The Honorable
Donna Frett-Gregory
Senate President
34th Legislature

Legislature of the Virgin Islands

CAPITOL BUILDING, P.O. BOX 1690
ST. THOMAS, U.S. VIRGIN ISLANDS 00804
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CHAIRPERSON
Committee of the Whole

MEMBER
Committee on Finance

Committee on Education
and Workforce Development

Committee on Economic Development
& Agriculture

May 23, 2022

Mr. Andrew Smith
Chief Executive Officer
V.I. WAPA Governing Board
P.O. Box 1450
St. Thomas, VI 00804-1450
via email: andrew.smith@viwapa.vi

Dear Mr. Smith:

During the Committee of the Whole hearing held on Monday, May 16, 2022, Senators requested information from the V.I. Water and Power Authority. Through this correspondence you are hereby required to provide the following information:

- Redacted copy of the V.I. Water and Power Authority's Strategic Plan.
- Detailed report on the status of V.I. Water and Power Authority's payment to the Government Employees' Retirement System for all outstanding employer and employee contributions.
- List of all new managerial and supervisory hires to include hire date, salary, bonus and other allowances to be paid.
- Report of all federally and locally funded projects to include name of the contractor, cost, status and projected completion date.
- Report of all outstanding debt of the V.I. Water and Power Authority to include vendor, amount, and age of debt.
- Copy of the territory-wide water flushing plan and plan on the replacement of water lines.
- Copy of the procedure for monitoring electrical system hookups and disconnections.

Please forward the information to the Office of the Senate President no later than Tuesday, May 31, 2022: We look forward to your cooperation. Should you have any questions, please contact my Legislative Director, Ms. Jamila Russell via email at jrussell@legvi.org or at (340) 227-2348.

Sincerely,

Donna Frett-Gregory
President-34th Legislature

Cc: Members of the 34th Legislature
Kyle Fleming, Chairman – WAPA Governing Board

VIRGIN ISLANDS
WATER
AND POWER
AUTHORITY

Office of the Executive Director

P.O. BOX 1450,
ST. THOMAS, US VI 00804-1450
TELEPHONE: (340) 774-3552 Ext. 2002
FAX: (340) 774-3422

June 1, 2022

VIA ELECTRONIC MAIL

Hon. Donna A. Frett-Gregory
Senate President
34th Legislature of the Virgin Islands
Capitol Building, Charlotte Amalie
P.O. Box 1690
St. Thomas, VI 00804
senatorfrett-gregory@legvi.org

Dear Senator Frett-Gregory:

In response to the requests for further information detailed in yours of May 23, 2022, please see the enclosed materials and explanations below:

Redacted Copy of the V.I. Water and Power Authority's Strategic Plan

The Authority's Strategic Plan is set for consideration by the Board this week. The requested redacted materials will be provided at the conclusion of that review.

Detailed Report on the Status of V.I. Water and Power Authority's Payments to the Government Employees' Retirement System for All Outstanding Employer and Employee Contributions

Commencing on July 8, 2021, the Authority failed to make employee and employer contributions to GERS. This continued through the April 27, 2022 payroll date, whereafter employee contributions were again remitted on May 12, 2022, and have continued at the regularly scheduled intervals. The Authority also begun making bi-weekly catch-up payments during non-payroll weeks to reduce the unremitted employee contribution amount. The first catch-up payment of $130,214 was made on May 24, 2022, reducing the unremitted employee contribution amount to

$2,752,580. The Authority has not yet resumed making employer contributions. The total unremitted employer contributions through the May 26, 2022 payroll date are $5,115,210. Please see the detailed report annexed hereto as Exhibit 1.

List of All New Managerial and Supervisory Hires to Include Hire Date, Salary, Bonus and Other Allowances to be Paid

Please see the detailed list annexed hereto as Exhibit 2.

Report of All Federally and Locally Funded Projects to Include Name of the Contractor, Cost, Status and Projected Completion Date

Please see the detailed list annexed hereto as Exhibit 3.

Report of All Outstanding Debt of the V.I. Water and Power Authority to Include Vendor, Amount, and Age of Debt

Please see the detailed report annexed hereto as Exhibit 4.

Copy of the Territory-Wide Water Flushing Plan And Plan on the Replacement of Water Lines

In September of 2017, hurricanes Irma and Maria devastated our beautiful Virgin Islands and severely impacted our already fragile water distribution system infrastructure. Most of the damage occurred on St. Croix, where the in-service lines largely consisted of the original ductile iron, cast iron and galvanize water piping that existed from the 1940's and 50's. That said, the majority of the existing water infrastructure has far exceeded its life expectancy and as a result, maintenance crews are tasked with addressing leaks daily. In the aftermath of the 2017 hurricanes, the water distribution system received additional and extensive damage from debris removal activities and planting of new utility poles by private contractors. While the damages to above ground utility infrastructure were visible early on, subsurface damage to the water distribution infrastructure have become more and more evident due to the increased frequency of water main leaks on St. Croix post storms. WAPA's water distribution department personnel have made every effort to utilize the "Drinking Water Capital Improvement Grant" funding made available through the EPA, DPNR and Public Finance Authority (PFA) to initiate several waterline rehabilitation and mitigation projects.

St. Croix's potable water distribution system application has been submitted to FEMA for prudent replacement of ALL ductile iron and cast iron water piping; upgrade existing infrastructure and pump stations to industry standards while increasing pipe sizes which help facilitate future expansion. Said pipes are the primary cause of the discolored water within the Territory. WAPA anticipates approval of its prudent replacement application by FEMA in summer of 2022. The goal is to expedite these projects and to have them completed within a ten year term. Additional coordination is required with DPW, Waste Management Authority, VINGN, WAPA Power, Liberty and Viya, to support the "Dig Once" philosophy.

The St. Thomas/St. John prudent replacement application is likewise being compiled and will be submitted to FEMA following a similar methodology as St. Croix. Please see the Territorial Water Plan annexed hereto as Exhibit 5.

Copy of the procedure for monitoring electrical system hookups and disconnections.

Please see the Standard Operating Procedure annexed hereto as Exhibit 6.

Please do not hesitate to contact me should you have any further questions or require further information.

Regards,

Andrew L. Smith
CEO/Executive Director

WAPA Exhibit 1

As of 5/27/2022	Employee Contribution	Employer Contribution	Total
Unremitted Amount	$ 2,882,794	$ 5,115,210	$ 7,998,004
Catch Up Payments	$ 130,214	$ -	$ 130,214
Net Unremitted Amount	$ 2,752,580	$ 5,115,210	$ 7,867,790

Pay Date	Employee Contribution	Employer Contribution	Total
7/8/2021	$ 130,158	$ 208,243	$ 338,401
7/22/2021	$ 131,011	$ 209,339	$ 340,350
8/5/2021	$ 132,802	$ 211,806	$ 344,608
8/19/2021	$ 133,094	$ 211,861	$ 344,955
9/2/2021	$ 130,977	$ 209,213	$ 340,190
9/16/2021	$ 131,108	$ 209,690	$ 340,798
9/30/2021	$ 132,534	$ 212,098	$ 344,632
10/14/2021	$ 131,725	$ 211,985	$ 343,710
10/28/2021	$ 130,701	$ 211,443	$ 342,145
11/10/2021	$ 131,761	$ 213,892	$ 345,653
11/24/2021	$ 131,449	$ 214,057	$ 345,506
12/9/2021	$ 130,746	$ 213,033	$ 343,780
12/23/2021	$ 129,649	$ 211,429	$ 341,078
1/5/2022	$ 128,901	$ 210,855	$ 339,756
1/20/2022	$ 129,669	$ 211,179	$ 340,847
2/3/2022	$ 128,996	$ 213,251	$ 342,247
2/17/2022	$ 130,915	$ 215,140	$ 346,055
3/3/2022	$ 132,064	$ 217,212	$ 349,277
3/17/2022	$ 132,119	$ 217,667	$ 349,786
3/30/2022	$ 130,627	$ 215,432	$ 346,060
4/13/2022	$ 130,746	$ 215,814	$ 346,560
4/27/2022	$ 131,042	$ 217,490	$ 348,532
5/12/2022	$ -	$ 216,322	$ 216,322
5/26/2022	$ -	$ 216,757	$ 216,757
Total	**$ 2,882,794**	**$ 5,115,210**	**$ 7,998,004**

Employee Position Title	Employee Annual Salary	Employee Department Short Description	Employee Department Description	Employee Group Description	Employee Grade	Employee Hire Date
IT OPERATIONS MANAGER	$85,000.00	SYS & INFO PR/FERC A&G	SYS & INFO PROCESSING/FERC ADMIN & GENERAL	MANAGEMENT/CONFIDENTIAL	M4	12/29/2021
CHIEF OPERATING OFFICER/ELECT.	$230,000.00	COO/FERC A&G	CHIEF OPERATING OFFICER/ADMIN & GENERAL	MANAGEMENT/CONFIDENTIAL	M7	04/11/2022
DEPUTY DIR. OF COMMUNICATIONS	$85,000.00	CUMMUNICATIONS/ADM.& GEN	COMMUNICATIONS/EXECUTIVE DIREC/FERC ADMIN. & GEN.	MANAGEMENT/CONFIDENTIAL	M5	04/19/2022
DIR.DISASTER RECOV.&COMPLIANCE	$115,000.00	DISASTER RECOVE/FINANCE/F	DISASTER RECOVE/FINANCE/FERC ADMIN. & GENERAL SAL	MANAGEMENT/CONFIDENTIAL	M6	02/22/2022
MANAGER OF MAINTENANCE	$96,000.00	POWER PRODUCTION/MAINT	POWER PRODUCTION/FERC MAINT OF STRUCTURES	MANAGEMENT/CONFIDENTIAL	M4	12/28/2021
ASSISTANT GENERAL COUNSEL	$125,000.00	GENERAL COUNSEL/FERC A&G	GENERAL COUNSEL/FERC ADMIN & GENERAL	MANAGEMENT/CONFIDENTIAL	M6	01/10/2022
AUTO SHOP SUPERVISOR	$52,760.66	GARAGE/FERC A & G	GARAGE/ADMINISTRATION/FERC ADMIN & GENERAL	SUPERVISOR	SS2	05/10/2021
CHIEF FIN. OFFICER	$180,000.00	FINANCE ADMIN/FERC A & G	FINANCE ADMIN/FERC ADMIN & GENERAL	MANAGEMENT/CONFIDENTIAL	M7	04/19/2022
DIRECTOR OF COMMUNICATIONS	$100,000.00	CUMMUNICATIONS/ADM.& GEN	COMMUNICATIONS/EXECUTIVE DIREC/FERC ADMIN. & GEN.	MANAGEMENT/CONFIDENTIAL	M6	03/07/2022
EXECUTIVE DIRECTOR	$325,000.00	EXECUTIVE/DIRECT/FERC A&G	EXECUTIVE DIRECTOR/FERC ADMIN & GENERAL	MANAGEMENT/CONFIDENTIAL	M8	01/10/2022

Additional Compensation

The Executive Director/CEO, COO-Electrical and Chief Financial Offcier receive housing allowences of $3,750 per month. The CFO also receives an education allowence of $25,000 per school year. The CEO and CFO are eligible for up to $50,000, and the COO-Electrical up to $70,000, in a discretionary bonus, the criteria and award of which is to be determined by the Governing Board. The CEO is eligible for up to $30,000 in a discretionary safety bonus to be primarily based on improvement of the Authority's Recordable Injury Rate.

ACTIVE CONTRACTS LISTING 2022 (updated May 31, 2022)

WAPA Exhibit 3

Contract Number	Contractor's Name	Service /Project Manager/Dept.	Contract Term/ Expiration Date	Contract Consideration	Funding Source
SC-63-10	Seven Seas - STT	Lease and water purchase agreement	15 years from May 2011 with option to extend for five-year period	rates	Local
SC-66-11	Seven Seas - STX	Lease and water purchase agreement	15 years from April 2012 with option to extend for five-year period	rates	Local
SC-30-17	Teledyne Monitor Labs	CEMS Maintenance/Audit Service	March 15, 2022 (pending addendum II for extension)	$2,179,858.00	Local
SC-05-18	Ranger American	Security and armored guard services	August 22, 2022	$99,680	Local
SC-63-18	Sustainable Capital	Consulting – Capital plan and budget	March 31, 2022*	NTE $940,000.00	Local
SC-29-19	Leidos Engineering, LLC	Engineering design services for STT/STJ Submarine Cable	July 31, 2023	$1,591,130.67	Federal
SC-52-19	Arcadis	Stack testing	Mar 31, 2022*	$740,000.00	Local

ACTIVE CONTRACTS LISTING 2022 (updated May 31, 2022)

Contract Number	Contractor's Name	Service /Project Manager/Dept.	Contract Term/ Expiration Date	Contract Consideration	Funding Source
SC-14-20	Haugland VI	Composite Poles Installation (STX)	December 21, 2023	$124,978,526.96	FEMA/HUD
SC-23-20	VI Paving	Underground installation of civil and electrical infrastructure in Midlands	August 31, 2022	$3,325,529.31	FEMA/HUD
SC-24-20	VIVOT	Underground installation of civil and electrical infrastructure in Golden Grove	September 7, 2022	$1,704,862.00	FEMA/HUD
SC-29-20	FXB, Inc.	Project Management	August 19, 2022	$5,980,007.00	FEMA/HUD
SC-33-20	Wartsila	Harley Power Plant – Generating Units	October 31, 2022	$75,143,018.00	HUD
SC-02-21	BDO	FY 2019 and 2020 Financial Statements	Dec 31, 2022	$655,000.00	Local
SC-07-21	Haugland VI	East End Substation Restoration and Expansion	April 30, 2022 (pending Change Order 1)	$1,164,565.67	FEMA
SC-13-21	Wartsila EPC	Engine Reservation and Engineering Agreement	16 months (NTP pending)	$3,342,350.00	Local
SC-20-21	Haugland VI	Composite Pole Installation	January 12, 2024	$57,817,965.32	FEMA/HUD

ACTIVE CONTRACTS LISTING 2022 (updated May 31, 2022)

Contract Number	Contractor's Name	Service /Project Manager/Dept.	Contract Term/ Expiration Date	Contract Consideration	Funding Source
SC-21-21	BBC Electrical Services	Replacement of wood poles to Composite Pole (STJ)	May 6, 2024	$35,886,447.50	FEMA/HUD
SC-22-21	J Benton Construction	Underground installation of civil and electrical infrastructure in Container Port	September 11, 2022 (pending final execution of addendum II	$4,322,205.93	FEMA/HUD
SC-23-21	Haugland VI	Undergrounding Project – Cruz Bay	July 2, 2022	$15,671,419.45	FEMA/HUD
SC-24-21	American Wire Group	Consignment of electrical material for T& D	April 21, 2023	$29,939,600.23	FEMA/HUD
SC-26-21	Barkley Technology	Composite Pole Management	February 23, 2023	NTE $3,145,745.40	FEMA/HUD
SC-29-21	Evertec	Bill printing and mailing services	June 10, 2024	NTE $2,200,000.00	Local
SC-31-21	Comprehensive Security	Security services (2 year contract)	March 31, 2023	$2,157,480.00	Local
SC-32-21	Comprehensive Security	Security services (2 year contract)	March 31, 2023	$2,127,620.00	Local

ACTIVE CONTRACTS LISTING 2022 (updated May 31, 2022)

Contract Number	Contractor's Name	Service /Project Manager/Dept.	Contract Term/ Expiration Date	Contract Consideration	Funding Source
SC-01-22	Seven Seas	Water purchase Agreement	June 30, 2026	rates	Local
SC-02-22	Electric Cities of Georgia	In House Power Line Man Training	June 30, 2023	$516,550.00	Local
SC-03-22	GRS Consulting	Perform actuarial calculations to determine the plans funding status and contribution.	October 31, 2021*	$19,000.00	Local
SC-04-22	JD&R ASSOCIATES, LLC	Contractor shall perform visual inspections and non-destructive examination on piping systems. Project Manager: Kareem Edwards - PRODUCTIONS	October 18, 2022	$146,878.00	Local
SC-07-22	CENTRAL SQUARE TECH, LLC	Annual Maintenance & Support for the Authorities ERP system. Project Manager: Julius Aubain- Information Technology (IT)	December 09, 2022	$181,471.76	Local
SC-08-22	On Site Environmental	STT Demolition of Israel Desalinization Equipment ("IDE")	13.5 weeks from Notice to Proceed	$326,200.00	HUD
SC-09-22	On Site Environmental	STT- Demolition and Disposal of IDE Tank 10 and its foundation	6.5 weeks from Notice to Proceed	$320,000.00	HUD
SC-10-22	Grace Civil	Firewater Pump Construction	25 weeks from Notice to Proceed	$495,000.00	HUD

ACTIVE CONTRACTS LISTING 2022 (updated May 31, 2022)

Contract Number	Contractor's Name	Service /Project Manager/Dept.	Contract Term/ Expiration Date	Contract Consideration	Funding Source
SC-11-22	ARCADIS, US., INC.	Establishing a Master Service Agreement (MSA) Project Manager: Maxwell George -Environmental Affairs	December 31, 2023	$200,000.00	Local
SC-13-22	Borinken	No. 2 Fuel Oil	December 31, 2022	Per Barrel of 42 US Gallons	Local

* contracts pending final payments

WAPA Exhibit 4

Virgin Islands Water and Power Authority
Summary of Outstanding Debt Obligations
(as of April 30, 2022)

Long-Term (Bonds and Notes)	Outstanding Balance	Tax Status	Final Maturity	Trustee Bank
Senior Bonds:				
Series 2003A[1]	$29,475,000	Tax-Exempt	7/1/2028	UMB Investment Direct
Series 2010B[1]	$4,175,000	Tax-Exempt	7/1/2022	UMB Investment Direct
Series 2010C[1]	$37,330,000	Taxable	7/1/2035	UMB Investment Direct
Series 2012A	$0	Tax-Exempt	7/1/2021	The Bank of New York Trust Company, N.A
Series 2015A (RUS Loan)	$9,948,942	Taxable	12/30/2034	UMB Investment Direct
Total	$80,928,942			
Subordinate Bonds:				
Series 2007A	$57,585,000	Tax-Exempt	7/1/2031	The Bank of New York Trust Company, N.A
Series 2012C	$21,780,000	Taxable	7/1/2025	The Bank of New York Trust Company, N.A
Total	$79,365,000			
Senior Bond Anticipation Notes (BANs):				
Series 2020A	$39,380,000	Tax-Exempt	7/1/2022	UMB Investment Direct
Series 2021A	$34,500,000	Tax-Exempt	7/1/2026	UMB Investment Direct
Series 2021B	$500,000	Taxable	7/1/2026	UMB Investment Direct
Total	$74,380,000			
Capital Leases:				
Vitol (LPG) Project[2]	**103,206,553**	N/A	1/1/2027	
Other Debt:				
CDL (Water System)[3]	$0	Taxable	7/1/2033	
Total Long-Term Debt Outstanding	**$337,880,495**			

Bank Facilities	Drawn	Tax Status	Expiration
Lines of Credit			
Banco Popular			
Electric System			
Capital Projects	$8,230,802	Tax-Exempt	7/31/2022
Working Capital	$10,155,774	Taxable	7/31/2022
Letter of Credit[4]	$0	N/A	N/A
	$18,386,576		
Water System			
Capital Projects	N/A	N/A	N/A
Working Capital	$1,802,217	Taxable	7/31/2022
	$1,802,217		
FirstBank			
Electric System			
Capital Projects	$4,875,000	Tax-Exempt	7/31/2022
Working Capital	$10,000,000	Taxable	7/31/2022
Overdraft	**14,819,605**	Taxable	10/31/2022
	$29,694,605		
Water System			
Capital Projects	$0	Tax-Exempt	N/A
Working Capital	$937,500	Taxable	7/31/2022
	$937,500		
Total Bank Facilities	$50,820,898		
Total Long-Term Debt Obligations	$337,880,495		
Total Outstanding Obligations	**$388,701,393**		

Notes:

1 Insured; Series 2003A(AMBAC) and 2010B & 2010C (Assured Guaranty)

2 Vitol project consists of costs to build, own and operate propane storage and distribution facilities on St. Croix and St. Thomas, as well as finance costs to make certain improvements and

3 Community Disaster Loans (CDLs) forgiven by act of Congress .

4 Separate letter of credit pledged to support the Series 2015A RUS loan.

St. Croix

Monthly *Flushing Schedule*

Shift Shedule	Shift # 1
8:00am - 4:00pm	1
4:00pm - 12:00am	2
12:00am - 8:00am	3

	Priority	Location	Geo-Location	Shift	Type	Tag #	Check	Date	Start Time	End Time	Comments
Week #1	1	Catherine Rest	Mid Island	2	Fire Hydrant						
	1	La Grange /Plantation	West	2	Sample Point						
	1	Fredriksted Ball Park	West	1	Sample Point						
	1	Estate Profit	Mid Island	2	Fire Hydrant						
	1	White Lady	West	1	Sample Point						
	1	Fredriksted Dock	West	2	Sample Point						
	1	Luise E Brown	West	2	Fire Hydrant						
	1	Croixville	West	2	Fire Hydrant						
	1	Grove Place	West	2	Fire Hydrant						
	1	Fredriksted Town	West	2	Fire Hydrant						

** Priority #1 Critical Area's - Not Deterimine by Potable Water Inventory Levels*

** Based on Customer Request*

	Priority	Location	Geo-Location	Shift	Type	Tag #	Check	Date	Start Time	End Time	Comments
Weeks 2 & 3	2	Williams Delight	West	2	Fire Hydrant						
	2	Monbijou	Mid Island	2	Fire Hydrant						
	2	MT Pleasant West	West	2	Fire Hydrant						
	2	Mahogony Welcome	East	2	Fire Hydrant						
	2	Annas Hope	East	2	Fire Hydrant						
	2	Stoney Ground	West	2	Fire Hydrant						
	2	Hannas Rest	West	2	Fire Hydrant						
	2	Carlton	West	2	Fire Hydrant						
	2	Whim	West	2	Fire Hydrant						
	2	Work & Rest	East	2	Fire Hydrant						
	2	Peter Rest	East	2	Fire Hydrant						
	2	Strawberry	Mid Island	2	Fire Hydrant						
	2	Sion Farm	Mid Island	2	Fire Hydrant						
	2	Concodia West & Villas	West	1 & 2	Fire Hydrant						
	2	Fredriksted Pool	West	1	Flush Point						
	2	Upper Love	West	2	Fire Hydrant						
	2	Castle Burke	West	2	Fire Hydrant						
	2	LA Grande Princess	West	2	Fire Hydrant						
	2	Christiansted Town	East	2	Fire Hydrant						
	2	Richmond East	East	2	Fire Hydrant						

** Priority #2 Area's - Discontinued Flushing once Potable Water Inventory is below 12,500,000 MG = < 56% Water Inventory*

Priority	Location	Geo-Location	Shift	Type	Tag #	Check	Date	Start Time	End Time	Comments
3	Paradise Mills Apt	West	2	Fire Hydrant						

Week #4	3	Marley Project	West	2	Fire Hydrant						
	3	Water Gut Homes	East	2	Fire Hydrant						
	3	Harvey Project	East	2	Fire Hydrant						
	3	D.Hamilton Jackson P	West	2	Fire Hydrant						
	3	W.I.M Hodge Pavillion	West	2	Fire Hydrant						
	3	JF Kennedy Terrace	East	2	Fire Hydrant						
	3	Kidney Centre	East	2	Flush Point						
	3	Pearl B Larson	East	2	Fire Hydrant						
	3	Glynn	Mid Island	2	Fire Hydrant						
	3	Frangipani	Mid Island	2	Fire Hydrant						
	3	Calquohoun	Mid Island	2	Fire Hydrant						
	3	Clifton Hill	Mid Island	2	Fire Hydrant						
	3	Adventure Hill	Mid Island	2	Fire Hydrant						
	3	Tide Village	East	2	Fire Hydrant						
	3	Tulipan	East	2	Fire Hydrant						
	3	Constitution Hill	East	2	Flush Point						
	3	Smith Field	West	2	Fire Hydrant						
	3	Two Brothers	West	2	Fire Hydrant						
	3	Two Williams	West	2	Fire Hydrant						
	3	St Georges	West	2	Fire Hydrant						

** Priority #3 Area's - Discontinued Flushing once Potable Water Inventory is below 15,000,000 MG = Below 68% Water Inventory*

Flushing Schedule

Priority	Location	Geo-Location	Time	Type	Daily	Weekly	Monthly	Comments
1	Catherine Rest	Mid Island	4:00pm-12:00pm	Fire Hydrant		X		Several Location
2	Williams Delight	West	4:00pm-12:00pm	Fire Hydrant			X	Several Location
1	La Grange /Plantation	West	4:00pm-12:00pm	Sample Point		X		1 Location& meterboxes
1	Fredriksted Ball Park	West	8:00am-4:00pm	Sample Point		X		1 Location
1	Estate Profit	Mid Island	4:00pm-12:00pm	Fire Hydrant		X		Several Location
2	Pearl B Larson	East	4:00pm-12:00pm	Fire Hydrant			X	1 Location
1	White Lady	West	Any Shift	Sample Point		X		1 Location
1	Fredriksted Dock	West	Any Shift	Sample Point		X		1 Location
1	Luise E Brown	West	4:00pm-12:00pm	Fire Hydrant		X		1 Loction
1	Croixville	West	4:00pm-12:00pm	Fire Hydrant		X		Several Location
1	Fredriksted Town	West	4:00pm-12:00pm	Fire Hydrant		X		Several Location

Priority	Location	Geo-Location	Time		Daily	Weekly	Monthly	Comments
2	Monbijou	Mid Island	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Glynn	Mid Island	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Frangipani	Mid Island	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Calquohoun	Mid Island	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Clifton Hill	Mid Island	4:00pm-12:00pm	Fire Hydrant			X	1 Location& Meter boxes
2	Adenture Hill	Mid Island	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	MT Pleasant West	West	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Tide Village	East	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Tulipan	East	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Mahogony Welcome	East	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Annas Hope	East	4:00pm-12:00pm	Fire Hydrant			X	Several Location &Flush point
2	Constitution Hill	East	4:00pm-12:00pm	Flush Point			x	1Location

Priority	Location	Geo-Location	Time		Daily	Weekly	Monthly	Comments
2	Smith Field	West	4:00pm-12:00pm	FFire Hydrant			X	
2	Stoney Ground	West	4:00pm-12:00pm	Fire Hydrant			X	
2	Two Brothers	West	4:00pm-12:00pm	Fire Hydrant			X	
2	Hannas Rest	West	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Carlton	West	4:00pm-12:00pm	Fire Hydrant			X	1 Loction
2	Whim	West	4:00pm-12:00pm	Fire Hydrant			X	1 Location& Meterboxes
2	Two Williams	West	4:00pm-12:00pm	Fire Hydrant			X	
2	ST .George	West	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Work&Rest	East	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Peter Rest	East	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Strawberry	Mid Island	4:00pm-12:00pm	Fire Hydrant			X	Several Location
2	Sion Farm	Mid Island	4:00pm-12:00pm	Fire Hydrant			X	Several Location

St. Thomas

Monthly *Flushing Schedule*

Shift Shedule	Shift # 1
8:00am - 4:00pm	1
4:00pm - 12:00am	2
12:00am - 8:00am	3

Priority	Location	District	Type	Tag #	Check	Date	Routine Flushing	Comments
1	Contant (Behind Car Wash)	Nisky	AFD	D-1			M W F @ 5 min interval	
1	Sandfill	Town	AFD	A-1			M W F @ 5 min interval	
1	Dejongh Gutt	Town	AFD	A-2			M W F @ 5 min interval	
1	Beltjen Rd (Hatchett Substation)	Town	AFD	A-3			M W F @ 5 min interval	
1	Altona PS	Altona PS	AFD	F-1			M W F @ 5 min interval	
1	Bethel Baptist	Berg's Home PS	AFD	N-1			M W F @ 5 min interval	
1	Annas Retreat 215-244	Annas Retreat	AFD	M-1			M W F @ 5 min interval	
1	Annas Retreat	Annas Retreat	AFD	M-2			M W F @ 5 min interval	
1	Nadir Community	Fourwinds	AFD	M-3			M W F @ 5 min interval	
	Bovoni Jenny's Hope	Fourwinds	AFD	M-4			M W F @ 5 min interval	
	Red Hook (Fruit Stand)	Smith Bay	AFD	M-5			M W F @ 5 min interval	
	Waterbay (Middle)	Smith Bay	AFD	M-6			M W F @ 5 min interval	
	Waterbay (Lower)	Smith Bay	AFD	M-7			M W F @ 5 min interval	
	Old Tutu (Flambouyant Corner)	Old Tutu	AFD	O-1			M W F @ 5 min interval	
	New Tutu- Upper Rd	New Tutu	AFD	P-1			M W F @ 5 min interval	
	New Tutu- Middle Rd	New Tutu	AFD	P-2			T TH S @ 5 min interval	
	New Tutu (Valley) - Right Loop	New Tutu	AFD	P-3			MWF @ 5 min interval	
	New Tutu (Valley) - Middle Loop	New Tutu	AFD	P-4			T TH S @ 5 min interval	
1	New Tutu (Valley) - Final	New Tutu	AFD	P-5			MWF @ 5 min interval	

** Priority #1 Critical Area's - Not Deterim** Priority #1 Critical

** Based on Customer Request*

**system Wide Fluhsing conductucted every 6 months

WAPA Exhibit 6

STANDARD OPERATING PROCEDURE

Work Request Processing

Table of Contents

Revision History

Revision	Date	Description of Changes
0	12/23/2009	New document.
1	7/1/2010	Added staking process to procedure (Appendix D).
2	7/12/2010	Added new request category and task structure (Appendix E). Revised trouble call process description (Page 15).
3	8/10/2010	Revisions contributed by Line and Design & Construction Departments on July 23, 2010.
4	1/12/2011	Revisions to trouble call initiated work requests (Page 6, 15, 16). Major and minor trouble call terminologies omitted. Revisions to work request category structure. (pages 26-27).
5	10/19/2016	Revisions to customer service request initiated work requests.
6	12/30/2016	Revisions to work request flow charts, addition of Appendix G: Scanning/Filing of work requests, Appendix H: Aquarius Scanning Tool Guide, Appendix I: Code Definitions

Stakeholder Approval

Version 6.0

- Niel Vanterpool, T&D Director:
- Allyson Gregory, System Planning Manager:
- LeCheea Smith, Automation & Operations Manager:
- Huston Harrigan, Substations Manager:
- Mikey Holder, St. Croix Design & Construction Manager:
- Cordel Jacobs, St. Thomas-St. John Design & Construction Manager:
- Yauncey Milligan, St. Croix Line Superintendent:
- Felix Rey, St. Thomas-St. John Line Superintendent:

Purpose

This standard operating procedure (SOP) seeks to establish a uniform process for generating necessary work request documents to effectively execute field related duties for the Transmission and Distribution Division and to adequately collect and document field data so as to update and maintain the Authority's GIS and mapping systems.

Background

Work requests are generally created from the following:

1. Customer Service Requests
2. Capital Project Requests
3. Trouble Calls

All requests (except those pertaining to Meter Services as discussed in Appendix F) must flow through the Design & Construction Department for processing. Upon receipt of requests, an Engineer Technician and/or engineer determines the specific type of work request based on the nature of the request. The Engineer Technician will create a Work Order in the Naviline/I525 CIS system. The Naviline/i525 will generate a specific "WF" number / Work Request number.

Work requests will not be processed without assigned work request numbers.

A list of specific work request types are as follows:

A. Customer Service Request Initiated Work requests

The Customer Service Department receives and processes customer requested work and passes these requests to the Design & Construction Department. Customer Service will generate the following list of specific work request types that fall into this category:

1. New Service Line Installation including Poles, Wires and Transformers (CAP)
2. Installation of Public Area Lights (CAP)
3. Installation of Private Area Lights (CAP)
4. Maintenance/Retirement (MNT)
5. Meter Installation/Replacement (CAP)

B. Capital Project Request Initiated Work requests

Capital project requests result in the generation of major works orders. There are two ways these work requests may originate:

a) An Engineering Technician and/or engineer receives a customer service request and determines that a Major Work request is needed.
b) The System Planning Department makes recommendations to the Design and Construction Department.

The following is a list of specific work requests that fall into the Major Work request category:

Customer or situation-upgrade driven work request types:

1. Primary pole upgrade (CAP)
2. Primary line extension (may include design work) (CAP)

Planning-driven work (major orders must include design work): (CAP)

3. Re-conductor/Line upgrade (CAP)
4. Voltage conversion projects (CAP)
5. Line Loss-reduction driven change-out/additions (CAP)
6. Large load installations (CAP)
7. Line Extensions for developers-customers' large commercial or residential phased development projects (CAP)
8. Roadway relocation/public works driven job orders (CAP)
9. System devices(fuses, reclosers, sectionalizing devices, etc.) (CAP)

C. Trouble Call Initiated Work requests

The Authority's System Operation Center/Dispatch receives trouble calls and coordinates with either the Line Department or Design & Construction for processing, depending on the work required. Trouble calls that involve maintenance of existing systems are sent directly to the Line Department. If work requires upgrades, improvements, or changes to existing system, the trouble call is sent to Design & Construction and the capital work request process should be followed.

The following are examples of Trouble Calls:

1. Repair/replace damaged pole
2. Repair/replace damaged equipment (i.e. transformers, fuses, etc.)
    a. Transformers over 25 kVA shall have approval by Planning prior to replacement.
3. Repairs or replacements resulting from accidents, fires, and other major disasters or emergencies.
4. Partial power/Fluctuating power/No power
5. Slack connection
6. Line sparking
7. Tree trimming
8. Low hanging lines
9. Broken meter glass
10. Blown line fuses
11. Street/Security light repair
12. High/Low voltage

Dispatch shall notify D & C for the following types of Trouble Calls:

1. Repair/replace damaged pole
2. Repair/replace damaged equipment (i.e. transformers, fuses, etc.)
3. Repairs or replacements resulting from accidents, fires, and other major disasters or emergencies.

Dispatch shall notify the Line Department for the following types of Trouble Calls:

Partial power/Fluctuating power/No power

1. Slack connection
2. Line sparking
3. Tree trimming
4. Low hanging lines
5. Broken meter glass
6. Blown line fuses
7. Street/Security light repair
8. High/Low voltage

Procedural Overview:

The Transmission and Distribution Division shall ensure all of the Authority's requirements are met for work requests. Accountability is needed at each stage of planning, design and construction, and as-built record keeping. As such, System Planning has developed stamps to facilitate the approval process (see Appendix B – Work request Process Approval Stamps). Once the work request is signed off on by designated Managers, it is ready for completion. System Planning will pre-map the work request before the work is executed. Once the notes are entered by the Administrative Department, the work request will be closed out. Completed work requests shall be delivered to the Planning Department for Audits. Planning shall only audit major construction work requests.

If a maintenance work request requires a pole to be installed, it needs to be captured with a capitalized work request. Work requests will be held active for a period of 12 months. Work requests held for customer payment for damages to WAPA equipment after a period of 12 months will be forwarded to WAPA's Legal Counsel for collections.

It is important that the work request process account for all materials requested from the warehouse in order to track inventory and related costs. Capitalization of some distribution equipment like transformers can be made upon purchase, but if so, the equipment cannot leave warehouse without a work request.

1. A design/sketch map must accompany all new installations of poles, wire, transformers and meters; and must show the following:
    a. Where the work activity will take place and include GPS points where applicable
    b. Reference pole tag number
    c. What existing facilities will be impacted
    d. VIWAPA construction standard specifications
    e. Track scope of work for new, retired or transferred facilities

2. Work requests will be taken to the field by Line Supervisors, and red-lined to show As-Built state:

- Red-line copies of the work request and Sketch-Map will serve as the "As-Built" in lieu of electronic media until automated design/staking is implemented.
- Line Department and/or Design and Construction Department will red-line work requests when changes to original are made either in the field or on the intended construction.

- As-Builts will allow for System Planning to know what was built to be modelled accordingly.

3. Design & Construction will provide a cursory audit of the work request and a GPS point of new line distribution additions.

a. Take As-built to field to gather GPS points for placing into the GIS.
b. Audit facility information in work request for completeness and accuracy.
c. Use green ink for any final changes, or comments to work request.
d. Collect GPS of all new facilities except for poles changed out in-place. Recollect GPS coordinates only when new pole is greater than 10 feet away from original position and record new data such as pole tag, year, framing changes, etc.

4. An Electrical Engineer in System Planning will serve as the primary person of contact for all mapping requirements. The following is a list of typical job duties for the System Planning Electrical Engineer:

a) Mapping additions/deletions – data maintenance
b) Coordination between departments to ensure work requests are meeting minimum requirements needed for system planning and engineering
c) Special mapping
d) GIS analysis, reporting and special map requests
e) WindMil model maintenance
f) Software maintenance
g) GPS maintenance
h) Database upkeep

Procedure

Customer Service Request Initiated Work Requests

Step 1: A customer service representative will generate all customer service order requests at each island's respective business office. At this point a contract is generated between the customer and the Authority, and a payment is made. An entry is then generated into the Electronic Work Request Processing System (i525) for processing. Customer Service generates UT work orders and forwards it to the Design and Construction Department.

Step 2: Once received by Design and Construction Department (D&C), an Engineer Technician and/or Engineer will log date of receipt and person assigned to work request in the UT service order on the i525. The Engineer Technician and/or Engineer will visit requested site and design project according to best practices and standards. If there are concerns that need to be addressed with the customer, Engineer Tech and/or Engineer will contact customer to resolve.

Step 3: The Engineer Technician and/or Engineer will consult with the System Planning Department for recommendations.

Step 4: The Engineer Technician and/or Engineer will create a WF work request in the i525 and close the corresponding UT service order and stamps the work request with the "Work Request Stamp".

i) A design/sketch map meeting minimum requirements listed above will accompany each work request (see Appendix A – Work request Design Drawing). The Engineer Technician and/or Engineer will create a formal Work request from one or more of the following aforementioned standard Work request categories:

a. Service Line Installation
b. Transformer Installation
c. Public Area Lights
d. Private Area lights
e. Maintenance/Retirement
f. Capital Work requests or Major Work request

Step 5: The Engineer Technician and/or Engineer will forward WF work request to System Planning for Approval. The System Planning representative will initial the stamp and return to the Engineer Technician and/or Engineer.

Step 6: The Engineer Technician and/or Engineer initials the stamp.

Step 7: The Engineer Technician and/or Engineer will forward WF work request to D&C Manager for approval. The D&C Manager will initial the stamp and return to the Engineer Technician and/or Engineer.

Step 7: The Engineer Technician and/or Engineer will forward WF work request to Line Department. If work involves the Line Department, D&C forwards the work request in its entirety to the Line Department administrative staff accompanied by transmittal sheet. Line Department administrative staff will log date of receipt in i525.

The Line Superintendent will coordinate the scheduling of work requests and approve each Work Request before its assigned. Line Department administrative staff will log scheduled date of work requests in the i525.

If the work request does not involve the Line Department, D&C forwards the work request directly to department responsible to complete the work accompanied by transmittal sheet. The responsible department's administrative staff will log date of receipt and schedule date of work in the i525.

If work request is not executed on scheduled date, administrative staff will log reason for delay and new scheduled date in the i525.

Step 8: Completed work requests will be red-lined to show As-Build state. The Line Superintendent (or designee) shall verify and approve that the work has been completed as designed per the work request. Verification shall be conducted via site inspection, photos and/or videos of the work performed. Work requests must be accompanied by a completed timesheet, JSA (Job Safety Analysis), materials sheet, equipment sheet and vehicle inspection form.

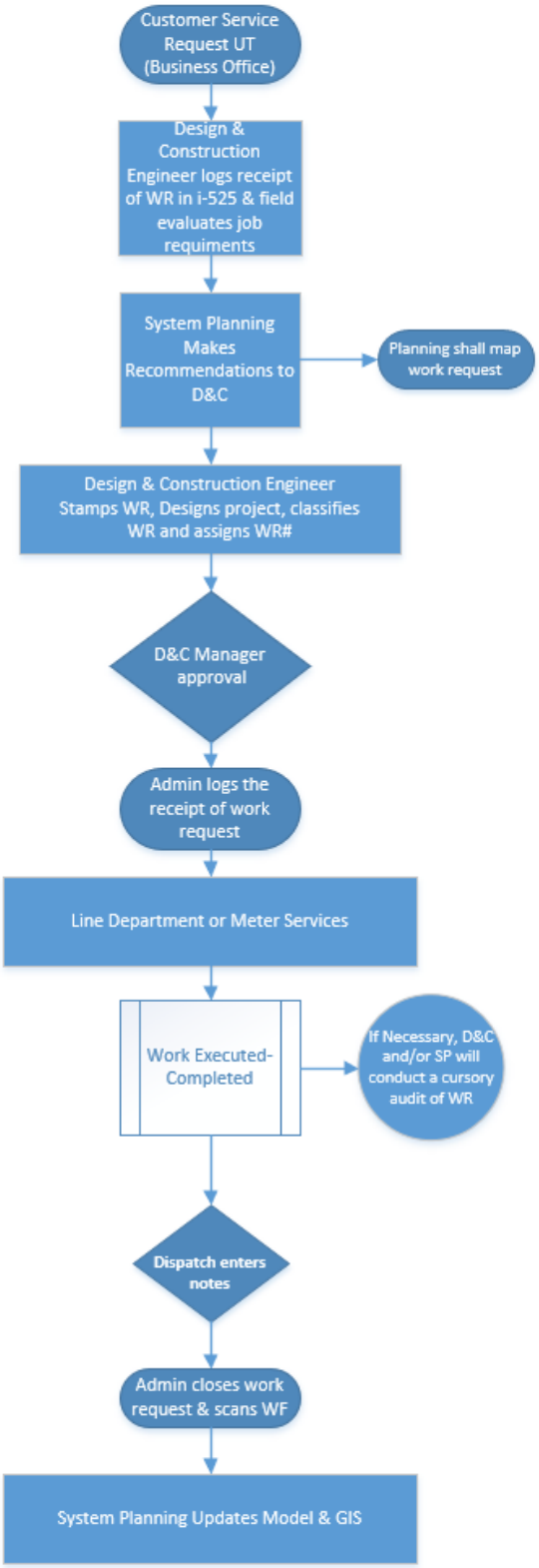
Note***If necessary, Design and Construction and/or System Planning will conduct a cursory audit of the work request and obtain a GPS point of new line distribution additions.

Step 9: Completed work requests shall be sent to Dispatch to enter notes in system.

Step 10: The work request shall then go to the Administrative Department where the Admin will close the work request. The work request shall be scanned and will then be filed by the Administrative Department and stored for a minimum of 12 months in the Administrative Offices. After such time, the completed work order shall be transferred to an external storage site.

Step 11: A copy of the completed work request will be sent to System Planning Department illustrating the work that was completed; System Planning will then audit major work requests to update the model and GIS systems as needed.

Process Flowchart (Customer Service Request Initiated Work Requests)



Capital Project Request Initiated Work Requests

Any Capital Request shall follow these steps:

Step 1: Contact Design & Construction Manager to initiate the Capital Request.

Step 2: Once received by Design and Construction Department (D&C), an Engineer Technician and/or Engineer will log date of receipt and person assigned to work request in the UT service order on the i525. The Engineer Technician and/or Engineer will visit requested site and design project according to best practices and standards. If there are concerns that need to be addressed with the customer, Engineer Tech and/or Engineer will contact customer to resolve.

Step 3: The Engineer Technician and/or Engineer will consult with the System Planning Department for recommendations.

Step 4: The Engineer Technician and/or Engineer will create a WF work request in the i525 and close the corresponding UT service order and stamps the work request with the "Work Request Stamp".

i) A design/sketch map meeting minimum requirements listed above will accompany each work request (see Appendix A – Work request Design Drawing). The Engineer Technician and/or Engineer will create a formal Work request from one or more of the following aforementioned standard Work request categories:

a. Service Line Installation
b. Transformer Installation
c. Public Area Lights
d. Private Area lights
e. Maintenance/Retirement
f. Capital Work requests or Major Work request

Step 5: The Engineer Technician and/or Engineer will forward WF work request to System Planning for Approval. The System Planning representative will initial the stamp and return to the Engineer Technician and/or Engineer.

Step 6: The Engineer Technician and/or Engineer initials the stamp.

Step 7: The Engineer Technician and/or Engineer will forward WF work request to D&C Manager for approval. The D&C Manager will initial the stamp and return to the Engineer Technician and/or Engineer.

Step 7: The Engineer Technician and/or Engineer will forward WF work request to Line Department. If work involves the Line Department, D&C forwards the work request in its

entirety to the Line Department administrative staff accompanied by transmittal sheet. Line Department administrative staff will log date of receipt in i525.

The Line Superintendent will coordinate the scheduling of work requests. Line Department administrative staff will log scheduled date of work requests in the i525.

If the work request does not involve the Line Department, D&C forwards the work request directly to department responsible to complete the work accompanied by transmittal sheet. The responsible department's administrative staff will log date of receipt and scheduledate of work in the i525.

If work request is not executed on scheduled date, administrative staff will log reason for delay and new scheduled date in the i525.

Step 8: Completed work requests will be red-lined to show As-Build state. The Line Superintendent (or designee) shall verify and approve that the work has been completed as designed per the work request. Verification shall be conducted via site inspection, photos and/or videos of the work performed. Work requests must be accompanied by a completed timesheet, JSA (Job Safety Analysis), materials sheet, equipment sheet and vehicle inspection form.

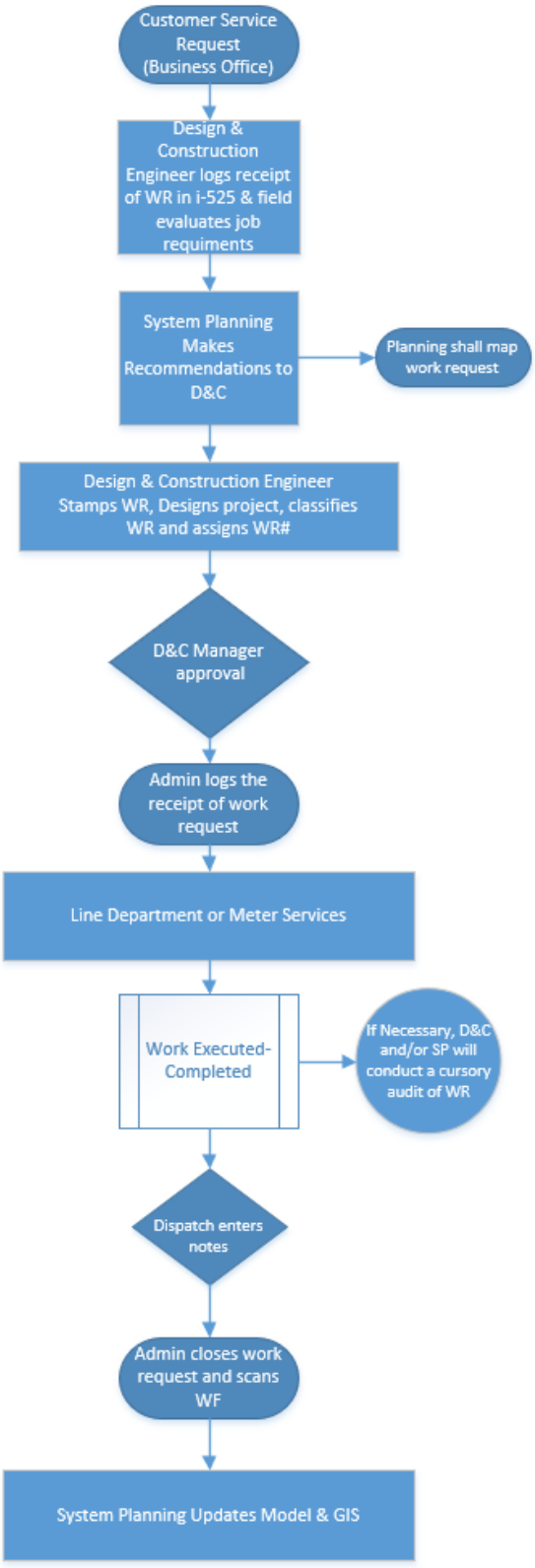
Note***If necessary, Design and Construction and/or System Planning will conduct a cursory audit of the work request and obtain a GPS point of new line distribution additions.

Step 9: Completed work requests shall be sent to Dispatch to enter notes in system.

Step 10: The work request shall then go to the Administrative Department where the Admin will close the work request. The work request shall be scanned and will then be filed by the Administrative Department and stored for a minimum of 12 months in the Administrative Offices. After such time, the completed work order shall be transferred to an external storage site.

Step 11: A copy of the completed work request will be sent to System Planning Department illustrating the work that was completed; System Planning will then audit major work requests to update the model and GIS systems as needed.

Process Flowchart **(Capital Project Request Initiated Work requests)**



Trouble Call/Emergency Work Requests

Step 1: Trouble Call work requests are received by System Operations Center (Dispatch). A WF work request shall be created by Dispatch in the i525. The dispatcher must log the following information in the i525:

i) Caller name and contact number
ii) Date and time request is received.
iii) Nature of request
iv) Customer account, if applicable
v) Service location, pole number, etc

Step 2: Dispatcher contacts Line Department or D&C depending on the type of work.

Step 3: The Line Department shall determine if the work is an emergency. If it's an emergency, the Line Department shall execute the work immediately. The Line Department then determines if the work is Maintenance or a Capital work request. If it's determined to be a capital work request, the Line Department shall contact Design & Construction for Capital Work order. If the work is not an emergency, it shall be sent to the Line Department for scheduling.

Note** If necessary, Design & Construction engineer shall create work order and job estimates.

Step 4: Completed work request shall be sent to Design & Construction Manager for approval or the Line Superintendent.

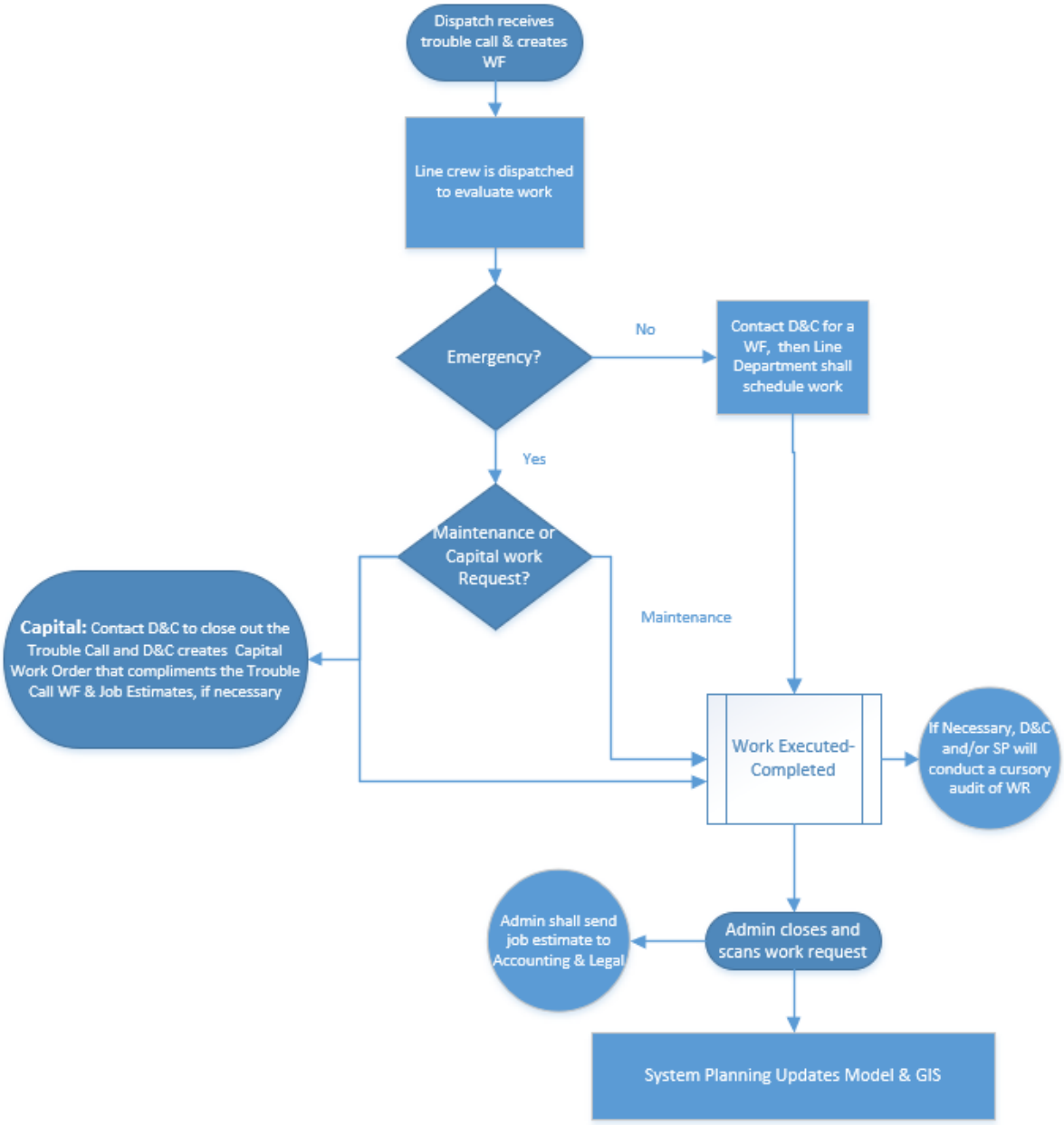
Step 5: After the work has been completed, the Line Superintendent signs off on the work request including the date. The Administrative Department shall log the work request. They will send job estimates to the Accounting & Legal Departments (if necessary).

Step 6: Completed work requests shall be sent to Dispatch to enter notes in system.

Step 7 : The work request shall then go to the Administrative Department where the Admin will close the work request. The work request shall be scanned and will then be filed by the Administrative Department and stored for a minimum of 12 months in the Administrative Offices. After such time, the completed work order shall be transferred to an external storage site.

Step 8: A copy of the completed work request will be sent to System Planning Department illustrating the work that was completed; System Planning will then audit major work requests to update the model and GIS systems as needed.

Process Flowchart **(Trouble Call/Emergency Work Process Flow Chart)**



Appendix A

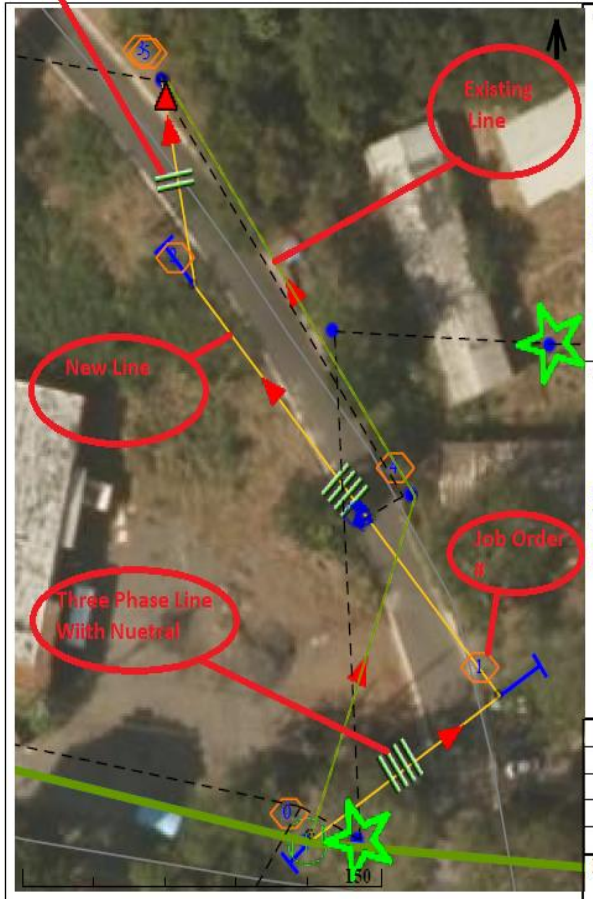
Partner Staking Sheet (Typical)

Staking Sheet for Job WF654633

Customer Name: VI Finest Foods LLC
Customer ID: 248411
Customer Phone:
Customer Address: Lindberg Bay 72 #4A (West Bay)
City:
Description:

Crew: STT Line Department
Task:
Category:
Location: Lindberg Bay 72 #4A (West Bay)
Loc ID: 204648
Services: Add Remove

Request Date:
Schedule Start:
Sub: Harley
Feeder: 6A
Phase:



0 NewUG 0 feet
Source: none
Comments:
Pole Tag: 1-020539

New (1) FULI25 : 50.0 AMP FUSE LINK
New (1) C7 : 3-PHASE CROSSARM CONST.DEADEND
New (1) E1 : SINGLE DOWN GUY
New (3) S1.3 : Cutouts (Three Single-Phase)

1 NewOH 96 feet
Source: 0
Comments:
Pole Tag: 1-020701

New (96) PRWI10 : 1/0 AL PRIMARY WIRE
New (1) 50-2 : 50 Foot Class 2 Wood Pole
Comment: 1-020701
New (1) C3 : 3-PHASE VER.CONST.30-60 DEGREE
New (1) E2 : SINGLE OVERHEAD GUY

2 NewOH 196 feet
Source: 1
Comments:
Pole Tag: 1-020702

New (196) PRWI10 : 1/0 AL PRIMARY WIRE
New (1) 50-2 : 50 Foot Class 2 Wood Pole
Comment: 1-020702
New (1) A5 : 1-PHASE SINGLE DEADEND
New (1) C7 : 3-PHASE CROSSARM CONST.DEADEND
New (1) E1 : SINGLE DOWN GUY

3 NewOH 76 feet
Source: 2
Comments:
Pole Tag:

New (76) PRWI10 : 1/0 AL PRIMARY WIRE
New (1) A5 : 1-PHASE SINGLE DEADEND

4 NewUG 133 feet
Source: 0
Comments:
Pole Tag: 1-017670

5 NewUG 182 feet
Source: 4
Comments:
Pole Tag: 1-018728

UNIT SUMMARY

UNIT	NEW	RET
283 000-00113	368	0
283 260-00051	1	0
50-2	2	0
A5	2	0
C3	1	0
C7	2	0
E1	2	0
E2	1	0
S1.3	3	0

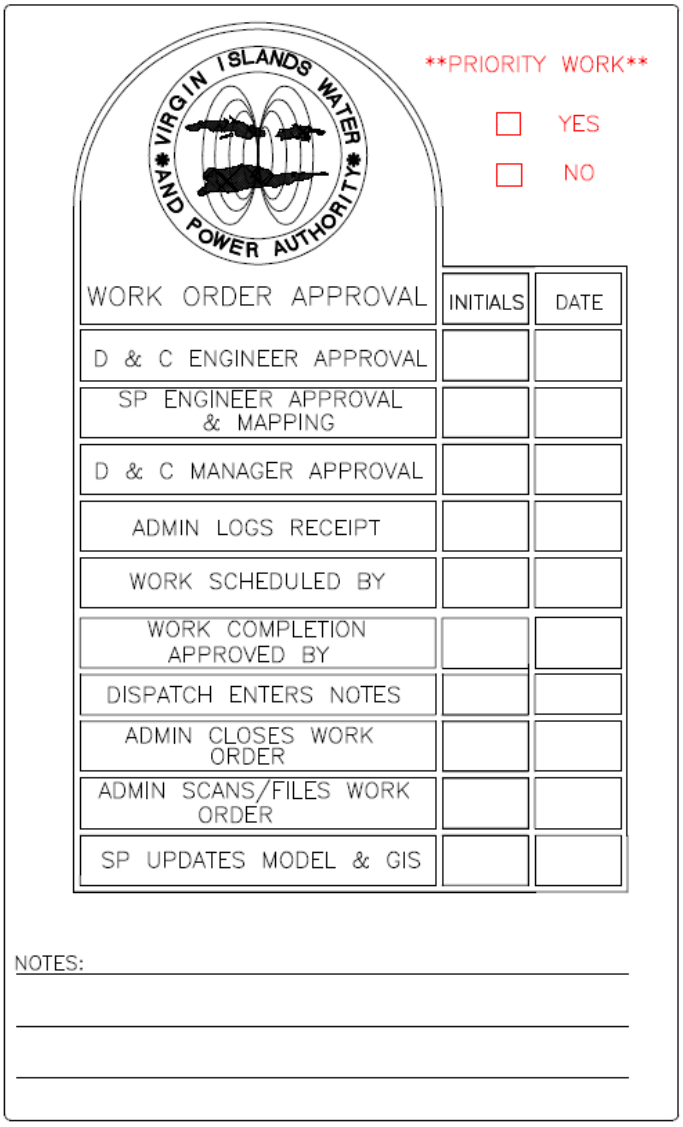
	By	Date	Joint Use	
Staked	Latiffany Charles		Transfer Required:	
Right-of-way			TELE:	Pole #:
Tailgate Session			CATV:	Pole #:
Completed				

Location:

Comments:

Appendix B

Work Request Process Approval Stamp



Appendix C
Truck Stock Inventory

Inventory control is an important part of the work request process. Work request documentation must accurately detail inventory usage so that actual material costs can be calculated for that work request. In order to monitor inventory consumption, weekly truck stock inventories must be performed and reconciled with work request inventory usage for that week. Truck stock inventory forms must be completed, reviewed and signed by the Line Department Superintendent before new truck stock materials are requested from the warehouse.

Please note that truck stock materials are only used for customer service and trouble call initiated work requests. Major work requests require a special request for specific materials from the warehouse.

Step 1: Supervisors must conduct an inventory of truck stock materials on their assigned vehicles on Friday of each week. Truck stock material inventory forms must be completed indicating the quantity of truck stock used during that week.

Step 2: Supervisors must submit completed truck stock material inventory forms to the Line Superintendent (or Assistant Line Superintendent) for approval.

Step 3: Upon approval of the form, the signed forms must be taken to the warehouse to re-stock used truck stock materials to their normal levels.

Step 4: Warehouse staff must stamp the forms once re-stock materials are issued. Forms are to be returned to the Line Department of archival. Supervisors should also retain completed copies of the forms for their own records.

Appendix D
Staking Process

Step 1: Once a work request is received, the Engineer Tech and/or Engineer must visit the requested location to determine the nature of work and document all specifications related to job.

Step 2: If the work request requires the installation of a new pole, meter, switch, or padmounted device, new GPS coordinates must be recorded with a Trimble handheld device. If the work request involves a pole or device relocation of 5 feet or greater, new GPS coordinates must be recorded.

Step 3: In addition to capturing GPS coordinates, the Engineer Tech and/or Engineer must also record proposed device attributes as though an actual inventory is being performed. Such information will include proposed transformer size, pole class, conductor size and estimated length, meter type, etc.

Step 4: The Engineer Tech and/or Engineer will generate a work request in WORK REQUEST PROCESSING SYSTEM to initiate the work process. The work request will include a narrative of the work to be performed and include a design/sketch map which will

a. Show clearly where the work activity will take place
b. Show what existing facilities will be impacted
c. Utilize VIWAPA construction standard specifications
d. Track scope of work for new, retired or transferred facilities

The design/sketch map should be drawn using the Partner Field Designer software.

Step 5: The Trimble handhelds must be returned to Electrical Engineer to import preliminary staking data into GIS mapping tool.

Step 6: Work request will be sent to Line Department to execute work. If a pole and/or padmount device is to be installed, Engineer Tech and/or Engineer must submit pole tags and tagging stickers along with work request to be placed by Line Department during work.

Step 7: Once work is complete, Line Department must return work request to System Planning for review. The work request must contain complete and accurate documentation of work performed, including the following:

a. Names of crew members
b. Time spent on job
c. Quantity of materials used
d. Deviation from original specification

Step 8: If there are significant deviations from the original work request, System Planning can recommend than an Engineer Tech and/or Engineer perform a cursory audit of the work performed.

Step 9: If work is completed satisfactorily, Electrical Engineer will make necessary changes to preliminary staking data and commit to master GIS and engineering model.

Appendix E

Work Request Category

The Transmission and Distribution division has adopted the following request category and task structure for work request processing:

Capital Requests (CAP Categories)

1. **New Construction OH (*NCO)**
    a. (LNEI) Line/Install Upgrade
    b. (RLSI) Recloser Install
    c. (CAPI) Capacitor Install
    d. (LTAI) Lightning Arrestor Install
    e. (OSWI) Overhead Switches Install
    f. (FLTI) Fault Indicator Install
    g. Pole Install

2. **New Construction UG (*NCU)**
    a. (LNEI) Line Install/Upgrade
    b. (PSWI) Padmounted Switches Install

3. **New Service Installation (*NSI)**
    a. (LNEI) Service Line Install
    b. (OTRI) Overhead Transformer Install
    c. (PTRI) Pad Transformer Install
    d. (PBLI) Public Street Light Install
    e. (PRLI) Private Street Light Install
    f. (FDLI) Federal Street Light Install
    g. (SCMI) Secondary Meter Install
    h. (PRMI) Primary Meter Install
    i. (NTMI) Net Meter Install

Maintenance Requests (MNT Categories)

1. **Distribution System OH Maintenance (*DOM)**
    a. (PRMM) Primary Meter Maintenance
    b. (SCMM) Secondary Meter Maintenance
    c. (LNEM) Line Maintenance
    d. (OTRM) Transformer Maintenance
    e. (PBLM) Public Streetlight Maintenance
    f. (PRLM) Private Streetlight Maintenance
    g. (FDLM) Federal Street Maintenance
    h. (RLSM) Recloser Maintenance

i. (CAPM) Capacitor Maintenance
j. (LTAM) Lightning Arrestor Maintenance
k. (OSWM) Overhead Switches Maintenance
l. (TRTM) Tree Trimming
m. (FLTM) Fault Indicator Maintenance
n. (POLM) Pole Maintenance

2. **Distribution System UG Maintenance (*DUM)**
   a. (LNEM) Line Maintenance
   b. (PTRM) Padmounted Transformer Maintenance
   c. (PSWM) Padmounted Switch Maintenance

3. **Transmission System OH Maintenance (*TOM)**
   a. (LNEM) Line Maintenance
   b. (OSWM) Switch Maintenance
   c. (POLM) Pole Maintenance

4. **Transmission System UG Maintenance (*TUM)**
   a. (LNEM) Line Maintenance
   b. (PSWM) Padmounted Switch Maintenance

Appendix F
Meter Services

This section outlines basic terminologies and work processes used within the Meter Services Department of the Transmission and Distribution Division.

Terminologies

Step 1: Final – An authorized customer request electrical power to be turned off
   a. Must be forwarded to the Meter Service Department

Step 2: Final/Connect – An authorized customer request electrical power to be turned off and a new applicant requests service to be reconnected the same day
   a. Must be forwarded to the Meter Service Department

Step 3: Connect – A request for electrical power to be turned back on
   a. Connects must be forwarded to the Meter Service Department; however if a meter was finalized over a period of 3 months, that connect becomes and Install and must be forwarded to the Design & Construction Department for the site to be visited

Step 4: Disconnect/Reconnect – If an electrician requests that services be disconnected in order for repairs to be made to either the customers' weather head or meter base said electrician must make this request to the business office. The business office will then forward this service request to the Transmission & Distribution Department. The electrician will make an appointment with the Line Superintendent or the Assistant Line Superintendent for the disconnection to be made. When the repairs are completed the electrician will notify the Transmission & Distribution Department that the site is ready for reconnection. However the electrician must submit a letter on his letter head with his seal indicating that the repairs were made in accordance with the National Electrical Code. The Transmission & Distribution Department will then forward this completed work request along with the electrician's letter to the Design & Construction Manager.

Connects

Step 1: Connects for Businesses requires a Load Requirement Form which should be submitted to Design & Construction
Step 2: Connects for Residential that has been out of service for a period of 3 months should go to Design & Construction as an Install

Finals

All finals are completed within 3 working days. If meter is inaccessible due to lock gate etc. service is disconnected from the pole with a last estimated reading for billing. Service will not be reconnected until meter has been relocated and accessible to WAPA on a 24/7 basis.

Appendix G

Scanning and Filing of Work Requests Standard Operating Procedure

I. ABSTRACT

Hard copies of WorkOrders are printed from the CIS system (Customer Information System) known as Sungard's I525 system or Naviline. For any given work order, there may be multiple job orders associated with it. They are printed as instructions for work to be completed. They are generated for maintenance (MNTs) or capital (CAPs) work. Filing and scanning of the completed job orders assists with maintaining the records of all completed jobs.

II. PURPOSE

This Standard Operating Procedure provides a method for the receiving, scanning, storage, andfiling of Virgin Islands Water and Power Authority Transmission & Distribution (T&D) Division completed work orders / job orders.

III. SCOPE

To outline the steps taken by the Authority to receive, scan, store, and file completed work order packages

IV. REQUIRED PRACTICE

All job orders created by T&D will be maintained by their respective departments while the job is being executed. When a completed Capital (CAP) job order is completed, the entire package shall be sent to System Planning Department where they will map any new items to the GIS system. The following standard operating procedure shall be followed:

A. RECEIVING

1. A completedwork order package (with all necessary job orders) will be combined by the Line Department's Administrative Personnel, and sent to System Planning to 1) update the GIS/Windmil, 2) file the work order documents. At the end of every fiscal year the Work Order Documents will be transferred to the TDAO warehouse where it shall be stored for one year before the files are shredded for disposal.

2. The work order documents shall be sent to the Administrative Department to be scanned by the Line Department's Administrative Personnel using the Authority's Aquarius scanning tool.

3.. The Administrative Personnel shall then file the work order packages.

B. SCANNING

1. A work order/job order shall be scanned using the Authority's scanning tool Aquarius. These work orders shall be stored on the Authority's secure server with login credentials required to access the work order documents.

2. The key identifiers that shall be used to query the scanned work order are the following: t WF number, customer name, location ID, date of work completion.

3. The entire work order package shall be scanned. This includes: (1) originally printed job order with approval pages, (2) completed printed job order with completion notes (with pertinent info and attributes of equipment, (3) all pertinent pics (before and after job completion), (4) forms (load request sheets, net meter packages, etc)

C. STORAGE/FILING

1. Hard copies of all work orders shall be stored in the Administrative offices. The work request shall be scanned and will then be filed by the Administrative Department and stored for a minimum of 12 months in the Administrative Offices. After such time, the completed work order shall be transferred to an external storage site.
2. Hard copies may be destroyed/shredded after three (3) years.

3. Completed work orders/job orders are to be organized and stored by the month in which the work was completed or the month indicated on the work order documents. At the completion of every month the work orders for that month will be scanned.

4. All work order documents will be searchable by the unique identifiers outlined above.

D. MAINTENANCE

1. All Scanned work requests will be saved on specified server.
2. All scanned work request must be in PDF format. The work request shall be protected on a secure server where only authorized personnel with an approved login shall have access to the files. Approved access shall allow for copying, printing, commenting, etc. or scanned work requests.

Appendix H
Aquarius Scanning Tool

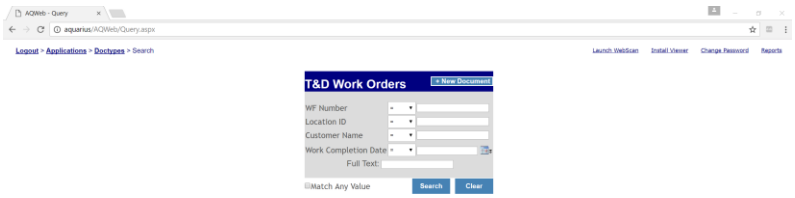
Description:

Aquarius it the Authority's scanning tool used to scan important documents and to create a centralized location for the scanned documents. The Aquarius scanning tool will be used by the Transmission & Distribution Personnel to scan work order documents after the System Planning Department has updated the system model and GIS and marked the work requests as complete.

Accessing Aquarius:

To access Aquarius, type the following in the web browser: http://aquarius/AQWeb/Query.aspx

The following screen should be displayed.

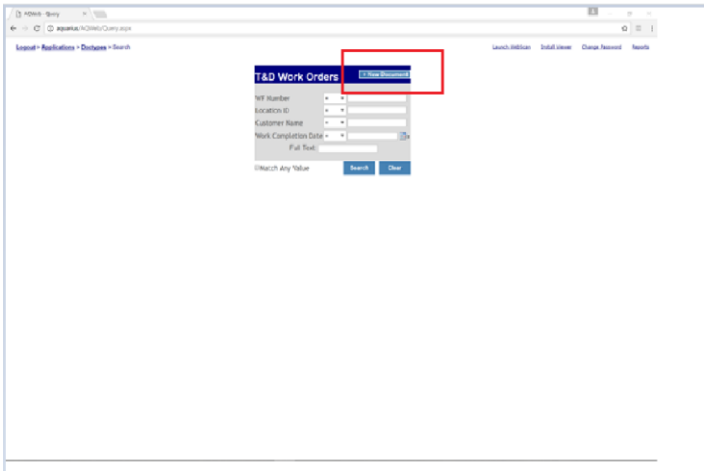


Searching for a Work Request (WF):

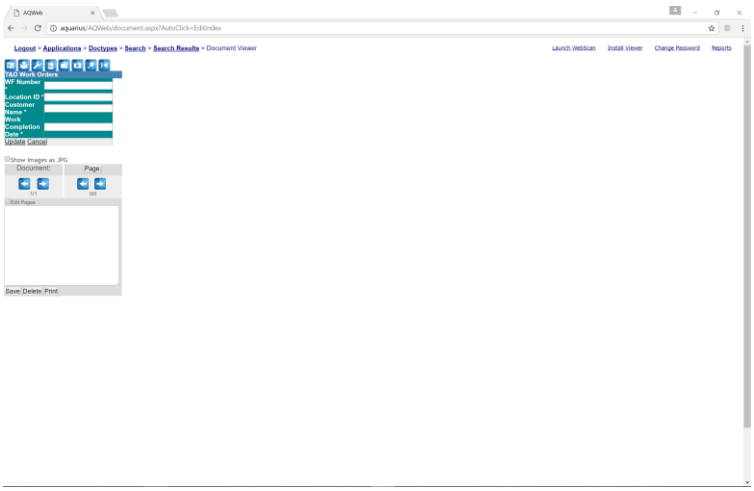
To run a query or search for a work order document, the user can enter any one of the required fields to include: WF number, Location ID, Customer Name, or Work Completion Date then select the Search button.

Scanning a Work Request (WF):

Step 1: To scan a document the user has to click the ‘New Document’ button in the center of the screen.

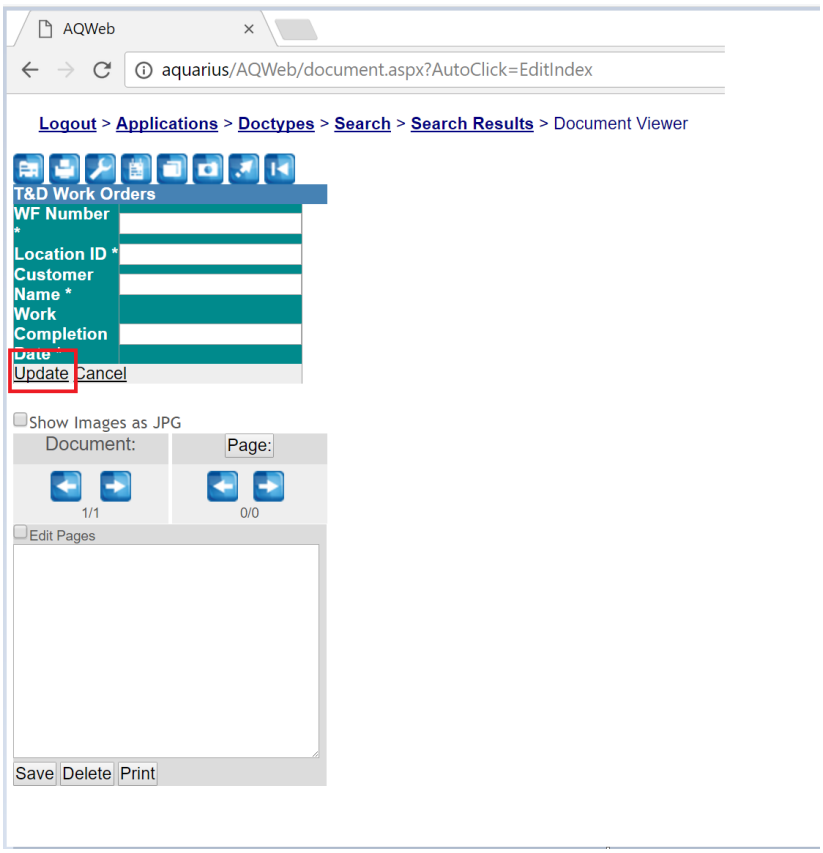


The following screen will be displayed:

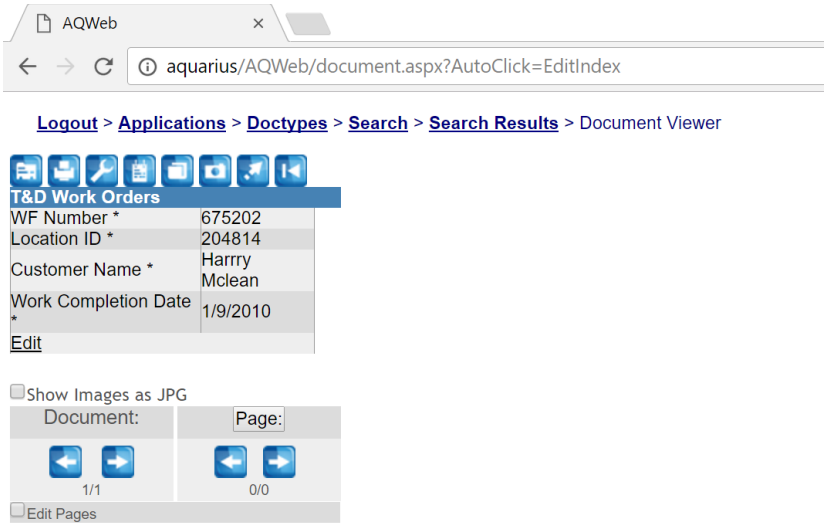


Step 2: The user will enter all of the required fields: WF Number, Location ID, Customer Name, and Work Completion date.

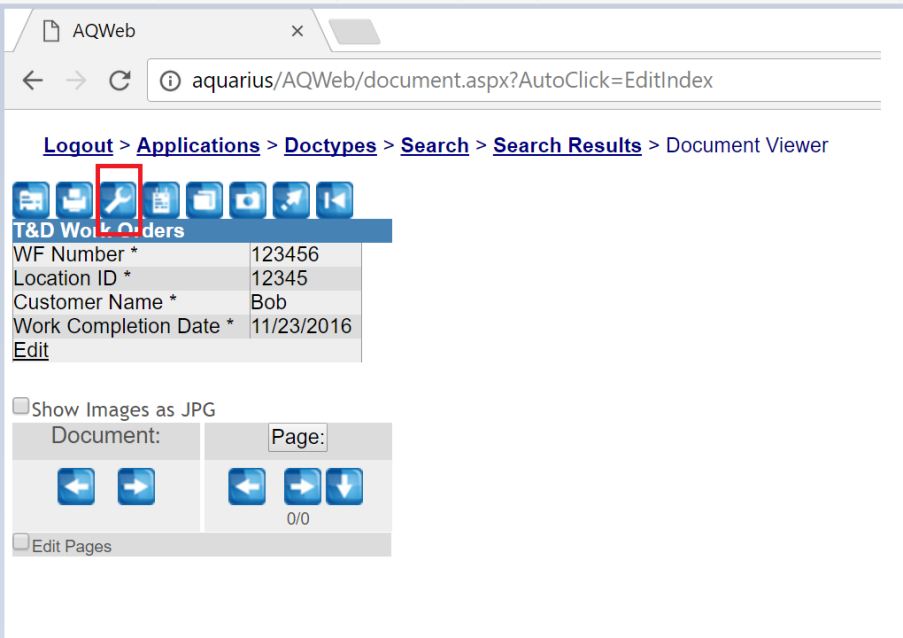
Step 3: Click on the Update link which is below the Work Completion Date Field.



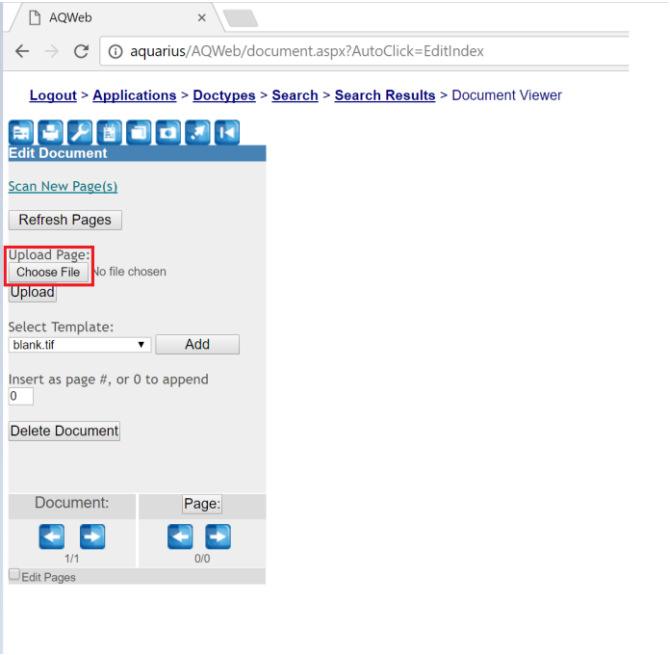
Step 4: Once the Update link is selected the user will be brought to the screen below.



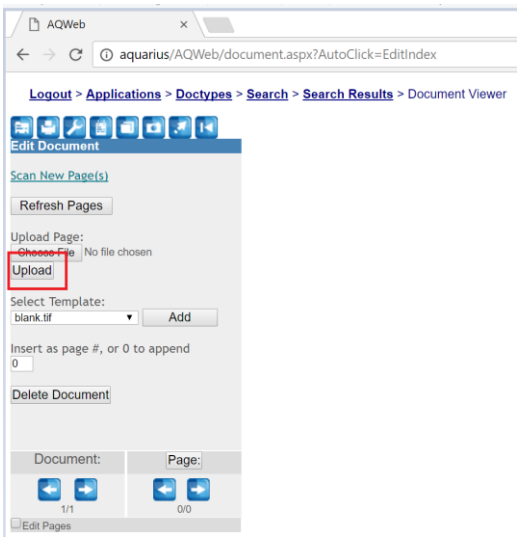
Step 5: Click on the blue wrench icon located above the line that says T&D Work Orders. This allows the user to edit the document.



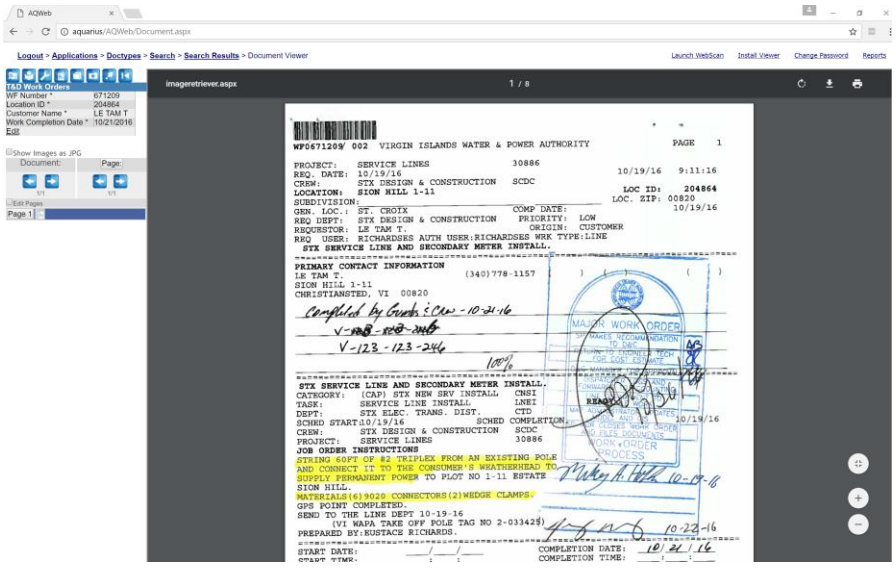
Step 6: After the wrench is selected the user will see the following screen. The user will then select Choose File. The user would then search for the location of the where the WF has been scanned. The user will then select the document and hit the Open button. The user will now see the file name that was selected next to the Choose file button. (It will no longer say 'No file chosen'.)



Step 7: Once the file is selected, the user will then upload the file by selecting the Upload button. The file has been uploaded it will be linked to the Work Order attributes that were inputted.



Step 8: Check if the work order has been scanned properly by selecting the Search Link and inputting any of the search fields. The work order information should be displayed in upper left hand corner of the screen and the scanned documents should be displayed on the right. The following screen will be displayed.



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Appendix I
T&D Code Definitions

Department Code	Department Description
CTD	STX ELEC. TRANS. DIST.
TTD	STT ELEC. TRANS. DIST.
TPM	STT ELEC. PROD. MAINT.
TMD	STT METER READING
CMD	STX METER READING
CWD	STX WATER DISTRIBUTION
TWD	STT WATER DISTRIBUTION
CPM	STX ELEC. PROD. MAINT.
SIP	SYSTEM INFO PROCESSING
CRP	STX REVENUE ASSURANCE
TRP	STT REVENUE ASSURANCE
TSYS	STT SYSTEM PLANNING
AUTO	AUTOMATION & OPERATIONS

Crew Code	Crew Description
CDIG	STX DIGGER TRUCK
CPOL	STX POLE PLANTING
CTRE	STX TREE TRIMMING
TPOL	STT POLE PLANTING
TDIG	STT DIGGER TRUCK
TTRE	STT TREE TRIMMING
TLIN	STT LINEMEN
CLIN	STX LINEMAN
TLDP	STT LINE/DIGGER/POLE/TREE
SCMS	STX METER SERVICES ELEC.
STMS	STT METER SERVICE ELEC.
STMT	STT MAINTENANCE

STLD	STT LINE DEPARTMENT
STMR	STT METER READING
SCLD	STX LINE DEPARTMENT
SCMR	STX METER READING
SCWD	STX WATER DISTRIBUTION
STWD	STT WATER DISTRIBUTION
SCMT	STX MAINTENANCE
SIP1	INSTALL PC
SCLM	STX LINE MAN
STTT	STT STD. EMPLOYEE RATE
SCDC	STX DESIGN & CONSTRUCTION
SCRA	STX REVENUE ASSURANCE
STDC	STT DESIGN & CONSTRUCTION
STRA	STT REVENUE ASSURANCE
SJMS	STJ METER SERVICES
SJWD	STJ WATER DISTRIBUTION
SJLD	STJ LINE DEPARTMENT
SJRA	STJ REVENUE ASSURANCE
SJMR	STJ METER READING
SJDC	STJ DESIGN & CONSTRUCTION
SYSP	SYSTEM PLANNING
STAO	STT AUTOMATION & OPS

Crew Type	Crew Type Description
CE	ST.CROIX ELECTRIC
TE	ST.THOMAS ELECTRIC
CW	ST.CROIX WATER
TW	ST.THOMAS WATER
SIP1	SIP INSTALL A PC ON STT
SCLC	ST.CROIX LINE CREW
STX	ST.CROIX
STT	ST.THOMAS

Crew Type	Crew Type Description
CW	ST.CROIX WATER
TE	ST.THOMAS ELECTRIC
TW	ST.THOMAS WATER
SIP1	SIP INSTALL A PC ON STT
SCPC	ST.CROIX POLE CREW
SCLC	ST.CROIX LINE CREW
SCDC	ST.CROIX DIGGING CREW
SCTT	ST.CROIX TREE TRIMING
SCMC	ST.CROIX MAINTAINACE CREW
CE	ST.CROIX ELECTRIC
STX	ST.CROIX
STT	ST.THOMAS
STJ	ST.JOHN

Job Order Header Crew Code	Job Order Header Crew Description
SCMS	STX METER SERVICES ELEC.
STMS	STT METER SERVICE ELEC.
TLIN	STT LINEMEN
TPOL	STT POLE PLANTING
STLD	STT LINE DEPARTMENT
TDIG	STT DIGGER TRUCK
STWD	STT WATER DISTRIBUTION
SCLD	STX LINE DEPARTMENT
STDC	STT DESIGN & CONSTRUCTION
SCMR	STX METER READING
SCWD	STX WATER DISTRIBUTION
SCRA	STX REVENUE ASSURANCE
SCDC	STX DESIGN & CONSTRUCTION
STRA	STT REVENUE ASSURANCE
SJLD	STJ LINE DEPARTMENT

SJMS	STJ METER SERVICES
STAO	STT AUTOMATION & OPS
STMR	STT METER READING
SCLM	STX LINE MAN
SJDC	STJ DESIGN & CONSTRUCTION
SJWD	STJ WATER DISTRIBUTION
SJMR	STJ METER READING
SYSP	SYSTEM PLANNING
TTRE	STT TREE TRIMMING
CTRE	STX TREE TRIMMING
TLDP	STT LINE/DIGGER/POLE/TREE
SJRA	STJ REVENUE ASSURANCE
CLIN	STX LINEMAN
CPOL	STX POLE PLANTING
CDIG	STX DIGGER TRUCK

Job Order Header Category Code	Job Order Header Category Description
BOND	(WF) BOND ISSUE
CADM	(WF) STX OTHER ADMIN.
CALC	(CP)STX T&D NEW AERIAL
CCWD	(CP)STX WTR DISTRIBU. CON
CCWP	(CP)STX WTR PRODUC. CONST
CDOM	(MNT) STX DIST OH MAINT
CDUM	(MNT) STX DIST UG MAINT
CLLS	(CAP) STX LINE LOSS
CMAI	(WF) STX METER MAINT.
CMIN	(CP) STX ELEC METER INST
CNCO	(CAP) STX NEW CONST OH
CNCU	(CAP) STX NEW CONST UG
CNSI	(CAP) STX NEW SRV INSTALL
CPRO	(CP) STX ELEC PROPERTY
CSEC	(CP) STX ELEC SECURITY
CSEL	(UT)CUST SERVICE ELECTRIC

CSSL	(UT)CUST SERV. STREET LT
CSTR	(CP)STX ELE STRUC & IMPRO
CSWA	(UT)CUST SERVICE WATER
CTIN	(CP) STX TRANSFORMER INST
CTOM	(MNT) STX TRAN OH MAINT
CXNC	(CP) STX NEW CONNECTIONS
CXPM	(CP) STX ELEC PROD MAINT
CXSL	(CAP) STX ELEC S/LIGHTS
CXSP	(CP)STX SYS U/GRADE/IMPR
ISIN	(CP) SYS. UPGRADE/INSTALL
JDMT	(WF) STJ LINE DEPT. MAINT
JDOM	(MNT) STJ DIST OH MAINT
JDUM	(MNT) STJ DIST UG MAINT
JLLS	(CAP) STJ LINE LOSS
JLMT	(WF) STJ LINE WORK MAINT.
JMAI	(WF) STJ METER MAINT.
JMIN	(CP) STJ METER INSTALL.
JMMT	(CP) STJ METER MAINT.
JNCO	(CAP) STJ NEW CONST OH
JNSI	(CAP) STJ NEW SRV INSTALL
JOAD	(WF) STJ OTHER ADMIN.
JPRO	(CP) STJ ELEC PROPERTY
JSTL	(CP) STJ INST STR. LIGHTS
JSUP	(CP)STJ SYS U/GRADE/IMPRO
JTOM	(MNT) STJ TRANS OH MAINT
JTRN	(CP) STJ TRANSFORMER INST
LEGL	(WF) LITIGATION/LEGAL SER
OTAD	(WF) OTHER ADMINISTRATIVE
PROP	(WF) STT PROP/BLDG MANAG.
RTCS	(WF)STT RATE CASE ANALY
SCHR	(WF)ST.C HUMAN RESOURCES
SCOH	(CP)STX ELEC T&D OH IN/RE
SIPM	(WF) SIP MAINT. OF LINES
SJMT	(WF) STJ ELEC. T&D MAINT.

SJOH	(CP)STJ ELEC T&D OH IN/RE
SJUG	(CP)STJ ELEC T&D UG IN/RE
STC	(CP) STT NEW CONSTRUCT.
STHR	(WF) ST.T HUMAN RESOURCES
STM	(WF) ST.Thomas Line Maint
STOH	(CP)STT ELEC T&D OH IN/RE
STPM	(WF)STT ELEC. PROD. MAINT
STSB	(CP) STT SUBSTATION
STSP	(CP)STT SYS U/GRADE/IMPRO
STTD	(WF) STT ELEC. T&D MAINT.
STTG	(WF) ST. THOMAS GARAGE
STTL	(WF) STT LINE WORK MAINT.
STTP	(CP) STT ELEC PROD MAINT
STUG	(CP)STT ELEC T&D UG IN/RE
STWD	(WF) STT WATER DISTRIBU.
STWP	(WF) STT WATER PRODUCTION
SXOH	(WF)STX ELEC T&D OH IN/RE
SXPM	(WF)STX ELEC. PROD. MAINT
SXTD	(WF) STX ELEC. T&D MAINT.
SXUG	(CP)STX ELEC T&D UG IN/RE
SXWD	(WF) STX WATER DISTRIBU.
SXWP	(WF) STX WATER PRODUCTION
TADM	(WF) STT OTHER ADMIN.
TALC	(CP)STT T&D AERIAL LNE CN
TALM	(CP)STT T&D AERIAL LNE M.
TATI	(CP) STT TRANSFORMER INST
TATM	(CP)STT TRANSFORMER MAINT
TCEV	(WF)STT/STX ENVIRONMENTAL
TCWD	(CP)STT WTR DISTRIBU. CON
TCWP	(CP)STT WTR PRODUC. CONST
TDOM	(MNT) STT DIST OH MAINT
TDUM	(MNT) STT DIST UG MAINT
TEPR	(CP) STT ELEC PRODUCTION
TLLS	(CAP) STT LINE LOSS

TMAI	(WF) STT METER MAINT.
TMTI	(CP) STT METER INSTALL.
TMTM	(CP) STT METER MAINT.
TNCO	(CAP) STT NEW CONST OH
TNCU	(CAP) STT NEW CONST UG
TNSI	(CAP) STT NEW SRV INSTALL
TPRO	(CP) STT ELEC PROPERTY
TSTI	(CP) STT INST STR. LIGHTS
TSTM	(CP) STT MAINT STR. LIGHT
TSTR	(CP)STT ELE STRUC & IMPRO
TTOM	(MNT) STT TRAN OH MAINT
TTUM	(MNT) STT TRAN UG MAINT
TULC	(CP) STT UNDG LINE MAINT
TULM	(CP)STT T&D UNDG LINE CNT

-END-