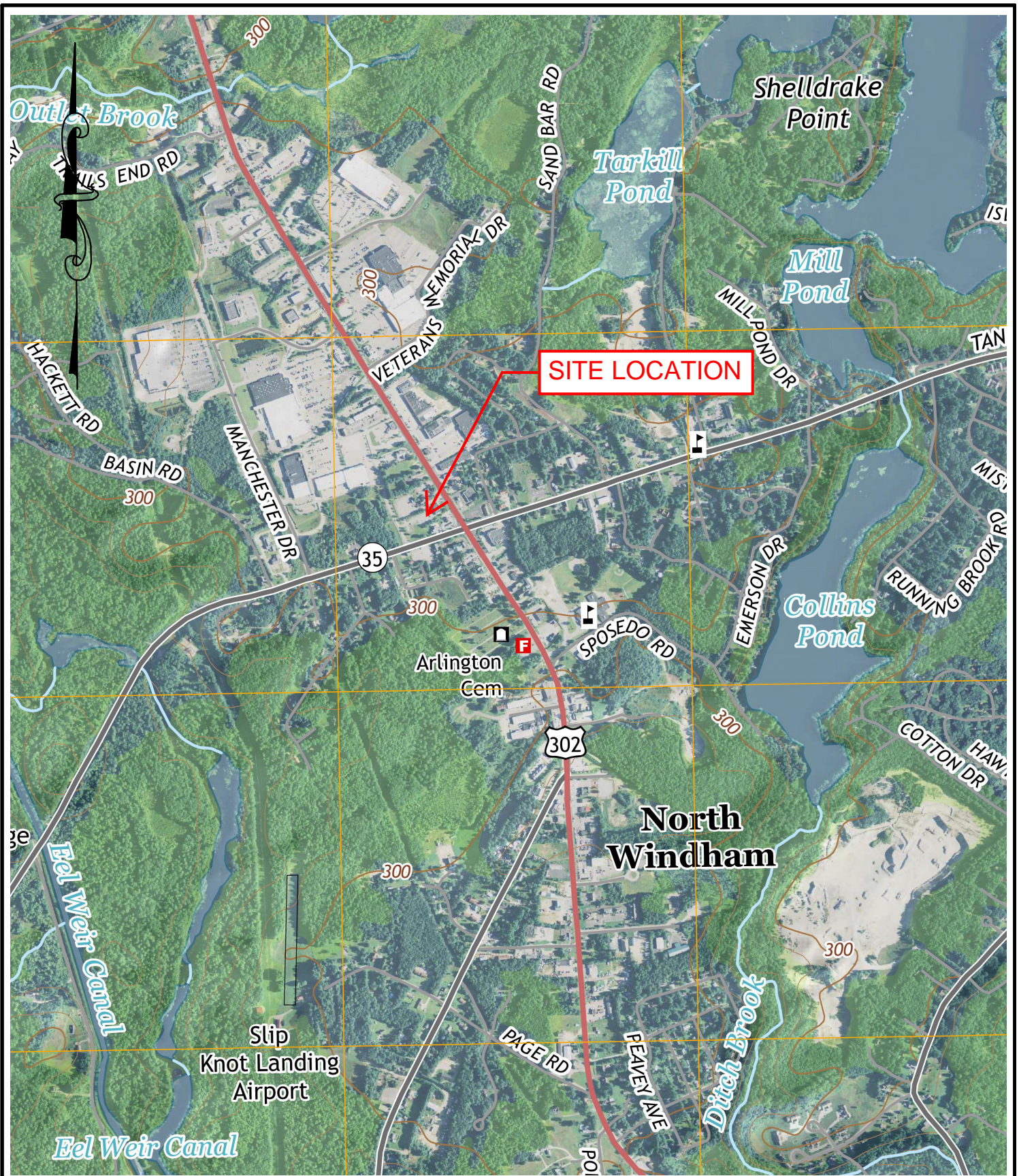
GORRILL PALMER



Douglas Reynolds, PE
Project Manager
Phone: 207-772-2515
dreynolds@gorrillpalmer.com

Attachments: Location Map
Water and Wastewater Projections and Treatment System

ATTACHMENT 1
LOCATION MAP



U.S.G.S. Location Map

Washville, Windham, Maine

North Windham Quadrangle, Maine-Cumberland Co. 7.5 Minute Series (Topographic)

Design: SRD	Date: JUNE 2026
Draft: SRD	Job No.:
Checked: DER	Scale: None
File Name: Windham Washville Location Map.dwg	



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Figure

1

ATTACHMENT 2

Water and Wastewater Projections and Treatment System

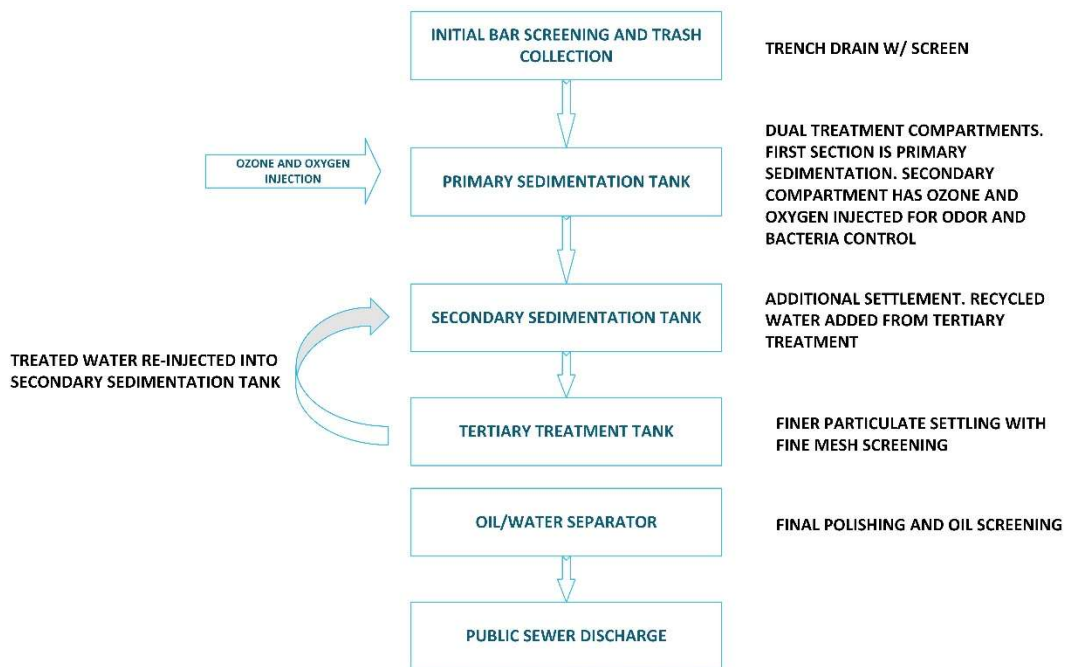


Car Wash Reclamation and Treatment System
Windham Washville Car Wash
770 Roosevelt Trail – Windham, ME
6/5/26

	Water Demand (GPD avg)	Wastewater (GPD avg)
Washville Car Wash	11,000	10,450
Other Development	12,000	12,000
Total	23,000	22,450

The Washville Car Wash water recycling system is designed to reduce potable water usage, minimize wastewater discharge, and maintain sanitary wash conditions through physical separation and advanced oxidation treatment.

The water recycling system operates as a multi-stage treatment process incorporating sedimentation, oxygenation, and ozone disinfection. Treated water is supplemental with potable water to ensure vehicle finish quality and compliance with health standards. The general process is provided below.



PROCESS DESCRIPTION

The treatment system is designed to capture trash and sediment to allow for the efficient water system treatment and reuse in an environmentally appropriate manner.

Stage 1 - Initial Bar Screening. Wash water generated from vehicle cleaning operations is collected via trench drains and floor drains located within the wash bays. The water is directed to a sump equipped with bar and mesh screens. This collection sump is subject to daily visual inspection and cleaned as necessary. At this stage, large debris and visible contaminants are removed; however, finer particles and dissolved solids may remain.

Stages 2 to 4 Sedimentation, Odor, and Bacteria Control. The collected wash water enters a series of sedimentation tanks designed to reduce suspended solids and settleable materials. These tanks remove sand, grit, road debris, and other particulate matter through gravity separation.

- Tanks are sized to provide adequate hydraulic retention time.
- Settled solids accumulate as sludge and are removed periodically for proper disposal in accordance with local waste regulations.
- This step reduces turbidity and protects downstream treatment components.

Stage 2: Primary Treatment. Following initial screening, water enters the two-compartment treatment tank where solids are allowed to settle in the first compartment. The effluent then passes through a baffle system into a secondary compartment, where ozone and oxygen are injected prior to conveyance to the Secondary Treatment Tank.

Odor and microbial control are achieved through the combined application of dissolved oxygen and ozone treatment. The Oxygen (O₂) and Ozone (O₃) Injection occur in the second compartment in the Primary Sedimentation Tank.

Oxygen prevents anaerobic conditions; inhibits anerobic bacteria associated with odor production; and reduces the formation of hydrogen sulfide and similar compounds. These improvements improve overall water quality prior to disinfection.

The Ozone treatment provides advanced oxidation and disinfection processes. Ozone is decomposed into oxygen and does not leave chemical residual in the recycled water system. The treatment provides for rapid inactivation of bacteria, viruses, and odor causing microorganisms; encourages oxidation of organic compounds; and reduces the formation of biofilm within tanks, piping, and equipment

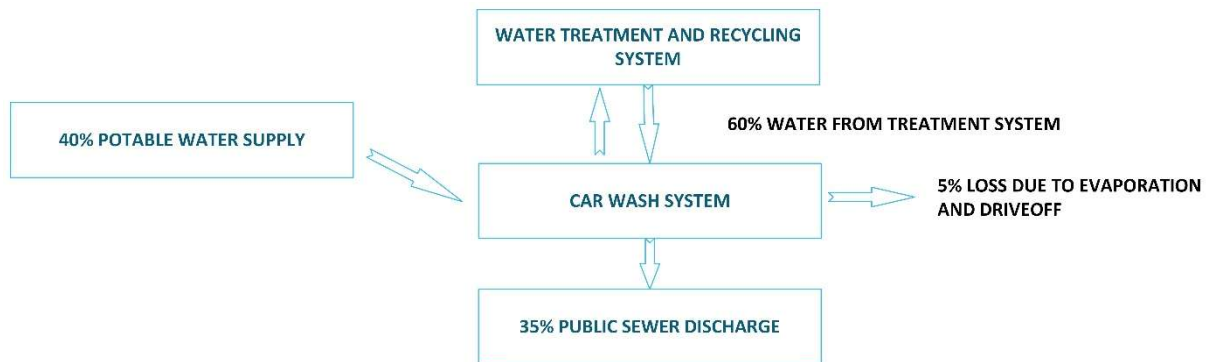
Stage 3: Secondary Treatment. The effluent from Stage 2 enters a two-chamber Secondary Treatment Tank. The first chamber provides additional settlement of suspended matter, while the second chamber is augmented with recirculated water from the Tertiary Treatment stage to maintain consistent water quality.

Stage 4: Tertiary Treatment. Clarified water from Stage 3 undergoes further treatment, including additional settlement and fine filtration to remove suspended solids greater than 5 microns. A portion of the treated water is recirculated through a cyclone and pump system back to the Secondary Treatment Tank, while the remaining treated effluent is conveyed through the oil/water separator prior to final discharge to the sewer system.

Stage 5: Oil/Water Separation. All treated water not recirculated within the system passes through an oil/water separator. This stage provides final polishing by removing any residual oils or grease that may not have been captured during upstream treatment.

WATER REUSE

Approximately 60% of the water utilized in the car wash is recycled and reused as shown below.



CAR WASH CLEANING CHEMICALS

All supplies and chemicals utilized for the car wash are environmentally friendly and appropriate for car wash applications. Those chemicals include

- Blue Coral AHS Wheel Cleaner
- Blair Ceramic Shine Plus Graphene
- Clean Touch Blue Foam Low pH Detergent
- Clean Touch Clear Coat Protectant
- NCS Ultra concentrate Ultra Presoak 222
- Blair Ceramics, Ceramic Shine
- Mast Solutions Total Tire Shine
- Clean Touch Red Foam Low pH Detergent
- Proline Revenge Bug Dissolver & Degreaser
- Topline Essence Low pH Presoak & Foamed
- Proline Performance Hi pH Wheel & Tire Cleaner
- Ultraflex Carnauga Wax
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TREATMENT SYSTEM MAINTENANCE

The treatment and recycling system requires routine inspection, cleaning, and servicing to ensure continuous and efficient operation. Maintenance tasks are carried out on a daily, weekly, and annual basis as outlined in Table 1.

Table 1 – Maintenance Standard Operating Procedures (1)

	Daily	Weekly	Monthly	Quarterly	Annual
Sump and Screens: Visually inspect bar and mesh screens in the collection sump; remove debris and trash as necessary.	X	X	X	X	X
System Walk-Through: Conduct a general inspection of tanks, pumps, and piping for leaks, abnormal noise, or equipment malfunction.	X	X	X	X	X
Effluent Quality Check: Verify that treated water is clear and free from visible contaminants before reuse.	X	X	X	X	X
Baffles and Settlement Chambers: Inspect for accumulation of solids; remove settled material as needed to maintain proper flow.		X	X	X	X
Ozone/Oxygen Injection System: Confirm operation and inspect diffusers for clogging or scaling.		X	X	X	X
Cyclone and Pump System: Check pump performance, flow rates, and clean strainer baskets.		X	X	X	X
Secondary and Tertiary Tanks: Measure sludge levels and remove excess accumulation.			X	X	X
Oil/Water Separator: Inspect and clean chamber surfaces; remove oil/grease as required.			X	X	X
Instrumentation and Controls: Test alarms, sensors, and flow meters to ensure proper operation.			X	X	X
Comprehensive Tank Cleaning: Drain and clean compartments as necessary to remove settled solids and biofilm.				X	X
Pumps and Motors: Inspect seals, bearings, and lubrication points; replace or service components as required.				X	X
Ozone Generator and Oxygen Feed: Perform functional testing and replace consumables (filters, diffusers) as recommended by manufacturer.				X	X
System Shut-Down and Inspection: Conduct a full inspection of all tanks, baffles, pumps, and separator units.					X
Manufacturer Service Review: Schedule a service inspection by an authorized Velocity Water Works technician for preventive maintenance and system upgrades.					X
Calibration of Sensors and Controls: Calibrate flow meters, level sensors and injection equipment.					X

- (1) Record Keeping. All inspections, maintenance activities, and corrective actions must be documented in a maintenance log. Records should include (a) Date and time of inspection/maintenance, (b) Name of employee/contractor performing task, (c) Observations, corrective measures taken, and parts replaced, and (d) Sign-off by supervisor (for compliance tracking).