

Interim Flushing Activities Summary

The United States Department of the Navy (Navy) continues to perform ongoing flushing of Navy-owned and/or -operated distribution lines to ensure safe drinking water is served to its consumers. Flushing activities performed for the Joint Base Pearl Harbor Hickam (JBPHH) Water System are described below.

The distribution system maintenance duties for the JBPHH Water System are divided between two Distribution groups: PRJ61B (Pearl Harbor), and PRJ61C (Hickam).

The PRJ61C group conducts Preventative Maintenance (PM) on all hydrants on Hickam. PM work for hydrants is completed to prevent hydrant failure and specific tasks include but is not limited to flushing until the water is clear, bolt replacement, rust and corrosion inspection, and repainting. After flushing, hydrants are secured, and all flushing apparatus are removed. Any issues with hydrants are reported immediately and then taken out-of-service. Hickam is delineated into twelve (12) different Utility Zones (see map in Attachment 1). Each zone is assigned to a month and all hydrants within that zone are PM accordingly throughout the year (eg. Zone 6 hydrants are scheduled to be flushed in June). An example of this PM plan is included in Attachment 2. Similar to Hickam, all hydrants on Pearl Harbor have a PM plan that is conducted by PRJ61B to prevent hydrant failure. PRJ61B and PRJ61C ensure that all hydrants are flushed once a year through routine hydrant PMs.

Hydrants in low usage areas have been identified on Pearl Harbor (see list in Attachment 2). These hydrants are flushed until the water is clear and then tested for residual chlorine on a monthly basis to maintain water quality. An example of this Flushing PM is included in Attachment 4. In addition to the PMs for routine hydrant flushing and flushing to maintain water quality described above, automatic flushers are also placed on hydrants near dead ends or in low water usage areas. There are four auto-flushers installed within the JBPHH Water System that are programmed to activate for different durations and at different times based on location.

Attachments:

1. PRJ61C Zone Map (Hickam)
2. PRJ61C Hydrant PM (Hickam)
3. PRJ61B List of Flushing Route (Pearl Harbor)
4. PRJ61B Flushing PM (Pearl Harbor)

ATTACHMENT 1

ATTACHMENT 2

NAVFAC Job Plan and Task

FEC:

Run Date: 6/26/2023 7:45 AM

Labor Hours: Y

JP Num	Description
UEM-76-HIK-FW-A-HYD	UEM,Hydrant

Safety Plan							
Asset	Location	Asset/Location Description	Hazard	Hazard Description	Type	Precaution	Precaution Description

NAVFAC Job Plan and Task

FEC:

Run Date: 6/26/2023 7:45 AM

Labor Hours: Y

JP Num	Description	Duration
Job Task		
Task	Description	Duration
10	Ensure safety measures are taken. Use Proper PPE, Traffic Controls, Follow ORM Guidelines.	00:00
20	Ensure surrounding area is free of obstruction, debris, overgrown vegetation within 3' radius of the fire hydrant.	00:00
30	Measure height from 4 1/2" stem to ground level 20-22 inches +/- 2 inches. Does the FH need to be raised? Yes / No Taken from UFC-3-600-01 and BWS Standards 2002	00:00
40	How far is the hydrant form from front of curb or edge of road? _____	00:00
50	Does FH have an isolation valve Yes/No. To be done concurrently with Fire Hydrant Valve Maintenance. --Close fire hydrant isolation valve to ensure operability and accessibility. --Remove debris from valve box as needed --With isolation valve closed Open & close fire hydrant valves to ensure operability and accessibility. --Check Rubber discs for wear and proper seating. --Grease Stems as needed with Food Grade Grease Only. --Report if stems are damaged and need replacement. --Re-open isolation valve. --Close Valve Box Cover	00:00
✓ 60	Attach water defuser or hose and flush hydrant until water is clear. Direct water onto a grassy area if possible.	00:00
70	Check and replace cap gasket as needed, clean and grease threads (food grade grease only). Replace caps/cap chains if damaged or not loose enough to turn cap freely. Report if nozzle threads are damaged.	00:00
80	Adjust packing bushing as needed.	00:00
90	Inspect and replace damaged and deteriorated bolts.	00:00
100	Check hydrant for any surface rust, corrosion, chip, touch-up paint and stencil ID markers as needed.	00:00

NAVFAC Job Plan and Task

FEC:

Run Date: 6/26/2023 7:45 AM

Labor Hours: Y

JP Num	Description	Duration
Job Task		
Task	Description	Duration
110	Check and verify that the hydrant is painted correctly according to requirements of NFPA Standard 291, when applicable.	00:00
120	Is blue road reflectors present? Yes / No If not, are blue reflectors needed? Yes / No	00:00
130	Is the hydrant protected: Bollards _____ Railings _____ Modifications needed? Yes / No	00:00
140	"Rate Degradation Index : see laminated Rate DI Sheet.	00:00
150	Report immediately to supervisor if any hydrant is inoperable and needs to be taken out-of-service. Tag hydrant w/ "out-of-service" devices. Notify Fire Department Regional Dispatch Center of action. RDC PH# 474-2222	00:00
160	Report any discrepancies that require a work order or material replacement to Supervisor.	00:00

JP Labor					
Craft	Labor	Qty	Rate	Cost	Lab Hours
PF		2	\$ 0.00	\$ 0.00	01:00

Summary

JP Num	Description
UEM-76-HIK-FW-A-HYD	UEM,Hydrant
Total:	1

ATTACHMENT 3

Routes Analysis

Route: UEM-PH-FW-REDHIL-FLUSHING		RED HILL FLUSHING PM ROUTE			Site: 10301		
Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
Route: UEM-PH-FW-RADTER-FLUSHING		RADFORD TERRACE FLUSHING PM ROUTE			Site: 10301		
Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-FHC 1	HYDRANT, RT-FH-35, WET-BARREL					
	SA-FHC 10	HYDRANT, RT-FH-5, WET-BARREL					
Route: UEM-PH-FW-PWCPEA-FLUSHING		PWC PEARL FLUSHING PM ROUTE			Site: 10301		
Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-FHK 609	HYDRANT, PWC-FH-609, WET-BARREL					
	SA-FHK 614	HYDRANT, PWC-FH-614, WET-BARREL					
Route: UEM-PH-FW-IROPOI-FLUSHING		IROQUOIS POINT FLUSHING PM ROUTE			Site: 10301		
Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-JFH 42	HYDRANT, IP-FH-42, WET-BARREL					
	SA-JFH 5	HYDRANT, IP-FH-5, WET-BARREL					
	SA-JFH 751	HYDRANT, IP-FH-75A, WET-BARREL					
Route: UEM-PH-FW-FISPEA-FLUSHING		FISC PEARL FLUSHING PM ROUTE			Site: 10301		
Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-FHQ 517	HYDRANT, FP-FH-517-Z9, WET-BARREL					
	SA-FHQ 523	HYDRANT, FP-FH-523-Z9, WET-BARREL					
	SA-FHQ 529	HYDRANT, FP-FH-529-Z9, WET-BARREL					

Routes Analysis

Route: UEM-PH-FW-FISPEA-FLUSHING		FISC PEARL FLUSHING PM ROUTE			Site: 10301		
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Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-FHQ 530	HYDRANT, FP-FH-530-Z9, WET-BARREL					
	SA-FHQ 542	HYDRANT, FP-FH-542-Z9, WET-BARREL					
	SA-FHQ 563	HYDRANT, FP-FH-563-Z9, WET-BARREL					

Route: UEM-PH-FW-MAKALA-FLUSHING		MAKALAPA FLUSHING PM ROUTE			Site: 10301		
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Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-FHL 904	HYDRANT, BMK-FH-904, WET-BARREL					
	SA-FHL 908	HYDRANT, BMK-FH-908, WET-BARREL					
	SA-FHL 910	HYDRANT, BMK-FH-910, WET-BARREL					
	SA-FHL 911	HYDRANT, BMK-FH-911, WET-BARREL					
	SA-FHL 914	HYDRANT, BMK-FH-914, WET-BARREL					
	SA-FHL 924	HYDRANT, BMK-FH-924, WET-BARREL					
	SA-FHL 933	HYDRANT, BMK-FH-933, WET-BARREL					
	SA-FHL 936	HYDRANT, BMK-FH-936, WET-BARREL					
	SA-FHL 938	HYDRANT, BMK-FH-938, WET-BARREL					
	SA-FHL 939	HYDRANT, BMK-FH-939, WET-BARREL					
	SA-FHL 940	HYDRANT, BMK-FH-940, WET-BARREL					
	SA-FHL 943	HYDRANT, BMK-FH-943, WET-BARREL					
	SA-FHL 945	HYDRANT, BMK-FH-945, WET-BARREL					
	SA-FHL 946	HYDRANT, BMK-FH-946, WET-BARREL					

Routes Analysis

Route: UEM-PH-FW-FORISL-FLUSHING	FORD ISLAND FLUSHING PM ROUTE	Site: 10301
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Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-FHS 11	HYDRANT, FI-FH-1-1, WET-BARREL					
	SA-FHS 14	HYDRANT, FI-FH-1-4, WET-BARREL					
	SA-FHS 21	HYDRANT, FI-FH-2-1, WET-BARREL					
	SA-FHS 214	HYDRANT, FI-FH-2-14, WET-BARREL					
	SA-FHS 25	HYDRANT, FI-FH-2-5, WET-BARREL					
	SA-FHS 27	HYDRANT, FI-FH-2-7, WET-BARREL					
	SA-FHS 31	HYDRANT, FI-FH-3-1, WET-BARREL					
	SA-FHS 35	HYDRANT, FI-FH-3-5, WET-BARREL					
	SA-FHS 39	HYDRANT, FI-FH-3-9, WET-BARREL					
	SA-FHS 415	HYDRANT, FI-FH-4-15, WET-BARREL					
	SA-FHS 48	HYDRANT, FI-FH-4-8, WET-BARREL					
	SA-FHS 519	HYDRANT, FI-FH-5-19, WET-BARREL					

Route: UEM-PH-FW-WESLOC-FLUSHING	WEST LOCH FLUSHING PM ROUTE	Site: 10301
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Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-IFH 13	HYDRANT, WL-FH-18, WET-BARREL					
	SA-IFH 15	HYDRANT, WL-FH-14, WET-BARREL					
	SA-IFH 2	HYDRANT, WL-FH-2, WET-BARREL					
	SA-IFH 22	HYDRANT, WL-FH-33, WET-BARREL					
	SA-IFH 28	HYDRANT, WL-FH-41, WET-BARREL					

Routes Analysis

Route: UEM-PH-FW-WESLOC-FLUSHING		WEST LOCH FLUSHING PM ROUTE			Site: 10301		
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Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-IFH 5	HYDRANT, WL-FH-6, WET-BARREL					
	SA-IFH 55	HYDRANT, WL-FH-71, WET-BARREL					
	SA-IFH 56	HYDRANT, WL-FH-70, WET-BARREL					
	SA-IFH 57	HYDRANT, WL-FH-69, WET-BARREL					
	SA-IFH 66	HYDRANT, WL-FH-81, WET-BARREL					

Routes Analysis

Route: UEM-PH-FW-MANANA-FLUSHING		MANANA FLUSHING PM ROUTE			Site: 10301		
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Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-EFH 1	HYDRANT, MAN-FH-1, WET-BARREL					
	SA-EFH 13	HYDRANT, MAN-FH-13, WET-BARREL					
	SA-EFH 16	HYDRANT, MAN-FH-16, WET-BARREL					

Route: UEM-PH-FW-PEACIT-FLUSHING		PEARL CITY PENINSULA FLUSHING PM ROUTE			Site: 10301		
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Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-AFH 1	HYDRANT, PC-FH-1, WET-BARREL					
	SA-AFH 30	HYDRANT, PC-FH-30, WET-BARREL					
	SA-AFH 35	HYDRANT, PC-FH-35, WET-BARREL					
	SA-AFH 7	HYDRANT, PC-FH-7, WET-BARREL					

Route: UEM-PH-FW-MCGPRO-FLUSHING		MCGREW POINT FLUSHING PM ROUTE			Site: 10301		
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Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-FHT 2	HYDRANT, MPT-FH-2, WET-BARREL					
	SA-FHT 3	HYDRANT, MPT-FH-3, WET-BARREL					
	SA-FHT 5	HYDRANT, MPT-FH-5, WET-BARREL					
	SA-FHT 6	HYDRANT, MPT-FH-6, WET-BARREL					
	SA-FHT 7	HYDRANT, MPT-FH-7, WET-BARREL					

Routes Analysis

Route: UEM-PH-FW-LUALUA-FLUSHING	LUALUALEI FLUSHING PM ROUTE	Site: 10301
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Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-NFH 151	HYDRANT, RTF-FH-15A, WET-BARREL					
	SA-NFH 21	HYDRANT, RTF-FH-21, WET-BARREL					
	SA-NFH 25	HYDRANT, RTF-FH-25, WET-BARREL					
	SA-NFH 26	HYDRANT, RTF-FH-26, WET-BARREL					
	SA-NFH 4	HYDRANT, RTF-FH-4, WET-BARREL					
	SA-NFH 8	HYDRANT, RTF-FH-8, WET-BARREL					
	SA-PFH 211	HYDRANT, LLL-FH-21-1, WET-BARREL					
	SA-PFH 35	HYDRANT, LLL-FH-C-5, WET-BARREL					
	SA-PFH 51	HYDRANT, LLL-FH-E-1, WET-BARREL					
	SA-PFH 612	HYDRANT, LLL-FH-61-2, WET-BARREL					
	SA-PFH 651	HYDRANT, LLL-FH-65-1, WET-BARREL					
	SA-PFH 652	HYDRANT, LLL-FH-65-2, WET-BARREL					
	SA-PFH 661	HYDRANT, LLL-FH-66-1, WET-BARREL					
	SA-PFH 671	HYDRANT, LLL-FH-67-1, WET-BARREL					

Route: UEM-PH-FW-NCTPAC-FLUSHING	NCTAMS FLUSHING PM ROUTE	Site: 10301
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Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-OFH 16	HYDRANT, NCT-FH-16, WET-BARREL					
	SA-OFH 21	HYDRANT, NCT-FH-21, WET-BARREL					
	SA-OFH 27	HYDRANT, NCT-FH-27, WET-BARREL					

Routes Analysis

Route: UEM-PH-FW-NCTPAC-FLUSHING		NCTAMS FLUSHING PM ROUTE		Site: 10301			
Sequence	Asset	Description	Location	Description	Job Plan	Description	Route Stop Description
	SA-OFH 36	HYDRANT, NCT-FH-36, WET-BARREL					
	SA-OFH 39	HYDRANT, NCT-FH-39, WET-BARREL					
	SA-OFH 43	HYDRANT, NCT-FH-43, WET-BARREL					
	SA-OFH 7	HYDRANT, NCT-FH-7, WET-BARREL					

ATTACHMENT 4

NAVFAC Job Plan and Task

FEC:

Run Date: 6/26/2023 7:21 AM

Labor Hours: Y

JP Num	Description
UEM-76-PH-FW-M-FLUSH	UEM, HYDRANT FLUSHING (MONTHLY)

Job Task		
Task	Description	Duration
10	Ensure safety measures are taken (example: use of proper PPE, traffic safety controls, etc).	00:00
20	Install necessary flushing apparatus and flush hydrant on common ground until water is clear.	00:00
30	When water is clear, obtain chlorine reading. Record meter reading_____PPM.	00:00
40	Secure hydrant and remove all flushing apparatus.	00:00
50	Report immediately to supervisor if any hydrant is inoperable and needs to be taken out-of-service.	00:00

JP Labor					
Craft	Labor	Qty	Rate	Cost	Lab Hours
IQ		1	\$ 0.00	\$ 0.00	00:30

Summary

JP Num	Description
UEM-76-PH-FW-M-FLUSH	UEM, HYDRANT FLUSHING (MONTHLY)
Total:	1