

A Scope of Work for the U.S. Environmental Protection
Agency
Safe Drinking Water Act -State
Revolving
Fund ASPA Consolidated
Grant
For the Benefit of the Territory of American
Samoa

# Replacing Gravity Main that is leaking badly within our Wastewater System

This project involves the replacement of a gravity main within our wastewater system, which is currently experiencing severe leaks. By undertaking this initiative, we anticipate a substantial improvement in controlling and reducing inflows into the system.

Similar to the mentioned endeavor, this undertaking is poised to make a significant impact on the efficiency and reliability of our wastewater infrastructure. Focused primarily on rectifying issues within the system owned by American Samoa Power Authority (ASPA), this project is in accordance with regulatory directives, including those outlined by the USEPA.

Through the enhancement and modernization of our wastewater infrastructure, we aim to elevate the standards of service provision and compliance with regulatory mandates. Ultimately, this effort is geared towards ensuring a sustainable and reliable wastewater system for the benefit of the community we serve.

Submitted by the

American Samoa Power Authority

September 2025



# <u>Project Title:</u> Replacing Gravity Main that is leaking badly within our Wastewater System to reduce and control inflows

#### **Project Background:**

The project aims to replace a deteriorating gravity main in the wastewater system due to significant leaks compromising efficiency and functionality. These leaks lead to resource loss, uncontrolled inflows, overflows, environmental concerns, and increased costs, posing risks to public health and safety. Initiated by the American Samoa Power Authority, the project aims to replace the failing main with modern materials to mitigate leaks, minimize inflows, and enhance reliability. Background assessments including condition surveys, hydraulic analyses, and risk assessments informed the development of a comprehensive plan, considering scope, timeline, and budget. Stakeholder engagement and regulatory compliance are crucial, involving collaboration with community members, regulatory agencies, and stakeholders. Overall, the project underscores a commitment to addressing infrastructure needs, improving performance, and safeguarding public health and the environment through proactive planning and investment for sustainable and resilient infrastructure.

# **Project Description:**

The design project will cover the areas identified on the location map below. These are areas identified for repair and upgrade and we will need reputable A&E to carry out the design before we proceed with the construction.

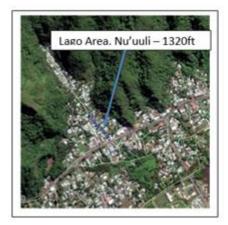








Figure #1 Location of Section that need Replacement

REPLACEMENT										
Existing main	Proposed Main	Proposed LF ( feet)	Existing Service Line	Proposed Service Line	Proposed LF ( feet)	Proposed MH	Village	Drawing Reference		
8" ACP	8"Ø PVC – SDR35 Gasket	3180	4"-6" ACP	6"/4"Ø x 20' PVC – SDR35 Gasket	3120	12 Ea 4'ID	Satala	RGM - 001		
8" ACP	8"Ø PVC – SDR35 Gasket	300	4"-6" ACP	6"/4"Ø x 20' PVC – SDR35 Gasket	300	10 Ea 4'ID	Utulei	RGM - 002		
8" ACP	8"Ø PVC – SDR35 Gasket	1430	4"-6" ACP	6"/4"Ø x 20' PVC – SDR35 Gasket	1430	4 Ea 4'ID	Utulei	RGM - 003		
8" ACP	8"Ø PVC – SDR35 Gasket	1308	4"-6" Ø ACP & SCH 40 Solvent	6"/4"Ø x 20' PVC – SDR35 Gasket	1320	11 Ea 4'II	Nuuuli	RGM - 004		
8" ACP	8"Ø PVC – SDR35 Gasket	1800	4"-6" Ø ACP & SCH 40 Solvent		1800	4 Ea 4'ID	Faga'alu	RGM - 005		

The Wastewater System Gravity Main Replacement Project aims to address critical infrastructure needs within our wastewater system by replacing a deteriorated gravity main that is causing significant leaks and compromising system efficiency. This project is essential for ensuring the continued safe and effective transport of wastewater, protecting public health, and safeguarding the environment.



# **Technical Task/Scope**

- 1. ASPA has successfully processed the DOC-PNRS Land Use Permit required for the execution of this project.
- 2. ASPA has proactively secured a Letter of Understanding (LOU) that outlines specific conditions, ensuring ASPA archaeologists will conduct monitoring activities during the excavation phase.
- 3. The ASPA Right of Way (ROW) personnel has diligently engaged with and consulted landowners to obtain the necessary assurances and licenses for entry and land use throughout the project.
- 4. The Environmental Protection Agency (EPA) will first complete the Section 106 process for the National Historic Preservation Act in consultation with the AS-HPO to obtain a concurrence for a "no historic properties affected" determination. After this process is complete, EPA will verify Section 7 Endangered Species Act compliance and make its NEPA determination.
- 5. The RFP for Design of the Upgrading and Replacement of Gravity Sewer Pipe that will need to be upgrade and replaced as per location provided will be prepared and to go through the normal approval process before a consultant is selected.
- 6. The ASPA Water & Wastewater Engineering Division will play a crucial role in providing Project Management (PM) for the project, overseeing and inspecting the various stages of implementation.
- 7. The selected contractor will be tasked with developing a robust Quality Assurance/Quality Control (QA/QC) Plan, which will undergo EPA approval. The QA/QC Plan will be an integral part of the deliverables submitted to the EPA.
- 8. Upon completion of the Design project, ASPA will compile a comprehensive final report, which will be submitted to the EPA, providing a comprehensive overview of the project's achievements, methodologies, and outcomes.



# **Project Budget**

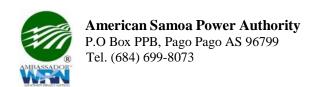
Propo	Budget						
PERSONNEL							
ADM	Admin	\$3,600.00					
ARC	Archaeology	\$26,400.00					
SUR	Surveying	\$26,400.00					
ROW	Right-of-Way	\$9,600.00					
EDP	Engineering-Design/Planning	\$50,400.00					
CON	Construction (Personnel)	\$62,400.00					
EPM	Engineering-Project Mgmt	\$36,000.00					
СМІ	Construction Mgmt & Inspection	\$55,200.00					
	Personnel Subtotal	\$270,000.00					
	\$59,940.00						
	Supplies	\$0.00					
	Equipment Rental	\$0.00					
	Contracts	\$1,870,060.00					
	Lowboy Trailer with Truck	\$400,000.00					
	Construction Vehicles (Flat bed or 4 x 4 Pickup)	\$100,000.00					
	Total Cost	\$2,700,000.00					

## **Key Personnel**

The specified Engineering, Project Management, and Inspection fees encompass all costs related to the engagement of professional ASPA project management staff, engineers, surveyors, inspectors, and support technicians essential for overseeing the construction of all facilities outlined in this project. These fees are designed to account for the comprehensive management and supervision required throughout the construction process.

Additionally, administrative costs have been identified to cover estimated expenses linked to the provision of office-based administrative support. This allocation ensures the smooth functioning of administrative tasks associated with the project, such as documentation, coordination, and communication, contributing to the overall efficiency and success of the initiative.

No	First/Last Name	Position Title	Division/Section	
1	Vacant	Wastewater Manager, P.E.	Wastewater	
2	Fidel Aguila	Senior Engineer	Water & Wastewater	
3	Epeli Nabolaniwaqa	Water Operation Manager	Water	
4	Samuela Tubui	Project Engineer	Water & Wastewater	
5	Arbor Day Mata'afa	Admin	Construction	
6	ROW	ROW	Procurement	
7	Lila Feseetai	Estimator	Construction	
8	Pulemau Paopao	Surveyor	Water & Wastewater	
9	Lancelot Tei	Archaeologist	PG	
10	Greg Allen	IPOR	Water & WW	
11	Uilaafi Mailo	Construction Foreman	Construction	
12	ASPA	When needed	Various	



ASPA employees engaged in this project will commit their expertise on either a full-time or part-time basis, as dictated by the project's requirements. Furthermore, an inspector will be stationed on-site throughout the entire duration of the project, ensuring continuous oversight and adherence to quality standards during the construction process. This on-site presence guarantees real-time monitoring and efficient resolution of any issues that may arise, contributing to the successful and timely completion of the initiative.

#### **Key Contractors**

Project shall go through a competitive RFP/RFQ process to determine best contractor/firm at a reasonable and affordable cost.

# Key Partners/Agencies to coordinate with.

AS-EPA (American Samoa Environmental Protection Agency) and US-EPA (United States Environmental Protection Agency) stand as crucial partners for ASPA in this undertaking. Collaborative efforts with these agencies will ensure regulatory compliance and environmental stewardship throughout the project. Additionally, ASPA will establish close working relationships with various government entities, including the Department of Marine and Wildlife Resources, the Department of Commerce, and the Historic Preservation Office. The collaborative engagement extends to other government agencies and private interest groups interested in participating, promoting a multi-stakeholder approach for a comprehensive and successful project implementation. This collaborative network enhances communication, coordination, and alignment of efforts, fostering a unified approach towards achieving the project's goals.

#### **Problem Statement**

The deteriorated state of the gravity main in our wastewater system presents a pressing problem, with severe leaks compromising system integrity and functionality. These leaks lead to resource loss, environmental risks, and increased operational costs. Aging infrastructure exacerbates these challenges, necessitating urgent action to prevent further deterioration and ensure compliance with regulations.

Addressing this problem requires replacing the failing gravity main with a modernized pipeline system. This solution must be carefully planned and executed to minimize disruptions, ensure compliance, and protect public health and the environment. Overall, the gravity main replacement project is crucial for improving system performance, mitigating risks, and ensuring the long-term sustainability of our wastewater infrastructure.



# **Project Goals/Objective**

The project aims to address the challenges posed by a failing gravity main within the wastewater system through the following objectives:

- 1. Carry out a design to replace and upgrade the deteriorated gravity main.
- 2. Minimize leaks and uncontrolled inflows to improve system efficiency and reduce environmental risks.
- 3. Ensure compliance with regulatory requirements and industry standards.
- 4. Enhance the reliability and resilience of the wastewater system.
- 5. Protect public health and the environment by preventing contamination and environmental degradation.
- 6. Ensure the long-term sustainability of the wastewater infrastructure through proper maintenance and technological advancements.

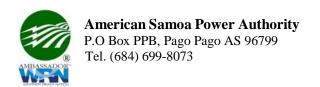
Overall, the project seeks to improve system performance, mitigate risks, and sustainably provide safe and reliable wastewater services to the community.

# **Implementation Approach**

The implementation approach for the project involves several key steps:

- 1. Preliminary Assessment and Planning: Assess the existing infrastructure and develop a detailed plan.
- 2. Design and Consultant: Create engineering designs adhering to regulatory standards.
- 3. Procurement and Contracting: Procure materials and services through competitive processes.
- 4. Construction and Installation: Execute construction activities with a focus on safety and quality.
- 5. Testing and Commissioning: Conduct thorough testing to ensure functionality and compliance.
- 6. Training and Handover: Provide training to operational staff and facilitate a smooth handover process.
- 7. Monitoring and Maintenance: Establish monitoring programs and schedules for routine maintenance.
- 8. Stakeholder Communication and Engagement: Maintain open communication with stakeholders throughout the process.

By following this approach, the project aims to successfully replace the failing gravity main within the wastewater system while ensuring compliance, quality, and stakeholder satisfaction.



#### **Deliverables**

Monthly progress reports will be completed and submitted to USEPA. Contractor's Plan and monthly reports will be provided. Final plans and specifications shall be submitted to USEPA for approval.

#### Administration

The procurement process will be the responsibility of the ASPA Procurement Manager. All purchases will be approved by EPA, the Executive Director and the ASPA Board of Directors. Design work and installation of the civil site work will be overseen by the ASPA ESD Project Manager and Engineer. Execution of work will be overseen by the Project Manager and Engineers. Administrative tasks will be overseen by ASPA's New Grants Manager. Administrative tasks will include, but not limited to tracking financial expenditures, financial reporting and project status appraisal for USEPA

## **Project Management**

The Project Manager for this project bears the following key responsibilities:

- I. Overseeing the project budget and schedule, ensuring financial allocations align with project objectives and timelines are adhered to.
- II. Making final decisions on purchases, change orders, and schedule adjustments, demonstrating authority in critical procurement and project management decisions.
- III. Serving as the primary liaison with the United States Environmental Protection Agency (USEPA) to address and seek approval on all matters requiring USEPA's authorization.
- IV. Collaborating closely with the Project Engineer to ensure strict adherence to all procedures outlined in the approved Quality Assurance/Quality Control (QA/QC) Plan submitted by the contractor. This collaborative effort aims to maintain high standards throughout the project's execution.

Additionally, in accordance with EPA regulations, the project will be managed by ASPA Water & Wastewater Engineering Division, further emphasizing the commitment to compliance and effective project oversight

## **Timelime and Schedule**

