

October 22, 2024

Inland Wetlands Commission and Planning & Zoning Commission
27 Main Street
P.O. Box 0548
Salisbury, CT 06068 email

**Re: New House and Driveway at 280-300 Between the Lakes Road
Application 2024-IW-036
File 4010128.001**

Dear Commissioners

Haley Ward is in receipt of peer review comments prepared by Thomas D. Grimaldi of R.R. Hildebrand Engineers & Surveyors, LLC dated October 15, 2024. The original comments are repeated below, and our responses are shown in bold.

Engineering Review Comment:

- 1. We take no exception with the methodology of the Stormwater Report.*

No response required.

Site Plan-

- 1. It appears from the existing topography that the entire area of the driveway could be treated by the addition of a grassed-lined swale from the southwestern most portion of the driveway to the proposed rain garden, and on the northern side of the proposed driveway from Between the Lakes Road to the Rain Garden with a stone-lined swale. If the Rain Garden sizing is of concern, the dwelling could be discharged into drywells in an effort to remove that area from the Rain Garden. Also, the Rain Garden could be extended to the north and slightly to the south to gain more area.*

We added an infiltration trench to the southwestern side of the driveway. On the northwest side of the driveway, we added a riprap swale that leads to the rain garden, and we expanded the rain garden to account for the additional area. The volume of the trench below the pipe invert combined with the rain garden volume exceeds the Water Quality Volume.

See Sheet 3.



2. A permanent easement for the right to drain and for maintenance over land of Lot #1 in favor of Lot #2 should be filed in the Salisbury Land Records, in the event that the ownership of either of the parcels is transferred.

The owner agrees to provide an easement and one is shown on the site plan. We have attached a draft of the easement language. The document will be finalized and recorded after approval.

3. Provide an Operation & Maintenance Plan for the proposed Rain Garden.

An Operation & Maintenance Plan is attached.

4. There are sixteen proposed geothermal wells located to the south of the proposed dwelling. Provide erosion and sedimentation control measures for the tailings and water that will be discharged during the drilling process.

Additional erosion control measures have been included. See Sheet 3.

5. Recommend the installation of a large sediment log directly down slope of the proposed Rain Garden.

A 12-inch filter sock is shown downhill of the rain garden. See Sheet 3.

6. Provide inlet protection for the proposed yard drain.

Inlet protection is provided. See Sheet 3.

7. Add compacted subgrade to the Paved Driveway cross section detail.

Compacted subgrade is provided. See Sheet 5.

Recommended Conditions of Approval:

1. Submit revised Engineering Plans to the Town Engineer for review/approval.

Revised plans and drainage calculations are attached.

2. Final approved plans shall have live signature and embossed seal of the Engineer and Surveyor of record. These shall be submitted to the Town of Salisbury Land Use Administrator prior to any construction.

Live stamped and embossed plans will be provided after approval.

3. The Design Engineer shall provide an Erosion & Sedimentation Control Measures Bond estimate for review by the Consulting Town Engineer.

A bond estimate is attached.

4. A Pre-Construction Meeting is recommended with the Town staff prior to the start of construction to inspect E & S control measures and to discuss construction sequencing/phasing.

The applicant agrees to a pre-construction meeting.



5. *During the construction process, the Owner/Developer/Contractor shall add erosion and sedimentation control measures as deemed necessary by the Town of Salisbury staff and/or the Consulting Town Engineer.*

The applicant agrees to this recommendation. See Note 4 on Sheet 1.

6. *Daily inspections and required maintenance of all erosion & sedimentation control measures shall be completed by the General Contractor until a permanent vegetated cover is established. Repairs shall be made immediately after inspections.*

The applicant agrees to this recommendation. See Note 5 on Sheet 1.

7. *Inspection requirements, by the Consulting Town Engineer, shall be determined by the Commission.*

The applicant agrees to a reasonable inspection schedule by the Consulting Engineer.

8. *An As-Built Site Improvement and Grading Plan, prepared by a State of Connecticut Registered Land Surveyor, shall be submitted to the Land Use Administrator after all the site work is completed, and prior to requesting a Certificate of Occupancy.*

The applicant agrees to this recommendation. See Note 6 on Sheet 1.

9. *A final site inspection shall be completed by the Land Use Administrator and/or the Town Engineer prior to the release of the Erosion & Sedimentation Control Bond and/or the issuance of a Certificate of Occupancy.*

The applicant agrees to this recommendation. See Note 7 on Sheet 1.

We are attaching the four of each following documents:

- *Plan set "New Residence, 280 Between the Lakes Road, Salisbury, Connecticut" prepared by Haley Ward, Inc. dated September 10, 2024, revised to October 16, 2024 consisting of 5 sheets*
- *Supplementary Drainage Calculations dated September 10, 2024, revised to October 21, 2024, prepared by Haley Ward, Inc.*
- *Driveway Right of Way and Drainage Easement Agreement dated October, 2024, prepared by Attorney Michael Citrin*
- *Operation, Monitoring, and Maintenance Plan dated October 17, 2024 prepared by Haley Ward, Inc.*



- *Opinion of Probable Erosion Control Cost for Bond Purposes, New House, 280 Between the Lakes Road, Salisbury, dated October 21, 2024, prepared by Haley Ward, Inc.*

Please let me know if you have any questions. Thank you.

Sincerely,
Haley Ward, Inc.

Todd Parsons, PE
Senior Project Manager

**DRIVEWAY RIGHT OF WAY AND DRAINAGE
EASEMENT AGREEMENT**

280 BTLR, LLC, a Mississippi limited liability company, with a principal business address of 23721 NE 48th Avenue, #H7, Okeechobee, Florida 34972, owns in fee simple two parcels, namely 280 BETWEEN THE LAKES ROAD, SALISBURY, CONNECTICUT, pursuant to a Warranty Deed from Marc Mallett and Lenore Mallett dated November 17, 2023, and recorded in Volume 272 at Page 403 of the Salisbury Land Records, and 300 BETWEEN THE LAKES ROAD, SALISBURY, CONNECTICUT, pursuant to a Warranty Deed from Abigail Raymond Salaway dated July 24, 2024, and recorded in Volume 273 at Page 583 of said Land Records.

300 Between The Lakes Road is described as "PROPOSED LOT #1 2.262± ACRES 98,553 S.F." and as shown on a map entitled "PROPOSED SUBDIVISION MAP PREPARED FOR ABIGAIL RAYMOND SALAWAY #300 BETWEEN THE LAKES ROAD SALISBURY, CONNECTICUT SCALE 1" = 40' SEPTEMBER 2, 2022 TOTAL AREA = 6.668± ACRES" and recorded as Map No. 2766 of the Salisbury Land Records. (Hereinafter referred to as "LOT #1")

280 Between The Lakes Road is described as "PROPOSED LOT #2 4.406± ACRES 191,911 S.F." on the above-referenced Map No. 2766. (Hereinafter referred to as "LOT #2")

280 BTLR, LLC is desirous of granting LOT #2 an easement for access over LOT #1 in the area identified as "PROPOSED DRIVEWAY AND DRAINAGE EASEMENT" on a map entitled "NEW RESIDENCE 280 BTLR, LLC" for the sole purpose of ingress and egress to and from Between The Lakes Road and LOT #2.

280 BTLR, LLC is also desirous of granting LOT #2 a drainage easement across LOT #1 for the surface ground water in the area identified as "PROPOSED DRIVEWAY AND DRAINAGE EASEMENT" on said Map entitled "NEW RESIDENCE 280 BTLR, LLC".

NOW THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, 280 BTLR, LLC hereby gives, grants, bargains, sells, and confirms unto the owner of LOT #2, also known as 280 Between The Lakes Road, its heirs and assigns forever, an easement over that portion of driveway located on "LOT #1", in area identified as "PROPOSED DRIVE AND DRAINAGE EASEMENT" on a map entitled "NEW RESIDENCE 280 BTLR, LLC" for the sole purpose of ingress and egress to and from Between The Lakes Road and LOT #2. FURTHER, 280 BTLR, LLC, hereby gives, grants, bargains, sells, and confirms unto the owner of LOT #2, its heirs and assigns forever, a drainage easement for surface water over LOT #1 in the area identified as "PROPOSED DRIVEWAY AND DRAINAGE EASEMENT" on said Map.

TO HAVE AND TO HOLD the said easements unto the said owner of LOT #2, its heirs and assigns forever, to its own proper use and behoof.

By the acceptance hereof, the owner of LOT #2, for its heirs and assigns, covenant that it shall, at its own expense, repair and maintain said driveway and drainage area and shall keep the same in good repair at all times.

Witnesses:

280 BTLR, LLC

By: Jeffrey Keenan, its Member

STATE OF CONNECTICUT }
 } ss. North Canaan
COUNTY OF LITCHFIELD }

October ____, 2024

On this ____ day of October, 2024, personally appeared JEFFREY KEENAN, duly authorized Member of 280 BTLR, LLC, a Connecticut limited liability company, and as such Member and signer and sealer of the foregoing instrument, acknowledged the execution of the foregoing to be his free act and deed as such Member, and the free act and deed of said limited liability company, before me.

Michael P. Citrin, Commissioner
Superior Court

OPINION OF PROBABLE EROSION CONTROL COST - FOR BOND PURPOSES
New House, 280 Between the Lakes Road, Salisbury
October 21, 2024

	UNITS	QUANTITY	UNIT PRICE	EXTENSION
Filter Sock	LF	1,110	\$6.00	\$6,660.00
Catch Basin Protection	EA	1	\$250.00	\$250.00
Erosion Control Blanket	SY	5,600	\$3.00	\$16,800.00
Riprap Swale	CY	38	\$130.00	\$4,940.00
Turf Establishment (includes seed bed preparation, seeding, mulching)	SY	3,900	\$2.50	\$9,750.00
Crushed Stone for Construction Entrance	CY	11	\$100.00	\$1,100.00
Subtotal				\$39,500.00
Maintenance	%	1	10%	\$3,950.00
Total				\$43,450.00



I. Determine Volume of Water Quality Basin

$WQV = (1.3''(R)(A))/12$ Where:

- WQV = Water Quality Volume (ac-ft)
- R = Volumetric Runoff Coefficient
- = 0.05+0.009(I)
- I = Percent Impervious Cover (whole number)
- A = Site Area (acres) = Watershed area excluding bottom of basin

Watershed	Area (acres)	Impervious	Coefficient	Volume (ac-ft)	Volume (CF)
To trench	0.47	32	0.34	0.0172	750
To Rain Garden	0.96	33	0.35	0.0361	1,572
Total Required				2,322	

$GRV = ((D)(A)(I))/12$

Where:

- GRV = Groundwater Recharge Volume
- D = Depth of Runoff to be Recharged (Table 7.4 of Stormwater Quality Manual)
- A = Site Area (acres)
- I = Percent Impervious Cover (decimal)

Watershed Number	Watershed Area (acres)	Percent Impervious	Groundwater Recharge Depth (D)	Groundwater Recharge Volume (ac.ft)	Groundwater Recharge Volume (CF)
To trench	0.47	0.32	0.25	0.0031	136
To Rain Garden	0.96	0.33	0.25	0.0066	287

Table 7.4

NRCS Hydrologic Soil Group	Average Annual Recharge	Groundwater Recharge Depth (D)
A	18 in/year	0.4 inch
B	12 in/year	0.25 inch
C	6 in/year	0.1 inch
D	3 in/year	0 inch

For Hydrologic Soil Group, see Web Soil Survey

The majority of development occurs over soil with hydrologic group B

For Design Use WQV since it is higher than GRV

Volume of Proposed Rain Garden For Barn & Driveway

Contour Elevation	Elevation Difference (ft)	Area (sq. ft.)	Volume (CF)	Cumulative Volume (CF)
758.8	-	1,200		
759.0	0.2	1,488	269	
760.0	1.0	2,071	1,780	2,048

Volume of Proposed Infiltration Trench

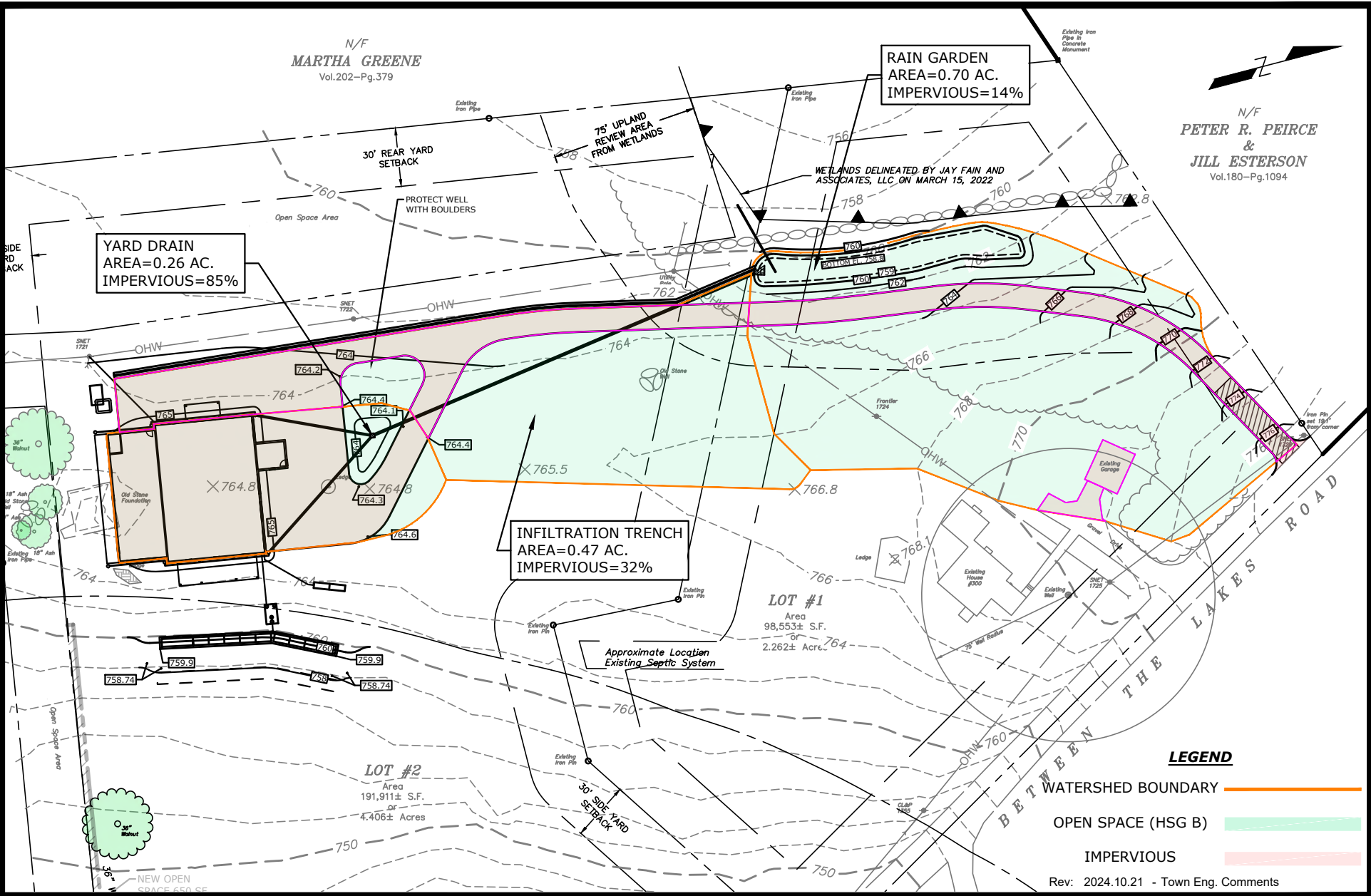
Length (ft)	Width (ft)	Bottom	Pipe Outlet	Height (ft)	Volume (CF)
330	4	759.2	759.8	0.6	792
Void Ratio					40%
Volume					317

Total Provided is the Combination of the Rain Garden and Infiltration Trench 2,365

FILE LOCATION: P:\CT4010128 - GREAT FALLS_CONSTRUCTION\128.001 - 280 BETWEEN THE LAKE RD. - TAP\02-CAD_FILES\280 BTL RD - PROJECT.DWG, 2024.10.21, 2:53 PM

N/F
MARTHA GREENE
 Vol.202-Pg.379

N/F
**PETER R. PEIRCE &
 JILL ESTERSON**
 Vol.180-Pg.1094



LEGEND

- WATERSHED BOUNDARY
 - OPEN SPACE (HSG B)
 - IMPERVIOUS
- Rev: 2024.10.21 - Town Eng. Comments



PROJECT
280 BETWEEN THE LAKES ROAD
 SALISBURY, CONNECTICUT

TITLE
WATERSHED MAP

DATE
 2024.09.10

SCALE
 AS NOTED

DRAWN BY
 CG

PROJECT No.
 4010128.001

DRAWING No.
EXHIBIT A

Stormwater Management Operation, Monitoring, & Maintenance Plan

280-300 BETWEEN THE LAKES ROAD, SALISBURY, CONNECTICUT

PREPARED FOR:
Great Falls Construction Co. and 280 BTLR, LLC

October 17, 2024

Prepared By:
Haley Ward, Inc.
140 Willow Street, Suite 8 | Winsted, Connecticut 06098

TABLE OF CONTENTS

I. Background and General Information

A. Compliance with Permits and Approvals

B. Preventive Measures

II. Inspecting and Maintaining Stormwater Management Facilities

A. Inspection Procedures

B. Maintenance Procedures and Standard Practices

I. Background and General Information

A. Compliance with Permits and Approvals

This project requires permits and approvals from the Town of Salisbury Planning & Zoning Commission and Inland Wetlands & Watercourses Commission. Compliance with those permits and approvals necessitates proper management of the stormwater management facilities.

B. Preventive Measures

The most effective way to maintain the stormwater quality controls is to prevent the pollutants from entering the facility in the first place. Common pollutants include sediment, trash and debris, chemicals, pet wastes, and others. The project shall incorporate the following good housekeeping practices:

- Keep the driveway free of trash and debris.
- Plan lawn and plant care to minimize the use of chemicals and pesticides.
- Be aware of automobiles leaking fluids. Use absorbents such as Speedi-Dry to soak up drippings – dispose of properly.
- Re-vegetate disturbed and bare areas to maintain stable vegetative cover.
- Clean and maintain the components of the storm drainage system, including inlets, storm sewers and outfalls.
- Do not store materials outdoors (including landscaping materials) unless they are properly protected from rain and from stormwater runoff.

II. Inspecting and Maintaining Stormwater Management Facilities

The quality of stormwater entering surface waters and groundwater relies heavily on the proper operation and maintenance of permanent best management practices.

This section contains a general overview of O&M guidelines and procedures.

A. Inspection Procedures

All stormwater management facilities shall be inspected by the owner or his representative at a minimum two times per year and during or after each rainfall event greater than two inches. Inspection should follow the inspection guidance below.

B. Maintenance Procedures and Standard Practices

Stormwater Management Facility Maintenance consists of two categories: scheduled and unscheduled. A description of each category follows.

Scheduled Maintenance and Practices: The majority of this work consists of

regularly scheduled mowings and trash and debris pickups for stormwater management facilities. It also includes practices to minimize contaminants from entering the runoff.

Follow the guidance below:

Winter Pavement Management:

1. Minimize and optimize the use of chloride-based deicing chemicals while maintaining public safety.
2. Assure that contractors handling salt and other deicers have proper training in their application.
3. Do not routinely store deicing materials on-site.
4. Any spills or inadvertent over-application shall be cleaned up immediately.

Rain Gardens:

1. The rain gardens shall be maintained in good condition. When repairs are necessary, they shall be initiated in a timely manner.
2. Mowing is generally not required of the bottom of the basins unless they become overgrown, or if growth of invasive species are identified in the basins. Mowing is required for side slopes when the grass/ground cover exceeds 6 inches in eight. Dense cover on all slopes should be maintained.
3. If there is any evidence of rodent holes, remove the rodents and repair any damage. When insects such as wasps or hornets interfere with maintenance activities, the insects should be destroyed.
4. Take care to ensure that trees do not hinder maintenance activities or maintenance access. If trees are not interfering with access, periodic pruning of dead branches and removal of nuisance brush is acceptable. Any erosion of basin or channel slopes should be stabilized with appropriate erosion control practices, seeded, and mulched. Replace rocks missing from splash pads or channel if there is any exposed soil or if there is only one layer of rock above native soil.
5. In addition to a semi-annual inspection, inspect the basins and within 24 hours following the end of any storm event of two inches or greater.
6. Inspect temporary and permanent seeding and planting for bare spots, washouts, and healthy growth of vegetation.
7. Remove built up sediment from the inlets, sediment forebays and all other areas in the basin where excessive accumulation of sediment may occur.
8. Reseed and replant areas disturbed by sediment removal after maintenance activity.
9. Clear trash and debris from the site.

Unscheduled Maintenance: Unscheduled maintenance will involve the repair of facilities after storms and flooding. The frequency and scope of this type of maintenance cannot be predicted. Some examples of unscheduled maintenance are:

- Debris removal during and following storms.
- Inlet and outlet channel repairs to halt erosion and maintain hydraulic capacity.
- Inlet and outlet structure repair so that the facility will function as intended.

Unscheduled maintenance shall be undertaken at the earliest practical time.