ANNUAL REPORT UPDATE

Reporting Period
July 1, 2018 to June 30, 2019 (Due October 1, 2019)

Arlington National Cemetery

1 Memorial Drive
Arlington, VA 22211

VPDES Permit Number: VAR040139
Permit Effective Date: November 1, 2018
Permit Expiration Date: October 31, 2023

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General Information

Permittee: Arlington National Cemetery
System Name: Arlington National Cemetery
Permit Number: VPDES Permit VAR040139
Reporting Period: July 1, 2018 to June 30, 2019

Authorized Program Signature Certification

Certification, as required by Virginia Administrative Code (9VAC25-890-40):

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:  Date: 1 OCT 2019

Thomas E. Austin, Colonel,
U.S. Army
Chief, Engineering Division

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TABLE OF CONTENTS

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1.0 INTRODUCTION

Arlington National Cemetery (ANC) submits this Annual Report in accordance with the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s) (9 Virginia Administrative Code [VAC] 25-890-1, et seq.) Part I D. The Annual Report contains an evaluation of ANC's MS4 program implementation, a review of each minimum control measure, and the status of its Total Maximum Daily Load (TMDL) Action Plan.

The below sections describe the effectiveness of ANC's MS4 program and discuss whether or not ANC must update its MS4 Program Plan.

Since the last Annual Report, VDEQ issued a new MS4 General Permit to ANC. As required by the new General Permit, ANC developed a new program plan, including revised/updated MS4 mapping and information table. Additionally, ANC revised its Illicit Discharge Detection and Elimination (IDDE) Written Procedures, Stormwater Management Facility Inspection and Maintenance Procedures, Stormwater Pollution Prevention Plan (SWPPP), and Chesapeake Bay TMDL Action Plan in accordance with the new General Permit. ANC's MS4 Program Plan outlines ANC's responsibilities for implementing its MS4 General Permit requirements.

2.0 MINIMUM CONTROL MEASURE REPORTING AND EVALUATION

2.1 Public Education and Outreach

(1) ANC addressed the following high-priority stormwater issues in the public education and outreach program:
Illicit Discharge Detection and Elimination; Good Housekeeping; Minimizing Potential Pollutants

(2) ANC used the following strategies to communicate each high-priority stormwater issue:		
Strategies	**Strategies used by ANC (check all used during permit year)**	**Issue addressed**
Traditional written materials	☒ Informational brochures and flyers (English and Spanish)	ANC distributed in emails to all facility personnel, contractors and USACE spill response and IDDE information including who to contact to report spills. We also provided brochures with good housekeeping and pollution prevention information provided in English and Spanish to facilities maintenance staff. **Appendix A** contains supporting documents.
	☐ Flyers posted in employee common areas (e.g., break rooms, restrooms, information bulletin boards)	
	☒ Facility-wide emails or newsletters	
Alternative materials	☐ Printed water bottles for employees	N/A
	☐ Stickers or magnets distributed at employee training events and/or tours for the visiting public	
Signage	☒ Mark storm drains with "Dump No Waste Drains to Chesapeake Bay"	ANC completed three projects containing storm drains marked with "Dump No Waste Drains to Chesapeake Bay.": • Ord-Weitzel Road • Pershing Road • All roads associated with Millennium Project.
	☐ Signs posted in employee common areas (e.g., break rooms, restrooms, information bulletin boards)	
	☐ Temporary signs at construction sites highlighting new stormwater management facilities or strategies	

Strategies	Strategies used by ANC (check all used during permit year)	Issue addressed
Media materials	☒ Information disseminated through electronic media, radio, televisions, movie theater, or newspaper	ANC posted informational articles on its public website about Turf Management, Sustainable Practices, Native Plants, and Rain Gardens. Link: https://www.arlingtoncemetery.mil/Explore/Memorial-Arboretum-and-Horticulture/Sustainable-Practices ANC contributed information for DoD Chesapeake Bay Program Journals. The Journals are publicly available and featured the following articles about ANC: • Making an Impact on Earth Day in the Chesapeake Bay with Cleanup/ Beautification including removing 17 pounds of trash and providing tours of cemetery rain gardens and sustainable landscape features (Summer 2018 issue). • Outstanding Urban BMP nomination for improvements and construction of five BMPs at the Funeral Queuing Area (Summer 2019 issue). • Stewardship activities – rain garden tour, Memorial Avenue Cleanup in partnership with the National Park Service, and an Arbor Day tour and tree planning (Summer 2019 issue). ANC's newsletter "Hallowed Grounds" posted on its public website, personnel bulletin boards, and sent to all ANC staff members contains articles applicable to the MS4 program including: • Sustainable Gardens at Millennium and Level III Arboretum Accreditation which includes rain gardens (July/Aug 2018 issue). • Sustainability and horticulture Memorial Arboretum rain garden tour (Nov/Dec 2018 issue). • Stream Restoration at ANC (Mar/Apr 2019 issue). • ANC Horticulture tour of the Memorial Arboretum to members of the American Public Gardens Association (July/Aug 2019 issue). ANC helped Joint Base Myer-Henderson Hall to publish a newspaper article titled "Protecting environment by preventing sewer backups". ANC circulated the article amongst staff. **Appendix A** contains copies of the journals, newsletters, and articles listed above.

Strategies	Strategies used by ANC (check all used during permit year)	Issue addressed
Speaking engagements	☒ Host educational arboretum and rain garden tours and events for the visiting public and distribute brochures to attendees	ANC hosted three tours for approximately 23 people where we discussed minimizing potential pollutants, the importance of trees and sustainability practices for improving stormwater quality, and carbon sequestration. **Appendix A** contains supporting documents.
Curriculum materials	☐ Host educational arboretum and rain garden tours and events geared toward visiting children and school groups	N/A
Training materials	☒ Employee training presentations focused on stormwater management, spill response, recognition and reporting of illicit discharges, good housekeeping, and pollution prevention	ANC updated their SWPPP in August 2018, including revised Stormwater Training materials. Training is discussed further in **Section 2.6**. **Appendix A** contains supporting documents.

MCM 1 Review and Evaluation Public Education and Outreach			
BMP	**Measurable Goal**	**Evaluation results**	**If not effective, provide discussion of MS4 Program Plan changes required**
Informational cards and brochures	Number of brochures and cards distributed.	☒ Effective ☐ Not Effective	N/A
Information disseminated through electronic media	Number of times link clicked or viewed	☒ Effective ☐ Not Effective	Currently, ANC's MS4 Program Plan does not address media materials. During this permit cycle, ANC determined media materials may be an effective strategy and has added to the revised MS4 Program Plan.
Educational arboretum and rain garden tours	Number of tours and attendees	☒ Effective ☐ Not Effective	N/A
SWPPP implementation, distribution, and training	Number of training sessions and attendees	☒ Effective ☐ Not Effective	N/A

2.2 Public Involvement and Participation

(1) Summary of public input on ANC's MS4 program	
Public Input Comment	**ANC's Response**
Any public input or comments on MS4 program via email, phone or in-person?	None
(2) Webpage link to the ANC's MS4 program and stormwater website:	
ANC MS4 Program documents are available to the public in on its website: https://www.arlingtoncemetery.mil/About/Policies-and-Public-Notices/Public-Notices	

(3) Public involvement activity implemented	(4) Metric to determine if beneficial to water quality	(4) Evaluation of metric as to whether or not the activity is beneficial to improving water quality	(5) Other MS4 permittees who participated with ANC in public involvement opportunities
Clean up Memorial Avenue and GW Parkway	Number of participants and pounds of trash collected	In April 2019, 5 participants collected 46 pounds of trash and debris. Activity is beneficial by removing pollutants that could mobilize and enter stormwater runoff.	National Park Service
Memorial Arboretum Tours	Number of attendees and brochures distributed	On April 26, 2019, and May 10, 2019, 10-15 attendees discussed importance of trees for improving water quality and carbon sequestration.	N/A
Spring Rain Garden Tour	Number of attendees and brochures distributed	On May 3, 2019, 10 attendees discussed functionality of rain gardens, plants, sustainability practices, and designs and how they improve water quality.	N/A
Street Sweeping	Road miles swept	ANC performs street sweeping weekly and swept 1,000 miles of roadway during the reporting period.	N/A

MCM 2 Review and Evaluation Public Involvement and Participation			
BMP	**Measurable Goal**	**Evaluation results**	**If not effective, provide discussion of MS4 Program Plan changes required**
Voluntary Clean-up Day	• Number of participants • Pounds of trash collected	☒ Effective ☐ Not Effective	N/A
Educational events and tours	• Reduction in illicit discharge and spill reports • Number of attendees • Number of brochures distributed	☒ Effective ☐ Not Effective	N/A
Street sweeping	• Number of road miles swept	☒ Effective ☐ Not Effective	N/A

2.3 Illicit Discharge Detection and Elimination

(1) ANC confirms that the MS4 map and information table are up-to-date as of June 30 of this reporting year.	☒ Confirm ☐ Not Confirmed, ANC will update the MS4 map
(2) ANC performed dry weather screening of outfalls during the reporting period, as part of the dry weather screening program.	Total Outfalls Screened __8____* Total Interconnections Screened __39___* **Appendix A** contains supporting documents.
(3) List of illicit discharges to ANC's MS4 including spills reaching ANC's MS4	
No illicit discharges were found during dry weather screening. One basin tested positive for chlorine during the interconnection inspections, however, the flow in the basin is stagnant, and therefore, not illicit. **Appendix A** includes a list of spills. *Outfall and interconnection screening were based on 2015 mapping from previously approved MS4 Program Plan and in accordance with previous MS4 permit.	

MCM 3 Review and Evaluation Illicit Discharge Detection and Elimination			
BMP	**Measurable Goal**	**Evaluation results**	**If not effective, provide discussion of MS4 Program Plan changes required**
Update MS4 storm sewer system map and informational table	Accuracy of ANC's storm sewer system map and information table	☒ Effective ☐ Not Effective	N/A
Perform dry weather screening of MS4 outfalls	Number of dry-weather inspections	☒ Effective ☐ Not Effective	N/A
Implement IDDE written procedures when illicit discharges or spills are reported	Number of illicit discharges reported, investigated, and corrected, if needed	☒ Effective ☐ Not Effective	N/A

2.4 Construction Site Stormwater Runoff Control

(1) ANC requires contractors to implement a construction site stormwater runoff program in accordance with General Permit Part I E 4 a (3). All land disturbing projects at ANC occurring during the reporting period have been conducted in accordance with the current department approved standards and specifications for erosions and sediment control.	☐ NA, ANC did not conduct land disturbing activities during the reporting period ☒ Confirmed ☐ Not Confirmed (see below)
	Appendix A contains copies of ANC's Construction General Permits and Notice of Termination
If one or more of ANC's land disturbing projects were not conducted with the department approved standards and specifications. Explain why the project(s) did not conform to the approved standards and specifications: N/A	
(2) Total number of construction site inspections conducted during the reporting period at ANC:	320
(3) Total number of enforcement actions:	ANC: 0 DEQ: 0

Number	Enforcement Action(s) Implemented	Type of Enforcement Action(s)
N/A	N/A	N/A

MCM 4 Review and Evaluation Construction Site Stormwater Runoff Control			
BMP	**Measurable Goal**	**Evaluation results**	**If not effective, provide discussion of MS4 Program Plan changes required**
Perform ESC Inspections	Number of ESC inspections performed	☒ Effective ☐ Not Effective	N/A
Correct compliance issues when found or reported	Number of issues found and corrected	☒ Effective ☐ Not Effective	N/A

2.5 Post-Construction Stormwater Management for New Development and Development on Prior-Developed Lands

(1) ANC has not developed their own standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and Virginia Stormwater Management Regulations (9VAC25-870). ANC addresses post-construction stormwater runoff control by requiring compliance with 9VAC25-870.	
(2) Total number of stormwater management facility inspections conducted on stormwater management facilities owned or operated by ANC.	24
(3) Description of the significant activities performed on ANC's stormwater management facilities to ensure they continue to perform as designed. (This does not include activities such as grass mowing or trash collection.)	
• Permeable pavement: (PP-1 and PP-2): In fall 2018, contractor completed repairs including removal and replacement, vacuuming, and sealant placement of the permeable pavement systems. • Microbioretention (MBR-1 and MBR-2): ANC has begun steps to replace turf and vegetation for microbioretention facilities which do not receive sufficient stormwater flow for vegetation to thrive. ANC is looking into replacement of narrow curb cuts. • Rain Garden (RG-6): Contractor repaired BMP and removed and replaced filter media and mulch to improve BMP functionality. ANC has begun vegetation replacement. • Stormceptor (STF-2): Contractor to remove sediment and repair crack in Stormceptor vault in FY20. • Laydown area and maintenance complex, spoils yard. **Appendix A** contains supporting documents.	
(4) Confirmation Statements (confirm one)	
☒**	ANC submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which ANC was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I E 5 f.
☐	ANC did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.
(5) ANC electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I E 5 g.	☐ Yes, Date submitted: ** ☐ NA
ANC recently obtained access to the Virginia Construction Stormwater General Permit database and VDEQ's BMP Warehouse. ANC is working with VDEQ regarding the electronic submittal of its BMPs in accordance with the MS4 permit conditions. **Appendix A contains a copy of ANC/VDEQ correspondence and information currently contained in BMP Warehouse database.	

MCM 5 Review and Evaluation Post-Construction Stormwater Management for New Development and Development on Prior-Developed Lands			
BMP	**Measurable Goal**	**Evaluation results**	**If not effective, provide discussion of MS4 Program Plan changes required**
Inspect stormwater management facilities	Number of stormwater management facility inspections performed	☒ Effective ☐ Not Effective	N/A
Submit stormwater facility database updates to VDEQ	Submit stormwater facility database updates to VDEQ when facilities are added or retrofitted	☒ Effective ☐ Not Effective	N/A

2.6 Pollution Prevention and Good Housekeeping for Facilities Owned or Operated by ANC

(1) Summary of any daily operational procedures developed or modified in accordance with Part I E 6 a during this reporting period:
ANC maintains and implements a variety of written pollution prevention and good housekeeping procedures for activities such as road, street, and parking lot maintenance; equipment maintenance; and application, storage, disposal of pesticides, herbicides, and fertilizers. We modified the following procedures/plans during the permit year: IDDE procedures; SWPPP; internal SOPs; and nutrient management plan.
(2) Summary of any new SWPPPs developed in accordance Part I E 6 c during this reporting period:
ANC developed and implemented a new SWPPP dated August 2018. The new SWPPP covers the entire site and property. ANC performed Comprehensive Site Compliance Evaluations for its high-priority areas (B123 Complex dated May 21, 2019, and Spoils Yard dated June 27, 2019) covering areas in accordance with its previous SWPPP. **Appendix A** contains the completed inspection forms
(3) Summary of any SWPPPs modified in accordance with Part I E 6 f during the reporting period:
None
(4) Summary of any new turf and landscape nutrient management plans developed:

Location of each land area in nutrient management plan	Total Acreage of land area	Date of plan approval
Six turf management units sitewide	506.9 acres	June 6, 2018

(5) Training events conducted in accordance with Part I E 6 m	(a) Date of training event	(b) Number of attendees	(c) Objective of the training event
Quarterly Town Hall	May 2019	Approximately 100-120 people	ANC provided training to all staff; objectives covered included: • Recognition and reporting of illicit discharges • Pollution prevention and good housekeeping associated with road, street, and parking lot maintenance. • Pollution prevention and good housekeeping associated with maintenance, public works, or recreational facilities • General stormwater topics, and • Spill response.
Landscaping and Visitors Services Contractor Training	March 2019	Approximately 50-75 people	ANC provided training to contractors who work in areas and with materials with the potential to contaminate stormwater. The training focused on ANC specific operations and protocols regarding stormwater pollution prevention.
	June 2019	Approximately 20 people	
Newcomers Training	August 2018	Approximately 10-20 people	New employee training included: • Recognition and reporting of illicit discharges • Pollution prevention and good housekeeping associated with road, street, and parking lot maintenance. • Pollution prevention and good housekeeping associated with maintenance, public works, or recreational facilities • General stormwater topics, and • Spill response.
	November 2018	Approximately 10-20 people	
	February 2019	Approximately 10-20 people	
	May 2019	Approximately 10 people	

(5) Training events conducted in accordance with Part I E 6 m	(a) Date of training event	(b) Number of attendees	(c) Objective of the training event
Facility Maintenance Department Training	February 2019	Approximately 10 people	ANC provided stormwater pollution prevention and waste management training to facility maintenance personnel.
USACE Contractor Training	January 2019	Approximately 20 people	ANC provided training to USACE contractors who work in areas and with materials with the potential to contaminate stormwater. The training focused on ANC specific stormwater and waste management operations and protocols.

MCM 6 Review and Evaluation Pollution Prevention and Good Housekeeping for Facilities Owned or Operated by ANC			
BMP	**Measurable Goal**	**Evaluation results**	**If not effective, provide discussion of MS4 Program Plan changes required**
NMP Plan implementation	NMP effectiveness	☒ Effective ☐ Not Effective	N/A
SWPPP implementation	SWPPP effectiveness at preventing illicit discharges and promoting good housekeeping	☒ Effective ☐ Not Effective	N/A
Training program events	Number of attendees at training program events	☒ Effective ☐ Not Effective	N/A

3.0 TMDL ACTION PLAN STATUS REPORT

a. BMPs implemented at ANC during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part I E 5 g

BMP Type	Location	Total Load Reductions (lbs/yr)		
		Nitrogen	Phosphorus	Total Suspended Solids
All BMPs used for TMDL compliance are included in the TMDL Action Plan drafted November 2018. ANC meets and exceeds the reduction requirements.	NA	NA	NA	NA

b. ANC will meet all required reductions during each reporting period of the permit as shown in its TMDL Action Plan dated November 11, 2018 **and will not acquire credits.**
ANC does not meet the criteria required in the General Permit for preparing a PCB TMDL.
Appendix A contains the TMDL Action Plan submittal letter dated March 11, 2019.

c. ANC meets and exceeds the reductions for total nitrogen, total phosphorus, and total suspended solids required during this permit term as demonstrated in its TMDL Action Plan. The table below summarizes ANC's pollutant reduction achievements.

	First Permit Cycle		*Second Permit Cycle*	
Pollutant	**Reduction Required in 1st Permit Cycle (lbs/yr)**	**Total Reduction Achieved with BMPs (lbs/yr)**	**Reduction Required in 2nd Permit Cycle (lbs/yr) [8x or 40% of L2 Scoping Run Reductions]**	**Total Reduction Achieved with BMPs (lbs/yr)**
Nitrogen	22	612.73	173	212.20
Phosphorus	1.74	315.25	14	143.37
TSS	1,271	142,876.37	10,169	105,884.20

d. BMPs ANC plans to implement during the next reporting period.

BMP Type	Location
Two Raingardens	Funeral Queuing Area
Hydrodynamic Separator with Filter	Ord-Wetzel (Section 52)

4.0 SUMMARY

Based on BMPs implemented and effectiveness of the minimum control measures, ANC's MS4 program appears effective. ANC will update its MS4 Program Plan to include media materials as a strategy to communicate high-priority stormwater issues in the Public Education and Outreach minimum control measure.

Appendix A
Supporting Documentation

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Informational Brochures and Flyers

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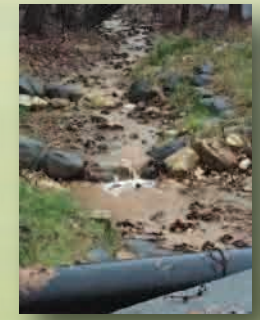
What is Stormwater?

Stormwater (i.e., rain or snowmelt) flows over the ground and impervious surfaces, such as parking lots, roads, sidewalks, and rooftops instead of being absorbed into the ground.

Why is Stormwater Runoff a Problem?



As stormwater runoff flows over surfaces, it collects pollutants, such as trash, chemicals, nutrients, and sediment. This untreated runoff flows into storm drains that lead directly to rivers, streams, wetlands, or coastal waters. The runoff carries pollutants into the waterbodies we use for drinking, swimming, and fishing.

- Sediment can cloud the water, making it difficult for aquatic plants to grow.
- Excess nutrients from pesticides and fertilizers can cause algae blooms.
- Bacteria and other pathogens can create health hazards.
- Litter and debris can choke, suffocate, or disable aquatic life such as ducks, fish, crabs, and birds.
- Common pollutants like trash, pesticides, paint, solvents, and motor oil can poison animals and people.

According to the EPA, impervious surfaces in a typical city block generate more than 5x the runoff than a forested area the same size.

What Should I do if There is a Spill?

If the spill is life-threatening, immediately call 911, then the Environmental POC

If not life-threatening, immediately call the Environmental POC

If safe to do so:

- STOP THE FLOW OF PRODUCT
- WARN PERSONNEL
- PROTECT STORMWATER INLETS
- SHUT OFF IGNITION SOURCES
- INITIATE CONTAINMENT
- COMPLETE THE SPILL RESPONSE FORM AND SUBMIT IT TO THE ENVIRONMENTAL POC

What is an Illicit Discharge?

An illicit discharge is any discharge into a storm drain system that is not composed entirely of stormwater.

What to look for...

- Water, chemicals, and other fluids flowing in storm drains during dry weather
- Water that is cloudy, dirty, has a sheen, contains debris or litter, has an odor
- Sediment, trash, fuels, and oils on the ground

IF YOU SPILL SOMETHING OR SUSPECT AN ILLICIT DISCHARGE, CONTACT THE ENVIRONMENTAL POC AT 703-614-0520

Stormwater Pollution Prevention

At Arlington National Cemetery

What We're Doing at Arlington National Cemetery

Low-Impact Development (LID)

LID practices are stormwater management practices that mimic natural infiltration or evaporation to remove pollutants and reduce the amount of stormwater runoff.

ANC attempts to manage stormwater as close to its source as possible by preserving and recreating natural landscape features, minimizing impervious areas, and treating stormwater as a resource rather than a waste. To achieve this, ANC uses rain gardens, bioretention ponds, and permeable pavement.

Use and Benefit of Permeable Pavement

Permeable pavement reduces polluted runoff by allowing stormwater to seep through the surface, filtering out pollutants.

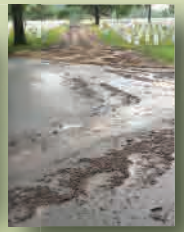
Permeable pavement is installed at the Millennium Site and used for sidewalks near the new Chapel Gate and along Eisenhower Avenue.

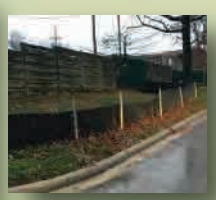
Pollution Prevention and You

Good Housekeeping

Good housekeeping is the easiest and most effective way you can help reduce or eliminate stormwater pollution.

ANC's GOAL: Keep stormwater from contacting pollutants and entering storm drains.

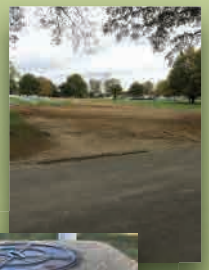




Keep a look out!

Contact ANC's Environmental POC if you see any of the following:

- Sediment or litter in drains, rain gardens, or bioretention ponds
- Dying vegetation
- Sediment in roads or not contained to construction sites
- Blocked drains
- Significant litter on the ground
- Chemical spills, leaks, or stains



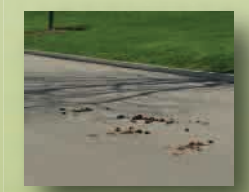
The EPA estimates that polluted stormwater accounts for 65% of pollution in rivers.

How You Can Reduce Your Impact on Stormwater Pollution

At work, at home, anywhere!

- NEVER DUMP ANYTHING DOWN STORM DRAINS!
- Don't litter!
- Maintain your car.

Only rain down the drain!

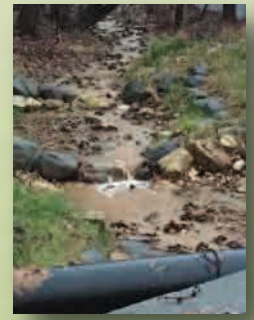


- Wash your car at a car wash or on your lawn.
- Pick up after your pet.
- Have your gutters discharge to vegetated or grassed areas.
- Reseed lawns to prevent sediment runoff.
- Compost or recycle yard waste.
- Use water-based paints and clean paint brushes in a sink.
- Deliver used oil to recycling centers.
- Use minimal amounts of pesticides and fertilizers.
- Consider using porous/permeable pavers when building patios and walkways.
- Clean up oil and chemical spills upon discovery.

¿Qué es la escorrentía pluvial?

Escorrentía pluvial (i.e., lluvia o nieve derretida) fluye sobre el terreno y superficies impermeables, tal como estacionamientos, carreteras, aceras y azoteas en vez de ser absorbida por el terreno.

¿Por qué la escorrentía pluvial es un problema?



Según la escorrentía pluvial fluye a través de las superficies, recoge contaminantes, tales como basura, compuestos químicos, nutrientes y sedimentos. Esta escorrentía pluvial sin tratamiento fluye hacia los drenajes pluviales que la llevan directamente a los ríos, quebradas, humedales o aguas costeras. La escorrentía pluvial transporta contaminantes hacia los cuerpos de agua que utilizamos para beber, nadar y pescar.

- Los sedimentos pueden poner turbia el agua, lo cual dificulta que las plantas acuáticas crezcan.
- Los nutrientes en exceso provenientes de los pesticidas y fertilizantes pueden causar un sobre crecimiento de algas.
- Las bacterias y otros patógenos pueden crear problemas de salud.
- Los escombros y basura pueden asfixiar, sofocar o inhabilitar la vida acuática tal como patos, peces, cangrejos y pájaros.
- Contaminantes comunes como basura, pesticidas, pintura, solventes y aceite de motor pueden envenenar los animales y las personas.

Según la Agencia de Protección Ambiental (EPA, por sus siglas en inglés), las superficies impermeables dentro de un bloque de una ciudad típica pueden generar hasta 5 veces la escorrentía pluvial comparado con un área boscosa del mismo tamaño.

¿Qué debo hacer si ocurre un derrame?

Si el derrame representa una amenaza a la vida, llame inmediatamente al 911, y después llame a la Persona de Contacto (POC, por sus siglas en inglés) Ambiental.

Si el derrame no representa una amenaza a la vida, llame inmediatamente al POC Ambiental.

De ser seguro hacerlo:

- DETENGA EL FLUJO DEL PRODUCTO
- AVISE AL PERSONAL
- PROTEJA LAS ENTRADAS AL DRENAJE PLUVIAL
- APAGUE LAS FUENTES DE IGNICIÓN
- INICIE LA CONTENCIÓN
- COMPLETE LA FORMA DE RESPUESTA A DERRAMES Y ENTRÉGUELA AL POC AMBIENTAL

¿Qué es una descarga ilegal?

Una descarga ilícita es cualquier descarga a un sistema de drenaje pluvial que no está compuesta en su totalidad por escorrentía pluvial.

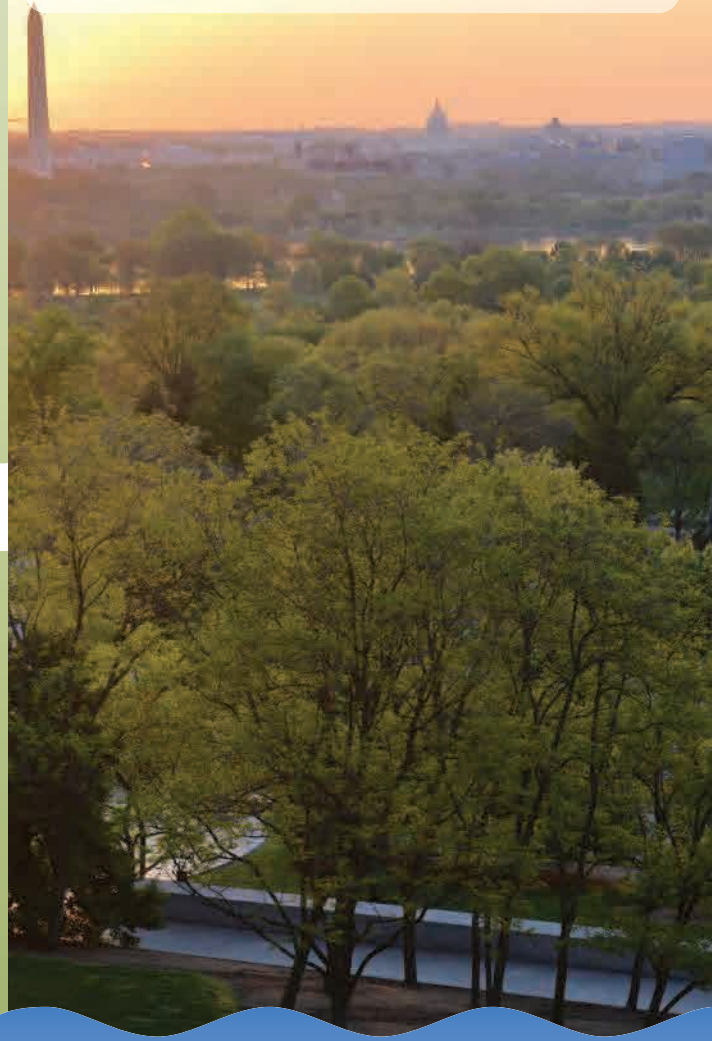
Lo que debe observar…

- Agua, compuestos químicos, y otros fluidos que estén fluyendo hacia los drenajes pluviales durante tiempo seco
- Agua turbia, sucia, que tenga un brillo, contenga escombros o basura, o que tenga un olor
- Sedimentos, basura, combustibles y aceites sobre el terreno

SI USTED DERRAMA ALGO O SOSPECHA UNA DESCARGA ILEGAL, CONTACTE AL POC AMBIENTAL AL SIGUIENTE NÚMERO DE TELÉFONO 703-614-0520

Prevención de Contaminación de la Escorrentía Pluvial

en el Cementerio Nacional de Arlington (ANC, por sus siglas en inglés)



Lo que estamos haciendo en el Cementerio Nacional de Arlington

Desarrollo de Bajo Impacto (LID, por sus siglas en inglés)

Las practicas LID son prácticas de manejo de escorrentía pluvial que imitan la infiltración natural o evaporación para remover los contaminantes y reducir la cantidad de escorrentía pluvial.

El ANC intenta manejar las escorrentías pluviales de la manera más cercana posible a la fuente al preservar y recrear las características naturales del entorno, minimizando las áreas impermeables, y utilizando la escorrentía pluvial como un recurso y no como un desperdicio. Para lograr esto, el ANC utiliza jardines de lluvia, lagunas de bio-retención, y pavimento permeable.

El Uso y Beneficio del Pavimento Permeable

El pavimento permeable reduce las escorrentías contaminadas al permitir que las aguas de escorrentía pluvial se infiltren a través de la superficie, lo cual filtra los contaminantes.

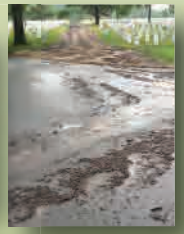
El pavimento permeable se instala en el Sitio del Milenio ("Millenium Site") y se utiliza para las aceras cerca al Portón de la Capilla ("Chapel Gate") y cerca de la Avenida Eisenhower ("Eisenhower Avenue").

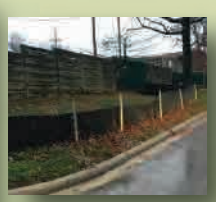
Prevención de Contaminación

Su Buen Mantenimiento de las Facilidades

El buen mantenimiento de las facilidades es el método más fácil y efectivo en que usted puede ayudar a reducir o eliminar la contaminación de las escorrentías pluviales.

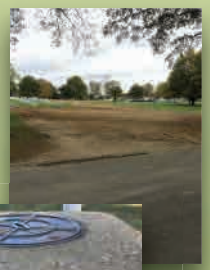
ALa META del ANC: Prevenir que las escorrentías pluviales entren en contacto con contaminantes y entren a los drenajes pluviales.





¡Manténgase pendiente!

Contacte al POC Ambiental del ANC si usted observa alguno de los siguientes:



- Sedimento o basura en los drenajes, jardines de lluvia o en las lagunas de bio-retención.
- Vegetación que esté decayendo.
- Sedimento en las carreteras o no contenido dentro de los sitios de construcción.
- Drenajes bloqueados.
- Cantidades excesivas de basura sobre el terreno
- Derrames de compuestos químicos, escapes o manchas.

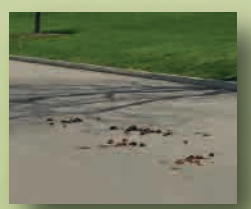
La EPA estima que las escorrentías pluviales contaminadas contribuyen al 65% de la contaminación en los ríos.

Como usted puede reducir su impacto en la contaminación de las escorrentías pluviales

¡En su trabajo, hogar y dondequiera!

- ¡NUNCA TIRE NADA DENTRO DE LOS DRENAJES PLUVIALES!
- No tire basura al piso
- Provea mantenimiento a su vehículo

¡Solamente lluvia por el desagüe!



- Lave su carro en un establecimiento de autolavado o sobre su césped.
- Recoja los desperdicios de su mascota.
- Coloque sus drenajes pluviales para que descarguen a áreas con vegetación o al césped.
- Re-siembre los jardines con césped para evitar que la escorrentía se lleve el sedimento.
- Haga composta o recicle los desechos del jardín.
- Utilice pinturas a base de agua y limpie las brochas dentro del lavadero.
- Entregue sus aceites usados a centros de reciclaje de aceite.
- Utilice cantidades mínimas de pesticidas y fertilizantes.
- Considere utilizar adoquines porosos / permeables cuando vaya a construir patios o aceras.
- Limpie los derrames deaceite o compuestos químicos tan pronto los descubra.

DoD Chesapeake Bay Program Journal
Summer 2018 and Summer 2019 Issues

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Summer 2018

DoD Chesapeake Bay Program Journal

PROTECTING THE CHESAPEAKE BAY FOR MILITARY READINESS, FOR OUR COMMUNITY, FOR FUTURE GENERATIONS

Leaders in Stewardship

By Sarah Diebel, DoD Chesapeake Bay Program

The U.S. Department of Defense (DoD) leads by example in its stewardship of natural and environmental resources by engaging volunteers with the knowledge and skills to enhance local watershed health. With the return of warmer weather and events like Earth Day and Arbor Day, DoD staff actively work to engage volunteers to make a positive environmental impact at installations and within surrounding communities. Installations host events and tours to educate and empower the public to make changes in their own lives and improve their local watersheds.

The initial results of the full Chesapeake Bay-wide Citizen Stewardship Index (Index)—the first comprehensive survey of stewardship actions and attitudes in the Chesapeake Bay watershed—found that most residents recognize the negative impacts of polluted waterways and wish to improve the environment around them. Last year, installations reported 4,454 volunteers worked on 147 citizen stewardship events, and yet the Index also revealed that there is significant potential to expand residential engagement in the Chesapeake Bay watershed. Hard-working DoD staff are committed to that effort and to making a meaningful difference at their installations and in the surrounding communities. This journal highlights some of the volunteer events held at DoD installations for Earth Day and Clean the Bay Day in 2018. Additional articles summarize the team effort among installation staff to protect degraded shorelines at Aberdeen Proving Ground (APG) and how installations can increase climate resiliency by better understanding vulnerability and risk.

For more information about the Index, check out the recent DoD Chesapeake Bay Program (CBP) fact sheet, and to learn more about other DoD stewardship achievements from last year, check out the fiscal year (FY) 2017 Annual Progress Report. The DoD CBP would like to thank the installations and individuals that contributed information and content for this journal, including:

- Don Calder, Joint Base Langley-Eustis (JBLE)
- Stacey Rosenquist and Elizabeth Fraser, Arlington National Cemetery (ANC)
- Karrie Reckley and MC3 Julio Martinez, Naval Support Activity Bethesda (NSAB)
- Tom Olexa, Naval Weapons Station Yorktown (NWSY)
- Olivia Mills and Jason Applegate, Fort A.P. Hill
- Jon Bleiweis, APG News, and Amanda Rominiecki, APG

PHOTOGRAPH RELEASED AND PROVIDED BY MC3 JULIO MARTINEZ, NAVAL SUPPORT ACTIVITY BETHESDA

DoD leads by example through its service to the community, and by empowering visitors and staff with the knowledge to improve their local watershed.

IN THIS ISSUE

Making an Impact on Earth Day in the Chesapeake Bay

By Stephanie Smith, Brown and Caldwell

Earth Day is a day to celebrate and enjoy the natural environment and ensure that future generations have the same opportunity. Earth Day is recognized through service and celebration at DoD installations in the Chesapeake Bay watershed. Each year, staff and visitors volunteer at installations to collect trash and debris, recycle, host educational events and festivals, or simply enjoy local natural areas through outdoor activities, such as running or fishing. Through the hard work of these volunteers, DoD installations enhance facility cleanliness, educate the public about environmental issues and how to serve as a steward of natural resources, and create opportunities for the public to enjoy the public access and recreation sites that these installations offer. This article highlights a few of the many events that occurred at DoD installations for Earth Day on April 22, 2018.

E-Waste Event

Naval Weapons Station Yorktown (NWSY) held an electronic-waste (e-waste) event and fire extinguisher turn-in, because many electronic devices (e.g., televisions and printers) contain potentially hazardous chemicals and non-degrading plastics. The Weapons Station Public Works Division (Environment and Transportation), Naval Facilities Engineering Command (NAVFAC) Qualified Recycling Program, and Defense Logistics Agency helped support the event. The NWSY event reduced the volume of waste sent to local landfills and helped protect the surrounding land and water resources. NWSY collected 30 pallets of electronic scrap with a gross weight of 14,668 pounds, eight pallets of reusable electronic materials, and more than 400 fire extinguishers, which were recycled by the Virginia Industry of the Blind. In addition, nearly 40 runners and walkers participated in the second annual Earth Day 5k, and 13 individuals participated in the Youth and Adult Fishing Derby at the Cheatham Annex.

Cleanup/Beautification

Many installations celebrated Earth Day with cleanup and beautification activities. As a part of Earth Day events at Naval Support Activity Bethesda (NSAB) in Maryland, 62 volunteers picked up 1,130 pounds of trash, including 290 pounds of scrap metal, as part of their base cleanup event. NSAB recycled the scrap metal, which reduced the volume of material sent to a landfill. Additionally, Arlington National Cemetery (ANC) partnered with the National Park Service (NPS) for the annual Memorial Avenue cleanup in Arlington County, Virginia. Volunteers collected 17 pounds of cigarette butts, plastic, bottles, paper, and clothing. ANC also provided a tour of the cemetery rain gardens and sustainable landscape features; answered questions from tour attendees; and distributed handouts on rain gardens, native plants, and downspout planters.

BMP Maintenance

Each year, Joint Base Langley-Eustis (JBLE) schedules conservation projects during Earth Day week to educate installation staff and the JBLE community on the importance of responsible environmental policies, our impact on the natural environment, and actions that each person can take to make the JBLE community a more sustainable and eco-friendly place to work and live. On April 23, volunteers performed maintenance on a bioretention cell adjacent to one of the dining facilities. The best management practice (BMP) was a prime candidate for the volunteer activity due to its highly visible location and outstanding maintenance needs. The installation's Stormwater Program Manager Ron Holcomb created a punch list of required maintenance activities after inspecting the BMP and reviewing the Engineering Technical Letter for this type of BMP. Together, 16 volunteers completed this necessary maintenance, and through their combined efforts, the BMP now meets original design functionality.

PHOTOGRAPH RELEASED AND PROVIDED BY NAVFAC MIDLANT EV.

WSY hosted a fishing derby, 5k run, and e-waste collection event to celebrate Earth Day.

PHOTOGRAPH RELEASED AND PROVIDED BY MC3 JULIO MARTINEZ, NSAB.

A volunteer at NSAB picks up trash at an installation site. A total of 62 volunteers participated in the base-wide cleanup event.

PHOTOGRAPH RELEASED AND PROVIDED BY ELIZABETH FRASER, ANC.

Volunteers from ANC and NPS removed trash and debris from Memorial Avenue in Arlington County, Virginia.

PHOTOGRAPH RELEASED AND PROVIDED BY DONALD CALDER, JBLE.

For the 48th observance of Earth Day, staff at JBLE found volunteers to provide needed maintenance for a BMP on the installation.

Summer 2019

DoD Chesapeake Bay Program Journal

Edited by the DoD Chesapeake Bay Program Team

PROTECTING THE CHESAPEAKE BAY FOR MILITARY READINESS, FOR OUR COMMUNITY, FOR FUTURE GENERATIONS

Volunteer Stewardship and Use of an Adaptive Management Approach Enhances Progress Towards Restoration Goals

By Sarah Diebel, DoD Chesapeake Bay Program Coordinator

Adaptive management is an iterative approach to meet long-term program objectives. Teams apply the knowledge gained throughout program phases to update and adjust future management decisions that lead to action. Utilizing an adaptive approach and adjusting the way we manage our activities is based on results from past performance. As the process illustrated in Figure 1 shows, the Chesapeake Bay Program Partnership (Partnership), of which DoD is a partner, must achieve outcomes that we have committed to and leverage limited resources. Taking the management strategies that each of the Goal Implementation Teams (GIT) have developed and reviewing their progress through the strategy review system (SRS), the Partnership is able to assess recent developments in science, economics, environmental conditions, and current policies. The SRS also allows to assess gaps to attaining the Partnership's 10 overarching Bay goals.

Recently, the Partnership completed its first SRS meeting for 2017-2018. From that meeting, the topics identified for additional focus in the future are environmental justice, social science, local government engagement, and finance. The DoD CBP is looking at ways in which we can integrate recommendations to adaptively manage activities that support the Chesapeake Bay restoration and protection effort.

Figure 1. Adaptive management process utilized to assess and adjust future management actions

On a separate note, the DoD CBP also wants to recognize the numerous contributions made by staff and volunteers for Earth Day, Arbor Day, and other environmental stewardship events that educated and inspired local communities to make positive environmental impacts.

Additionally, we also want to recognize several installations for their restoration efforts. The hard work and creativity of those working toward the Bay's restoration deserves credit. On an annual basis, the Best Urban Best Management Practice (BMP) in the Bay Award contest (BUBBA) recognizes the BMPs installed in the Chesapeake Bay watershed. This year, several outstanding installations submitted packages highlighting projects that provided tangible benefits to local communities. These standout installations deserve acknowledgment for their outstanding accomplishments.

The DoD CBP would like to thank the installations and individuals that contributed information and content for this journal, including:

- Rachel Felver, Chesapeake Bay Program Communications Director, Alliance for the Chesapeake Bay
- The installations who applied for the Best Urban BMP in the Bay Award and to Rachelle Knight (Naval District Washington) and Stacey Rosenquist (ANC) for providing those nomination packages to the DoD CBP
- The staff and volunteers from across the Bay watershed that conducted stewardship activities this spring.

IN THIS ISSUE

DoD Installation Stewardship Activities Around the Watershed

By Sarah Diebel, DoD Chesapeake Bay Program Coordinator

With the return of warmer weather, environmental staff are actively engaging with the Chesapeake Bay community to educate and empower those on and off installations to improve local watersheds. The DoD CBP thanks all personnel that volunteered their time and participated or held Earth Day, Arbor Day, and clean-up events—everyone is truly making a positive impact!

1


2


3


4

April was a busy month for stewardship activities with Earth Day on April 22nd and Arbor Day on April 26th. Over the following pages, you can learn more about the many educational events, cleanups, and celebrations this spring.

1 **The environmental team at Aberdeen Proving Ground (APG) in Maryland held their second annual Discovery Fest on May 4th where the team demonstrated the effects of sediment pollution on the Chesapeake Bay.** The demonstration included the effects of stormwater flow on soil without any erosion controls, soil with a filter sock as the erosion control, and soil stabilized with vegetation (grass cover).

2 **Joint Base Little Creek-Fort Story held Earth Day activities at their Child Development Center** where staff discussed the life cycle of a bat, how the installation is protecting the federally-threatened Northern Long-Eared Bat, and the importance of bats for humans.

3 **ANC in Virginia held three events including a rain garden tour, Memorial Avenue Cleanup in partnership with the National Park Service, and an Arbor Day tour and tree planting.** The rain garden tour was open to the public to inform visitors on what ANC has implemented to treat stormwater. The arboretum walking tour discussed the significance of the cemetery's status as a Level III accredited arboretum. ANC ended the tour with the arborist planting a ceremonial tree. The Memorial Ave cleanup, in coordination with National Park Service, had five participants who showed their strength by collecting 46 pounds of debris.

4 **NSF Indian Head held cleanup events at Indian Head and Stump Neck.** There were 71 volunteers, 105 bags of trash collected, and 22 tires removed. A combined weight of 3,700 pounds of trash was collected from one mile of beach shoreline. The installation also continued their Earth Day tradition by planting willow oak trees and eastern red cedars.

PHOTOS RELEASED AND COURTESY OF:

1. Aberdeen Proving Ground

2. Gary Jordan, U.S. Fish and Wildlife Service

3. ANC

4. NSF Indian Head

Possum Point Repair and Restoration of the North Severn Shoreline

As an important component of a larger effort totaling 28,000 linear feet of shoreline restoration at the North Severn Complex, this project included the repair and restoration of 1,517 linear feet of shoreline that was severely damaged by erosion for decades. The project protects both nearby infrastructure and the North Severn Complex and reduces TN, TP, and TSS loads.

Challenges Overcome: The project included five reaches subject to high wave action and storm energy, which led to extensive erosion. The shoreline along Mill Creek was also dominated by Phragmites australis, a non-native invasive species. Rather than repairing the existing bulkhead, stone revetment, which has a 50-year useful life, was recommended. To minimize the impact to tidal water, the existing stone at the toe of the slope in front of the bulkhead was retained. In areas where native tidal wetlands grew behind the bulkhead, the design was modified by adding stone to the top and front of the bulkhead, allowing tidal water to flood the area.

North Willow Oaks Wetland at NSF Dahlgren

The Willow Oaks Wetlands is a textbook example of how to eliminate a portion of an aged stormwater conveyance system, introduce a cost-effective retrofit, and reduce excessive pollutants and sediments in one BMP.

A team of engineers and scientists at NSF Dahlgren had the forethought to use a portion of a former golf course to install a constructed wetland. The BMP was designed to treat stormwater from 160 acres (40+ acres were impervious surfaces) in 5 acres of wetlands. Additionally, 600 linear feet of conveyance piping was removed.

Challenges Overcome: The project proposed that the Willow Oaks wetlands mimic the natural local water bodies. The wetlands consist of a meandering channel connecting a series of deep pools through marshes. Since the completion of Willow Oaks, the wetlands have been a showcase for the Navy.

As an amenity and to facilitate education and outreach, two walking paths wind around the south wetland which allow base residents to enjoy natural scenery.

Improvements to Arlington National Cemetery

Visitors, families, and dignitaries travel along the historic Memorial Avenue and through the beautifully landscaped site that includes perfect rows of marble headstones, curvilinear roads, and manicured landscape near the Potomac River, a tributary of the Chesapeake Bay.

As an active cemetery conducting between 25-30 funerals daily, ANC requires parking for families and visitors attending services. In 2015, ANC embarked on a project to maximize parking spaces adjacent to the Administration Building. This five-acre project required the construction of five stormwater BMPs: four rain gardens and one underground treatment device.

Challenges Overcome: Rain gardens create beautiful landscape features in the parking lots, but the grass channel leading to the underground device did not meet beautification standards. Keeping with the standards expected of ANC, the facility installed boulders and rocks to create a curving channel to slow stormwater flow and beautify the small area.

PHOTO RELEASED AND COURTESY OF NAVAL SUPPORT ACTIVITY ANNAPOLIS

The project created almost 61 acres of impervious area treatment credit, exceeding its impervious area restoration requirement by 12 acres. As a result, the facility surpassed its TP goal by 30 pounds per year (lb/year) and achieved 14 percent of its required TN reduction.

PHOTO RELEASED AND COURTESY OF NAVAL SUPPORT FACILITY DAHLGREN

The combined wetlands provide 424 lb/year TN and 93 lb/year TP reduction, which exceeds their pollutant reduction goals for years to come. Combined with other BMPs that have been installed, the facility's reduction goal was achieved in 2017!

PHOTO RELEASED AND COURTESY OF ARLINGTON NATIONAL CEMETERY

To honor the aesthetic character of ANC, plants were carefully selected. Species tolerant of wet conditions were selected to soak up water, provide food for local wildlife, and create a serene view and sitting area for visitors.

Hallowed Grounds Newsletter
Jul/Aug 2018, Nov/Dec 2018, Mar/Apr 2019, and July/Aug 2019 Issues

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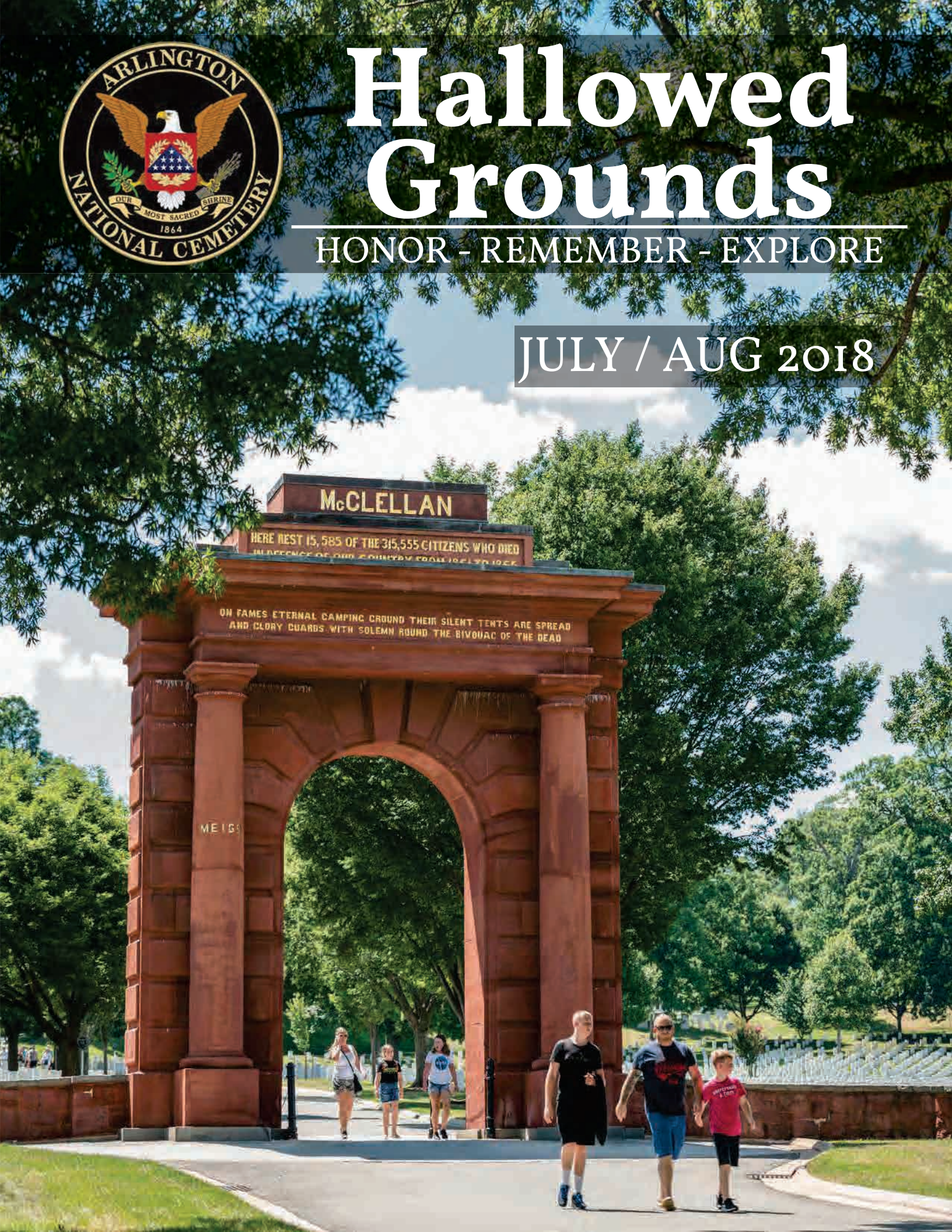
Hallowed Grounds

HONOR - REMEMBER - EXPLORE

JULY / AUG 2018



ANC Teammates,

By now, everyone knows we are preparing to formally dedicate the Millennium project, the cemetery's first expansion in decades. But we aren't stopping there.

Charged by Congress to extend the life of the cemetery well into the future, we are fully engaged in planning the next expansion into the former Navy Annex land around the Air Force Memorial (AFM). Many of you, our visitors and stakeholders might be wondering what's going on with this expansion project and when we are going to see construction. So, I want to provide a quick explanation of ANC's expansion south.

To start, let me clarify a common misunderstanding. The cemetery's expansion south actually requires two projects: one to move the roads out of the way and one to convert the land into cemetery space that will match the rest of ANC. Road realignment is being done via ANC's Defense Access Road (DAR) Realignment Project. This will relocate portions of Columbia Pike, Southgate Road and Joyce Street, and change the VA-27 interchanges at Columbia Pike. Federal Highways is the lead for this DAR project, and we are working together to ensure the realignment supports cemetery needs. These road changes will provide the cemetery the maximum land possible for expansion. Thus, this project is the critical enabler for the next project - the Southern Expansion project. We expect construction to begin in Fiscal Year 2021.

ANC's Southern Expansion Project converts the current landscape in the land surrounding the AFM into a combination of above- and below-ground interment areas, builds a new operations complex (replacing Buildings 123 and 117) south of Columbia Pike, and incorporates the AFM into the cemetery. In total, the Southern Expansion Project adds nearly 50 acres of new space to ANC for interment usage. We expect construction to begin as early as 2022 and be complete in late 2025.

We are currently working with Arlington County, the Commonwealth of Virginia, and our leaders at both the Pentagon and Capital Hill to work through appropriations and continue collaborative planning on the DAR project. ANC must acquire land from Arlington County and the Commonwealth to complete the realignment, but we need Congress to provide additional funding and authority to move forward. We expect to do that in Fiscal Year 2019.

Please see the maps on page 23 that show our proposed project as well as the lands needed to complete this DAR project.

- Col. Mike Peloquin, Chief of Engineering

Hallowed Grounds

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About this newsletter
Hallowed Grounds is the bi-monthly internal newsletter of Arlington National Cemetery, covering topics related to ANC, ANMC, and the U.S. Army.

Hallowed Grounds is maintained by the Arlington National Cemetery Public Affairs Office.

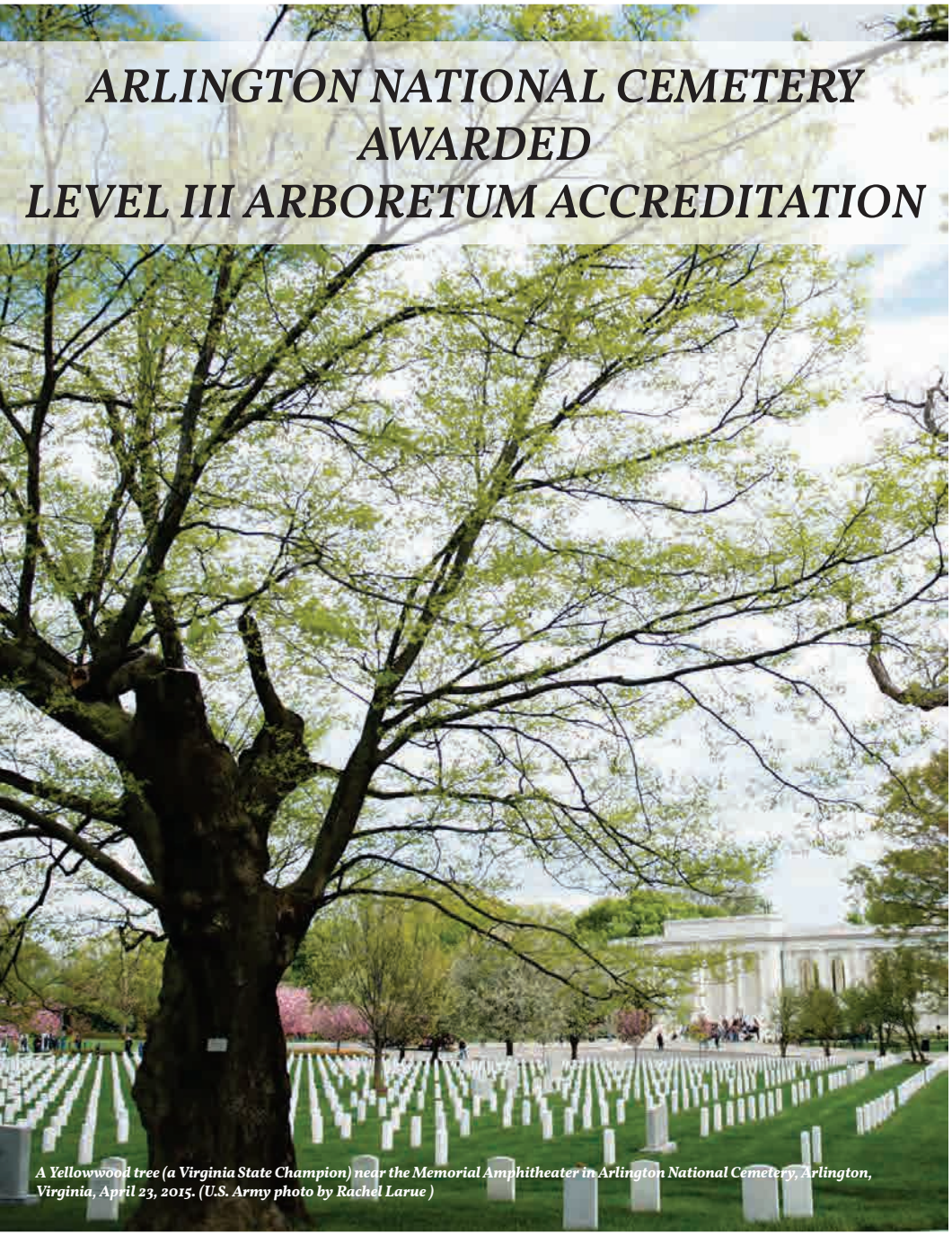
For questions or comments, please contact PAO at:
arlingtoncemetery.pao@mail.mil

Cover photo:
Visitors walk through McClellan Gate between Sections 12 and 33, July 18, 2018.
U.S. Army photo by Elizabeth Fraser.

Contents

July / Aug 2018

ARLINGTON NATIONAL CEMETERY AWARDED LEVEL III ARBORETUM ACCREDITATION



A Yellowwood tree (a Virginia State Champion) near the Memorial Amphitheater in Arlington National Cemetery, Arlington, Virginia, April 23, 2015. (U.S. Army photo by Rachel Larue)

From the Public Affairs Office

Arlington National Cemetery (ANC) is proud to announce it was awarded Level III Arboretum accreditation in mid-June 2018. ANC was previously designated as a Level II Arboretum in March 2015 and there are only 24 renowned institutions worldwide who maintain this prestigious accreditation, including only two cemeteries – Mount Auburn Cemetery in Cambridge, Massachusetts, and Spring Grove Cemetery and Arboretum in Cincinnati, Ohio.

"I'm very proud of our dedicated horticulture professionals, and our entire team of cemetery employees who played a part in this success," said Arlington National Cemetery Superintendent Katharine Kelley. "We are honored to reach this level of achievement as a Level III Arboretum, which contributes immeasurably to our mission to care for all those who rest here."

ArbNet created its Arboretum Accreditation Program to establish and share a widely recognized set of industry standards for the purpose of unifying the arboretum community. Accreditation is based on self-assessment and documentation of an arboretum's level of achievement of accreditation standards, including planning, governance, number of species, staff or volunteer support, education and public programming, and tree science research and conservation.

To be considered for Level III accreditation, an institution must first satisfy all criteria for Level I and Level II accreditation. It must also have a minimum of 500 species, varieties or cultivars of trees or woody plants; a dedicated curator, or curator-equivalent employee, focused on the care and development of the arboretum collection; professional capability to collaborate with other arboreta-relevant organizations; and share plant collections data with networked collections databases.

Additionally, there must be an active agenda related to tree science, strategic planting, or conservation, which should include direct research or the facilitation of scientific activities beyond public educational activities, in which data are acquired to solve problems in tree science or tree conservation. Finally, the institution must have a substantial program of education related to trees, conservation, and other related topics.

"It's a substantial leap from a Level II to a Level III Arboretum," said Arlington National Cemetery Chief of Horticulture Stephen Van Hoven. "Through our science, research and conversation efforts – Arlington National Cemetery has solidified itself as a leader in cemetery horticulture, landscape design and collections management."

Current projects the ANC horticulture and arboretum staff are working on which led to this accreditation include:

- Assisting the United States Department of Agriculture and the Animal and Plant Health Inspection Service (APHIS) to establish and monitor Emerald Ash Borer (EAB) traps within the cemetery to aid in detecting, quantifying and tracking the population of EAB in Arlington County and Northern Virginia.
- Conducting trials of 20 different species of boxwoods planted at different locations within the cemetery.
- Partnering with the Virginia Chapter of The American Chestnut Foundation to conduct growth trials of chestnut blight-resistant trees.
- Partnering with the U.S. Army Corps of Engineers to establish a study that compares the design and configuration of in-ground pre-placed crypts.
- Installing several rain gardens capturing rain water during storm events.
- Mapping invasive species growing in the forested natural areas at the north end of the cemetery (began in spring 2018).
- Collaborating with the Potomac Conservancy Growing Native program to allow volunteers to access the cemetery to collect acorns, hickory nuts and other seeds.

"A national shrine, Arlington National Cemetery is also truly world class as an Arboretum," said Executive Director of Army National Military Cemeteries and Arlington National Cemetery Karen Durham-Aguilera. "These incredibly beautiful grounds reflect how we are privileged to honor our veterans' and patriots' service and sacrifice on behalf of a grateful nation."

COMMON GROUND - Why we love gardening!

Kent Carson

Design & Construction Chief, Engineering

Working as a member of the Engineering team for nearly 11 years, Kent and his team identify and then create projects on what work or repairs are needed throughout the cemetery. They take ideas and transform them into words, sketches, calculations and paperwork needed to accomplish their goals.

"I am an engineer by training, a bit of a nerd by nature, and a gardener by instinct," Kent said. "It is in my blood." His parents grew up as farmers in Kansas and Kent started "digging in the soil" himself in high school, bringing new plants to his yard that he found in his travels. In college, he conducted "Plant Doctor" seminars where people would bring plants to him to diagnose.

"I loved to visit the famous 'Japanese Gardens' in Portland, Oregon where I grew up," Kent said. While living in Japan, he created his first small Japanese garden complete with a Koi pond. In Germany, he added tulip gardens and more formal landscaping and plants inspired by the Palaces and Chalets from the region. Upon moving to Virginia, his yard had nothing but grass, weeds and a stand of trees.

Kent's favorite feature of the ANC Arboretum? "I love the four seasons of trees here at ANC," he said. "Every season has its beauty, but my favorite is fall - the colors can take your breath away." He is also a big fan of the flowers. "The use of pollinator friendly plants, native plants and the rain gardens are some of the things I have learned from the ANC horticulture staff. Many of their ideas, plants and methods are adopted into my own garden. Some of the shrubs and bulbs I have are even from ANC (like the tulips from the last Town Hall meeting."

Franklin Barrett

Chief of the Protection Programs Division, Events & Ceremonies

Joining the ANC team in May 2011, Franklin supervises two Security Specialists responsible for antiterrorism, emergency management and physical Security, as well as managing the over protection program of ANC. Prior, he worked for the Military District of Washington and before that was active duty for just over 10 years in the Army as a satellite systems / network coordinator.

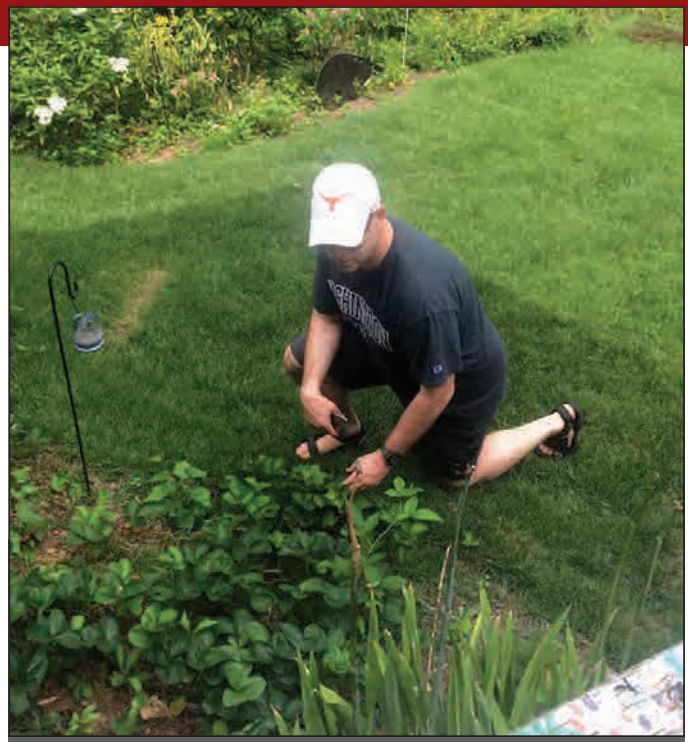
Franklin did a lot of landscaping work as a teenager and says he always enjoyed being outdoors.

"My current gardening efforts really were born out of the good fortune of living in a rural agricultural area," Franklin said. "And [from] the desire of my son to have a garden."

Franklin says he got into the art of foraging (finding edible foods in the wild like berries, nuts, etc.) just a couple of years ago and that it was inspired by all of the edible foods at ANC. "A lot of people don't realize how much we have here: mulberries, persimmons, serviceberries…and I'm sure a few edible nut trees as well," Franklin said.

"I think the idea of just growing your own food is pretty awesome," Franklin said. "And the idea that you can find edible food just about anywhere plants are growing is cool, too. If I had the free time to do it, I'd start a local group that provides advice for families to grow some of their own food."

Franklin's favorite feature of the ANC Arboretum? "The beautiful landscape," Franklin said.



Lt. Col. Toney Stephenson

Chief, Contracting Support Element

Lt. Col. Stephenson began working at ANC just 30 days ago as the program integrator of contract acquisitions. He has served for 21 years in the U.S. Army and says that his love of gardening began when he was five-years-old.

"Growing up in Arkansas, we had a big garden," Stephenson said. "I did a lot of gardening of tilling in the spring, weeding in the summer mornings, and picking the vegetables in the evening. Gardening is my mother's passion as well. She still gardens to this day (flowers and vegetables). I mostly stay in the strawberries (pictured above) and vegetable areas now with the little time I have."

Stephenson says that gardening helps him relax and that he looks forward to see the changing colors this fall at ANC.

Did You Know?

ANC Espionage History



(From the left): Stephanie Czech Rader in the 1940s. (U.S. Army photo via Cornell University); William Joseph "Wild Bill" Donovan, Head of the OSS. (National Archive photo); Francis Gary Powers in 1962. (Photo by Warren K. Leffler).

Did you know ANC is the final resting place of several important figures in the history of U.S. espionage? Highlighted on a public tour by the ANC History Office, July 16, here are three icons of U.S. intelligence:

Stephanie Czech Rader -

Born to Polish immigrants, Rader attended Cornell University where she majored in chemistry. She enlisted in the Army and later went through Officer Candidate School. She attracted the attention of the Office of Strategic Services (OSS) [a wartime intelligence agency of the U.S. during World War II and predecessor of the Central Intelligence Agency (CIA)] because of her knowledge of the Polish language and culture. She was one of two OSS agents assigned to the U.S. Embassy in Warsaw, Poland and traveled the country after World War II to gather intelligence on Soviet troop movements. She was awarded a posthumous Legion of Merit which she had been recommended for in 1946 but was initially turned down for by the War Department. She is buried in Section 11, Grave 614.

William "Wild Bill" Donovan -

Considered the "Father of American Intelligence," Donovan joined the New York National Guard in 1912 where he served on the Mexican Border in 1916 and earned the Medal of Honor at the Second Battle of the Marne in July 1918. During World War II, he founded the OSS which conducted espionage, sabotage and morale operations. Although the OSS disbanded after World War II, Donovan's work led to the establishment of the CIA in 1947. He is buried in Section 2, Grave 4874.

Francis Gary Powers –

In 1950, Powers enlisted in the U.S. Air Force and was recruited by the CIA in January 1956 where he joined its U-2 program. While on a reconnaissance mission for the CIA, Powers' U-2 spy plane was shot down over Soviet Union airspace May 1, 1960. This flight was the first (and only) U-2 flight across the whole of Russia. On Feb. 10, 1962, he and an American student were exchanged for Col. Rudolf Abel, a Soviet KGB agent, in a spy swap. He received the CIA's Intelligence Star in 1965 and posthumously awarded the Silver Star Medal, Distinguished Flying Cross, Prisoner of War Medal and CIA Director's Medal. He is buried in Section 11, Grave 685.

MARBLE & TURF

Sustainable Gardens at Millennium

By Stacey Rosenquist, Environmental Compliance Program Manager

With the Millennium expansion, Arlington National Cemetery gains important stormwater features, such as rain gardens. These depressed areas in the landscape collect rain water from the roads and sidewalks and allow it to soak into the garden. Planted with grasses, turf, shrubs, trees and flowering perennials, these attractive rain gardens filter out trash, sediment and nutrients in the stormwater runoff. They also provide food and shelter for butterflies, song birds and other wildlife throughout the seasons.

Millennium has three styles of rain gardens:

- ***Micro-Bioretention gardens*** adjacent to Shelter 1 are small depressed gardens treating runoff from small area developments.
- ***Bioretention basins*** adjacent to Columbaria are depressed gardens treating runoff from large impervious and pervious areas.
- ***Urban Bioretention gardens*** located within the Columbaria are expanded tree pits and planting beds.

An Urban Bioretention garden located within Columbarium Court 11 of the newest area of Arlington National Cemetery, the Millennium Project, Arlington, Virginia, July 20, 2018. They contain Fothergilla and Cephalotaxus, low-growing shrubs, in between stone benches. (U.S. Army photo by Elizabeth Fraser)

JULY 16 - National Association of Landscape Professionals' 22nd Annual Renewal and Remembrance Event at ANC.

SOUTHERN EXPANSION PROJECT MAPS

Defense Access Road Realignment Proposal & Project Concepts

MAP 1: DAR PROJECT BEFORE

The DAR Project is critical to ensure maximization of ANC's contigeous space.

Three steps must take place:

1. Acquire the land shown on the left.
2. Realign the roads.
3. Move the utilities.

MAP 2: DAR PROJECT AFTER

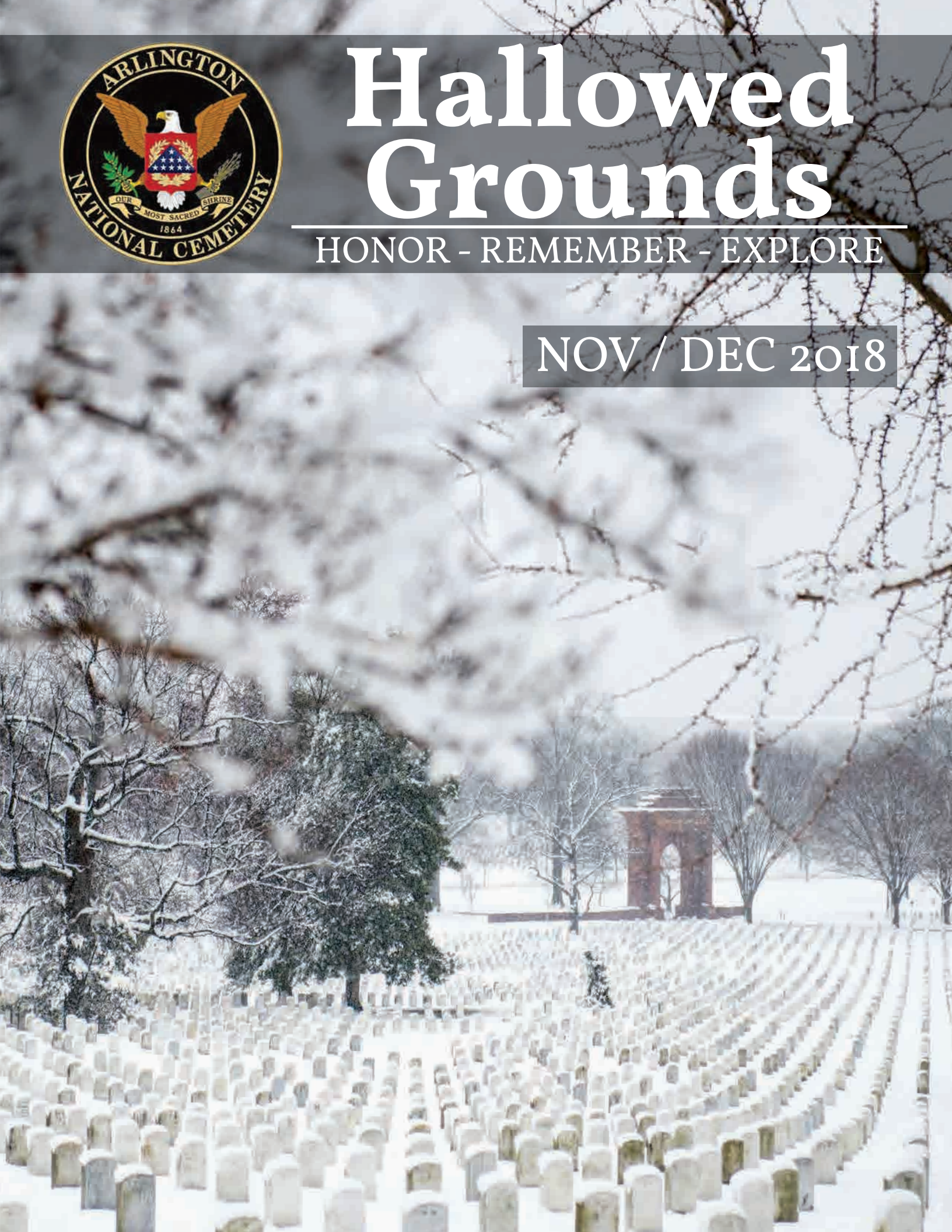
Arlington National Cemetery will have more burial space within its new boundary, especially with the field operations' footprint being located in the space south of Columbia Pike.

Concept: Southern Expansion & Air Force Memorial

Hallowed Grounds

HONOR - REMEMBER - EXPLORE

NOV / DEC 2018



To All Our Valued Employees,

I would like to first start off by thanking every member of our team for your dedicated service and commitment of honorably serving those laid to rest at Arlington National Cemetery (ANC). This fall marked yet another remarkable display of the professional organization that is entrusted to preserve our nation's hallowed grounds. On Nov. 11, 2018, we reconfirmed our commitment to our great nation by hosting the 2018 National Veterans Day Observance which marked the 100th Anniversary of the end of World War I. It was our "great people honoring service and sacrifice to a grateful nation" that ensured this observance was executed with honor and dignity. So, it is with great honor that we highlight in this issue the over 35 current veterans serving as members of this great organization that are committed to honoring the service and sacrifice of those laid to rest at ANC.

Just around the corner on Dec. 15, we will host the annual National Wreaths Across America Day, where we will facilitate the placing of over 250,000 donated wreaths at the final resting place of service members and their loved ones at ANC and Soldiers' and Airmen's Home National Cemetery (SAHNC). This can't be accomplished without the commitment of our entire enterprise ensuring the safety and care of the cemetery. So please, let's all be a little more diligent in ensuring a safe and wonderful experience is provided for visitors, families and loved ones visiting us on this special day. This year, there are major changes to cemetery access. Please review pages 14 and 15 to understand this new guidance and to find details on our employee "Wreaths-In" day. Also included are walking/driving maps and volunteer tips. With over 90,000 volunteers last year, it will surely be a busy day, so please stay safe.

Speaking of safety - if you are a big on decorating for the holidays, our resident electrician, Dan Frye, has some tips on how to light up your home, safely! Find these pro-tips on page 12.

On behalf of the Executive Director, the Superintendent and I, thank you all for your hard work and continued commitment as we honor service and sacrifice on these hallowed grounds. We are proud to serve among you. May you have a wonderful holiday season filled with joy and love.

- U.S. Army Sgt. Maj. Juan Abreu,
Senior Enlisted Advisor, ANC & OAC

Hallowed Grounds

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Karen Durham-Aguilera
Executive Director - OAC

Katharine Kelley
Superintendent - ANC

Sgt. Maj. Juan Abreu
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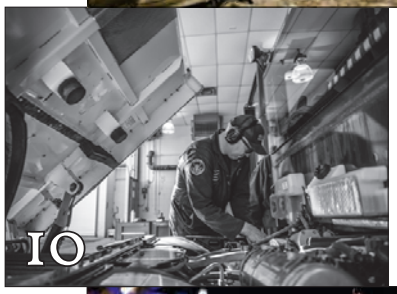
Cover photo:
Snow falls in Section 33 of Arlington National Cemetery, Arlington, Virginia, March 21, 2018. U.S. Army photo by Elizabeth Fraser.

Contents

Nov / Dec 2018



Restoration of James R. Tanner Amphitheater

David Fedroff (left), deputy director of engineering, and Rebecca Stevens (right), cultural resource manager for engineering, talk with others inside the Tanner Amphitheater during its restoration at Arlington National Cemetery, Arlington, Virginia, Oct. 24, 2018. (U.S. Army photo by Elizabeth Fraser)

By Rebecca Stevens, Cultural Resources Manager, Engineering

In 2015, ANC embarked on the restoration of the Tanner Amphitheater in partnership with the National Park Service's Historic Preservation Training Center. After three years of forensic analysis of the materials and finishes, a thorough condition assessment, and design development, staff and guests finally saw physical work begin this summer. This preservation effort assures the amphitheater, built in 1873, remains as originally designed and built for the next 150 years.

Upon completion in the Spring of 2019, colors will dominate the visual appearance of the restored amphitheater. Metallic bronze capitals and bases will set-off the light tan columns. A yellow rostrum base and ambulatory piers will be the most noticeable change from the white color which has decorated the structure for the past 100 years. In a few years, the wisteria will grow back to once again grace the structure in vines and purple blossoms.

While differences in color will be the most visible change, guests and staff may miss the substantive work that is being done to improve the weather-resistant properties of the amphitheater. Some examples are the stainless steel flashing installed to cap each pier and column. This will reduce wood deterioration and prevent water from infiltrating brick capitals. Also, to reduce maintenance and extend the life of the new colors, we are using mineral coatings rather than latex or oil-based paints.

In addition, masons are removing all the Portland-based cement stucco and replacing it with natural cement. Applied after WWII, the Portland-based cement stucco damaged the original brick columns and after scientific analysis, the architect determined the best solution to stop the damage was to return the columns to their original natural cement finish. This change, which will be unnoticed when the restoration is complete, will provide a better performing stucco.

The skilled craftsmanship, repointing, stuccoing, repairing, recoating, metalworking, and bronzing currently underway and hidden from view will restore Tanner Amphitheater to its original appearance.

Did You Know?

ANC Burial Wait Times

Section 12 of Arlington National Cemetery, Arlington, Virginia, Oct. 29, 2018. (U.S. Army photo by Elizabeth Fraser)

By ANC Public Affairs Office

The process to schedule a burial at ANC can be complex and we handle each family's request individually with the utmost care and professionalism. As of October 2018, wait times at ANC are as long as 27 - 35 weeks (for cremated remains) to schedule a service consisting of military funeral honors which require funeral escorts and up to 20 weeks for services requiring military funeral honors without escorts and dependent honors (for cremated remains).

Services are scheduled in the order in which the requests are received via our Call Center, with the only exception being current conflict active duty service members killed in action or who died of wounds. These services are accommodated within two weeks of the date of death. Veterans and family members with casketed remains are subsequently scheduled, followed by services with cremated remains.

Three factors influence wait times for burial at ANC:

- The family's decision on casketed or cremated remains.
- The military resources available.
- The preferences of the individual family.

Generally, the more resource intensive the service, the longer the wait time. As part of an overall strategy to reduce wait time for families, increase operational efficiency, and maximize effective use of all of the cemetery's resources, the Secretary of the Army's Advisory Committee on Arlington National Cemetery was consulted on this topic starting in 2016.

On May 8, 2018, after thorough discussion and careful consideration, the Committee recommended limiting the grade of those eligible for military funeral honor services at ANC which require the most extensive level of resources. The recommendation stipulates military funeral honors at ANC, which include an escort consisting of a marching element, band and a caisson team, be authorized for only those military members who attained the grade of E-9, W-4, and O-4 and above, or who were killed in action (regardless of rank).

Implementation of this recommendation will reduce the amount of time families must wait and increase operational efficiency by approximately one third, or result in a reduced wait time of 19-25 weeks. The Committee delivered their recommendation in a formal report for decision by the Secretary of the Army. When approved, implementation will be announced.

THANK YOU TO ALL OF THE VETERANS ON STAFF AT ANC & OAC.
Below is a list of those who self-identified themselves to us.
We are honored to work with you everyday on these Hallowed Grounds.

Pamela Boyett
Norma Brisbane
Justin Buller
George Burgess
Raymond Buzzard
Mary Carpenter
Jamie Coppage
Norman Creek, Jr.
Wesley Erving
David Fedroff
Blad Fernandez
Glen Foster
John Gandy
Kevin Huxford
Lillian Jenkins
Joseph Karanosky
Tim Keating
Quinton Keel
Katharine Kelley
MIchael Kempton
Sherry Love
Kenneth Macomber
Doug Martin
Mary Lynn Malone
Kenneth Marciano
Joe Mercer
Warren "Mac" McFarland
Patrick McGrady
Micheal Migliara
Charles Moore
Joy Ortman
Asha Poke
Willie Polite
Robert Quackenbush
Roy "Rex" Rexroat
Beatriz Rivera
Joseph Rodriguez
Norka Rojas
Calvin Roseman, Jr.
Thomas Skews
Arthur Smith
Charles Walters
Anthony Whalen
Renea Yates
Paul Zacharzuk

MARBLE & TURF

Monarch Butterflies

By Kelly Wilson, Horticulturist

Maybe you've seen them hovering over the Lantana in the McClellan landscape or fluttering above Sedum plantings in the columbaria.

What in the world are we talking about? Monarch Butterflies! It's been a great year for Monarchs. One reason is that there are more plants for the Monarch caterpillar and butterfly to feast on. Arlington National Cemetery is doing its part by planting Asclepias (milkweed) plants for the emerging caterpillars, and nectar producing plants like Lantana for the butterflies. Both types of plants are necessary to nourish the Monarch through its development and its many generations throughout the season.

Remember that while we may be witnessing a spike in the number of Monarchs this year, it changes every year, mostly due to unpredictable weather patterns.

However, continuing efforts to conserve the overwintering forest sites in Central Mexico, public education on the Monarch's unique and largest insect migration, learning from scientists on how insecticides and herbicides put Monarchs at risk, and encouraging the planting of native milkweed plants all go a long way in helping protect such a valuable species.

A monarch butterfly lands on Asclepias (milkweed) in the Facility Maintenance parking lot rain garden at Arlington National Cemetery, Arlington, Virginia, Sept. 10, 2018. (U.S. Army photo by Kelly Wilson)

IN CASE YOU MISSED IT!

Photo highlights from October & November 2018

OCT. 12 - Environmental sustainability and horitculture Memorial Arboretum rain garden tour.

OCT. 17 - 1st Special Forces Command (Airborne) wreath-laying ceremony to commemorate President John F. Kennedy's constributions to the U.S. Army Special Forces.

MAR / APR 2019

Hallowed Grounds

HONOR - REMEMBER - EXPLORE

Hallowed Grounds

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Cover photo:
Service members hold state and territorial flags along the Memorial Mall, March 22, 2019.
(U.S. Army photo by Elizabeth Fraser)

Contents

March / April 2019

Team,

On behalf of the Executive Director and myself, a thank you for all that you do every day to support Arlington National Cemetery. It is about that time again! Memorial Day and our busy season is all but upon us. Therefore, I wanted to take a moment to remind everyone about the important part everyone of us plays in the visitor experience at ANC. From family members to honor flights to school groups and "bucket list-ers," everyone who comes through our gates is an important part of what we are here to do. Honor, Remember and Explore is best done through a positive and engaging experience.

I'd like all of us to be self-aware and ensure we are using these "must have" skills when speaking to and interacting with our families and visitors.

#1 - Effective Listening

Without the ability to listen carefully to what a guest is saying, a message could be easily misunderstood and misinterpreted. As a result, communication breaks down causing frustration.

#2 - Attentiveness

Be attentive and pay attention. Our guests usually just need simple and clear answers or directions. There's nothing wrong with using talking points, as long as they are personalized and used appropriately.

#3 - Patience

Many of our families and visitors travel very far and they are not familiar with Washington D.C. traffic, rules or the amount of people. So, it is really important to separate your feelings from the situation and understand that in most cases a customer is upset with something that has nothing to do with you personally.

#4 - Self-control

Maintaining self-control is paramount in customer service. Dealing with surprises, confused people or a language barrier can be frustrating. If you keep cool, so will our guests. Try to remember they may be lost or confused, and more so, grieving. Take deep breaths and help the best way you can. They will respond well to your calm and confident demeanor.

#5 - Clear Communication Skills

Not everyone is a great communicator, but you can be if you speak with a clear and positive tone and ensure your guidance is simple and easy to understand. It helps to avoid to misunderstandings and unwanted consequences. If you need help with what to say, our public affairs team will be happy to coach you or prepare easy to remember talking points.

#6 - Don't Forget Body Language

When talking to your customers, body language and facial expressions convey far more than the meaning of the words.

#7 - Taking Responsibility

Our guests expect us all to take responsibility for any problems or negative experiences they are having at ANC. First, sincerely apologize that they are having trouble and then let them know you are there to help them. Show your readiness to assist in anyway you can, as quickly and efficiently as possible, or share that our management team will address their concern.

#8 - Willingness To Improve

A high performing organization never stops learning. This means there's always room for improvement and it should be part of all of our consciousness that we continually look for ways to enhance the experience that is Arlington National Cemetery! If you have good ideas or ways to do things better, remember our suggestions box link or bring it up to your leadership chain.

Thank you for all that you do - let's have a wonderful "busy season" and a great run up to Memorial Day 2019!

- Kate Kelley, Superintendent, Arlington National Cemetery

MARBLE & TURF

Our New Linden Trees

Linden trees (Tilia cordata) arrive at Arlington National Cemetery to be placed along the Memorial Mall below the Tomb of the Unknown Soldier, Arlington, Virginia, March 12, 2019. (U.S. Army photo by Elizabeth Fraser)

By Greg Huse, Urban Forester, Horticulture

If you've been by the Memorial Mall below the Tomb of the Unknown Soldier in the past few weeks, you've undoubtedly noticed a big change happening. The large aerial hedges of linden trees (Tilia cordata) that have flanked the north and south sides of the Mall for the past few decades are no longer there.

During those years, the trees slowly started declining due to poor health and structural issues. Over the course of the past few growing seasons, several of the worst trees were removed, a few at a time, and replaced with new ones. After discussions regarding the condition of the hedges were held, the Horticulture team put together a plan to remove all of the remaining older trees at one time, and have them all replaced. As a result, the hedges would consist of trees of the same size and age, and have a uniform look. With Superintendent Katharine Kelley's approval, the project was a go!

All of the new trees were personally selected in the field by the ANC Urban Forester to ensure good health and structure, and size consistency. The existing Mall trees were removed in a few days by the tree and shrub care contractor, and the site prepared for planting. All of the new trees will be installed by the end of March 2019. As before, the contractor will slowly train and shape the trees so that they may once again be that magnificent aerial hedge.

STREAM RESTORATION AT ANC

By Stacey Rosenquist, Environmental Compliance Program Manager, Engineering

When one thinks of Arlington National Cemetery (ANC), they think of the perfect rows of marble headstones, curving roads, graceful trees, and the historic avenue bringing visitors, families and dignitaries to these hallowed grounds. While they travel along the historic Memorial Avenue and through the beautifully landscaped cemetery, most may not note their proximity to the Potomac River, a tributary of the Chesapeake Bay.

To improve water quality in the Chesapeake Bay and its tributaries, Virginia General Assembly enacted the Chesapeake Bay Preservation Act in 1988. This Act allows ANC to enhance water quality and allow development to continue. When developing the cemetery, ANC selects stormwater best management practices (BMP) to meet performance standards designed to reduce water quality impacts.

One BMP includes a restored stream and vegetated buffer in the Millennium section. ANC chose to improve the condition of the stream running through the project site because of stream bank erosion.

While streams are complex and natural systems, predicting their response to an engineered design is not easy. Ultimately, ANC chose a stream channel design to meet required water quality reductions and improve stream conditions. This design included adjusting stream elevation, adding step pools and a border pool, stream bank stabilization, and restoring the adjacent buffer area.

By restoring the stream's condition and buffer area, ANC improved the water quality of the Potomac River. In addition to the stream restoration, ANC has implemented other BMPs, such as rain gardens, permeable sidewalks, porous pavement, and underground treatment devices. By carefully managing our land uses within the cemetery, ANC reduces its pollution impacts on water quality, subsequently improving the health of the Chesapeake Bay.

Stream located near Columbarium Courts 12 and 13 of Arlington National Cemetery, Arlington, Virginia, Aug. 20, 2014. (U.S. Army Core of Engineers photo)

Did You Know?

APPRAISALS ARE DUE!

By ANC Human Resources

The 2019 annual appraisal rating cycle ended on March 31, 2019. Supervisors or employees will initiate the annual appraisal on or after April 1, 2019 with a suspense date of May 26, 2019 to complete the annual rating of record.

Employee input is not mandatory but highly encouraged and valuable. It is the employee's best chance for making the best case for how they performed during the rating cycle. It is recommend that employees draft their self-assessment in a Microsoft word document and copy and paste in the MyPerformance Tool. Employees will need to write a separate assessment for each rated element consisting of 2,000 characters or less. Once an employee has their final draft for each element, then they can simply paste the material into the MyPerformance tool.

Questions employees should consider when writing a good self-assessment:

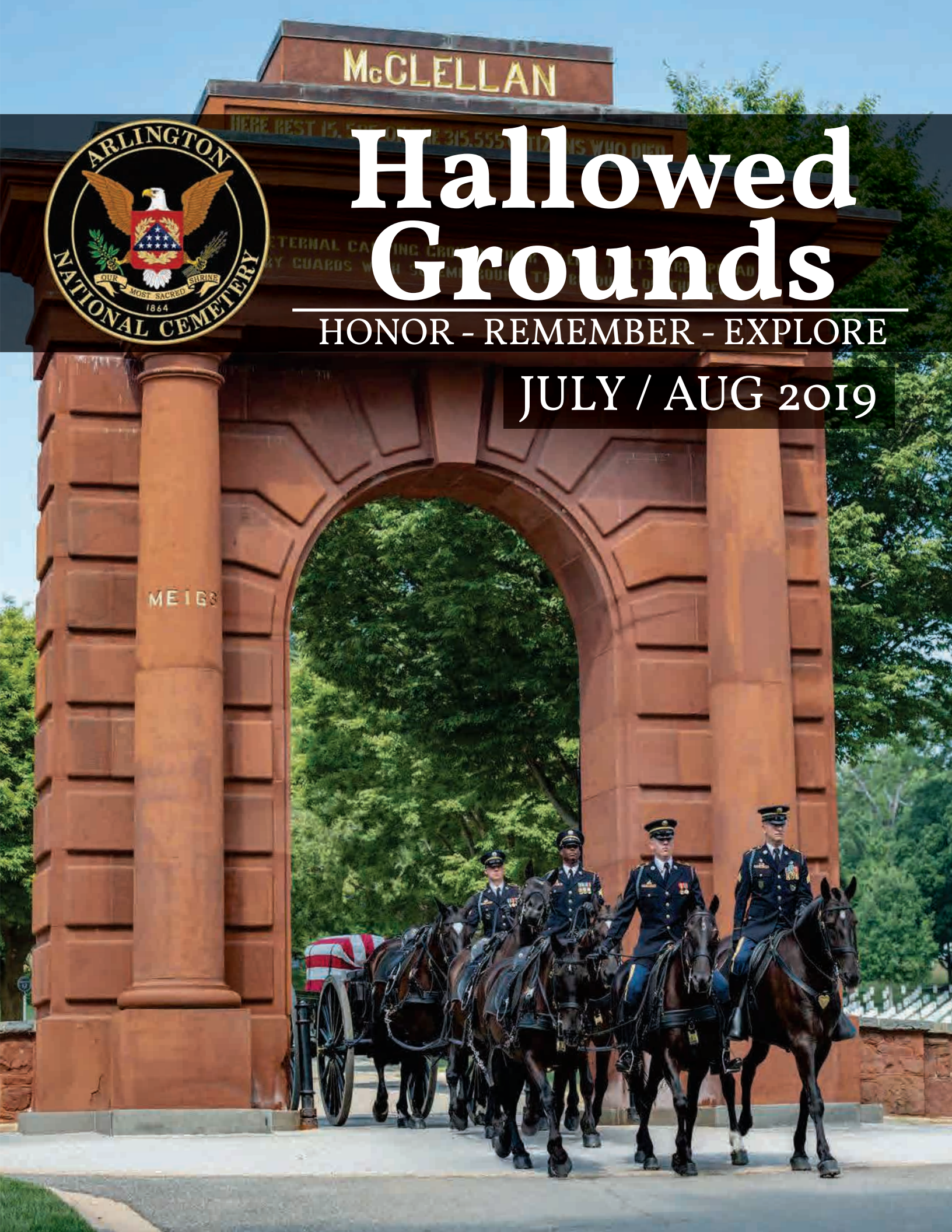
1. Describing the level of performance you believed you achieved and highlight significant achievements focusing on how it supported mission and team?
2. For elements you rate yourself as Outstanding, explain how your performance exceeded standards for an outstanding performance. Ensure your claims are documented and supportable.

Supervisors are required to write performance narratives for all employee performance elements. Discussions regarding specific employee contributions should be completed with employees prior to writing narratives and providing a rating. The final rating will not be divulged/disclosed to the employee until the Higher Level Reviewer has approved the ratings.

Supervisors are encouraged to write performance assessments for each of their employee's performance elements in a Microsoft word document and then copy and paste those assessments in the MyPerformance Tool. When writing performance assessments, supervisors should:

1. Review employee's self-assessments and have discussions with employees. They should also ask for examples in such cases and then formulate the performance assessment based on employee input and observations.
2. Focus on concrete job behaviors and performance results, not impressions. They should provide specific, relevant details to justify and support the ratings given, and include enough details that a third party would understand the reason for the rating. A common problem with assessments is that the examples provided or the wording used in the assessment does not match the assigned ratings. Examples should be provided in the assessment which would allow an external audience to clearly understand the justification for the rating. Write assessments which include examples that demonstrate behavior throughout the rating period and from a variety of different situations and examples.

Step by step instructions and information on how to access the MyPerformanceTool system will be sent out for employees, supervisors, and higher level reviewers by the G1 HR office. For additional information on writing performance self-assessments or performance narrative assessments, please contact Joy Ortman, 703-614-0599 or Lynn Gabriel, 703-614-3601.



ARLINGTON NATIONAL CEMETERY

OUR MOST SACRED SHRINE

1864

Hallowed Grounds

HONOR - REMEMBER - EXPLORE

JULY / AUG 2019

To the entire OAC / ANC Team,

It is hard for me to believe I am writing my last leader note for our newsletter as the Superintendent at Arlington National Cemetery.

I want to thank you for all of your efforts over the last three and half years through what has been the most challenging and rewarding time of my professional life. Working with you in each of your roles, performing the myriad missions here at ANC has been meaningful to me and challenges me to strive to be the best I can be as a leader. Our mission, like many Army missions but certainly not all, truly is a no-fail mission. You have risen to each occasion and executed each mission with precision and passion and as a result, we've taken the cemetery far over the last few years.

The results speak for themselves: Millennium is open and operational. Land acquisition for Southern Expansion is on track. We are meeting the intent of Congress in proposing changes to eligibility. We continue to receive the funding we need and we continue to balance all our efforts expertly. Our day to day execution of the interment mission, taking care of families and connecting visitors to the cemetery's rich history continues with dignity and honor. We have set the stage to improve the visitor experience through interpretation and education and we stand ready to take ownership of Memorial Avenue if legislated to do so. Contracting, maintenance, safety and logistics support have never been better in my time here than they are today.

Finally, after many years we've made great headway in updating our regulations, divesting cemeteries, delivering technology, hiring the right talent and in defining our role as cemetery proponent for the Army. Our positive engagements on the hill, credibility with our budget execution, and our external partnerships speak to the stellar reputation of the cemetery.

Suffice to say, I am very proud of all of you and it has been my honor, privilege, and challenge to serve with you and be a part of this great team. I would ask that you continue to provide the same great support to the new superintendent, the Executive Director, and Chief of Staff that you provided to me!

Thank you!

- Kate Kelley
Superintendent

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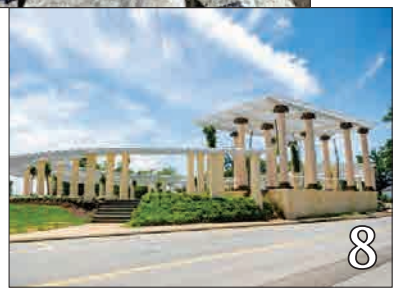
Cover photo:
The 3d U.S. Infantry Regiment (The Old Guard) Caisson Platoon passes by McClellan Gate, Arlington National Cemetery, July 26, 2019.
(U.S. Army photo by Elizabeth Fraser)

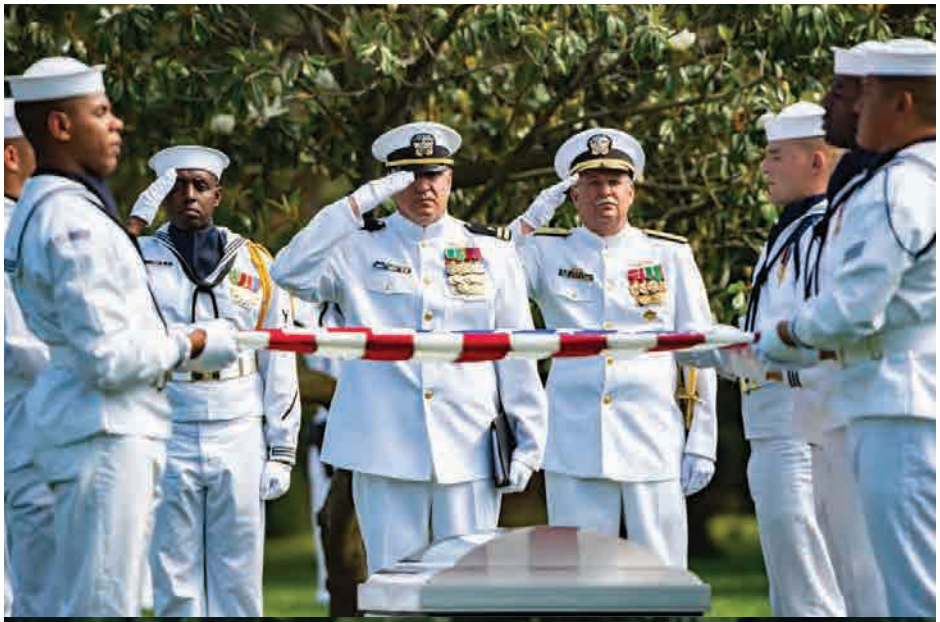
Contents

July / August 2019



JUNE 21 - ANC Horticulture team gives a tour of the Memorial Arboretum to members of the American Public Gardens Association.

JUNE 24 - Military funeral honors with funeral escort for U.S. Navy Cmdr. James. B. Mills.



"*Protecting environment by preventing sewer backups*" Article

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History teaches JBM-HH Soldier/athlete

Spc. Clive Smith knows his Jordans and Russells

By Jim Dresbach
Pentagram Staff Writer

Editor's note: In commemoration of Black History Month, The Pentagram is featuring a series about Joint Base Myer-Henderson Hall Soldiers and who influenced their careers in the arts or subjects of expertise.

Spc. Clive Smith is an aide to the Joint Base Myer-Henderson Hall command group team during business hours, but when not at his desk in Bldg. 59, he sees to business on the basketball court.

Smith is a member of the JBM-HH men's basketball team and his history on the hardwood is an abbreviated history. The 28-year-old did not start playing organized basketball until his senior year at South Miami Senior High School in Florida.

"I didn't start playing basketball until I was 18," Smith said. "I didn't touch a basketball until I was 18. I played football. I was a defensive end. I found out that I was more athletic in basketball."

Smith called South Miami Senior High School a basketball hot bed, but the school has produced famous athletes, entertainers, and politicians. Football Hall-of-Famer Derrick Thomas, rapper Pitbull, and U.S. Sen. Marco Rubio are famous alumni of the school. Since football was his initial specialty, he rattled off a handful of players, including Thomas, who he loved to watch.

PHOTO BY JIM DRESBACH

Joint Base Myer-Henderson Hall Soldier and base basketball player Clive Smith lines positions himself for a rebound before a foul shot Friday versus Fort Bliss in the 2019 Capitol Classic at the Fort Myer Fitness Center.

"I definitely followed Michael Vick and Miami Dolphins Zach Thomas, Derrick Thomas and LT (New York Giants linebacker Lawrence Taylor)," said Smith, who also was a big University of Miami football follower.

Smith successfully tried out for the Division II Florida Memorial University basketball team in Miami Gardens, Florida. His high school basketball coach, Robert Doctor, recognized Smith's athleticism and talent, gave Smith an opportunity and arranged for the chance to play in college.

"I wasn't even planning on going to college," said Smith, who picked up basketball knowledge by playing in pick-up games and watching basketball on television. "My basketball coach called me one day. My coach asked me if he could get me into a school would I go, and I said 'yes'."

As for his basketball influences, Smith watches and admires players he knows he can emulate.

"You know, most people watch Lebron James," Smith said. "I can't do the things he does, so I watch people like Tim Duncan, Amar'e Stoudemire and Dwight Howard. He's my favorite. Howard was 'Superman'."

Smith talked about basketball history and noted winning National Basketball Association team championships leaves a legacy in basketball lore.

"Everyone says (Chicago Bull) Michael Jordan is the best, and they always say that because he has six rings," Smith said. "But look at (Boston Celtics) Bill Russell. Is he really the best? He has 11 rings. If rings make you the best, it could be Bill Russell. I love Kareem (Abdul-Jabbar), too and that hook shot. I love old school moves. I still go out to the park and watch the guys do old school moves."

Pentagram Staff Writer Jim Dresbach can be reached at jdresbach@demilitary.com.

Protecting environment by preventing sewer backups

By Jen Tolbert
Environmental Management Division
JBM-HH Directorate of Public Works

One of the greatest creations of the modern-day era was the development of the sanitary sewer system. While it may not be the most glamorous invention, this system of underground pipes has helped to significantly improve human health and environmental conditions in towns and cities by containing sewage and preventing bacteria and diseases from spreading throughout our communities and the environment.

The sanitary sewer system carries wastewater directly from sinks, toilets, washing machines, and more to municipal wastewater treatment facilities, where the water is filtered and treated before being discharged. Unfortunately, sanitary sewer systems are not fool proof. Occasionally, blockages in sewer pipes cause sewer backups or overflows, which is an unintentional release of sewage to stream or surface areas before it reaches the wastewater treatment plant. Not only are sanitary sewer system backups a complete mess to clean up, they can also severely harm the environment. The wastewater can overflow into the storm-water system, which carries rainwater directly to local streams and creeks.

Sewage overflows can contaminate groundwater and surface water, which can spread diseases via drinking water, recreational water sources, and the food sources through the contamination local fish catch.

While there are several ways a sanitary sewer system can get backed up, including roots infiltrating the pipe system and aged piping, a common cause of backups is the presence of obstructions in sewer pipes. In other words, people dumping things they shouldn't down the drain.

In order to protect the health of communities and local environment, individuals must do their part to prevent sewage overflows from occurring by learning what can and can't be put down drains and toilets.

Be mindful of what goes down the kitchen or breakroom sink. The following food-related materials can cause clogs in the sewer lines and create backups:

- **Greases, fats, and oils (such as cooking oils including barbecue grease).** These stick together and coat the insides of pipes, solidifying as they cool and creating blockages.
- **Coffee grounds.** Grounds do not break down in water, but instead clump together and build up.
- **Egg shells.** The shells break down to a sand-like consistency that can contribute to clogs, and they do not sharpen the blades of garbage disposal as a common myth says.
- **Pasta and rice.** These foods tend to swell when they come into contact with water.
- **Fibrous foods (such as corn husks, celery, and artichokes).** The fibers can get tangled with other materials and cause a clog.

Remember that toilets do not make everything disappear. The following restroom-related products should never be flushed down toilets:

- **Wipes and cosmetic towelettes.** This includes wipes that claim to be "flushable." These items do not actually break down. Instead, they may gather together and create a major blockage.
- **Feminine products and cotton swabs.** As with the items above, these are not biodegradable and are a very common cause of sanitary sewer line backups.
- **Dental floss.** Floss does not biodegrade and can easily become tangled with other items and form clogs.
- **Paper towels and tissues.** While they may seem similar to toilet paper, these paper products are not made to dissolve and disintegrate in water like toilet paper does.

By individuals doing their part to keep these items out of the sanitary sewer systems, everyone can prevent the contamination of local waters and the spread of diseases through our communities.

To report conditions that could cause stormwater pollution or to get more involved with stormwater activities at JBM-HH, call the Environmental Management Division at (703) 696-8095.

PHOTO COURTESY OF WATER USER SOU

Occasionally, blockages in sewer pipes cause sewer backups or overflows, which is an unintentional release of sewage to stream or surface areas before it reaches the wastewater treatment plant. Not only are sanitary sewer system backups a complete mess to clean up, they can also severely harm the environment.

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Arboretum Tour Flyers

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ARLINGTON
NATIONAL CEMETERY
HONOR · REMEMBER · EXPLORE

MEMORIAL ARBORETUM
Spring 2019 Walking Tours

Memorial Arboretum Spring Plant Tour
Friday, April 12, 2019
9:00 – 11:00 a.m.
Meet at the Welcome Center Information Desk.

Bathe in the cemetery's spring beauty with a stroll through the Memorial Arboretum.

Arlington National Cemetery has a diverse collection of flowering shrubs and perennials. Learn firsthand from the cemetery's Horticulturist about how to identify and grow these spring blooming treasures.

Memorial Arboretum Walking Tour
Friday, April 26, 2019 AND
Friday, May 10, 2019
9:00 – 11:30 a.m.
Meet at the Welcome Center Information Desk.

Come see the trees of Arlington at the peak of their spring splendor! The vibrant red, white, yellow and pink blossoms of over 300 tree species are a must see for anyone visiting ANC in the spring.

Learn about the cemetery's Memorial Arboretum, a Level III Accredited Arboretum. You'll gain insight into the urban forestry program, extensive tree collection, and State Champion trees. The overall Horticulture program and the variety of techniques used to create some of the most breathtaking formal and informal landscapes and gardens will also be highlighted.

Friday, April 26 is Arbor Day. On this day we will celebrate the trees of Arlington with a ceremonial tree planting. All tour participants are welcome to attend.

Memorial Arboretum Spring Rain Garden Tour
Friday, May 3, 2019
9:00 a.m. – 11:00 a.m.
Meet at the Welcome Center Information Desk.

Join Arlington's Horticulturist and Environmental Specialist for a look at the cemetery's rain gardens and other practices the cemetery has in place to help manage storm water.

Learn how rain gardens function, what plants succeed, and lessons learned. Explore some of the native plants, sustainability practices, and designs in place at the cemetery.

Attendees should bring water and be prepared to walk in heat, on hilly and uneven terrain.

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Stormwater Training Materials

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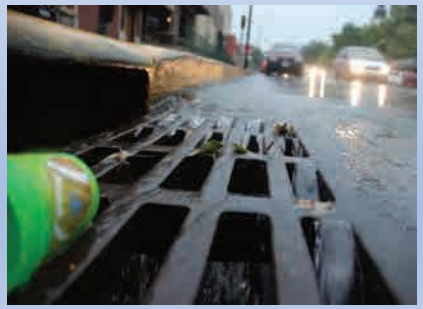
Arlington National Cemetery

Stormwater Training 2018

What is Stormwater Pollution?

Stormwater

- Precipitation - rain, snow, sleet, freezing rain
- Runs over pavement and grass and can pick up pollutants

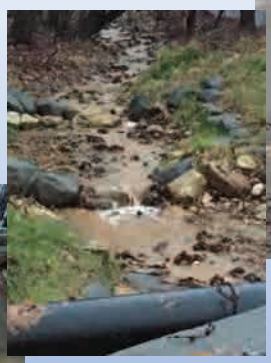


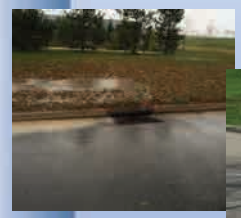
- Pollutant = Sediment, dredged spoil, sewage, garbage, chemical wastes, oil/grease, biological materials, heat, rock, sand, soil, etc.

- Common ANC pollutant sources:
  - Littering
  - Sediment/spoil
  - Oil and chemical spills/leaks
  - Washing
  - Fertilizers and pesticides

Key Risks

ANC storm drains discharge to Boundary Channel and Pentagon Lagoon. Stormwater entering storm drains is not treated!





If regulations are not followed:
- Employees and/or public could be exposed to contaminated water
- Costly to achieve compliance again

Municipal Separate Storm Sewer System (MS4) Permit and Program

ANC's permit requires a MS4 Program Plan. This Plan includes:

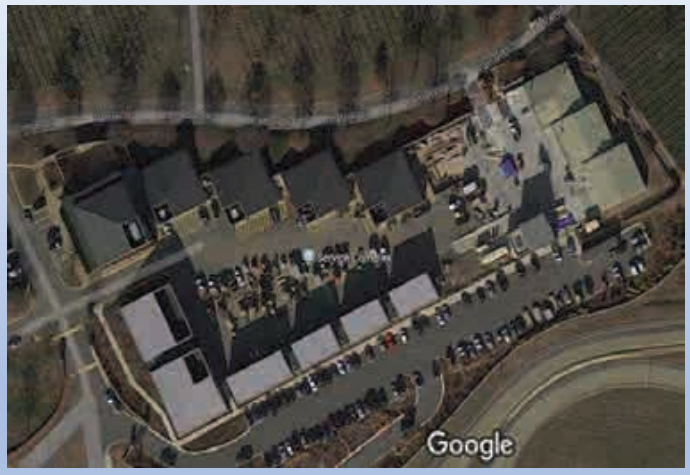
- Public Education
- Public Involvement
- Construction Site Stormwater Control
- Post-Construction Stormwater Management
- Pollution Prevention Practices, Stormwater Pollution Prevention Plan (SWPPP), and Good Housekeeping
- Illicit Discharge Detection and Elimination

The VDEQ-approved Plan is "law" at ANC!

SWPPP and Good Housekeeping

SWPPP includes:

- Inventory of Potential Pollutants
- Best Management Practices (BMPs)
- Inspection Requirements
- Illicit Discharge Detection
- Training Requirements
- Reporting Requirements



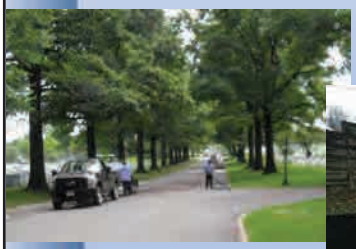
SWPPP and Good Housekeeping

High Priority Areas at ANC	Potential Pollutants
Building 123 Complex	Sand, salt, sediment, petroleum, oil, lubricants, pesticides and fertilizers, hazardous materials and wastes, saw dust
High-Traffic Visitor Areas	Litter
Spoils Area and Contractor Storage Area	Spoils, unusable soils, green waste, dirt, concrete dust, solid waste, petroleum, oil, lubricants, pesticides and fertilizers
Active Construction Sites	Sediment, petroleum, oil, lubricants, hazardous materials, solid and construction wastes
Parking Lots, Vehicle and Equipment Storage	Petroleum, oil, lubricants, litter
Reseeding and Landscaping Areas	Sediment, petroleum, oil, lubricants, pesticides and fertilizers

SWPPP and Good Housekeeping

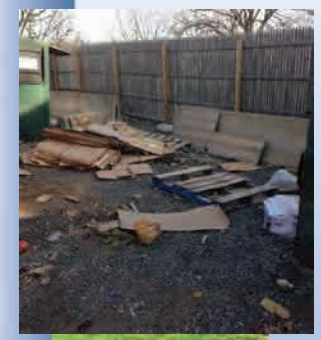
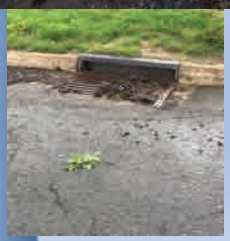
Best Practices at ANC

- Good housekeeping
- Performing maintenance and inspections to prevent and identify leaks
- Sediment and erosion control
- Spill response planning (SPCC plan)
- Street sweeping with vacuum truck
- Rain gardens and bioretention basins
- Stormceptors and storm filters
- Permeable and porous pavement
- Pre-treatment and underground treatment chambers





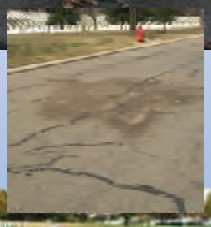
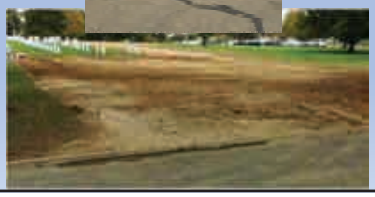
SWPPP and Good Housekeeping

What should you look for?

- Water backing up, overflowing
- Sediment or litter in BMPs or drains
- Dying vegetation
- Water bypassing BMP
- Sediment in road, not contained to site
- Blocked drains
- Litter on the ground
- Stains or chemical spills

See Something Say Something

Illicit Discharge Detection and Elimination

What is an Illicit Discharge?

- Any discharge into a storm drain system that is not composed entirely of stormwater.

Look for...

- Potable water, chemicals, other fluids flowing in storm drains during dry weather
- Water that is cloudy, dirty, has a sheen, contains debris or litter, has an odor
- Sediment, trash, fuels, and oils

PERMIT
ANC is required to track all observed discharges and spills.

Spill Response Procedures

Individual Reporting Spill	
Name and Address	Arlington National Cemetery 1 Memorial Drive Arlington, VA 22211
Phone	
Date and time of spill	
Weather conditions	
Type of material discharged	
Location of the spill	
Quantity discharged (estimate) and characterization of the event	
Name of any surface water involved or threatened	
The source of the discharge	
Description of all affected media (soil, water, vegetation)	
Cause of the discharge	
Possible hazards to the environment	
Any damages or injuries caused by the discharge	
Any known or anticipated health risks associated with the incident	
Actions being used to stop, remove, and mitigate the effects of the discharge	
Whether an evacuation may be needed	

Individuals or organizations contacted

Name	Organization	Time of Call

If there is a threat to human health or the environment, immediately call 911 then the Environmental POC

If the spill is not life-threatening, immediately call the Environmental POC
703-614-0520

If safe to do so:

- **STOP THE FLOW OF PRODUCT**
- **WARN PERSONNEL**
- **SHUT OFF IGNITION SOURCES**
- **INITIATE CONTAINMENT**
- **COMPLETE SPILL REPORT FORM AND SUBMIT IT TO THE ENVIRONMENTAL POC**

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Illicit Discharge Survey and Interconnection Screening Results Table

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2016 -2018 Outfalls -Illicit Discharge Survey

Inspector	Assessment ID	Outfall ID	Date	Time	Flow	Chlorine	Condition
Fenn	00001	R001	7/12/2016	16:40	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] 22" drain (concrete in concrete wall) to open ditch, with larger drain (from other source) adjoining. Little flow, mostly sediment, close to opaque, gray. No chlorine when tested. Outfall appears in good condition besides flow line and sediment.
Grady	00006	R001	8/1/2017	12:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Water flow. No chlorine. Outfall on NPS property. Concrete pipe discharging to a natural stream bed. Land use in Drainage Area is institutional. Closed concrete pipe discharges top open ditch. Flow is clear with no odor. Staining evident along flow line. No sample sent to offsite lab.
Rosenquist	00018	R001	8/24/2018	14:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] No trace of chlorine. Stromwater discharges to open ditch in wooded area on NPS property adajcent to SEC36A and SEC53. Sample collected in ditch on NPS property.
Castillo Casarez	00012	R002	8/7/2018	15:20	Y	N	R002-B [Total Chlorine=0 ppm/Free Chlorine=0 ppm] Drain and system in good condition and with no traces of chlorine.
Castillo Casarez	00013	R002	8/7/2018	16:00	Y	N	R002-A [Total Chlorine=0 ppm/Free Chlorine=0 ppm] All inlets are in similarly good condition and too deep to test for chlorine levels.
Castillo Casarez	00011	R002	8/8/2018	8:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Flow was identified but too deep to test. Access drain mostly covered with overgrown vegetation.
Grady	00008	R003	8/2/2017	12:00	N	N	Millennium Project has redirected stormwater and created new outfalls into Millennium stream. All ANC property.
Rosenquist	00015	R003	8/24/2018	13:30	N	N	Millennium Project has redirected stormwater and created new outfalls into Millennium stream. All ANC property.

2016 -2018 Outfalls -Illicit Discharge Survey

Inspector	Assessment ID	Outfall ID	Date	Time	Flow	Chlorine	Condition
Grady	00009	R004	8/2/2017	12:00	N	N	Millennium Project has redirected stormwater and created new outfalls into Millennium stream. All ANC property.
Rosenquist	00016	R004	8/24/2018	13:30	N	N	Millennium Project has redirected stormwater and created new outfalls into Millennium stream. All ANC property.
Fenn	00002	R005	7/12/2016	10:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] 12" drain to stream (concrete pipe protruding from earth). Little flow, with slight sulfurous smell, and barely visible oil sheen on surface of flow. Orange-brown in color, and very cloudy, liekly from sediment, which is visible all throughout stream. Outfall appears in good condition, but multiple problematic indicators.
Grady	00010	R005	8/2/2017	12:00	N	N	Millennium Project has redirected stormwater and created new outfalls into Millennium stream. All ANC property.
Rosenquist	00017	R005	8/24/2018	13:30	N	N	Millennium Project has redirected stormwater and created new outfalls into Millennium stream. All ANC property.
Fenn	00003	R006	7/12/2016	15:00	N	N	22" concrete drain (from concrete wall in side of hill) to open ditch, composed of concrete and stone. No flow present, but slight flow line visible in pipe.
Grady	00007	R006	8/2/2017	12:00	N	N	Stormwater BMP (MTD). Closed pipe to open drainage system down hillside to Millennium Stream. No flow.
Rosenquist	00014	R006	8/6/2018	10:00	N	N	Stormwater BMP (MTD). Closed pipe to open drainage system down hillside to Millennium Stream. No flow.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Fenn	I001		7/11/2016	8:30	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Large pipe draining into open ditch. Flow present, no chlorine detected. Concrete ditch is deteriorating, very overgrown. Sediment deposits and uneven patches in concrete at bottom of trapezoidal ditch.
Grady	I001		8/1/2017	12:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Steady water flow. Concrete drain in good condition (minor cracks). Eastside of gate overgrown with foilage.
Castillo Casarez	I001		8/6/2018	2:45	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Flow inspected twice on that day. Muddy water was present during first inspection. KTR replacing storm sewer lines discharging to outfall. Second inspection that day, flow was clear. KTR dewatering excavation for installation of MTD BMP in SEC 52. No chlorine detected.
Fenn	I002		7/11/2016	16:45	N	N	Three curb storm drains with square metal grates in front, along road. All in good condition, with mild corrosion of grates. No flow present at each. Unsure which is outflow; two directly across from each other, one closer to Memorial Ave.
Grady	I002		8/1/2017	12:00	N	N	No flow. Square grate overgrown with vegetation. Good condition.
Castillo Casarez	I002		8/8/2018	9:50	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Stagnant water with no traces of chlorine.
Fenn	I003		7/11/2016	16:40	N	N	Square metal grate in grass off of stairs/pedestrian path. Overgrown, partially covered with grass. Mild corrosion of grate, small debris present in drain. No flow present at time of inspection.
Grady	I003		8/1/2017	12:00	N	N	Earth encroaching grate. Inlet good condition. Border NPS property. No flow.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Castillo Casarez	I003		8/8/2018	9:45	N	N	Debris in outflow with minor overgrown vegetation.
Fenn	I004		7/11/2016	16:30	N	N	Large metal curb drain with manhole on sidewalk at far right end when faced from road. No flow present, substantial debris and sediment/dirt present in drain. Metal at curb has light wear, and manhole cover has light corrosion.
Grady	I004		8/1/2017	12:00	N	N	Metal grate. Inlet good condition. No flow. NPS property.
Castillo Casarez	I004		8/8/2018	11:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Metal grate in fair condition. Flow had no trace of chlorine. The east drain is the only drain that does not have a flow. All drains appear clear of debris.
Fenn	I005		7/11/2016	16:55	N	N	Storm drain at edge of parking lot, with concrete slab and manhole cover on top. Storm drain is bent/bowing at center and metal is worn, missing paint, and presents mild corrosion. No flow is audible, but visually inaccessible.
Grady	I005		8/2/2017	12:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Metal Great. Good condition. Standing water observed. No flow.
Castillo Casarez	I005		8/8/2018	9:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Stagnant water in inlet. Manhole houses many mosquitos. No traces of chlorine
Fenn	I006		7/11/2016	17:00	N	N	Small domed metal grate set in grass adjacent to parking lot. Grate is significantly covered by dirt and grass, and has mild corrosion. No flow present, but substantially overgrown and dirt spilling over into drain.
Grady	I006		8/1/2017	12:00	N	N	Circular grate. Earth encroachment. Debris over the area. Standing water observed. No flow.
Castillo Casarez	I006	-A	8/8/2018	8:40	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Small flow with no chlorine. Good condition.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Castillo Casarez	I006	-B	8/8/2018	8:50	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Minimal overgrown vegetation with stagnant water. No traces of chlorine.
Fenn	I007		7/12/2016	12:35	N	N	Round metal grate with rungs beneath leading down into drain. Too deep to determine flow or ascertain much about condition of drain. Metal grate has mild deterioration and corrosion, and slight overgrowth of grass.
Grady	I007		7/31/2017	12:00	N	N	Metal grate. Inlet good condition. No flow.
Castillo Casarez	I007		8/7/2018	9:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Metal grate over drain in good condition. Flow too deep to be able to reach to be tested. See I007-A & -B
Castillo Casarez	I007	-A	8/7/2018	9:05	N	N	No flow. Catch basin and inlet in good condition.
Castillo Casarez	I007	-B	8/8/2018	8:30	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Site currently under construction but in general good condition. A flow was indentified but is too deep to test.
Fenn	I008		7/12/2016	12:50	N	N	Manhole in concrete slab with asphalt-filled storm drain at front (curb), at perimeter of parking lot. Low points in curb appear to allow drainage of water into plantings beyond via gravel fill. Flow indeterminate, inaccessible.
Grady	I008		7/31/2017	12:00	N	N	Minor damage to concrete. Inlet good condition. No flow.
Castillo Casarez	I008		8/8/2018	7:18	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Overgrown vegetation and "foamy" basin cover overshadow access. Interior of outflow in good condition and with no traces of chlorine.
Fenn	I009		7/13/2016	12:52	N	N	Metal curb drain with metal grate in front. No flow, dirt and debris present in drain. Grate is worn and corroded, and is missing a small piece at front left corner. Road is cracking around grate.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Grady	I009		7/31/2017	12:00	N	N	Concrete cover deteriorated. Earth encroaching inlet. No flow.
Castillo Casarez	I009		8/7/2018	8:15	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Drain is mostly clear of debris. No traces of chlorine.
Fenn	I010		7/13/2016	13:00	N	N	Manhole in center of road, in good condition. Two possible manholes located, both photographed. Flow inaccessible, indeterminate.
Grady	I010		8/1/2017	12:00	N	N	No flow. Good condition.
Castillo Casarez	I010		8/7/2018	8:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Drain has been half-way covered with mowing debris. No traces of chlorines.
Fenn	I011		7/12/2016	13:15	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Large concrete slab resting on brick base covered in concrete. 18" square metal grate at center of slab. Small, vertical metal grate cut into west face of base to allow flow of water at ground level. Active flow, but unreachable. Grate has deteriorated paint and corrosion.
Grady	I011		8/2/2017	12:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Moderate water flow. No Chlorine. Inlet in good condition.
Castillo Casarez	I011		8/8/2018	10:30	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Flow uniterrupted and no traces of chlorine. Good condition.
Fenn	I012		7/13/2016	13:00	N	N	Small metal curb drain on exterior (to ANC) road side of wall, with square concrete slab resting on top. Road slopes down toward/around drain. Brick on cemetery side of wall shows arch, evidence of historic drain, now perhaps covered by ground. No flow immediately apparent, but difficult to see into drain.
Grady	I012		8/1/2017	12:00	N	N	No flow. Brick base is deterioated. No visible point of water inflow.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Castillo Casarez	I012		8/7/2018	7:45	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] All features appear to be in good condition. Drain is clear of debris and has no traces of chlorine.
Fenn	I013		7/12/2016	13:30	N	N	Small rectangular concrete slab with manhole cover, resting on brick. Four wooden posts driven into ground just beyond corners of slab. Flow inaccessible, indeterminate. Slab, manhole cover, and brick all show mild deterioration.
Grady	I013		8/2/2017	12:00	N	N	Brick base deteriorated. No flow.
Castillo Casarez	I013		8/7/2018	7:30	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Metal lid, concrete slab, and brick surround are in good condition and free of debris. Flow has no traces of chlorine. North drain currently does not have a flow while the west drain does.
Fenn	I014		7/12/2016	13:45	N	N	Small ditch in ground draining through pipe in wall, with stone/concrete surrounding. Trench is entirely filled with sediment/debris, pipe is barely visible, mostly filled/buried. No flow present.
Grady	I014		8/1/2017	12:00	N	N	Filled with debris. No visible inflow entry. No flow.
Castillo Casarez	I014		8/6/2018	1:50	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Stagnant water at catch basin. No traces of chlorine.
Fenn	I015		7/8/2016	11:45	N	N	Rectangular metal grate set in concrete along ANC wall. No flow present. Concrete around grate is cracked, grate is broken at corner, and sediment/dirt has entered drain.
Grady	I015		7/31/2017	12:00	N	N	Grate broken. Concrete has cracks. Drain is dry. Fair condition. No flow.
Castillo Casarez	I015		8/6/2018	1:30	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] No traces of chlorine. Drain in good condition except for missing corner (southwest) of the drain.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Fenn	I016		7/8/2016	11:30	N	N	Curved square metal grate in grass away from wall by appx. 30 feet. No flow, mild corrosion of grate, missing paint. Sediment and lawn clipping within drain.
Grady	I016		7/31/2017	12:00	N	N	No flow. Mortar damage. Debris build up. Good condition.
Castillo Casarez	I016		8/7/2018	10:10	N	N	No flow. Minorly wet likely rain water. Drain consists of minor overgrown vegetation but in fair condition.
Fenn	I017		7/8/2016	11:25	N	N	Drain covered by large circular concrete slab. Mostly inaccessible, but slab is broken along edge, enough to see there is no flow. Debris and sediment present in drain.
Grady	I017		8/31/2017	12:00	N	N	Circular condition cover broken. Broken cover allows stormwater to enter drain. Standing water. No flow.
Fenn	I018		7/8/2016	11:05	N	N	Partially covered by square concrete slab, which is broken at edges/corners. Pipe visible, no flow present. Sediment and debris (leaves/stones) present in drain.
Grady	I018		7/31/2017	12:00	N	N	Mortar cracks around inlet. Plant growth and debris impact inlet/drain. Good condition.
Castillo Casarez	I018		8/6/2018	1:05	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Concrete slab cover partially offset. No traces of chlorine. Sample tested from outflow next to wall.
Fenn	I019		7/12/2016	10:45	N	N	Inaccessible, flow indeterminate. Covered by small square concrete slab, which has been partially buried/sunken, perhaps when gate road was paved (seemingly overtop).
Grady	I019		7/31/2017	12:00	N	N	No flow. Square concrete cover broken/chipped. Brick base sunken. Standing water.
Fenn	I020		7/12/2016	10:45	N	N	Inaccessible, flow indeterminate. Covered by concrete slab, unknown condition.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Grady	I020		7/31/2017	12:00	N	N	Square concrete slab covers circular brick base. Moderate damage. No flow.
Castillo Casarez	I020		8/6/2018	12:55	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Concrete slab and brick in general good condition. Stagnant water identified.
Castillo Casarez	I020	-D	8/6/2018	12:56	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Catch basin part of I020, no traces of chlorine. Stagnant water. Basin in good condition.
Castillo Casarez	I020		8/8/2018	2:30	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Flow was identified with no traces of chlorine. Two samples were taken. Water is stagnant.
Castillo Casarez	I020	-A	8/8/2018	10:20	Y	Y	[Total Chlorine=0.5 ppm] Catch basin in general fair condition with a crack interiorly. The flow in this basin is stagnant.
Castillo Casarez	I020	-A	8/8/2018	2:15	Y	Y	[Total Chlorine=0.5 ppm] During the second assessment five sample were taken and all samples had traces of chlorine. This basin is the only basin in the system which tested positive for chlorine. Major crack observed along the south wall of the inlet.
Castillo Casarez	I020	-B	8/8/2018	2:10	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] The water is stagnant and had no traces of chlorine. Three sample were taken and all came out clean.
Castillo Casarez	I020	-C	8/8/2018	10:20	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Basin contain stagnant water and no traces of chlorine. Mild sings of debris but still in good condition.
Castillo Casarez	I020	-C	8/8/2018	2:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Second inspect reaffirmed no traces of chlorine in stagnant water.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Fenn	I021		7/12/2016	14:00	N	N	Small quire concrete slab covering brick base. One brick removed on eastern side, presumably for drainage. Flow inaccessible, indeterminate, although grate near road shows no evidence of flow.
Grady	I021		7/31/2017	12:00	N	N	Square cpncrete cover over round concrete on brick base. Damage to inlet and drainage area. No flow.
Castillo Casarez	I021		8/6/2018	12:35	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Stagnant water, all drains are mostly clear with minimal mowing waste. No trace of chlorine.
Grady	I022		8/2/2017	12:00	N	N	Millennium Project has established new inlets and redirected stormwater flow. This inlet no longer exists.
Grady	I023		8/2/2017	12:00	N	N	Millennium Project has established new inlets and redirected stormwater flow. This inlet no longer exists.
Grady	I024		8/2/2017	12:00	N	N	Millennium Project has established new inlets and redirected stormwater flow. This inlet no longer exists.
Grady	I025		8/2/2017	12:00	N	N	Millennium Project has established new inlets and redirected stormwater flow. This inlet no longer exists.
Grady	I026		8/2/2017	12:00	N	N	Millennium Project has established new inlets and redirected stormwater flow. This inlet no longer exists.
Grady	I027		8/2/2017	12:00	N	N	Millennium Project has established new inlets and redirected stormwater flow. This inlet no longer exists.
Grady	I028		8/2/2017	12:00	N	N	Millennium Project has established new inlets and redirected stormwater flow. This inlet no longer exists.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Fenn	I030		7/11/2016	10:20	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Gate at wall, no flow present. Gate in good condition. Substantial flow audible from circular grate across road from gate, but inaccessible, so unable to test for chlorine. Vegetation overgrown at base of gate.
Grady	I030		8/2/2017	12:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Flow. No chlorine. Debris and vegetation overgrowth at gate in wall. Damage to wall surrounding gate. Stormwater diverted under gate. Flow identified in downstream inlet.
Castillo Casarez	I030		8/6/2018	8:45	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Flow was identified with no traces of chlorine. Excess vegetation along the wall and gate. Major mortar failure by gate and mud over parts of the drain.
Fenn	I031		7/11/2016	10:10	N	N	Concrete slab with manhole cover atop/adjacent to curb storm drain. Good condition, no problems evident. Minimal flow: not moving, barely wet, likely from watering of grass (nearby). Inaccessible, so unable to test for chlorine.
Grady	I031		8/2/2017	12:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Very low flow. No Chlorine. Good condition.
Castillo Casarez	I031		8/6/2018	9:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Flow has no traces of chlorine. Good clean pathways.
Fenn	I032		7/11/2016	10:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Gate, ditch, and drain all deteriorating. Brick ditch leading to larger ditch crumbling, small bio growth (moss, lichen) evident. Gate out of plumb, flow appears to be emerging from beneath concrete slab at base of gate. Large debris (branches, twigs) in ditch, bricks and concrete show evidence of mineral deposits.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Grady	I032		7/31/2017	12:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] No chlorine. Overgrown vegetation at gate. Wall surronding gate in fair condition. Drain in fair condition.
Castillo Casarez	I032		8/6/2018	9:15	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Gate, ditch, and drain all deteriorating, specifically the east wall of the north portion of the ditch. Brick ditch leading to larger ditch consists of deteriorated bricks and loss of mortar. Gate out of plumb, flow appears to be emerging mostly from east corner beneath concrete slab. Ditch is clear of debris. No trace of chlorine.
Fenn	I033		7/11/2016	10:35	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Concrete slab with manhole atop ANC wall, with small ditch/curb drain beyond wall, for flow entering off of road. Flow audible, but could not test, all points inaccessible. Manhole shows deterioration of paint, and bio growth/sediment present in drain away from road.
Grady	I033		8/2/2017	12:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] No chlorine. Drain at wall is in good condition. Middle drain has considerable debris buildup and vegetation encroachment.
Castillo Casarez	I033		8/6/2018	9:30	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Man hole and basin north of wall are in good condition. Drain south of the wall is mostly unaffected by vegetation, other drains are similar. Flow mostly clear of debris and has no traces of chlorine.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Fenn	I034		7/11/2016	9:40	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] Large metal grate at base of wall inside ANC. Flow present, but inaccessible for chlorine testing. Mild corrosion of grate, grass surrounding is slightly overgrown, and small amount of debris visible in drain.
Grady	I034		8/2/2017	12:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] No chlorine. Drain at wall is in good condition. Middle drain has considerable debris buildup and vegetation encroachment.
Fenn	I035		7/11/2016	10:48	N	N	Manhole just outside of gate, set in concrete next to gate driveway. Flow inaccessible, indeterminate; no visible problems.
Grady	I035		8/1/2017	12:00	N	N	No flow. Metal grate and concrete in good condition. Inlet on Marshall Road. NPS property.
Castillo Casarez	I035		8/6/2018	2:30	N	N	Minimal dirt in drain but otherwise this drain is in good condition. No flow.
Fenn	I036		7/11/2016	13:20	N	N	Storm drain at side of road, with square metal grate in front. No flow. Grate has mildly deteriorated paint and mild corrosion. Sediment and small debris visible in drain.
Grady	I036		8/1/2017	12:00	N	N	No flow. Clear of debris. Good condition. 2 inlets.
Castillo Casarez	I036		8/10/2018	4:00	N	N	This inlet did not consist of a flow and contains minimal debris.
Fenn	I037		7/11/2016	13:22	N	N	Storm drain at side of road, with square metal grate in front. Paint on grate s deteriorated, grate is mildly corroded. No flow. Sediment and small debris visible in drain.
Grady	I037		8/2/2017	12:00	N	N	No flow. Minor debris in grates. 2 inlets. Good condition. Standing water.
Castillo Casarez	I037		8/10/2018	3:50	N	N	These inlets do not have any flow and contain minimal debris.

2016 -2018 Interconnections -Illicit Discharge Survey

Inspector	Interconnection ID	Interconnection ID Section	Date	Time	Flow	Chlorine	Condition
Fenn	I038		7/11/2016	13:15	N	N	Metal storm drain at side of road, partially broken/missing, with square metal grate in front, partially corroded. No flow, but broken portion of storm drain has significant corrosion. Small debris and mild sediment present in drain.
Grady	I038		8/2/2017	12:00	N	N	No flow. Minor debris in grates. 2 inlets. Good condition. Standing water. Metal cover of westside drain droken/damaged.
Castillo Casarez	I038		8/10/2018	3:50	N	N	These inlets do not have any flow and contain dirt and trash.
Fenn	I039		7/11/2016	13:10	N	N	Square metal grate set in concrete pad, in grass just off of walkway. Partially covered by lawn clippings, scratched from lawn equipment, with light corrosion of grate and deterioration of concrete. No flow present. Substantial lawn clippings and debris partially covering grate and present within drain.
Grady	I039		8/1/2017	12:00	N	N	Standing water. Good condition. No flow.
Castillo Casarez	I039		8/10/2018	4:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] This inlet consists of stagnant water with mowing debris. No traces of chlorine were found. In good condition.
Fenn	I040		7/11/2016	13:05	N	N	Square concrete slab resting atop outflow, flow inaccessible, indeterminate. Concrete slab shows mild staining/deterioration.
Grady	I040		8/1/2017	12:00	N	N	Standing water. Good condition. No flow.
Castillo Casarez	I040		8/10/2018	4:00	Y	N	[Total Chlorine=0 ppm/Free Chlorine=0 ppm] This system contains stagnant water and minimal vegetation debris. No traces of chlorine were found.

Spill History Report

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ARLINGTON NATIONAL CEMETERY

SPILL REPORTS July 1, 2018 - June 30, 2019

Date	Material	Location	Affected Media	Source	Amount	RP	Corrective Action	Reportable* (Y/N)	Reported To (Verbal/Written)	Date Reported
6072019	diesel	Dewey and Jesup Drives	road	asphalt roller	0.5 gallon	USACE KTR	applied absorbent and repaired leaking hose	N	USACE	6072019
6062019	hydraulic fluid	Ord Weitzel Road	road	broken hydraulic line	1.5 quarts	USACE KTR	hydraulic excavator fitting failed, repaired equipment	N	USACE	6062019
5152019	hydraulic fluid	Marshall Drive	road	broken hydraulic line	8 gallons	ANC	oil dri and repaired equipment	N	ANC	5152019
5142019	oil	Tram Circle	road	oil	<1 gallon	Tram KTR	oil dri and repaired equipment	N	ANC	5142019
3292019	oil	Gifford and Lewis Drives	road	oil	<2 gallon	USAF Bus	oil dri and rstreet sweeper	N	ANC	4052019
1182019	sewage	Sec 6 and Grant Drive	grass/water	blocked sewage	unknown	ANC	cleared line and limed the area	Y	VDEQ	1182019
11032018	antifreeze	Sec 35 Porter and Memorial Drives	road	broken down bus	2 gallons	Coach Bus	oil dri and removed bus	N	ANC	11032018
11022018	sewage	Sec 41	soil/water	broken sewage line	>100 gallons	ANC	flushed the line	Y	VDEQ	1102018
11052018	sewage	Sec41	soil/water	broken sewage line	>100 gallons	ANC	limed the area/repaired line	Y	VDEQ	11052018
10052018	hydraulic fluid	110 Access Gate	soil	broken hydraulic line	3-4 gallons	EDC	removed contaminated soil	N	USACE	10102018
11082018	hydraulic fluid	B129	concrete yard	broken hydraulic line	deminimus	ANC	oil dri and repaired equipment	N	ANC	11082018
11282018	hydraulic fluid	Sec 82	grass	broken hydraulic line	< quart	ANC	removed soil and repaired equipment	N	ANC	11282018

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Construction General Permits

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COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
TDD (804) 698-4021
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

11/25/2013

Arlington National Cemetery
1 Memorial Drive
Arlington, VA 22211

RE: Construction General Permit Coverage #VAR10C624, Arlington National Cemetery Millennum Project - Commercial - Arlington

Dear Don Free:

DEQ has received your registration statement for the proposed land-disturbing project under the General Permit for Discharges of Stormwater from Construction Activities (VAR10). The project's date of coverage is either the date of this letter or fifteen business days after the postmark date of the project's complete registration packet submittal to DEQ.

By submission of the registration statement, you acknowledge that the proposed project is eligible for coverage under the General Permit and you have agreed to the conditions in the General Permit including any applicable conditions regarding Total Maximum Daily Loads and impaired waters. Please be aware that §62.1-44.15:35 of the Code of Virginia and the General Permit contain additional requirements if nonpoint nutrient offsets are chosen to meet the post-development nonpoint nutrient runoff compliance requirements. Section §62.1-44.15:35 I requires that the permit issuing authority require that nonpoint nutrient offsets or other off-site options achieve the necessary nutrient reductions **PRIOR TO THE COMMENCEMENT OF THE PERMITTEE'S LAND DISTURBING ACTIVITY.**

A copy of the General Permit is available on the DEQ web page at http://www.deq.virginia.gov/Portals/0/DEQ/Water/Publications/CGPvar10.pdf. Print the VAR10 permit and read it carefully as you are responsible for meeting all the permit conditions. The General Permit will expire on June 30, 2014.

Your project specific permit registration number is **VAR10C624.** A copy of this permit coverage letter, registration statement, copy of the VAR10 permit, and the project's Stormwater Pollution Prevention Plan (SWPPP) must be at the construction site from the date of commencement of the construction activity to final stabilization. In addition, DEQ staff conduct periodic site inspections for compliance with the permit.

Additional information is available on the DEQ webpage at: http://www.deq.virginia.gov/programs/water/stormwatermanagement/vsmppermits/constructiongeneralpermit.aspx. For questions, contact the Permit Processor at (804) 698-4039.

Sincerely,

Frederick K. Cunningham

Frederick K. Cunningham, Director
Office of Water Permits

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

March 05, 2019

Forrester Construction Co
Donald Free
12231 Parklawn Dr
Rockville, MD 20852

RE: Notice of Termination under the VPDES Construction General Permit (VAR10)
General Permit No. VAR10C624
Millennum Project Arlington National Cemetery
Commercial
Arlington

Dear Permittee:

The Department of Environmental Quality (DEQ) has reviewed and approved your Notice of Termination received on March 05, 2019. Your termination of general permit coverage is effective upon the date of this letter unless you provide an objection in accordance with the paragraph below.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty (30) days from the date you received this decision within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Virginia Department of Environmental Quality.

If you have any questions about this letter, please contact the DEQ Office of Stormwater Management at ConstructionGP@deq.virginia.gov.

Sincerely,

Jaime B. Robb, Manager
Office of Stormwater Management

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

March 09, 2016

Environmental Design and Construction LLC
1108 Good Hope Rd SE
Washington, DC 20020
pleclair@envdes.com

RE: Coverage under the VPDES Construction General Permit (VAR10)
General Permit No. VAR10H891
Arlington National Cememtery - Funeral Procession Queuing
Commercial - Parking Lot Demolition
Arlington

Dear Permittee:

DEQ has reviewed your Registration Statement received on February 25, 2016 and determined that the proposed land-disturbing activity is covered under the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10). The effective date of your coverage under this general permit is July 1, 2014 or the date of this letter, whichever is later.

A copy of the general permit can be obtained from DEQ's webpage at the following location: http://www.deq.virginia.gov/Portals/0/DEQ/Water/Publications/CGP2014.pdf. The general permit contains the applicable Stormwater Pollution Prevention Plan (SWPPP) requirements and other conditions of coverage. Please print the general permit and read it carefully as you will be responsible for compliance with all permit conditions.

DEQ staff has determined that the proposed land-disturbing activity will discharge to a surface water identified as impaired or for which a TMDL wasteload allocation has been established and approved prior to the term of the general permit for (i) sediment or a sediment-related parameter or (ii) nutrients. Therefore, the following general permit (Part I.B.4) and SWPPP requirements (Part II.A.5) must be implemented for the land-disturbing activity:

- Permanent or temporary soil stabilization shall be applied to denuded areas within seven (7) days after final grade is reached on any portion of the site;
- Nutrients (e.g., fertilizers) shall be applied in accordance with manufacturer's recommendations or an approved nutrient management plan and shall not be applied during rainfall events;
- Inspections shall be conducted at a frequency of (i) at least once every four (4) business days or (ii) at least once every (5) business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted on the next business day; and
- Representative inspections used by utility line installation, pipeline construction, or other similar linear construction activities shall inspect all outfalls.

The general permit will expire on June 30, 2019. The conditions of the general permit require that you submit a new registration statement at least 90 days prior to that date if you wish to continue coverage under the general

permit, unless permission for a later date has been granted by the Board. Permission cannot be granted to submit the registration statement after the expiration date of the general permit.

If you have any questions about this permit, please contact the DEQ Office of Stormwater Management at ConstructionGP@deq.virginia.gov.

Sincerely,

Frederick K. Cunningham, Director
Office of Water Permits

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

November 13, 2017

Four Tribes Construction Services LLC
814 W Diamond Ave Ste 310
Gaithersburg, MD 20878
mmccourt@boldconcepts.com

RE: Coverage under the VPDES Construction General Permit (VAR10)
General Permit No. VAR10K463
Arlington National Cemetery Ord and Weitzel Road Repairs
Transportation - Roadway
Arlington

Dear Permittee:

DEQ has reviewed your Registration Statement received on November 02, 2017 and determined that the proposed land-disturbing activity is covered under the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10). The effective date of your coverage under this general permit is July 1, 2014 or the date of this letter, whichever is later.

A copy of the general permit can be obtained from DEQ's webpage at the following location: http://www.deq.virginia.gov/Portals/0/DEQ/Water/Publications/CGP2014.pdf. The general permit contains the applicable Stormwater Pollution Prevention Plan (SWPPP) requirements and other conditions of coverage. Please print the general permit and read it carefully as you will be responsible for compliance with all permit conditions.

DEQ staff has determined that the proposed land-disturbing activity will discharge to a surface water identified as impaired or for which a TMDL wasteload allocation has been established and approved prior to the term of the general permit for (i) sediment or a sediment-related parameter or (ii) nutrients. Therefore, the following general permit (Part I.B.4) and SWPPP requirements (Part II.A.5) must be implemented for the land-disturbing activity:

- Permanent or temporary soil stabilization shall be applied to denuded areas within seven (7) days after final grade is reached on any portion of the site;
- Nutrients (e.g., fertilizers) shall be applied in accordance with manufacturer's recommendations or an approved nutrient management plan and shall not be applied during rainfall events;
- Inspections shall be conducted at a frequency of (i) at least once every four (4) business days or (ii) at least once every (5) business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted on the next business day; and
- Representative inspections used by utility line installation, pipeline construction, or other similar linear construction activities shall inspect all outfalls.

The general permit will expire on June 30, 2019. The conditions of the general permit require that you submit a new registration statement at least 90 days prior to that date if you wish to continue coverage under the general

permit, unless permission for a later date has been granted by the Board. Permission cannot be granted to submit the registration statement after the expiration date of the general permit.

If you have any questions about this permit, please contact the DEQ Office of Stormwater Management at ConstructionGP@deq.virginia.gov.

Sincerely,

Frederick K. Cunningham, Director
Office of Water Permits

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

March 23, 2018

NDC LLC dba New Dominion Construction Inc
17958 Dumfries Shopping Plaza Ste B3
Dumfries, VA 22026
bdisentie@newdominionconstruction.com

RE: Coverage under the VPDES Construction General Permit (VAR10)
General Permit No. VAR10K727
Arlington National Cemetery Spoils Yard
Commercial/Military
Arlington

Dear Permittee:

DEQ has reviewed your Registration Statement received on January 23, 2018 and determined that the proposed land-disturbing activity is covered under the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10). The effective date of your coverage under this general permit is July 1, 2014 or the date of this letter, whichever is later. A copy of the general permit can be obtained from DEQ's webpage at the following location: http://www.deq.virginia.gov/Portals/0/DEQ/Water/Publications/CGP2014.pdf.

The general permit contains the applicable Stormwater Pollution Prevention Plan (SWPPP) requirements and other conditions of coverage. Please print the general permit and read it carefully as you will be responsible for compliance with all permit conditions. Additionally, coverage under this construction general permit does not relieve the operator of complying with all other federal, state, or local laws and regulations.

DEQ staff has determined that the proposed land-disturbing activity will discharge to a surface water identified as impaired or for which a TMDL wasteload allocation has been established and approved prior to the term of the general permit for (i) sediment or a sediment-related parameter or (ii) nutrients. Therefore, the following general permit (Part I.B.4) and SWPPP requirements (Part II.A.5) must be implemented for the land-disturbing activity:

- Permanent or temporary soil stabilization shall be applied to denuded areas within seven (7) days after final grade is reached on any portion of the site;
- Nutrients (e.g., fertilizers) shall be applied in accordance with manufacturer's recommendations or an approved nutrient management plan and shall not be applied during rainfall events;
- Inspections shall be conducted at a frequency of (i) at least once every four (4) business days or (ii) at least once every (5) business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted on the next business day; and
- Representative inspections used by utility line installation, pipeline construction, or other similar linear construction activities shall inspect all outfalls.

In accordance with the Virginia Stormwater Management Program State Permit Fee Regulation (9 VAC 25-870-830), you may be required to pay an annual permit maintenance fee until coverage under this general permit is terminated. If you are required to pay an annual permit maintenance fee, you will receive an invoice from the VSMP Authority including the amount and due date.

The general permit will expire on June 30, 2019. The conditions of the general permit require that you submit a new registration statement at least 90 days prior to that date if you wish to continue coverage under the general permit, unless permission for a later date has been granted by the Board. Permission cannot be granted to submit the registration statement after the expiration date of the general permit.

If you have any questions about this permit, please contact the DEQ Office of Stormwater Management at ConstructionGP@deq.virginia.gov.

Sincerely,

Jaime B. Robb, Manager
Office of Stormwater Management

MATERIAL APPROVAL SUBMITTAL

(See Instructions on Reverse)

Form Approved
OMB No 9000-0062

TO: *(Contracting Officer)*	**FROM:** *(Contractor)*	DATE
Wendy McCoy	Miami Technology Solutions, LLC	01/28/19
CONTRACT NUMBER	SUBMISSION NUMBER	SUBMITTAL
W91236-18-C-0021	**031**	☒ NEW ☐ RESUBMITTAL
PREVIOUS SUBMISSION NUMBER	PROJECT NUMBER	
N/A		

TO BE COMPLETED BY CONTRACTOR			**FOR GOVERNMENT USE ONLY**			
ITEM NO.	SPECIFICATION SECTION/ PARA NO./DRAWING NO.	DESCRIPTION OF MATERIAL *(Include Type, Model Number, Catalog Number, Mfg., etc.)*	AP-PROVE	DISAP-PROVE	SEE REVERSE	INITIAL
1	01 57 23-3	DEQ Permit	☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	

BY COMPLETING THIS FORM, THE UNDERSIGNED CONTRACTOR CERTIFIES THAT THE MATERIAL COMPLIES WITH ALL SPECIFICATIONS OF SUBJECT CONTRACT.

DATE *(YYYYMMDD)*	TYPE OR PRINT NAME AND GRADE	SIGNATURE
2019/01/28	Harry Brown	Harry Brown Jr

FOR GOVERNMENT USE ONLY

TO: *(Base Civil Engineering Officer)*

For Evaluation and Action

DATE *(YYYYMMDD)*	TYPE OR PRINT NAME AND GRADE	SIGNATURE

TO: *(Contracting Office)*

RECOMMEND ☐ APPROVAL ☐ DISAPPROVAL AS INDICATED ABOVE AND SUBJECT TO ANY APPLICABLE COMMENTS ON THE REVERSE

DATE *(YYYYMMDD)*	TYPE OR PRINT NAME AND GRADE	SIGNATURE

TO: *(Contractor)*

☐ APPROVED ☐ DISAPROVED AS INDICATED ABOVE AND SUBJECT TO ANY APPLICABLE COMMENTS ON THE REVERSE SIDE. REQUEST RESUBMITTAL ON DISAPPROVED ITEMS WITHIN _____ DAYS OF DATE SHOWN BELOW.

DATE *(YYYYMMDD)*	TYPE OR PRINT NAME AND GRADE	SIGNATURE

AF IMT 3000, 20030901, V1 PREVIOUS EDITION IS OBSOLETE.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

January 04, 2019

United States Army Corps of Engineers Norfolk District
803 Front St
Norfolk, VA 23510
daniel.b.reyes@usace.army.mil

RE: Coverage under the VPDES Construction General Permit (VAR10)
General Permit No. VAR10L445
Arlington Nation Cemetery Pershing Dewey Clayton Jesup Grant Drive Reconstruction PDCJG
Transportation - Roadway Construction
Arlington

Dear Permittee:

DEQ has reviewed your Registration Statement received on July 13, 2018 and determined that the proposed land-disturbing activity is covered under the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10). The effective date of your coverage under this general permit is July 1, 2014 or the date of this letter, whichever is later. A copy of the general permit can be obtained from DEQ's webpage at the following location: http://www.deq.virginia.gov/Portals/0/DEQ/Water/Publications/CGP2014.pdf.

The general permit contains the applicable Stormwater Pollution Prevention Plan (SWPPP) requirements and other conditions of coverage. Please print the general permit and read it carefully as you will be responsible for compliance with all permit conditions. Additionally, coverage under this construction general permit does not relieve the operator of complying with all other federal, state, or local laws and regulations.

DEQ staff has determined that the proposed land-disturbing activity will discharge to a surface water identified as impaired or for which a TMDL wasteload allocation has been established and approved prior to the term of the general permit for (i) sediment or a sediment-related parameter or (ii) nutrients. Therefore, the following general permit (Part I.B.4) and SWPPP requirements (Part II.A.5) must be implemented for the land-disturbing activity:

- Permanent or temporary soil stabilization shall be applied to denuded areas within seven (7) days after final grade is reached on any portion of the site;
- Nutrients (e.g., fertilizers) shall be applied in accordance with manufacturer's recommendations or an approved nutrient management plan and shall not be applied during rainfall events;
- Inspections shall be conducted at a frequency of (i) at least once every four (4) business days or (ii) at least once every (5) business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted on the next business day; and
- Representative inspections used by utility line installation, pipeline construction, or other similar linear construction activities shall inspect all outfalls.

In accordance with the Virginia Stormwater Management Program State Permit Fee Regulation (9 VAC 25-870-830), you may be required to pay an annual permit maintenance fee until coverage under this general permit is terminated. If you are required to pay an annual permit maintenance fee, you will receive an invoice from the VSMP Authority including the amount and due date.

The general permit will expire on June 30, 2019. The conditions of the general permit require that you submit a new registration statement at least 90 days prior to that date if you wish to continue coverage under the general permit, unless permission for a later date has been granted by the Board. Permission cannot be granted to submit the registration statement after the expiration date of the general permit.

If you have any questions about this permit, please contact the DEQ Office of Stormwater Management at ConstructionGP@deq.virginia.gov.

Sincerely,

Jaime B. Robb, Manager
Office of Stormwater Management

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Stormwater Facility Inspection Sheets

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Arlington National Cemetery Post-Construction Inspection Checklist				STORMCEPTOR
Inspector Name: Renee Lavinsky			Date: 2/26/19	Date of last inspection:
Weather/site conditions: Sun, 48F			Time since last rainfall: > 24 hours	
BMP INFORMATION				
BMP Installation Date: 2002-2003			Model: 900 1200 ✓ 1800 2400	
BMP #: STC-1	Location: Columbarium 7		As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	**☐ Yes ■ No**


Storm

Arlington National Cemetery Post-Construction Inspection Checklist				STORMCEPTOR
Inspector Name: Renee Lavinsky			Date: 2/26/19	Date of last inspection:
Weather/site conditions: Sun, 48F			Time since last rainfall: > 24 hours	
BMP INFORMATION				
BMP Installation Date: 2002-2003			Model: 900 1200 ✓ 1800 2400	
BMP #: STC-2	Location: Columbarium 8		As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	**☐ Yes ■ No**


STORM WATER
QUALITY
SERVICE

Arlington National Cemetery Post-Construction Inspection Checklist				STORMCEPTOR
Inspector Name: Renee Lavinsky			Date: 2/26/19	Date of last inspection:
Weather/site conditions: Sun, 48F			Time since last rainfall: > 24 hours	
BMP INFORMATION				
BMP Installation Date: 2013			Model: ✓ 900 1200 1800 2400	
BMP #: STC-3	Location: Columbarium 9 North		As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	**☐ Yes ■ No**


STORM WATER
QUALITY
WATER MATERIALS


OUTLET

Arlington National Cemetery Post-Construction Inspection Checklist				STORMCEPTOR
Inspector Name: Renee Lavinsky			Date: 2/26/19	Date of last inspection:
Weather/site conditions: Sun, 48F			Time since last rainfall: > 24 hours	
BMP INFORMATION				
BMP Installation Date: 2013			Model: ✓ 900 1200 1800 2400	
BMP #: STC-4	Location: Columbarium 9 South		As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	**☐ Yes ■ No**

Arlington National Cemetery Post-Construction Inspection Checklist				STORMCEPTOR
Inspector Name: Renee Lavinsky			Date: 2/26/19	Date of last inspection:
Weather/site conditions: Sun, 48F			Time since last rainfall: > 24 hours	
BMP INFORMATION				
BMP Installation Date: 2006			Model: 900 1200 1800 ✓ 2400	
BMP #: STC-5	Location: Section 76		As-Built Plans available: ☑ Yes ☐ No	
ROUTINE MAINTENANCE ACTIVITIES				
Activity			**Frequency**	**Completed**
None			NA	NA
FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Inlet/Outlet/Access				
Pipe blockages	☑ Yes ☐ No	Professional	Water overflow from weir (see below)	
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

Sediment was not visible in STC-5; however, water was overflowing the weir, indicating that the drain into the stormceptor may be blocked.

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ **Yes** ■ **No**


Suspected plugged drain
Water overflowing
Water overflowing

Arlington National Cemetery Post-Construction Inspection Checklist				STORMCEPTOR
Inspector Name: Renee Lavinsky			Date: 2/26/19	Date of last inspection:
Weather/site conditions: Sun, 48F			Time since last rainfall: > 24 hours	
BMP INFORMATION				
BMP Installation Date: 2006			Model: 900 1200 ✓ 1800 2400	
BMP #: STC-6	Location: Section 78		As-Built Plans available: ☑ Yes ☐ No	
ROUTINE MAINTENANCE ACTIVITIES				
Activity			**Frequency**	**Completed**
None			NA	NA

FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model #* / *Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			
Additional Observations or Comments:				

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ **Yes** ■ **No**

Arlington National Cemetery Post-Construction Inspection Checklist			STORMCEPTOR
Inspector Name: Renee Lavinsky		Date: 2/26/19	Date of last inspection:
Weather/site conditions: Sun, 48F		Time since last rainfall: > 24 hours	
BMP INFORMATION			
BMP Installation Date: 1998		Model: 900 ✓ 1200 1800 2400	
BMP #: STC-7	Location: York Dr./Marshall Dr.	As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Inlet/Outlet/Access				
Pipe blockages	☑ Yes ☐ No	Professional	Water overflow from weir (see below)	
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☑ Yes ☐ No	Professional	Sediment observed, but not measured	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

Sediment visible in STC-7, depth not determined. The drain into the stormceptor tank complete buried with sediment and not visible. Water overflowing the weir.

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ **Yes** ■ **No**


Water overflowing
Covered drain

Arlington National Cemetery Post-Construction Inspection Checklist				**CHAMBER/MTD/SAND FILTER**
Inspector Name: Renee Lavinsky			Date: 2/26/19	Date of last inspection:
Weather/site conditions: Sun, 48F			Time since last rainfall: >24 hours	
BMP INFORMATION				
BMP Installation Date: 2016			Type: ☒ Pre-Treatment ☐ Storage ☐ Other	
BMP #: STF-2	Location: Building 129		As-Built Plans available: ☒ Yes ☐ No	
ROUTINE MAINTENANCE ACTIVITIES				
Activity			**Frequency**	**Completed**
None			NA	NA
FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☒ No			
Pipe or joint breaks or cracks	☐ Yes ☒ No			
Access cover missing, cracked, damaged, or unable to open	☐ Yes ☒ No			
Sediment Level				
Sediment accumulation in forebay	☒ Yes ☐ No ☐ N/A	Professional	Approximately 6 inches of sediment in concrete vault	
Sediment depth on vault floor greater than 15% of diameter or interior depth of vault	☐ Yes ☒ No			
Standing water inside chamber for more than 24 hours after storm	☐ Yes ☒ No			
Scum line present	☐ Yes ☒ No			
Chamber cracked (cracks wider than ½ inch), collapsed, or bent out of shape	☒ Yes ☐ No	Professional	Water entering from crack in southwest corner of vault	
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☒ No ☐ N/A			
Sediment on pavement	☒ Yes ☐ No ☐ N/A	Professional	Sediment tracked throughout service area.	
Trash, debris, bare soil, and/or erosion	☐ Yes ☒ No ☐ N/A			

Additional Observations or Comments:

The concrete vault in which the filters are located has sediment 6-12 inches deep. South end near outlet has minimal sediment and north end has most.

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	**☐ Yes ☐ No**

Arlington National Cemetery Post-Construction Inspection Checklist			CHAMBER/MTD/SAND FILTER
Inspector Name: Renee Lavinsky		Date: 2/26/19	Date of last inspection:
Weather/site conditions: Sun, 48F		Time since last rainfall: >24 hours	
BMP INFORMATION			
BMP Installation Date: 1996		Type: ☒ Pre-Treatment ☐ Storage ☐ Other	
BMP #: PT-UTD	Location: B 123 Complex	As-Built Plans available: ☐ Yes ☒ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☒ No			
Pipe or joint breaks or cracks	☐ Yes ☒ No			
Access cover missing, cracked, damaged, or unable to open	☐ Yes ☒ No			
Sediment Level				
Sediment accumulation in forebay	☐ Yes ☒ No ☐ N/A			
Sediment depth on vault floor greater than 15% of diameter or interior depth of vault	☐ Yes ☒ No			
Standing water inside chamber for more than 24 hours after storm	☒ Yes ☐ No			
Scum line present	☒ Yes ☐ No	Professional	Trash and scum visible within chamber	
Chamber cracked (cracks wider than ½ inch), collapsed, or bent out of shape	☐ Yes ☒ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☒ No ☐ N/A			
Sediment on pavement	☒ Yes ☐ No ☐ N/A	ANC	Sediment tracked by vehicles throughout service area.	
Trash, debris, bare soil, and/or erosion	☒ Yes ☐ No ☐ N/A	ANC	Trash visible within chamber	

Additional Observations or Comments:

Standing water with floating debris and trash in second manhole.

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	**☐ Yes ☒ No**

Arlington National Cemetery Post-Construction Inspection Checklist			CHAMBER/MTD/SAND FILTER
Inspector Name: Renee Lavinsky		Date: 2/26/19	Date of last inspection:
Weather/site conditions: Sun, 48F		Time since last rainfall: >24 hours	
BMP INFORMATION			
BMP Installation Date: 1996		Type: ☐ Pre-Treatment ☐ Storage ☑ Other	
BMP #: UTD	Location: B 123 Complex	As-Built Plans available: ☐ Yes ☑ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access cover missing, cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Level				
Sediment accumulation in forebay	☐ Yes ☑ No ☐ N/A			
Sediment depth on vault floor greater than 15% of diameter or interior depth of vault	☐ Yes ☑ No			
Standing water inside chamber for more than 24 hours after storm	☑ Yes ☐ No			
Scum line present	☐ Yes ☑ No			
Chamber cracked (cracks wider than ½ inch), collapsed, or bent out of shape	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☑ Yes ☐ No ☐ N/A	ANC	Sediment tracked by vehicles throughout service area.	
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	**☐ Yes ☑ No**

Arlington National Cemetery **Post-Construction Inspection Checklist**			**BIORETENTION AND RAIN GARDEN** (with or without underdrain)
Inspector Name: Stacey Rosenquist		Date: 5/20/19	Date of last inspection:
Weather/site conditions: Sunny 90 degrees		Time since last rainfall: 05/19/2019 0.24 inches 05/13/2019 0.59 inches	
BMP INFORMATION			
BMP Installation Date: 2018		Underdrain Present: ▣ Yes ☐ No	
BMP #: MBR-1 MBR-2	Location: Gifford Drive	As-Built Plans available: ☐ Yes ▣ No	

ROUTINE MAINTENANCE ACTIVITIES

Activity	Frequency	Completed
Mowing grass filter strips and bioretention turf cover	At least 4 times a year	▣ Yes ☐ No
Spot weeding, erosion repair, trash removal, and mulch raking	Twice during growing season	▣ Yes ☐ No
• Spring visual inspection and cleanup • Supplement mulch to maintain a 3" layer • Prune trees and shrubs	Annually	▣ Yes ☐ No
Remove sediment in pre-treatment cells and inflow points	Once every 2 to 3 years	☐ Yes ☐ No ▣ Not due
Replace the mulch layer	Every 3 years	☐ Yes ☐ No ▣ Not due

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Surface				
Vegetation • Vegetation species inconsistent with design specs • Less than 75-90% cover (mulch plus vegetation) • High grass • Dying or dead vegetation • Vegetation killed by salt or winter elements	▣ Yes ☐ No	ANC	Dying vegetation. ANC replacing vegetation.	ongoing
Filter Media/Mulch Layer • Too low, too compacted, and/or clogged • Older than 3 years and/or in poor condition • Ponding • Chemicals, fertilizers, oil, grease, trash, debris, sediment, sand • Erosion, exposed soil • Topsoil in poor condition	☐ Yes ▣ No			

Arlington National Cemetery **Post-Construction Inspection Checklist**			**BIORETENTION AND RAIN GARDEN** (with or without underdrain)	
Pre-treatment • Trash, sediment, debris, oil, grease • Clogging, standing water • Odor, algae, floating vegetation • Dead vegetation or exposed soil	☐ Yes ☒ No			
Outlet				
Erosion or sediment build-up	☐ Yes ☒ No			
Grate or spillway condition	☐ Yes ☒ No			
Proper Drainage, Underdrains and Observation Wells				
Does not dewater between storms or ponding for more than 48 hours after rain event	☐ Yes ☒ No			
Clogged underdrains	☐ Yes ☒ No			
Observation well caps present	☒ Yes ☐ No ☐ N/A			
Inlets				
Sediment build-up, trash, debris, or erosion at curb cuts, pavement edges, and/or bypassing	☒ Yes ☐ No	ANC	Sheet flow bypassing curb cuts.	ongoing
Inflow hindered by vegetation	☒ Yes ☐ No	ANC	Installed turf too high.	ongoing
Drainage and Adjacent Upstream Areas				
Adequate vegetation	☒ Yes ☐ No			
Trash, debris, bare soil, signs of scour, oil, grease, and/or erosion	☐ Yes ☒ No			

Additional Observations or Comments:

With small curb cuts and flat gutter pan, stormwater bypasses curb cuts and enters inlets connected to RG-5. Without sufficient stormwater flow, the vegetation is failing to thrive.

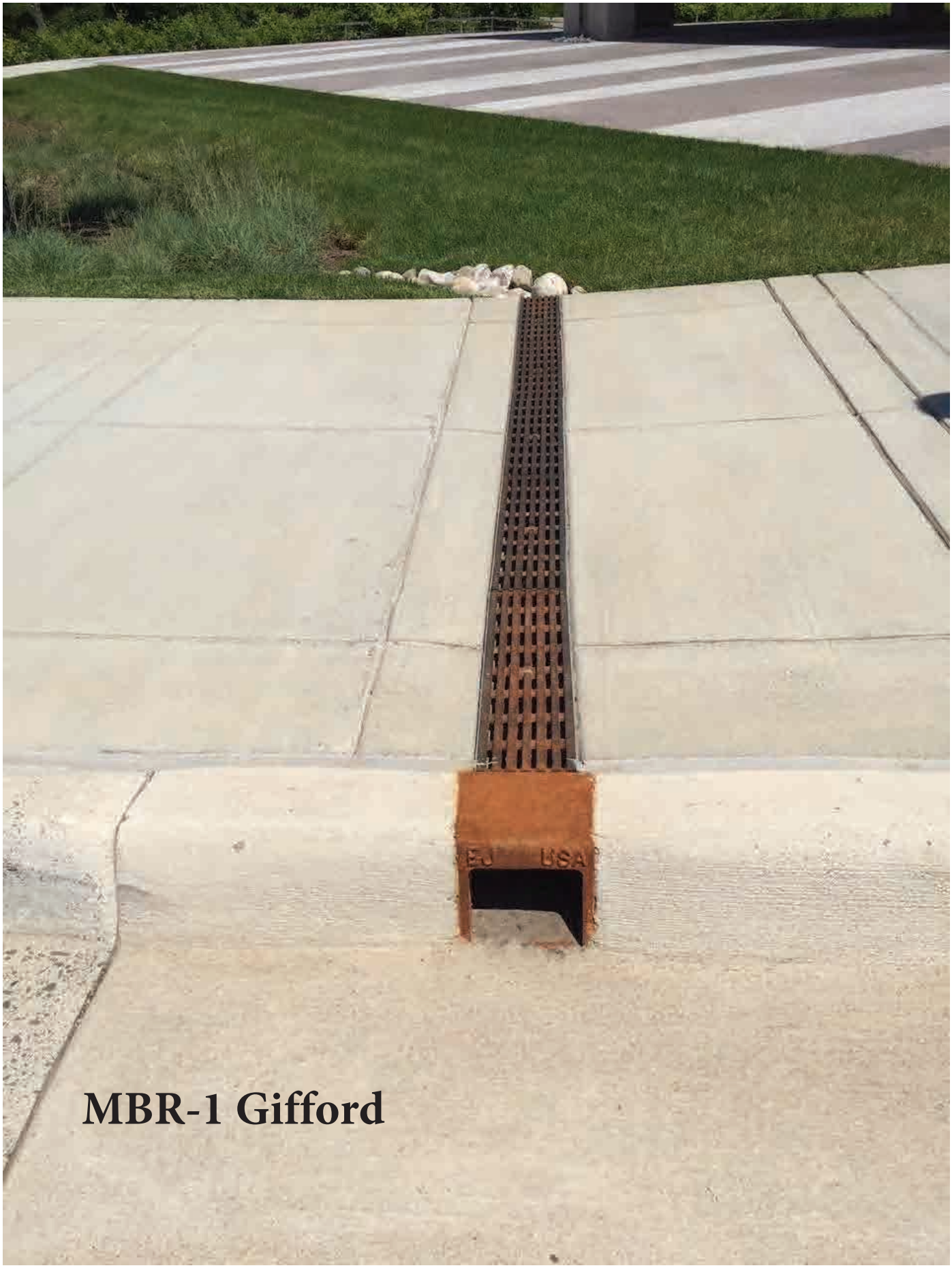
ANC has begun steps to replace curb cuts, lower turf, and replace vegetation.

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	**☒ Yes ☐ No**


MBR-1 Gifford


MBR-1 Gifford

MBR-1 Gifford

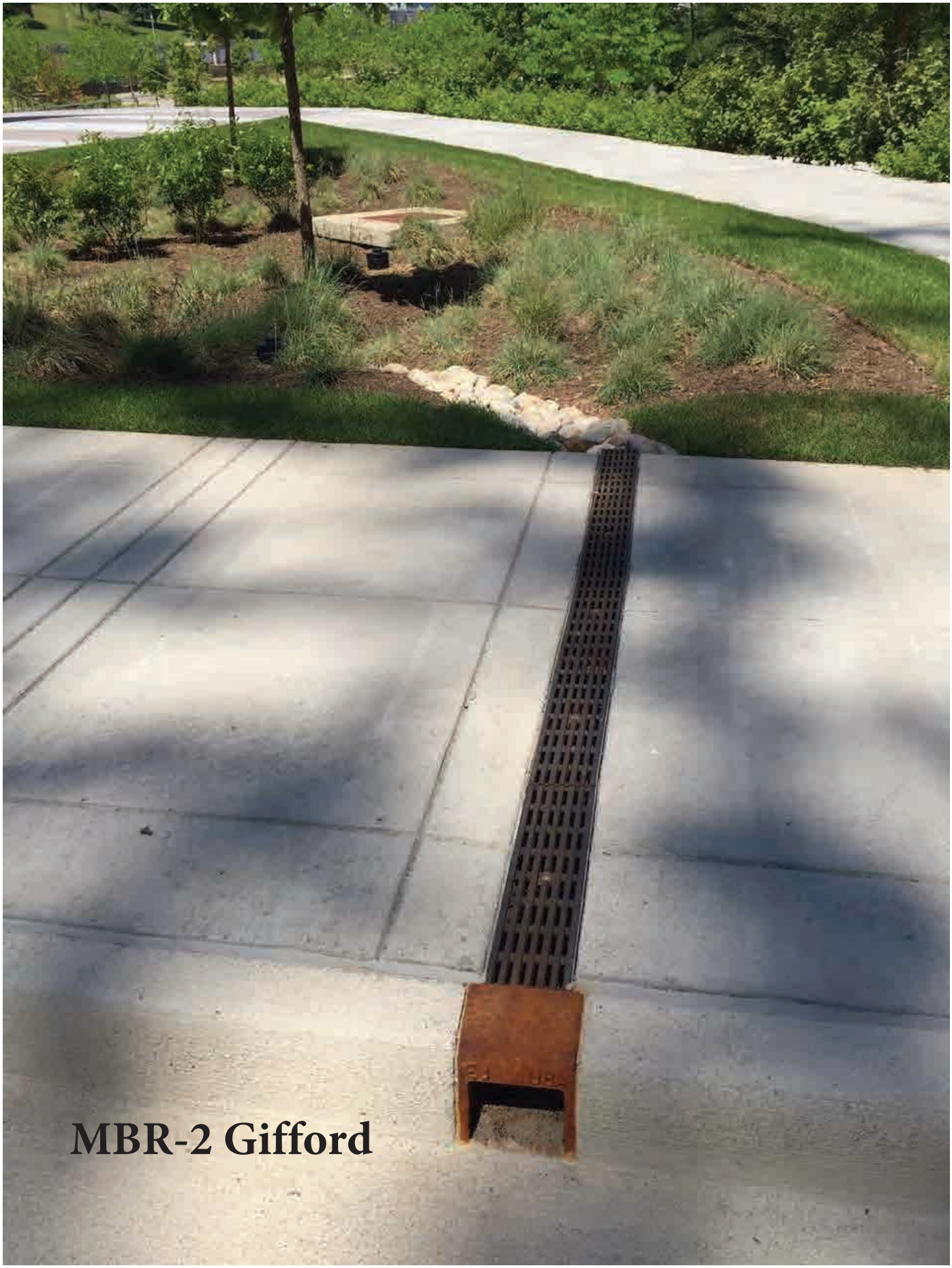


MBR-1 Gifford


MBR2 Gifford


MBR-2 Gifford

MBR-2 Gifford



MBR-2 Gifford

Arlington National Cemetery Post-Construction Inspection Checklist				PERMEABLE and POROUS PAVEMENT
Inspector Name: Stacey Rosenqust			Date: 5/22/19	Date of last inspection: 5/10/18
Weather/site conditions: 72 degrees sunny			Time since last rainfall: 05/09/2019 0.25 in 05/13/2019 0.59 in	
BMP INFORMATION				
BMP Installation Date: 2013/2014			Underdrain Present: ☐ Yes ▣ No	
BMP #: PP-1 PP-2	Location: Eisenhower Drive Meigs Drive		As-Built Plans available: ☐ Yes ▣ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
Dry-weather vacuum sweeping	Annually	▣ Yes ☐ No

FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Surface				
Deterioration (e.g., sinking, spalling, cracking, broken pavers)	☐ Yes ▣ No			
Erosion and/or bare or exposed soil in grid paver areas	☐ Yes ▣ No			
Presence of loose material, sediment deposits, or ponding	☐ Yes ▣ No			
Drainage and Adjacent Upstream Areas				
Vegetation encroachment	☐ Yes ▣ No			
Trash, debris, bare soil, and/or erosion	☐ Yes ▣ No			
Inlets/Outlets				
Erosion	☐ Yes ☐ No ▣ N/A			
Clogged or obstructed	☐ Yes ☐ No ▣ N/A			
Observation Wells				
Caps present	☐ Yes ☐ No ▣ N/A			
Standing water in well (3 days after storm event >½ inch)	☐ Yes ☐ No ▣ N/A			

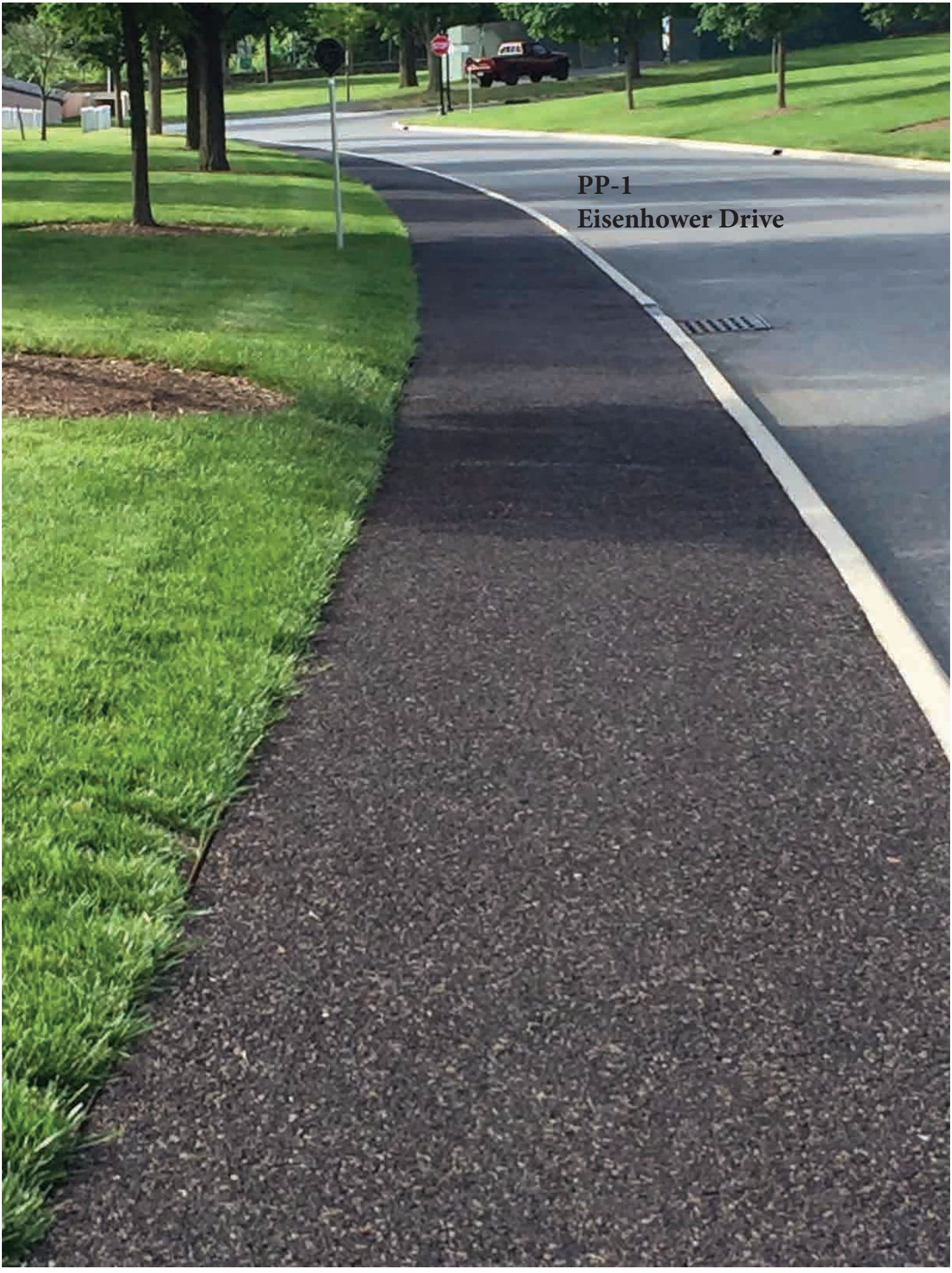
Additional Observations or Comments:

KTR completed repairs (removal and replacement, vacuuming, sealant placement) of the permeable pavement systems in Fall 2018.

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	**☐ Yes ▣ No**


PP-1
Eisenhower Drive


PP-1
Eisenhower Drive


PP-1
Eisenhower Drive


PP-1
Eisenhower Drive
repair patch
repair patch


PP-1
Eisenhower Drive
repair patch
repair patch

PP-1
Eisenhower Drive


PP-1
Eisenhower Drive

PP-1.
Eisenhower Drive


PP-1
Eisenhower Drive
repair patch


PP-1
Eisenhower Drive
repair patch

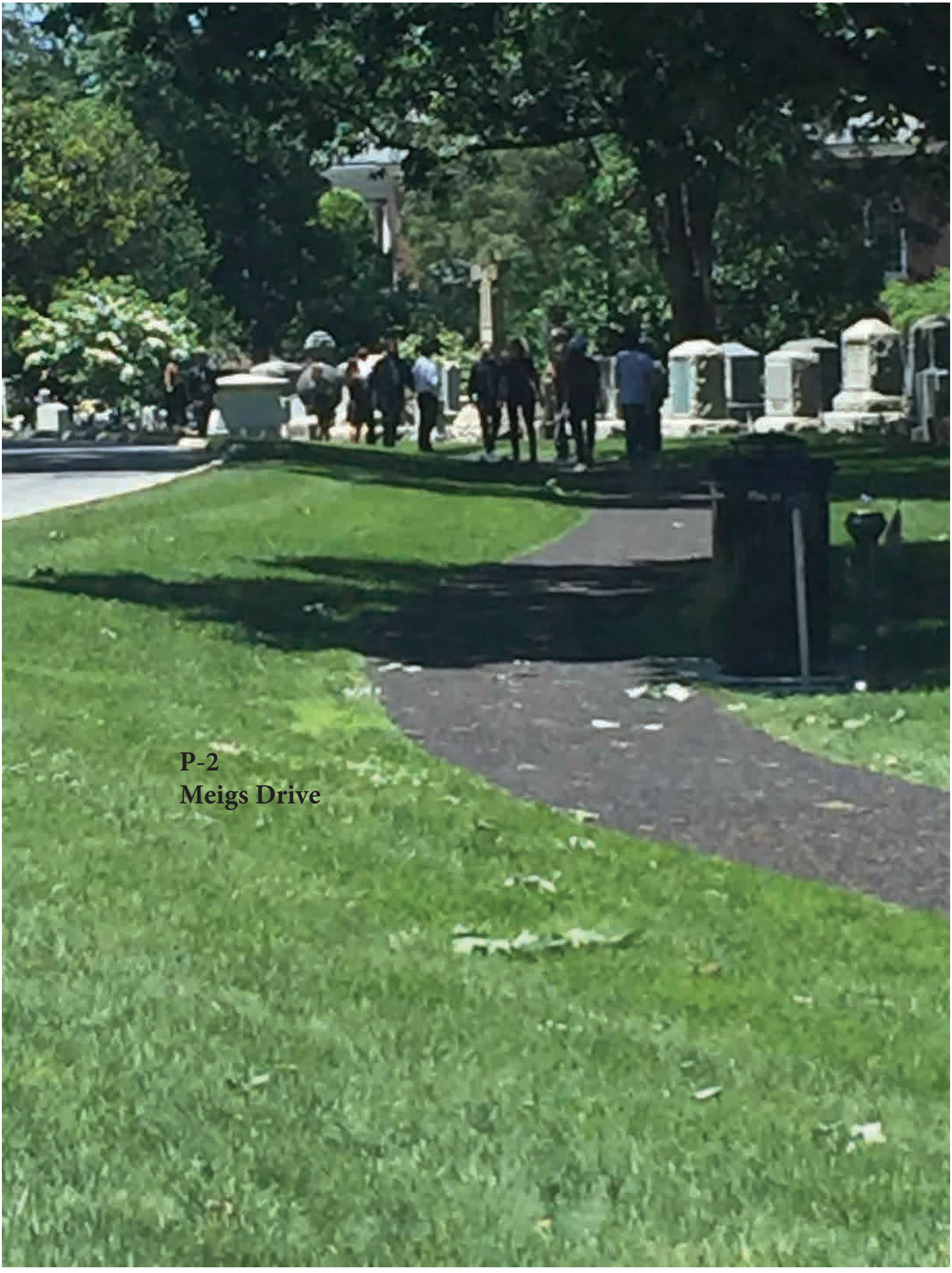

PP-1
Eisenhower Drive


repair patch
repair patch
PP-1
Eisenhower Drive


PP-1
Eisenhower Drive
repair patch
repair patch

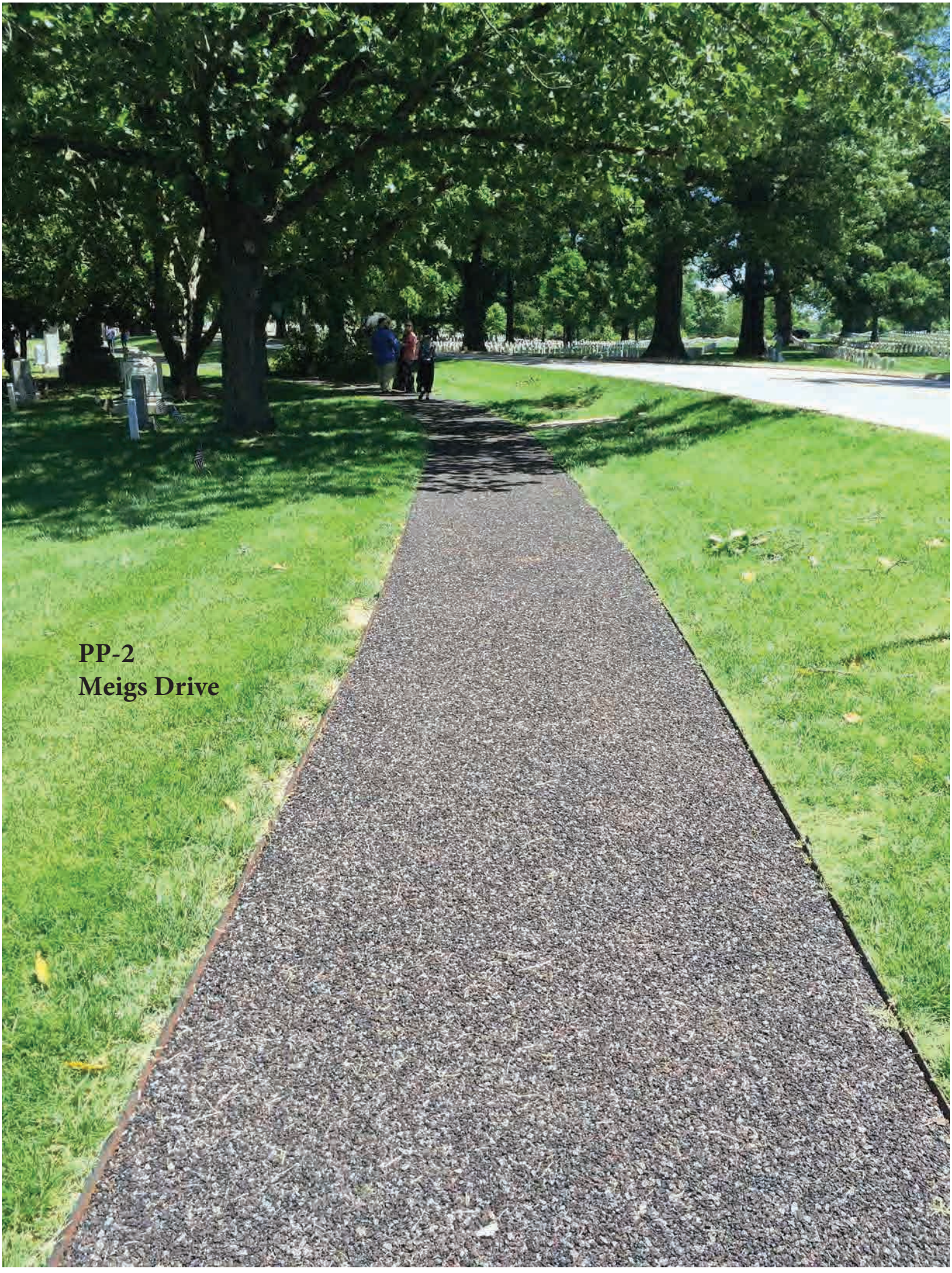
PP-1
Eisenhower Drive

PP-2
Meigs Drive



P-2
Meigs Drive

PP-2
Meigs Drive



PP-2
Meigs Drive

PP-2
Meigs Drive

PP-2
Meigs Drive

Arlington National Cemetery **Post-Construction Inspection Checklist**			**BIORETENTION AND RAIN GARDEN** (with or without underdrain)
Inspector Name: Stacey Rosenquist		Date: 5/20/19	Date of last inspection: N/A
Weather/site conditions: sunny 90 degrees		Time since last rainfall: 05/19/2019 0.25 in 05/13/2019 0.59 in	
BMP INFORMATION			
BMP Installation Date: 2018		Underdrain Present: ☒ Yes ☐ No	
BMP #: RG-5	Location: Columbarium 12	As-Built Plans available: ☐ Yes ☒ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
Mowing grass filter strips and bioretention turf cover	At least 4 times a year	☐ Yes ☒ No
Spot weeding, erosion repair, trash removal, and mulch raking	Twice during growing season	☒ Yes ☐ No
• Spring visual inspection and cleanup • Supplement mulch to maintain a 3" layer • Prune trees and shrubs	Annually	☒ Yes ☐ No
Remove sediment in pre-treatment cells and inflow points	Once every 2 to 3 years	☐ Yes ☐ No ☒ Not due
Replace the mulch layer	Every 3 years	☒ Yes ☐ No ☐ Not due

FIELD INSPECTION CHECKLIST				
Criteria	**Maintenance Required?**	**ANC or Professional fix**	**Comments**	**Date Repaired**
Surface				
Vegetation • Vegetation species inconsistent with design specs • Less than 75-90% cover (mulch plus vegetation) • High grass • Dying or dead vegetation • Vegetation killed by salt or winter elements	☐ Yes ☒ No			
Filter Media/Mulch Layer • Too low, too compacted, and/or clogged • Older than 3 years and/or in poor condition • Ponding • Chemicals, fertilizers, oil, grease, trash, debris, sediment, sand • Erosion, exposed soil • Topsoil in poor condition	☐ Yes ☒ No			

Arlington National Cemetery **Post-Construction Inspection Checklist**			**BIORETENTION AND RAIN GARDEN** (with or without underdrain)	
Pre-treatment • Trash, sediment, debris, oil, grease • Clogging, standing water • Odor, algae, floating vegetation • Dead vegetation or exposed soil	☐ Yes ☒ No			
Outlet				
Erosion or sediment build-up	☐ Yes ☒ No			
Grate or spillway condition	☐ Yes ☒ No			
Proper Drainage, Underdrains and Observation Wells				
Does not dewater between storms or ponding for more than 48 hours after rain event	☐ Yes ☒ No			
Clogged underdrains	☐ Yes ☒ No			
Observation well caps present	☒ Yes ☐ No ☐ N/A			
Inlets				
Sediment build-up, trash, debris, or erosion at curb cuts, pavement edges, and/or bypassing	☐ Yes ☒ No			
Inflow hindered by vegetation	☐ Yes ☒ No			
Drainage and Adjacent Upstream Areas				
Adequate vegetation	☒ Yes ☐ No			
Trash, debris, bare soil, signs of scour, oil, grease, and/or erosion	☐ Yes ☒ No			
Additional Observations or Comments: Constructed under CGP VAR10C624. RG-5 drains well after storm events. Vegetation is thriving				
ANNUAL REPORTING				
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)				**☐ Yes ☒ No**

Arlington National Cemetery **Post-Construction Inspection Checklist**			**BIORETENTION AND RAIN GARDEN** (with or without underdrain)
Inspector Name: Stacey Rosenquist		Date: 5/20/19	Date of last inspection: N/A
Weather/site conditions: sunny 90degrees		Time since last rainfall: 05/19/2019 0.24 inches 05/13/2019 0.59 inches	
BMP INFORMATION			
BMP Installation Date: 2018		Underdrain Present: ▣ Yes ☐ No	
BMP #: RG-6	Location: Columbarium 13	As-Built Plans available: ☐ Yes ▣ No	

ROUTINE MAINTENANCE ACTIVITIES

Activity	Frequency	Completed
Mowing grass filter strips and bioretention turf cover	At least 4 times a year	☐ Yes ☐ No N/A
Spot weeding, erosion repair, trash removal, and mulch raking	Twice during growing season	▣ Yes ☐ No
• Spring visual inspection and cleanup • Supplement mulch to maintain a 3" layer • Prune trees and shrubs	Annually	▣ Yes ☐ No
Remove sediment in pre-treatment cells and inflow points	Once every 2 to 3 years	☐ Yes ☐ No ▣ Not due
Replace the mulch layer	Every 3 years	☐ Yes ☐ No ▣ Not due

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Surface				
Vegetation • Vegetation species inconsistent with design specs • Less than 75-90% cover (mulch plus vegetation) • High grass • Dying or dead vegetation • Vegetation killed by salt or winter elements	▣ Yes ☐ No	ANC	vegetation died, <75% vegetation KTR repaired BMP. ANC will add new vegetation.	June 2019
Filter Media/Mulch Layer • Too low, too compacted, and/or clogged • Older than 3 years and/or in poor condition • Ponding • Chemicals, fertilizers, oil, grease, trash, debris, sediment, sand • Erosion, exposed soil • Topsoil in poor condition	▣ Yes ☐ No	Professional	Filter media appears clogged. BMP holds water longer than 48 hours. KTR removed filter media and mulch to improve BMP functionality.	June 2019

Arlington National Cemetery **Post-Construction Inspection Checklist**			**BIORETENTION AND RAIN GARDEN** (with or without underdrain)	
Pre-treatment • Trash, sediment, debris, oil, grease • Clogging, standing water • Odor, algae, floating vegetation • Dead vegetation or exposed soil	☐ Yes ☒ No			
Outlet				
Erosion or sediment build-up	☐ Yes ☒ No			
Grate or spillway condition	☐ Yes ☒ No			
Proper Drainage, Underdrains and Observation Wells				
Does not dewater between storms or ponding for more than 48 hours after rain event	☒ Yes ☐ No	Professional	BMP holds water longer than 48 hours. KTR repaired BMP.	June 2019
Clogged underdrains	☐ Yes ☒ No			
Observation well caps present	☒ Yes ☐ No ☐ N/A			
Inlets				
Sediment build-up, trash, debris, or erosion at curb cuts, pavement edges, and/or bypassing	☐ Yes ☒ No			
Inflow hindered by vegetation	☐ Yes ☒ No			
Drainage and Adjacent Upstream Areas				
Adequate vegetation	☒ Yes ☐ No			
Trash, debris, bare soil, signs of scour, oil, grease, and/or erosion	☐ Yes ☒ No			
Additional Observations or Comments: 5/20/2019 - BMP lacked vegetation and held water >48 hours. 6/2019 - KTR repaired BMP by removing/replacing filter media and mulch. 2019 - ANC anticipates replacing vegetation this year.				
ANNUAL REPORTING				
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)				☒ **Yes** ☐ **No**


RG-6 C13


RG-6 C13


RG-6 C13


RG-6 C13


RG-6 C13


RG-6 C13

RG-6 C13

Arlington National Cemetery Post-Construction Inspection Checklist			CHAMBER/MTD/SAND FILTER
Inspector Name: Renee Lavinsky		Date: 6/12/19	Date of last inspection: 2/26/19
Weather/site conditions: 75, clear		Time since last rainfall: >24 hours	
BMP INFORMATION			
BMP Installation Date: 2016		Type: ☒ Pre-Treatment ☐ Storage ☐ Other	
BMP #: MTD-1	Location: Chaffee parking lot	As-Built Plans available: ☐ Yes ☒ No	

ROUTINE MAINTENANCE ACTIVITIES

Activity	Frequency	Completed
None	NA	NA

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☒ No			
Pipe or joint breaks or cracks	☐ Yes ☒ No			
Access cover missing, cracked, damaged, or unable to open	☐ Yes ☒ No			
Sediment Level				
Sediment accumulation in forebay	☐ Yes ☒ No ☐ N/A			
Sediment depth on vault floor greater than 15% of diameter or interior depth of vault	☐ Yes ☒ No			
Standing water inside chamber for more than 24 hours after storm	☒ Yes ☐ No			
Scum line present	☒ Yes ☐ No	Professional	Trash visible within chamber 1	
Chamber cracked (cracks wider than ½ inch), collapsed, or bent out of shape	☐ Yes ☒ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☒ No ☐ N/A			
Sediment on pavement	☐ Yes ☒ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☒ No ☐ N/A			

Additional Observations or Comments:

Trash floating in hydro-separator (chamber 1), other chambers clear.

ANNUAL REPORTING

Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ Yes ☒ No

Chamber 1

Hydro-seperator in chamber 1

Chamber 2

Chamber 3

Chamber 4

Arlington National Cemetery Post-Construction Inspection Checklist			STORMCEPTOR
Inspector Name: Renee Lavinsky		Date: 6/12/19	Date of last inspection: 2/26/19
Weather/site conditions: 75, clear		Time since last rainfall: > 24 hours	
BMP INFORMATION			
BMP Installation Date: 2002-2003		Model: 900 1200 ✓ 1800 2400	
BMP #: STC-1	Location: Columbarium 7	As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES

Activity	Frequency	Completed
None	NA	NA

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING

Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ Yes ■ No

Arlington National Cemetery Post-Construction Inspection Checklist			STORMCEPTOR
Inspector Name: Renee Lavinsky		Date: 6/12/19	Date of last inspection: 2/26/19
Weather/site conditions: 75, clear		Time since last rainfall: > 24 hours	
BMP INFORMATION			
BMP Installation Date: 2002-2003		Model: 900 1200 ✓ 1800 2400	
BMP #: STC-2	Location: Columbarium 8	As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ Yes ■ No

Arlington National Cemetery Post-Construction Inspection Checklist			STORMCEPTOR
Inspector Name: Renee Lavinsky		Date: 6/12/19	Date of last inspection: 2/26/19
Weather/site conditions: 75, clear		Time since last rainfall: > 24 hours	
BMP INFORMATION			
BMP Installation Date: 2013		Model: ✓ 900 1200 1800 2400	
BMP #: STC-3	Location: Columbarium 9 North	As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES

Activity	Frequency	Completed
None	NA	NA

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING

Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ Yes ■ No

Arlington National Cemetery Post-Construction Inspection Checklist			STORMCEPTOR
Inspector Name: Renee Lavinsky		Date: 6/12/19	Date of last inspection: 2/26/19
Weather/site conditions: 75, clear		Time since last rainfall: > 24 hours	
BMP INFORMATION			
BMP Installation Date: 2013		Model: ✓ 900 1200 1800 2400	
BMP #: STC-4	Location: Columbarium 9 South	As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ Yes ■ No

Arlington National Cemetery Post-Construction Inspection Checklist			STORMCEPTOR
Inspector Name: Renee Lavinsky		Date: 6/12/19	Date of last inspection: 2/26/19
Weather/site conditions: 75, clear		Time since last rainfall: > 24 hours	
BMP INFORMATION			
BMP Installation Date: 2006		Model: 900 1200 1800 ✓ 2400	
BMP #: STC-5	Location: Section 72	As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment blockage, sediment in inlet pipe no issue.	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ Yes ■ No

Arlington National Cemetery Post-Construction Inspection Checklist			STORMCEPTOR
Inspector Name: Renee Lavinsky		Date: 6/12/19	Date of last inspection: 2/26/19
Weather/site conditions: 75, clear		Time since last rainfall: > 24 hours	
BMP INFORMATION			
BMP Installation Date: 2006		Model: 900 1200 ✓ 1800 2400	
BMP #: STC-6	Location: Section 78	As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Inlet/Outlet/Access				
Pipe blockages	☐ Yes ☑ No			
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☐ Yes ☑ No		No sediment observed	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ Yes ■ No

Arlington National Cemetery Post-Construction Inspection Checklist			STORMCEPTOR
Inspector Name: Renee Lavinsky		Date: 6/12/19	Date of last inspection: 2/26/19
Weather/site conditions: 75, clear		Time since last rainfall: > 24 hours	
BMP INFORMATION			
BMP Installation Date: 1998		Model: 900 ✓ 1200 1800 2400	
BMP #: STC-7	Location: York Dr./Marshall Dr.	As-Built Plans available: ☑ Yes ☐ No	

ROUTINE MAINTENANCE ACTIVITIES		
Activity	**Frequency**	**Completed**
None	NA	NA

FIELD INSPECTION CHECKLIST

Criteria	Maintenance Required?	ANC or Professional fix	Comments	Date Repaired
Inlet/Outlet/Access				
Pipe blockages	☑ Yes ☐ No	Professional	Water overflow from weir (see below)	
Pipe or joint breaks or cracks	☐ Yes ☑ No			
Access portals cracked, damaged, or unable to open	☐ Yes ☑ No			
Sediment Levels				
Sediment depth of the following values (sampling procedures provided below): *Model # / Depth (in.)*: 900 / 6; 1200 / 7; 1800 / 12; 2400 / 12	☑ Yes ☐ No	Professional	Sediment observed, but not measured	
Oil Levels				
Oil greater than 1" (sampling procedures provided below):	☐ Yes ☑ No			
Upstream and Drainage Area				
Oil, fuel, or chemical spills	☐ Yes ☑ No ☐ N/A			
Sediment on pavement	☐ Yes ☑ No ☐ N/A			
Trash, debris, bare soil, and/or erosion	☐ Yes ☑ No ☐ N/A			

Additional Observations or Comments:

Sediment visible in STC-7, depth not determined. The drain into the stormceptor tank complete buried with sediment and not visible. Water overflowing the weir.

ANNUAL REPORTING	
Are significant maintenance activities required for the stormwater management facility to perform as designed? (does not activities such as grass mowing or trash collection)	☐ Yes ■ No


Water overflowing
Covered drain

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ANC/VDEQ Correspondence
and
Information Currently Contained in BMP Warehouse Database

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From: Rosenquist, Stacey M CIV USARMY HQDA ANC OSA (USA) <stacey.m.rosenquist.civ@mail.mil>
Sent: Thursday, September 19, 2019 2:25 PM
To: Renee Lavinsky <rlavinsky@bluestoneenviro.com>
Subject: FW: [Non-DoD Source] Re: BMP Warehouse

From: Keeling, William <william.keeling@deq.virginia.gov>
Sent: Thursday, September 19, 2019 12:15 PM
To: Rosenquist, Stacey M CIV USARMY HQDA ANC OSA (USA) <stacey.m.rosenquist.civ@mail.mil>
Subject: [Non-DoD Source] Re: BMP Warehouse

Stacey,

Attached are the records I have associated with your facility. Not all DOD records have a facility associated with them. I am recommending you do not do anything with the old data until DEQ can get those records attributed to your permit number and or facility. Please at this time only load new data that reflects implementation during this reporting period. I have your name and facility listed as working with me on getting historical data corrected.
Let me know if you have further questions.
Bill

On Thu, Sep 19, 2019 at 11:57 AM Rosenquist, Stacey M CIV USARMY HQDA ANC OSA (USA) <stacey.m.rosenquist.civ@mail.mil < Caution-mailto:stacey.m.rosenquist.civ@mail.mil > > wrote:

> Bill,
>
> I cannot locate ANC's BMPs in the warehouse. Can you assist me with finding previously reported BMPs? Or should I enter all the BMPs while entering the new BMP data?
>
> Thank you,
>
> Stacey
>
> Stacey M. Rosenquist
> Environmental Compliance Program Manager
> Arlington National Cemetery
>
> 703-614-0520 o / 703-963-9465 c

--
William Keeling
Virginia Department of Environmental Quality
1111 E. Main Street
Richmond VA, 23219
804-698-4342
william.keeling@deq.virginia.gov < Caution-mailto:william.keeling@deq.virginia.gov >

Agency Code	Tracking ID	Facility	Submission Name	Organization	Phase	Status	Data Provider ID	BMP Name	Practice Description	Agency Name	BMP Extent	Contact Name	Measure	Latitude	Longitude	HUC VA6
DOD	DOD-1996-000037110	Arlington National Cemetary	20171130-92	United States Army	Phase 6	SubmitSuccess	VAFY17341	New Stormwater Treatment	B123	DoD	2.43	Stacey Rosenquist	Site Area	38.87119	-77.062587	PL24
DOD	DOD-2002-000037111	Arlington National Cemetary	20171130-96	United States Army	Phase 6	SubmitSuccess	VAFY17413	Proprietary Stormwater Treatment Device	COL7	DoD	1.05	Stacey Rosenquist	Area Treated	38.87485	-77.060522	PL24
DOD	DOD-2002-000037112	Arlington National Cemetary	20171130-96	United States Army	Phase 6	SubmitSuccess	VAFY17414	Proprietary Stormwater Treatment Device	COL8	DoD	0.98	Stacey Rosenquist	Area Treated	38.87675	-77.060027	PL24
DOD	DOD-2006-000037113	Arlington National Cemetary	2017121-102	United States Army	Phase 6	SubmitSuccess	VAFY17482	Proprietary Stormwater Treatment Device	SEC76	DoD	1.5	Stacey Rosenquist	Area Treated	38.88087	-77.062114	PL24
DOD	DOD-2006-000037114	Arlington National Cemetary	2017121-102	United States Army	Phase 6	SubmitSuccess	VAFY17483	Proprietary Stormwater Treatment Device	SEC78	DoD	1.43	Stacey Rosenquist	Area Treated	38.87751	-77.059327	PL24
DOD	DOD-2012-000000712	Arlington National Cemetary	2017125-121	Department of Defense	Phase 6	SubmitSuccess	VAFY171072	New Runoff Reduction	Eisenhower Drive	DoD	0.36	Stacey Rosenquist	Site Area	38.87609	-77.066279	PL24
DOD	DOD-2012-00091254	Arlington National Cemetary	2018117-132	Department of Defense	Phase 6	SubmitSuccess	VAFY171074	New Runoff Reduction	B123	DoD	0.23	Stacey Rosenquist	Site Area	38.87069	-77.062358	PL24
DOD	DOD-2014-00091104	Arlington National Cemetary	2018117-132	Department of Defense	Phase 6	SubmitSuccess	VAFY17298	New Runoff Reduction	Meigs Drive	DoD	0.03	Stacey Rosenquist	Site Area	38.88002	-77.077017	PL24
DOD	DOD-2016-00049106	Arlington National Cemetery	20171128-88	Department of Defense	Phase 6	SubmitSuccess		Stream Restoration Urban	Millennium Project Urban Stream Restoration	DOD	1900	Stacey M. Rosenquist	Length Restored	38.878325	-77.068672	PL24
DOD	DOD-2016-00049207	Arlington National Cemetery	20171128-88	Department of Defense	Phase 6	SubmitSuccess		New Runoff Reduction	BioRetention 3 - Queuing Parking Lot Underground BioRetention Areas	DOD	6.74	Stacey M. Rosenquist	Site Area	38.8821	-77.0657	PL24
DOD	DOD-2016-00049208	Arlington National Cemetery	20171128-88	Department of Defense	Phase 6	SubmitSuccess		New Runoff Reduction	BioRetention 4 - Queuing Parking Lot Underground BioRetention Areas	DOD	6.74	Stacey M. Rosenquist	Site Area	38.8804	-77.0639	PL24

HUC 12	Locality	State FIPS	County FIPS	Measure Unit	Impervious Acres Treated	Runoff Acres Treated	Bmp Type Code Description	Bmp Name Type Code	BMP Name Type Code Description	Installation Date	MS4 Permit Number	MS4 Permittee Name	MS4 Service Area	MS4 Action Plan	MS4 Ownership Type	Maintenance Agreement	Bmp Type Code
020700100103	ARLINGTON	51	51013	ACRE	1.55	0.88	Urban	ST	State	1/1/1996							URB
020700100103	ARLINGTON	51	51013	ACRE			Urban	ST	State	1/1/2002							URB
020700100103	ARLINGTON	51	51013	ACRE			Urban	ST	State	1/1/2002							URB
020700100103	ARLINGTON	51	51013	ACRE			Urban	ST	State	1/1/2006							URB
020700100103	ARLINGTON	51	51013	ACRE			Urban	ST	State	1/1/2006							URB
020700100103		51		ACRE	0.36	0.08	Urban	ST	State	1/1/2012							URB
020700100103		51		ACRE	0.16	0.09	Urban	ST	State	1/1/2012					Public		URB
020700100103		51		ACRE	0.03	0.03	Urban	ST	State	1/1/2014				Chesapeake Bay Action Plan	Public		URB
020700100103		51		FEET			Urban	ST	State	6/30/2016			Inside MS4 service area				URB
020700100103		51		ACRE	0.41	0.95	Urban	ST	State	6/30/2016			Inside MS4 service area				URB
020700100103		51		ACRE	0.51	0.92	Urban	ST	State	6/30/2016			Inside MS4 service area				URB

Comprehensive Site Compliance Evaluations

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Arlington National Cemetery Comprehensive Site Compliance Evaluation	
Name: B123 Complex	
Date: May 21, 2019	**Reporting Period:** July 1, 2018 - June 30,2019

Inspection Report	Results
Review of High-Priority Areas and SWPPP Availability	
Are there any new high-priority areas and/or activities that must be added to the SWPPP?	YES ☒ NO ☐
Any changes to activities such that an area is no longer classified as high-priority?	YES ☐ NO ☒
If YES, describe SWPPP modifications needed. Revised SWPPP dated 2018 includes practices throughout the cemetery. ANC's revised MS4 Program Plan contains the SWPPP at Attachment E.	
SWPPP (hard-copy or electronic copy) available to employees at high-priority areas?	YES ☒ NO ☐
If NO, describe action required and expected date of completion.	
Are SWPPP updates required?	**YES** ☐ **NO** ☒
Site-Specific Source Controls Inspections	
Dates of inspections: March 15, 2019 and May 21, 2019	
Were all site-specific source control inspections completed?	YES ☒ NO ☐
Dates of inspections: Q1: March 2019 Q2: May 2019 Q3: _____ Q4: _____	
If NO, describe action required and expected date of completion.	
Were any corrective actions required?	YES ☒ NO ☐
If YES, were corrective actions completed?	YES ☒ NO ☐
If NO, describe action required and expected date of completion. Ongoing corrective actions include picking up trash and street sweeping the area.	
Are all potential pollutants accurately described and included in the SWPPP?	YES ☒ NO ☐
If NO, describe.	
Are all source controls in place and effective for minimizing pollutants in stormwater?	YES ☒ NO ☐
If NO, describe.	
SWPPP updates required?	**YES** ☐ **NO** ☒

Inspection Report	Results
Stormwater Management Facilities (Structural BMPs) Inspections	
Inspection Date(s): 02/26/2019	**UTD, PT-UTD, STF-2**
Were any corrective actions required?	YES ☒ NO ☐
If YES, were corrective actions completed?	YES ☐ NO ☒
If NO, describe action required and expected date of completion. Through a NAVFAC contract action, ANC plans on conducting maintenance on units in FY20.	
Are all stormwater management facilities in place and effective for minimizing pollutants in stormwater?	YES ☒ NO ☐
If NO, describe.	
SWPPP updates required?	**YES ☐ NO ☒**
Illicit Discharge Inspections	
Were any illicit discharged detected during the reporting period?	YES ☐ NO ☒
Was the source of the illicit discharge identified and eliminated? **N/A**	YES ☐ NO ☐
If NO, describe.	
SWPPP updates required?	**YES ☐ NO ☒**
Spills and Leaks Reporting	
Did any reportable spills occur during the reporting period?	YES ☒ NO ☐
Were any corrective actions required?	YES ☒ NO ☐
If YES, were corrective actions completed?	YES ☒ NO ☐
If NO, describe action required and expected date of completion.	
SWPPP updates required?	**YES ☐ NO ☒**
SWPPP Compliance	
Is the SWPPP accurate and effective for the facility?	YES ☒ NO ☐
If NO, describe. ANC's revised SWPPP dated 2018 reflects requirements found in the MS4 permit issued November 1, 2018.	
Is the SWPPP compliant with the terms and conditions of the permit?	YES ☒ NO ☐
If NO, describe. Revised SWPPP reflects permit terms and conditions effective November 1, 2019.	

Inspection Report	Results
Summary/Additional Comments	
During this permit reporting year, ANC inspected the two high priority areas in accordance with the approved MS4 Program Plan dated 2015. During this time, ANC revised it's MS4 Program Plan, including the SWPPP at Attachment E, to reflect upcoming MS4 permit conditions effective November 1, 2018. The revised MS4 Program Plan's SWPPP includes practices throughout the cemetery.	


BLDG
123A


Bobcat


NEW HOLLAND


Bobcat


Hudson

Arlington National Cemetery Comprehensive Site Compliance Evaluation	
Name: SEC58 Contractor Yard / SEC61 Spoils Yard	
Date: June27, 2019	**Reporting Period:** July 1, 2018 - June 30,2019

Inspection Report	Results
Review of High-Priority Areas and SWPPP Availability	
Are there any new high-priority areas and/or activities that must be added to the SWPPP?	YES ☒ NO ☐
Any changes to activities such that an area is no longer classified as high-priority?	YES ☐ NO ☒
If YES, describe SWPPP modifications needed. Revised SWPPP dated 2018 includes practices throughout the cemetery. ANC's revised MS4 Program Plan contains the SWPPP at Attachment E.	
SWPPP (hard-copy or electronic copy) available to employees at high-priority areas?	YES ☒ NO ☐
If NO, describe action required and expected date of completion.	
Are SWPPP updates required?	**YES** ☐ **NO** ☒
Site-Specific Source Controls Inspections	
Dates of inspections: June 27, 2019	
Were all site-specific source control inspections completed?	YES ☒ NO ☐
Dates of inspections: Q1: _____ Q2: June 2019 Q3: _____ Q4: _____	
If NO, describe action required and expected date of completion.	
Were any corrective actions required?	YES ☒ NO ☐
If YES, were corrective actions completed?	YES ☒ NO ☐
If NO, describe action required and expected date of completion. Ongoing corrective actions include picking up trash, maintaining the parking area, reducing on-site equipment maintenance, managing solid waste collection, and covering landscaping materials to prevent erosion or decomposition.	
Are all potential pollutants accurately described and included in the SWPPP?	YES ☒ NO ☐
If NO, describe.	
Are all source controls in place and effective for minimizing pollutants in stormwater?	YES ☒ NO ☐
If NO, describe.	
SWPPP updates required?	**YES** ☐ **NO** ☒

Inspection Report	Results
Stormwater Management Facilities (Structural BMPs) Inspections	
Inspection Date(s): **No structural BMPs installed at the site.**	
Were any corrective actions required?	YES ☐ NO ☐
If YES, were corrective actions completed?	YES ☐ NO ☐
If NO, describe action required and expected date of completion.	
Are all stormwater management facilities in place and effective for minimizing pollutants in stormwater?	YES ☐ NO ☐
If NO, describe.	
SWPPP updates required?	**YES ☐ NO ☒**
Illicit Discharge Inspections	
Were any illicit discharged detected during the reporting period?	YES ☐ NO ☒
Was the source of the illicit discharge identified and eliminated? **N/A**	YES ☐ NO ☐
If NO, describe.	
SWPPP updates required?	**YES ☐ NO ☒**
Spills and Leaks Reporting	
Did any reportable spills occur during the reporting period?	YES ☐ NO ☒
Were any corrective actions required? N/A	YES ☐ NO ☐
If YES, were corrective actions completed?	YES ☐ NO ☐
If NO, describe action required and expected date of completion.	
SWPPP updates required?	**YES ☐ NO ☒**
SWPPP Compliance	
Is the SWPPP accurate and effective for the facility?	YES ☒ NO ☐
If NO, describe. ANC's revised SWPPP dated 2018 reflects requirements found in the MS4 permit issued November 1, 2018.	
Is the SWPPP compliant with the terms and conditions of the permit?	YES ☒ NO ☐
If NO, describe. Revised SWPPP reflects permit terms and conditions effective November 1, 2019.	

Inspection Report	Results
Summary/Additional Comments	

During this permit reporting year, ANC inspected the two high priority areas in accordance with the approved MS4 Program Plan dated 2015. During this time, ANC revised it's MS4 Program Plan, including the SWPPP at Attachment E, to reflect upcoming MS4 permit conditions effective November 1, 2018. The revised MS4 Program Plan's SWPPP includes practices throughout the cemetery.

Also, during thise permit reporting year, ANC pursued a site improvement project at the Spoils Yard under construction general permit VAR10K727 held by New Dominion Construction.

Blade and Belt Maintenance Area

Landscaping Supply Storage

Landscaping Equipment Storage

Landscaping Waste Collection Roll-Off

Landscaping Material Storage


DAVEY
DAVEY
Commercial Grounds Management
CHANTILLY, VA.
USDOT 093861

Removed Turf

Landscaping Material and Equipment Storage

Landscaping Material Storage Area

Landscaping Recycling Roll-Off


Mulch
Landscaping Recycling Roll-Off
Removed Turf


Montgomery Vault
Liner Storage Area
POL Contaminated Media
(removed and managed in
accordance with thee
VSWMR)

Montgomery Vault Liner Supply/Storage Area


Montgomery Vault Liner
Supply/Storage Area
(KTR cleaned up the area.)


OTS


DAVEY
DAVEY

Landscaping Equipment Storage Area

Landscaping Equipment Storage Area

TMDL Action Plan Submittal Letter

From:	Rosenquist, Stacey M CIV USARMY HQDA ANC OSA (USA)
To:	"JEFFREY.SELENGUT@DEQ.VIRGINIA.GOV"
Cc:	"Tuthill, Anna"
Subject:	Arlington National Cemetery TMDL - VAR040139
Date:	Monday, March 11, 2019 11:26:00 AM
Attachments:	ANC TMDL Action Plan 2019 FINAL.pdf

Jeff,

ANC posted the attached TMDL Action Plan at the https://www.arlingtoncemetery.mil/About/Policies-and-Public-Notices/Public-Notices.

Please contact me with any questions.

Stacey M. Rosenquist
Environmental Compliance Program Manager
Arlington National Cemetery

703-614-0520 o / 703-963-9465 c