NORTHEAST ENGINEERS & CONSULTANTS, INC.

STORMWATER SYSTEM
OPERATIONS AND MAINTENANCE PLAN

"Valley Crossing"

Assessor's Map 107NE, Lot 402B
0 Valley Road
Middletown, RI

Prepared For
James H. Clausen Revocable Trust
7067 Villa Estelle Drive
Orlando, FL 32819

Rev. August 2022

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Civil ● Site ● Land Development ● Waterfront ● Coastal Engineering ● Environmental ● Geotechnical ● Structural ● Transportation ● Surveying

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1.0 INTRODUCTION

1.1 SITE INFORMATION FOR VALLEY CROSSING

City / Town:	Middletown, Rhode Island
Adjacent Roadways:	Valley Road (RI State Roadway)
Lot(s) identification:	A.P. 107NE Lot 402B
Zoning District:	LBA (Limited Business – Traffic Sensitive)
Site Use:	Medical Office (commercial)
Site Area:	2.25 Acres
FEMA Zone and Map:	Zone "X (Panel 44005C0093J)

2.0 ADMINISTRATION

2.1 RESPONSIBLE PARTIES

The Owner and party responsible for the operation and maintenance of the Stormwater Management System shall be:

James H. Clausen Revocable Trust
7067 Villa Estelle Drive
Orlando, FL 32819

The Owner intends that this Plan shall run with the land and be binding upon the Owner and the Owner's successors and assigns. A copy of this Plan shall be provided to any future property owners. This Section shall be amended as necessary.

Easements across the stormwater system to the Town of Middletown may be provided upon request. The Owner is solely responsible for all other operation and maintenance. Refer to any stormwater maintenance agreements in Appendix C which may be applicable for this site.

2.2 O&M EXPENSES

It is anticipated that the Operation and Maintenance budget will be incorporated into the operating budget of the property. The stormwater facilities will require continual maintenance to operate at peak efficiency. It is anticipated that small equipment and hand labor will typically be required to operate and maintain the system. A vacuum truck will be required for routine maintenance. Operation and Maintenance activities and equipment will be funded by the Owner.

3.0 GENERAL INSPECTION AND MAINTENANCE

This section contains a general overview of O&M guidelines and documentation procedures. Specific guidance is described in Section 5.0. Appendix A contains applicable Operation, Maintenance and Management Inspection Checklists. Appendix B contains a location map of stormwater features to be maintained and details of the devices which may be referenced during maintenance should any reconstructive measures be undertaken.

3.1 MAINTENANCE INSPECTION SCHEDULE

All stormwater management facilities shall be periodically inspected by a qualified individual. Inspections shall be conducted by a registered professional engineer where the structural or hydraulic integrity of the system is in question or as noted on the inspection checklists. Inspections shall follow the specific guidelines found in the checklists included in Appendix A. Regular inspections of the stormwater system shall be completed at the following intervals:

1. Biannual basis (twice per year)
2. After storm events greater to or equal to a 1-year, 24-hour Type III storm (2.8 inches of precipitation with 24-hours). The following website may be consulted to determine total rainfall for recent storm events in order to determine if an inspection is warranted:

   https://www.wunderground.com/weather/us/ri/middletown/02842

Conditions may warrant additional inspections throughout the year in order to determine the cause of failure conditions exhibited by the stormwater system. It is the responsibility of the Owner and his qualified inspectors to determine if additional inspections are necessary. Timing of such inspections may be:

1. Pre-storm
2. During a storm event

3.2 TYPES OF MAINTENANCE

Maintenance activities are described in three basic categories based upon the magnitude and type of the maintenance activities performed. A description of each category follows.

3.2.1 PREVENTATIVE MAINTENANCE

The most effective way to maintain the stormwater system is to prevent the pollutants from entering them in the first place. Common pollutants include sediment, trash and debris, chemicals, runoff from stored materials, and illicit discharges. The Owner shall implement the following measures to address these potential contaminants. **These activities do not correspond to any maintenance checklists provided in the following sections and should be considered "Good Housekeeping" measures intended to reduce the potential for costly maintenance in the future.**

- Educate employees of how their actions impact water quality, and how they can help reduce maintenance costs;
- Keep the property free of trash and debris;
- Ensure the proper disposal of hazardous wastes and chemicals;
- Plan landscaping care to minimize the use of fertilizers, herbicides, and pesticides. It is recommended that these materials not be kept on site when not in use;
- Sweep paved surfaces and dispose of sweepings properly. Regular sweeping can prevent or delay more costly maintenance that requires the use of more specialized equipment, such as a vacuum truck. The Owner should be aware that lax sweeping will affect stormwater components that they are ultimately responsible for;
- Be aware of automobiles leaking fluids. Use absorbents to soak up drippings – dispose of properly (refer to section 3.2.5 of this manual);
- Re-vegetate disturbed and bare areas to maintain vegetative stabilization under the direction of a qualified landscaper.

3.2.2 ROUTINE AND MINOR MAINTENANCE

Routine maintenance work to be undertaken by the Owner shall include activities normally performed throughout the year as described in the following sections. Such maintenance consists of isolated or small-scale maintenance and correcting minor operational problems. Most of this work can be completed by a small crew with hand tools, and small equipment. Routine maintenance will include parking lot vacuuming which will require a vacuum truck. **Routine maintenance activities are included in the inspection and maintenance checklists and are required according to the intervals specified in Section 3.1 above.**

3.2.3 MAJOR MAINTENANCE

This work consists of more complex maintenance/operational problems and system failures. Some of this work may require consultation with a licensed engineer and/or the Town of Middletown. This work may also require more specialized maintenance equipment, design/details, surveying, or assistance through qualified contractors and consultants. **Major maintenance activities may be required as a result of the regular inspections and will not need to be performed at standard intervals.**

3.2.4 ILLICIT DISCHARGES

The following discharges are prohibited at the site, either into the stormwater system or otherwise:

- Contaminated groundwater, unless specifically authorized by the RIDEM and the Town.
- Wastewater from washout of concrete, unless the discharge is contained and managed by appropriate control measures (applicable during any construction activities).
- Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials (applicable during any construction activities).
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance. Proper storage and spill prevention practices must be utilized at all times.
- Soaps or solvents used in vehicle and equipment washing.
- Toxic or hazardous substances from a spill or other release.

Should any illicit discharges be detected at any time, the Owner will notify the Middletown Department of Public Works immediately. In the case of extreme discharges, or at the direction of the Town, the Owner shall also notify RIDEM and RIDOT. Any and all cleanup activities shall be completed in coordination with these agencies. All recovered material following a spill of illicit materials shall be disposed of in accordance with the mandates of RIDEM.

3.2.5 SPILL PREVENTION AND CONTROL

Any chemicals and/or hazardous waste material must be stored properly and legally in covered areas, with containment systems constructed in or around the storage areas. Areas must be designated for any such material delivery and storage. All areas where potential spills can occur and their accompanying drainage points must be identified in order for prevention to be possible. The owner and operator must establish spill prevention and control measures to reduce the chance of spills, stop the source of spills, contain and clean-up spills, and dispose of materials contaminated by spills. The site manager must establish and make highly visible location(s) for the storage of spill prevention and control equipment and provide training for personnel responsible for spill prevention and control on the construction site. The following table lists specific potential sources of spills, the associated risks, and the applicable preventative measures.

Potential Source of Pollution	Risk	Preventative Measures
Oil, gasoline, or hydraulic fluid leaks from vehicles	Oil or fluid leaks entering the drainage system or polluting downstream properties	The potential for fuel or fluid leaks from vehicles on site will be minimized by regular inspection of the site for spills or evidence of contamination in paved areas. All vehicles on site will be monitored for leaks. Any petroleum products used on site will be stored in tightly sealed containers, all of which will be clearly labeled. Following any spill absorbent material will be placed over the area to collect excess fluid. The absorbent material will be replaced and disposed of properly when saturated.
Temporary site toilet facilities (during construction)	Leaks and or overflows from temporary site toilets.	The General Contractor will ensure that temporary site toilets are maintained in good working order.
Stored construction materials	Leakage of stored materials entering the drainage system and hence downstream receiving waters.	The owner will ensure that all materials stored on site are placed in suitable leak-proof containers. Materials such as cement and asphalt will be stored in covered, weatherproof facilities only. Diesel, or other fuel stored on site will be stored in approved containers, with containment areas where required. All site materials storage facilities will be clearly labeled and adequate measures will be taken to ensure that spills can be isolated within the storage area.

3.2.6 MAINTENANCE REPORTING

At the request of the Town, submittal of the required inspection forms and inspector qualifications may be provided on an annual basis. Requirements of annual reporting will be determined during the town permitting process.

4.0 LAWN, GARDEN, AND LANDSCAPE MANAGEMENT (PREVENTATIVE MAINTENANCE)

Grasses require more water and attention than alternative groundcovers, flowers, shrubs, or trees. Alternatives to turf are especially recommended for problem areas such as lawn edges, frost pockets, shady spots, steep slopes, and soggy areas.

4.1 GRASS

Grass seed is available in a wide range of cultivated varieties. The Owner should consult a landscape expert to choose the grass type that matches the site conditions, and is consistent with the Owners desired level of maintenance.

4.2 MOWING AND MANAGEMENT

To prevent insects and weed problems, the Owner should mow high, mow frequently, and keep mower blades sharp. Lawns should not be cut shorter than 2 to 3 inches, because weeds can grow more easily in short grasses. Grass can be cut lower in the spring and fall to stimulate root growth, but not shorter than 1 ½ inches.

4.3 FERTILIZATION

If fertilizing is desired, consider the following points:

- Most lawns require little or no fertilizer to remain healthy. Fertilize no more than twice a year - once in May-June, and once in September-October;
- Fertilizers are rated on their labeling by three numbers (e.g., 10-10-10 or 12-4-8), which refer to their Nitrogen (N) – Phosphorus (P) – Potassium (K) concentrations. Fertilize at a rate of no more than ½ pound of nitrogen per 1000 square feet, which can be determined by dividing 50 by the percentage of nitrogen in the fertilizer;
- Apply fertilizer carefully to avoid spreading on impervious surfaces where the nutrient can be easily washed into storm drains or directly into surface waters;
- To encourage more complete uptake, use slow-release fertilizers that is those that contain 50 percent or more water-insoluble nitrogen (WIN);
- Grass blades retain 30-40 percent of nutrients applied in fertilizers. Reduce fertilizer applications by 30 percent, or eliminate the spring application of fertilizer and leave clippings on the lawn where they will degrade and release stored nutrients back to the soil; and
- Fertilizer should not be applied when rain is expected. Not only does the rain decrease fertilizer effectiveness, it also increases the risk of surface and ground water contamination.

4.4 WEED MANAGEMENT

The Owner must decide how many weeds can be tolerated before action is taken to eradicate them. To the extent practicable, weeds should be dug or pulled out. If patches of weeds are present, they can be covered for a few days with a black plastic sheet. This process kills the weeds while leaving the grass intact. If weeds blanket a large enough area, the patch can be covered with clear plastic for several weeks, effectively "cooking" the weeds and their seeds. The bare area left behind after weeding should be reseeded to prevent weeds from growing back. As a last resort, the Owner may use chemical herbicides to spot treat weeds.

4.5 PEST MANAGEMENT

Effective pest management begins with maintenance of a healthy, vigorous lawn that is naturally disease resistant. The Owner should monitor plants for obvious damage and check for the presence of pest organisms. Learn to distinguish beneficial insects and arachnids, such as green lacewings, ladybugs, and most spiders, from ones that will damage plants.

When damage is detected or when harmful organisms are present, the Owner should determine the level of damage the plant is able to tolerate. No action should be taken if the plant can maintain growth and fertility. If controls are needed, there are a variety of low-impact pest management controls and practices to choose from, including the following:

- Visible insects can be removed by hand (with gloves or tweezers) and placed in soapy water or vegetable oil. Alternatively, insects can be sprayed off a plant with water, or in some cases vacuumed off of larger plants;
- Store-bought traps, such as species- specific, pheromone-based traps or colored sticky cards, can be used;
- Sprinkling the ground surface with abrasive diatomaceous earth can prevent infestations by soft-bodied insects and slugs. Slugs can also be trapped by falling or crawling into small cups set in the ground flush with the surface and filled with beer;
- In cases where microscopic parasites, such as bacteria and fungi, are causing damage to plants, the affected plant material can be removed and disposed of. (Pruning equipment should be disinfected with bleach to prevent spreading the disease organism);
- Small mammals and birds can be excluded using fences, netting, tree trunk guards, and, as a last resort, trapping. (In some areas trapping is illegal. Property owners should check local codes if this type of action is desired); and
- The Owner can encourage/attract beneficial organisms, such as bats, birds, green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seedhead weevils, and spiders that prey on detrimental pest species. These desirable organisms can be introduced directly or can be attracted to the area by providing food and/or habitat.

If chemical pesticides are used, the Owner should try to select the least toxic, water soluble and volatile pesticides possible. All selected pesticides should be screened for their potential to harm water resources. When possible, pesticides that pose the least risk to human health and the environment should be chosen. A list of popular pesticides, along with their uses, their toxicity to humans and wildlife, EPA's toxicity rating,

and alternatives to the listed chemicals, is available from *The Audubon Guide to Home Pesticides*, (http://www.audubon.org/bird/pesticides/).

4.6 SENSIBLE IRRIGATION

Established lawns need no more than one inch of water per week (including precipitation) to prevent dormancy in dry periods. Watering at this rate should wet soil to approximately 4-6 inches and will encourage analogous root growth. If possible, use timers to water before 9:00 a.m., preferably in the early morning to avoid evaporative loss. Use drought-resistant grasses (see "grass selection" above) and cut grass at 2-3 inches to encourage deeper rooting and heartier lawns.

5.0 ROUTINE MAINTENANCE OF STORMWATER DEVICES

5.1 INFILTRATION CHAMBERS

A subsurface infiltration system is required for the rooftop runoff of the structure. The system is intended to treat rooftop runoff while providing the required groundwater recharge for the development. Subsurface infiltration chambers allow for temporary storage and infiltration into underlying soil. Overflow outlets are to be provided at each roof downspout.

The stormwater design for this development includes the following infiltration systems:

1. Location: Under the sidewalk in front of the structure
   Size and type: 24 Stormtech SC-310 units

5.1.1 REQUIRED INFILTRATION CHAMBER MAINTENANCE

Maintenance inspections shall include the following tasks. All inspections shall be carried out using the checklist provided in Appendix A of this document:

1. Subsurface infiltration chambers shall be inspected via inspection ports or manholes to grade for the presence of sediments. Should the average depth of sediment exceed 3 inches within the inlet chambers, or at one of the inspection ports, a clean out of the system should be performed. This should be accomplished by vacuum truck.

2. Any stormwater inlet structures shall also be inspected for accumulated sediments and debris. Should accumulation exceed 50% of the structure sump, the material shall be removed and disposed of off-site at a licensed facility. Structural faults shall be repaired and outlet pipes inspected for blockage.

5.2 PERVIOUS PAVEMENT

Pervious pavement consists of a porous paved surface course that is underlain by washed, uniformly graded aggregates and filter stone, and finally a lined stone reservoir. Stormwater enters through the pores in the pavement and is stored in the voids that exist in the layer of aggregate until it can percolate through the filter stone and into the stone reservoir. Stormwater treatment is provided by the filtering stone media. Treated stormwater percolates into the native sand material below the device. A system of underdrains in the stone reservoir meters high flow stormwater out of the system.

5.2.1 REQUIRED PERVIOUS PAVEMENT MAINTENANCE

Maintenance inspections shall include the following tasks. All inspections shall be carried out using the checklists provided in Appendix A of this document:

1. Permeable pavements require regular vacuum sweeping or hosing (minimum every six months) to keep the surface from clogging.

2. The site should be inspected regularly to ensure that the paving surface drains properly after storms

3. Inspect the surface annually for deterioration or spalling. If surface needs to be repaired, ensure that it is not repaved or resealed with impermeable materials.

General maintenance activities include the following:

1. Minimize use of sand and salt in winter months.

2. Keep adjacent landscape areas well maintained and stabilized (erosion gullying quickly corrected).

3. Post signs identifying permeable pavement.

The owner is to ensure that the pervious pavement is never sealed or repaved with impervious materials. The function of the pervious pavement is critical to the drainage of the site. Should this surface ever be sealed, the parking lot would no longer drain properly.

5.3 WET SWALE

The wet swale intercepts surface runoff and convey stormwater towards water quality features or away from sensitive areas. The wet swale is located at or within the water table and is planted with wetland grasses or other plantings. The wet swale is intended to have permanent ponding areas designed to provide water quality treatment via root uptake and particle settlement.

5.3.1 REQUIRED WET SWALE MAINTENANCE

The maintenance objectives for this device include maintaining the hydraulic efficiency of the swale, minimizing invasive plants, and ensuring structural integrity. These inspections include the following:

1. The side slopes of a swale shall be inspected for erosion and gullying. Reinforce existing grass plantings if found to be deficient, erosion is present, or the channel has been compromised.

2. Sediment shall be removed from a swale when the design depth has been reduced by 25%. All material shall be disposed of in accordance with all state and local regulations.

3. Woody vegetation shall be pruned where dead and dying branches are observed, and reinforcement plantings shall be planted it 50% of the original vegetation establishes after two years.

4. Invasive plants which reduce the capacity or integrity of the swales are to be removed and disposed of.

5. If the surface of the swale becomes clogged to the point that standing water is observed on the surface 48 hours after precipitation events, the bottom shall be roto-tilled or cultivated to break up and hard packed sediments and then re-seeded / replanted.

5.4 TRENCH DRAIN

An eight-inch-wide trench drain is located at the bottom of the paved access drive. This structure has a cast iron grate and discharges to the swale along the front of the property via a 6-inch PVC pipe.

5.4.1 REQUIRED TRENCH DRAIN MAINTENANCE

Maintenance inspections shall include the following tasks. All inspections shall be carried out using the checklists provided in Appendix A of this document:

1. The bottom of the trench drain shall be inspected for the presence of debris or sediments. All material removed shall be removed with a shovel and disposed of in accordance with all applicable RIDEM regulations. Any large debris which could potentially obstruct the outflow pipe shall be removed immediately. Should excess sediments and debris be encountered, the Owner should consider more frequent sweeping.

2. The frame and grates of the trench drain shall be inspected for damage. Damage may include blockage of the grate openings, or a compromise of the safety of the device. Structural faults shall be repaired by a qualified contractor.

3. The outlet pipe shall be inspected for damage or obstruction. Any damage shall be repaired by a qualified contractor.

6.0 APPENDICES

APPENDIX A OPERATION AND MAINTENANCE CHECKLISTS

Valley Crossing
Valley Road, Middletown

Inspection Checklist for Infiltration Chambers

Minimum inspection schedule shall be bi-annual and after major storm events

Device Description:	24 Stormtech SC310 chambers
Device Location:	under sidewalk in front of building
Relevant O&M Section:	Section 5.1
Inspector's Name:	
Date of Inspection:	
Date of Last Inspection:	
Start Time:	
End time:	
Type of Inspection:	□ Biannual □ Major Storm □ Pre-Storm □ Post Storm □ Other

Specific Inspection Requirements		
Maintenance Activity	**Is Status Satisfactory?**	**Corrective Action Needed**
Inspet inlet chambers via inspection ports for presence of sediments. Sediments shall be removed via vacuum truck if depth exceeds 3-inches.	□ Yes □ No	
Inspect inlet header for presence of sediments via drain basins. Sediments shall be removed via a vaccum truck or by hand. The presence of excessive sediments shall require an inspection of upstream piping to ensure that soiltighness.	□ Yes □ No	
Inspect chambers via drain basin covers and inspection ports for structural damage or collapse.	□ Yes □ No	

Valley Crossing
Valley Road, Middletown

Specific Inspection Requirements		
Maintenance Activity	**Is Status Satisfactory?**	**Corrective Action Needed**
Should system fail to regularly drain within 48-hours after a storm, the system shall be excavated and the underying 24 inches of material replaced with ASTM-33 sand. The system shall then be replaced per the original design drawings.	□ Yes □ No	

Valley Crossing
Valley Road, Middletown

Inspection Checklist for Trench Drain

Minimum inspection schedule shall be bi-annual and after major storm events

Device Description:	8-inch wide trench drain with cast iron grate
Device Location:	Bottom of access drive near Valley Road
Relevant O&M Section:	Section 5.4
Inspector's Name:	
Date of Inspection:	
Date of Last Inspection:	
Start Time:	
End time:	
Type of Inspection:	□ Biannual □ Major Storm □ Pre-Storm □ Post Storm □ Other

Specific Inspection Requirements		
Maintenance Activity	**Is Status Satisfactory?**	**Corrective Action Needed**
The bottom of the trench drain shall be inspected for the presence of debris or sediments. All material removed shall be removed with a shovel and disposed of in accordance with all applicable RIDEM regulations. Any large debris which could potentially obstruct the outflow pipe shall be removed immediately. Should excess sediments and debris be encountered, the Owner should consider more frequent sweeping.	□ Yes □ No	
The frame and grates of the trench drain shall be inspected for damage. Damage may include blockage of the grate openings, or a compromise of the safety of the device. Structural faults shall be repaired by a qualified contractor.	□ Yes □ No	
The outlet pipe shall be inspected for damage or obstruction. Any damage shall be repaired by a qualified contractor.	□ Yes □ No	

Valley Crossing
Valley Road, Middletown

Inspection Checklist for Wet Swale

Minimum inspection schedule shall be annual and after major storm events

Device Description:	Wet infiltration swale (vegetated)
Device Location:	Downstream of abutting residences
Relevent O&M Section:	Section 5.3
Inspector's Name:	
Date of Inspection:	
Date of Last Inspection:	
Start Time:	
End time:	
Type of Inspection:	□ Aannual □ Major Storm

Specific Inspection Requirements		
Maintenance Activity	**Is Status Satisfactory?**	**Corrective Action Needed**
The side slopes of a swale shall be inspected for erosion and gullying. Reinforce existing grass plantings if found to be deficient, erosion is present, or the channel has been compromised	□ Yes □ No	
Sediment shall be removed from a swale when the design depth has been reduced by 25%. All material shall be disposed of in accordance with all state and local regulations	□ Yes □ No	
Woody vegetation shall be pruned where dead and dying branches are observed, and reinforcement plantings shall be planted it 50% of the original vegetation establishes after two years	□ Yes □ No	
Invasive plants which reduce the capacity or integrity of the swales are to be removed and disposed of	□ Yes □ No	
If the surface of the swale becomes clogged to the point that standing water is observed on the surface 48 hours after precipitation events, the bottom shall be roto-tilled or cultivated to break up and hard packed sediments and then re-seeded / replanted	□ Yes □ No	

Valley Crossing
Valley Road, Middletown

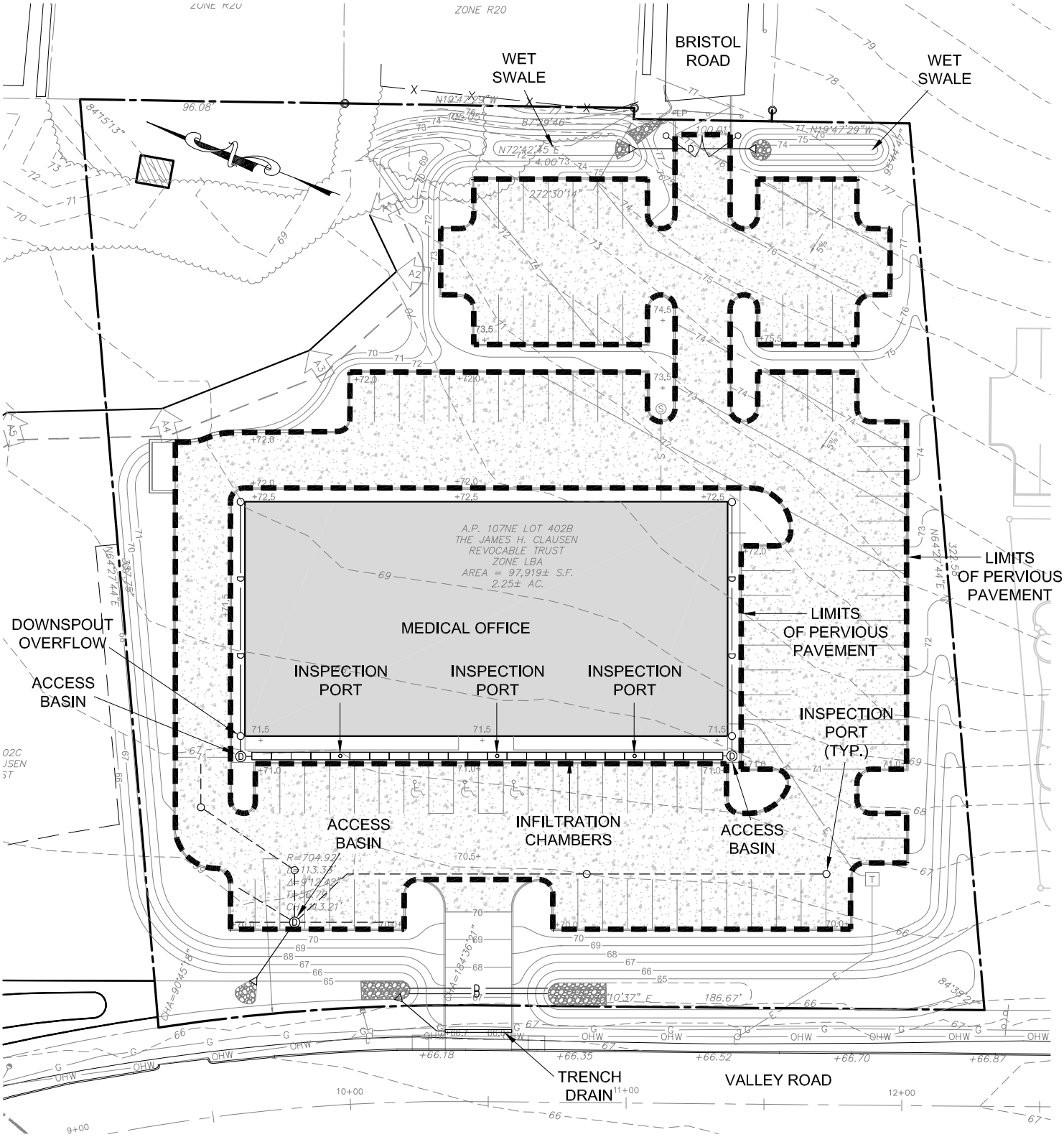
Inspection Checklist for Pervious Pavement

Minimum inspection schedule shall be bi-annual and after major storm events

Device Description:	Pervious pavemnt
Device Location:	parking lot
Relevent O&M Section:	Section 5.2
Inspector's Name:	
Date of Inspection:	
Date of Last Inspection:	
Start Time:	
End time:	
Type of Inspection:	□ Biannual □ Major Storm □ Pre-Storm □ Post Storm □ Other

Specific Inspection Requirements		
Maintenance Activity	**Is Status Satisfactory?**	**Corrective Action Needed**
Pervious pavement surfaces shall be vacuumed in order to keep the surface from clogging. Minimum vacuuming shall be twice per year. More frequent vacuuming may be required depending on traffic volume on the site.	□ Yes □ No	
Ensure that adjacent vegetated areas are stabiized and not contributing sediments to the pavement surface.	□ Yes □ No	
Inspect access bain and inspection ports for presence of sediments. Sediments shall be removed via vacuum truck if depth exceeds 3-inches.	□ Yes □ No	

APPENDIX B STORMWATER DEVICE MAP AND DRAWINGS



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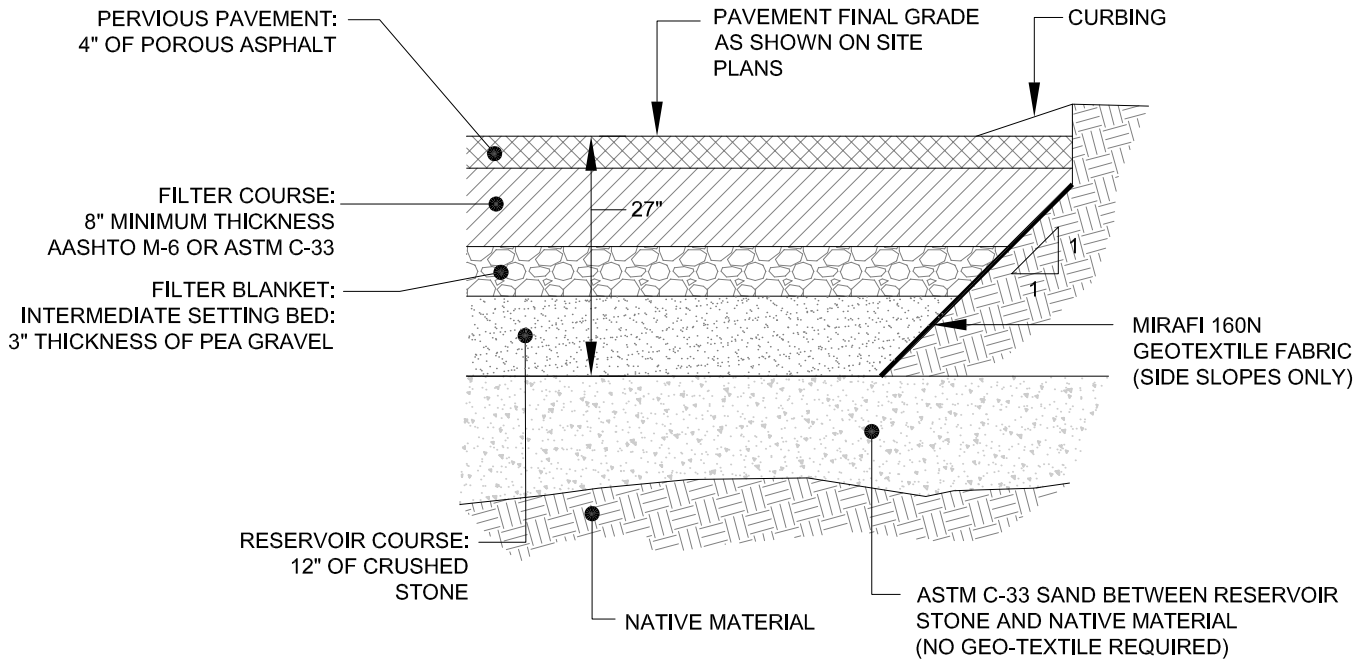
Project Title:	Drawing Title:
VALLEY CROSSING VALLEY ROAD, MIDDLETOWN, RI	STORMWATER DEVICE MAP

Issued for:	Drawing Number:	Project Number:
O&M DOCUMENT	M-1	18225.5



U.S. STANDARD SIEVE SIZE	PERCENT PASSING	
	FILTER COURSE (RIDOT M.01.02.1)	RESERVOIR COURSE (AASHTO No.3)
6"	100	100
2 1/2"	-	90-100
2"	-	35-70
1 1/2"	-	0-15
1"	-	-
3/4"	-	0-5
1/2"	-	-
3/8"	-	-
#4	75-100	-
#8	-	-
#200	0-12	-

Scale: NTS	Date: REV. 11AUG22	Designed By: JJR	Drawn By: JJR	Checked By: GES

Project Title:

VALLEY CROSSING
VALLEY ROAD, MIDDLETOWN, RI

Drawing Title:

PERVIOUS PAVEMENT

Issued for:	Drawing Number:	Project Number:
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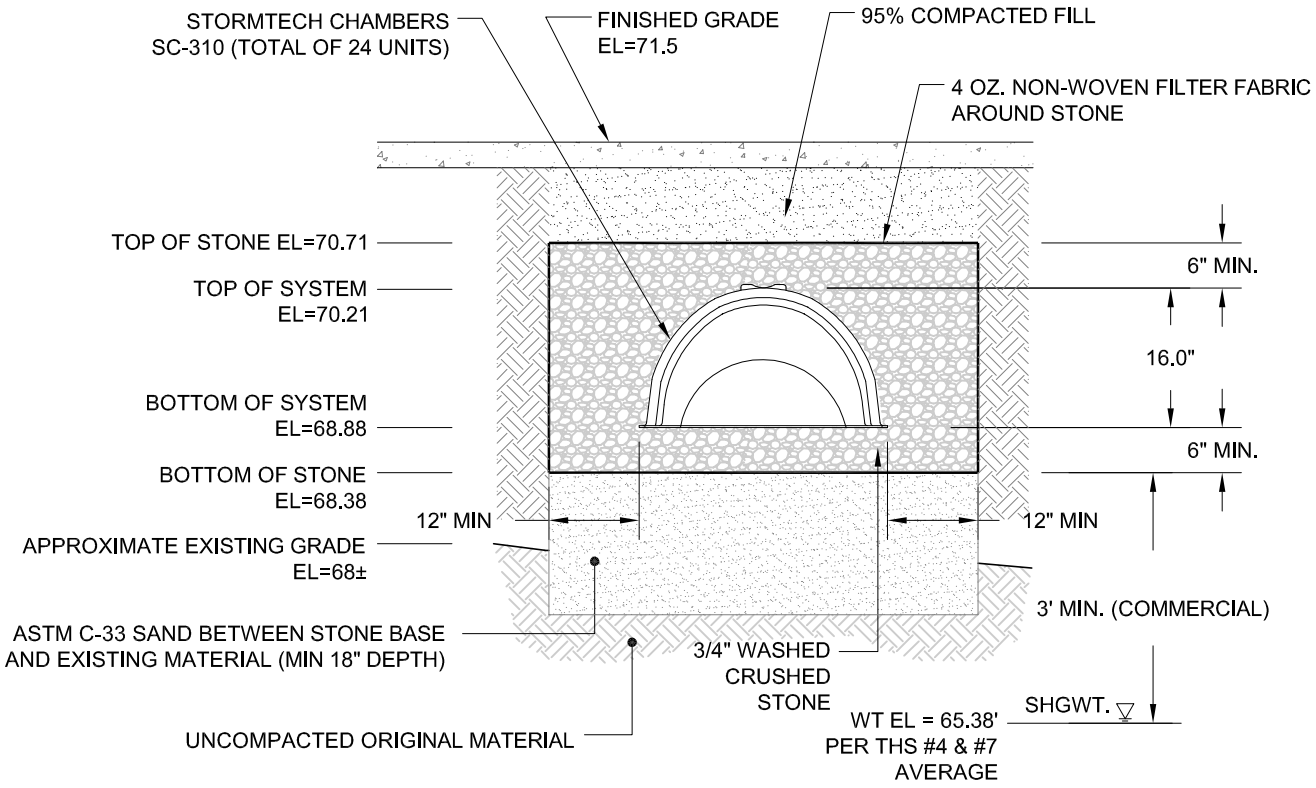

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Project Title:	Drawing Title:	
VALLEY CROSSING VALLEY ROAD, MIDDLETOWN, RI	INIFILTRATION CHAMBER SECTION	
Issued for: O&M DOCUMENT	Drawing Number: M-3	Project Number: 18225.5

APPENDIX C STORMWATER MAINTENANCE AGREEMENT

(If required by the municipality, the agreement will be attached here.)