Basin Planning Consultant Request for Qualifications

Mandatory Pre-Submittal Conference

Jeff Haby, Vice President – Production and Treatment Maria Franco, Contract Administrator

January 7, 2016



Disclaimer

- Oral statements or discussion during the preproposal meeting will not be binding, nor will it change or affect the terms or conditions of the Contract. Changes to the RFQ, if any, will be addressed in writing only via an Addendum.
- This presentation only paraphrases the RFQ and is for informational purposes only.
- Prospective Proposers should reference the RFQ for full details.

Agenda

- Introductions
- RFQ Overview
- Consent Decree (CD) Partial Overview
- Scope of Services
- Additional Requirements
- Evaluation Criteria
- Submittal Requirements
- Evaluation Process
- Schedule
- Communications

Introductions

SAWS Key Participants

- Maria Franco, Contract Administrator
- Jeff Haby, SSO Reduction Program Manager
- Tammy McNarie, SSORP Deputy Program Manager
- Bob Johnson, Manager, Master Planning
- Annette Duron, Manager, Proactive Planning

RFQ Overview

Objective

 The selected professional consulting firm will provide consulting services and engineering services to include validating the engineering feasibility for SAWS developed concepts, as well as prepare preliminary engineering reports (PERs).

RFQ Overview

Project Need

- Detailed project definitions are needed for the Remedial Measures Plans
 - Well defined project scope
 - Constructible & Operable
 - Affordable

Consent Decree (CD)

Partial Overview

Read the CD:

http://www.saws.org/infrastructure/epa/download.cfm

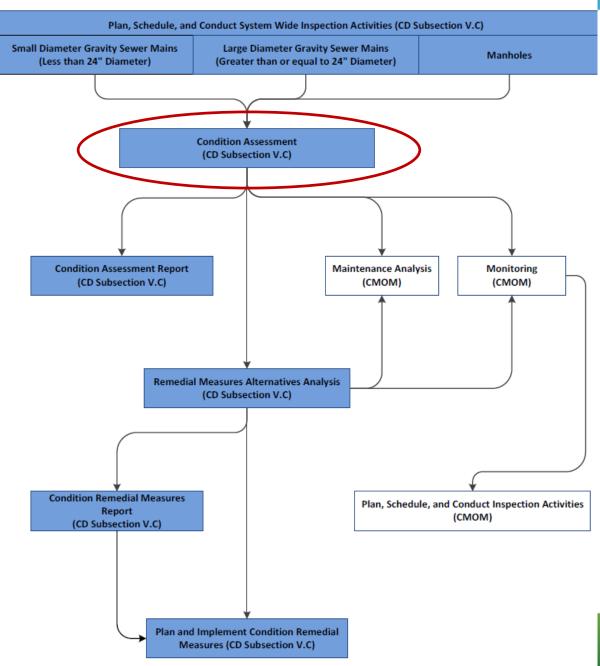
Key Sections governing the work:

- Condition
 - Condition Remedial Measures Alternatives Analysis
 - Condition Remedial Measures Plan
- Capacity
 - Capacity Remedial Measures Alternatives Analysis
 - Capacity Remedial Measure Plan
- Right of Entry and <u>Information Collection and Retention</u>
- Appendix G Capacity Remedial Measures Plan Template
- Appendix G Condition Remedial Measures Plan Template



CD Appendix C

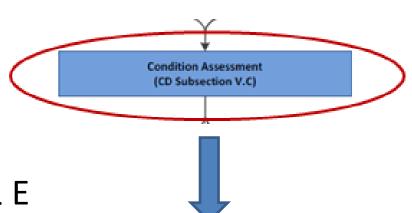
Condition Assessment and Condition Remedial Measures Plan Development



CD Appendix C

Condition Ratings

- SAWS completed ratings
- Alternatives needed for D & E

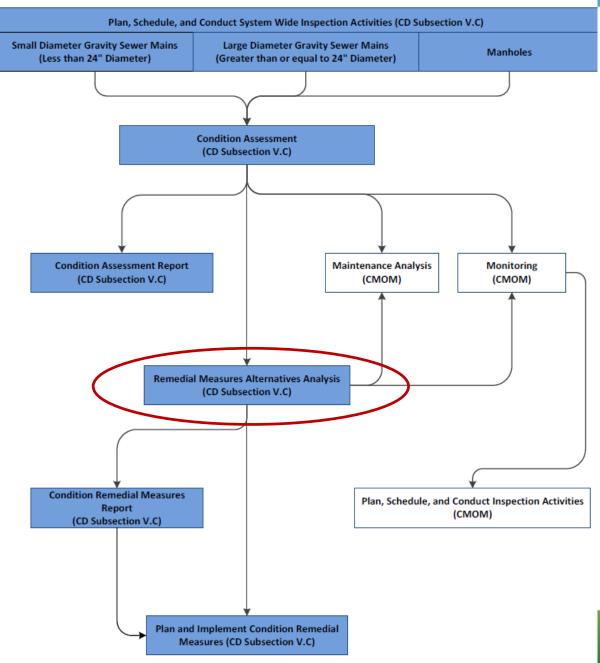


Category	Example Structural Conditions SAWS Anticipates for Each Category	Likely Outcome		
E - Very Poor Condition	Structural collapse, which has or could likely cause SSO; or collapse imminent	Alternatives Analysis		
D - Poor Condition	Significant missing material or broken material, severe corrosion with exposed pipe wall reinforcement, or pipe wall deformation greater than 25% from structural deterioration combined with hinge fractures.	Alternatives Analysis or Monitoring		
C - Fair Condition	Pipe wall deformation less than 25% from structural deterioration combined with hinge cracks, displaced fractures, or moderate corrosion - but no pipe wall reinforcement visible.	Monitoring or Maintenance Analysis		
B - Good Condition	Pipe wall deformation from construction impacts or less than 10% of diameter from structural deterioration, minor corrosion, slightly open non-displaced fractures, or other moderate material degradation.	Maintenance Analysis		
A - Very Good Condition	Mild defects which may include tight non-displaced cracks or other mild material degradation.	Maintenance Analysis		



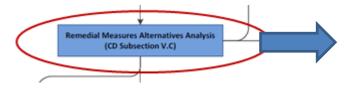
CD Appendix C

Condition Assessment and Condition Remedial Measures Plan Development



CD Appendix C

Condition Remedial Measures Alternatives Analysis



 BPC develops plan for identified defects (D&E assets)

Remedial Measures Alternatives Analysis (CD Subsection V.C)

SAWS shall determine which solution is most likely to resolve the structural defects with the most practical solution and timeframe for resolving structural defects considering both the long-term performance of gravity sewer mains/manholes and the life-cycle cost for the gravity sewer mains/manholes. Such solutions and techniques may include, but are not limited to:

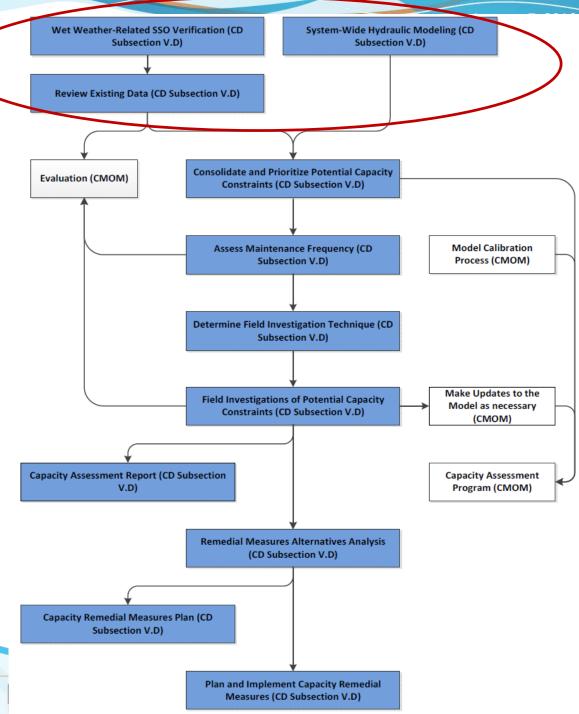
- Gravity Sewer Mains:
 - Point Repairs: Grouting sleeve system, CIPP sleeve and lining, Robotic sewer pipe repair, Open trench
 - Pipe Rehabilitation: Slip lining, CIPP
 - Pipe Replacement: Open trench, Pipe bursting, Jack and bore, Directional drilling, Micro-tunneling
 - Other remediation techniques (such as new technologies or methods that become available)
 - Monitoring or Maintenance Analysis (performed as part of CMOM)
- Manholes
 - Manhole Repair or Rehabilitation: Poured in place liners, Cured in place liners, Cementitious coating, Polymer coating, Mechanical seals and insert replacement, Bolt replacement, Cover replacement, Manhole frame adjustment and resealing
 - Manhole Replacement
 - Other remediation techniques (such as new technologies or methods that become available)
 - Monitoring or Maintenance Analysis (performed as part of CMOM)





CD Appendix D

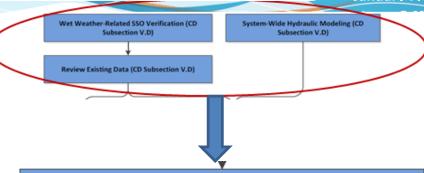
Capacity Assessment and Capacity Remedial Measures Plan Development



CD Appendix D

Wet Weather SSO Categories

- SAWS completed
 - Wet weather SSO verification
 - Modeling
 - Review existing data
- Resulted in Wet
 Weather SSO categories
 (A C)



Review Existing Data (CD Subsection V.D)

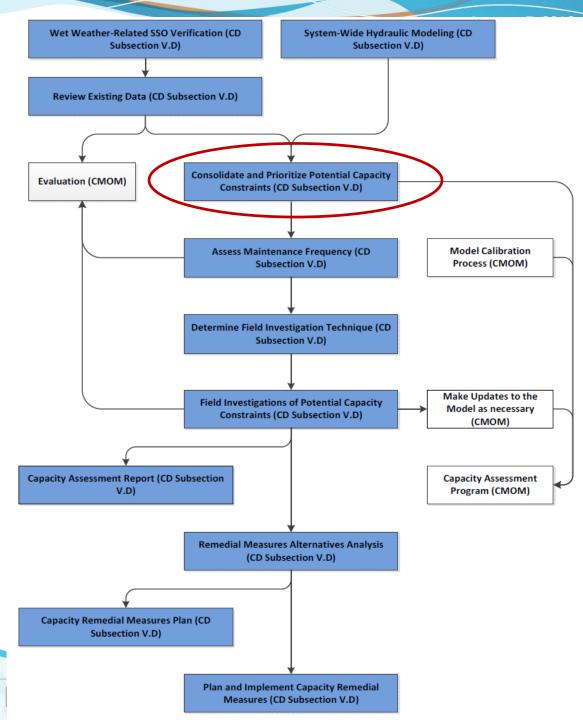
- Review historical Cleaning, CCTV, SSO, flow monitoring, modeling, and other data if applicable for each SSO identified above
- Categorize SSO as follows:
 - A) Most likely a capacity-related SSO. Existing data indicates that there does not appear to be a history of maintenance or structural issues that may have led to the SSO.
 - B) Most likely maintenance-related. Existing data indicates that the cause is most likely a maintenance related cause such as FOG, Roots, or Debris, but there may also be a Capacity Constraint at the SSO location.
 - C) Clearly not a capacity related SSO. Existing data indicates the SSO was not capacity related. Examples include isolated events such as pools, or cooling towers being drained into the sewer system or cleaning maintenance related issues such as significant FOG, roots, or debris.





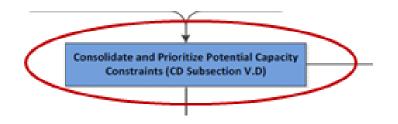
CD Appendix D

Capacity Assessment and Capacity Remedial Measures Plan Development



CD Appendix D

Potential Capacity Constraints



Consolidate and Prioritize Potential Capacity Constraints (CD Subsection V.D)

Priority 1 - Category A SSO per Review of Existing Data and where model also predicts a SSO

Priority 2 - Where model predicts SSO, but with no observed SSO. Category A SSO per Review of Existing Data, but model does not predict a SSO.

Priority 3 - Where model predicts Hydraulic Grade Line (HGL) near ground elevation

Priority 4 - Category B SSO per Review of Existing Data

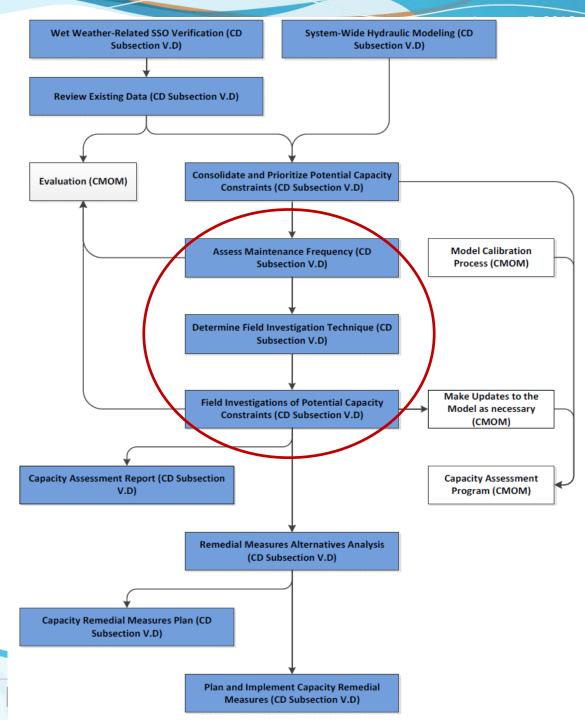
Priority 5 - Where pipe design capacity is exceeded for sustained 60 minutes or more but the HGL is not near the ground elevation.

 SAWS identified and prioritized potential capacity constraints (Priority 1 -5)



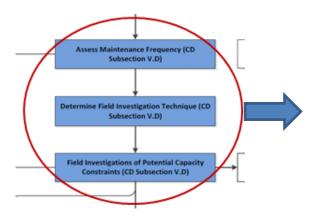
CD Appendix D

Capacity Assessment and Capacity Remedial Measures Plan Development



CD Appendix D

Field Investigations to Confirm Capacity Constraints



 SAWS conducting field verification

Field Investigations of Potential Capacity Constraints (CD Subsection V.D)

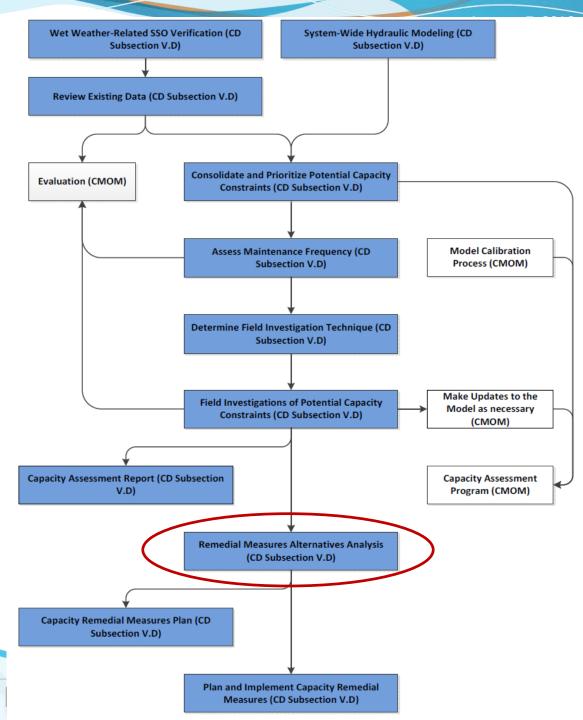
- Implement selected field investigation technique at each location until a wet weather event is experienced and determine whether there is a significant wet weather response
- *Notes
- Generally, if the HGL is at or near ground surface elevation during a wet weather event less than 1-inch over a 24 hour period, identify as a potential remedial measure and refer for remedial measures alternatives analysis.
- Generally, for wet weather events that exceed 1-inch over a 24 hour period and are less than the "assessment storm":
 - If the location is in the model, generally follow the below guidelines.
 - Apply observed storm to model and determine predicted HGL at the potential capacity constraint location. Compare predicted HGL from model to observed HGL. SAWS shall use its best professional judgment to adjust the model if appropriate.
 - If observed HGL is at or above the model's predicted HGL at the observed storm:
 - a. For Priority 1, 2 and 3, typically identify as a potential remedial measure and refer for alternatives analysis as appropriate
 - b. For Priority 4 and 5, evaluate on a case-by-case basis as appropriate
 - If observed HGL is less than the model's predicted HGL at the observed storm:
 - a. For Priority 1 and 2:
 - i. If model predicts an overflow at the "assessment storm", evaluate on a case-bycase basis as appropriate.
 - ii. If model does not predict an overflow at the "assessment storm", typically remove the site from the Field Investigation program as appropriate. These sites shall be monitored in the future as part of CMOM.
 - b. For Priority 3, 4, and 5, typically remove the site from the Field Investigation program as appropriate. These sites shall be monitored in the future as part of CMOM.
 - If the location is not in the model, SAWS shall model the location or conduct an empirical hydraulic analysis using the Rational Method or other professionally recognized storm water flow rate calculation method to determine whether the location should be identified as a potential remedial measure and referred for alternatives analysis.
- If a wet weather event is approximately equal to or exceeds the "assessment storm", and an overflow does not occur, this would not be considered a Capacity Constraint. These sites shall be monitored in the future as part of CMOM as growth occurs.
- If there is not a significant wet weather response, remove location from the Field Investigation program





CD Appendix D

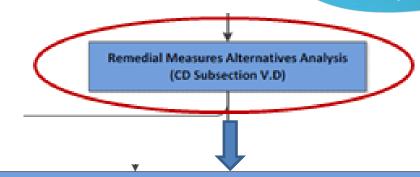
Capacity Assessment and Capacity Remedial Measures Plan Development



CD Appendix D

Capacity Remedial Measures Alternatives Analysis

 BPC develops preliminary design report for identified concepts developed by SAWS



Remedial Measures Alternatives Analysis (CD Subsection V.D)

- For each confirmed Capacity Constraint, perform an engineering analysis and collect any necessary additional field data such as:
 - Smoke testing
 - Dye testing
 - Flow metering
 - CCTV
 - Other data as needed

Use engineering analysis to determine which solution is most likely to resolve the constraint at the lowest possible cost. Alternative measures include: (1) Re-routing a portion of upstream wastewater flows, (2) Reducing flows entering the WCTS from customers, (3) Reduction of Inflow, (4) Reduction of Infiltration, (5) Increase conveyance capacity of WCTS, (6) Upstream flow detention facilities, (7) continued monitoring, if appropriate, (8) Other engineering solutions.

- *Notes
- Apply "design storm" and 20-year growth projection to determine appropriate pipe sizing as needed

Plan and Implement Capacity Remedial Measures (CD Subsection V.D)

- Prioritize remedial measures and periodically evaluate priorities
 - Generally, review severity of Capacity Constraints identified during inspections, frequency and history of capacity-related SSOs, pipe size, age and material, maintenance history, relationship of Capacity Constraint areas of the WCTS to growth-related improvements and/or conditionrelated improvements, and other criteria determined to be appropriate by SAWS.
- Coordinate with condition remedial measures as needed
- Allocate budget
- Design as needed
 - Typically, SAWS will consider selection of next larger commercially available pipe size for pipe up-size projects if warranted under the specific circumstances for a remedial measure.
- Implement remedial measures

Capacity Remedial Measures Plan (CD Subsection V.D)

- See Capacity Remedial Measures Plan Template in Appendix G



Scope of Services

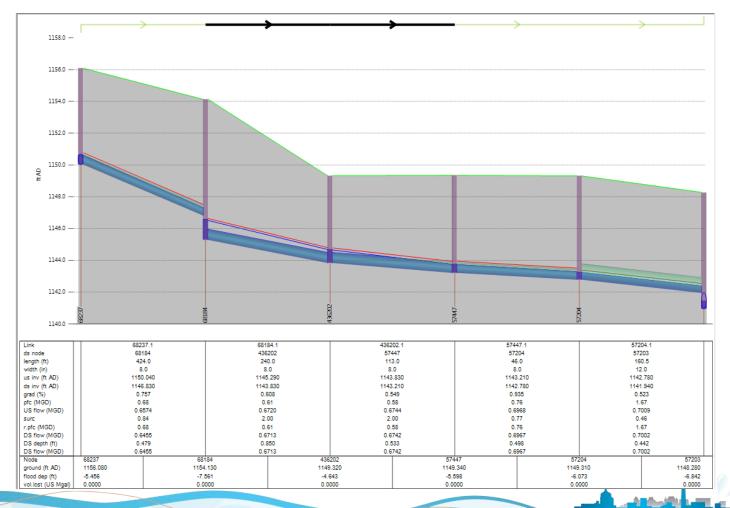
SAWS Information Available for Use by BPC

- Spreadsheet Flow Model (Group I sewers) and InfoWorks ICM© Model (Group II sewers)
- SSO database
- SAWS GIS
- SAWS as-built records and drawings
- GIS coverage showing concepts to be analyzed
- CCTV videos and defect code database
- SAWS condition ratings



Hydraulic Models

Infoworks ICM Model Output Example



SAWS Information for use by BPC

CCTV Videos



SAWS Information for use by BPC

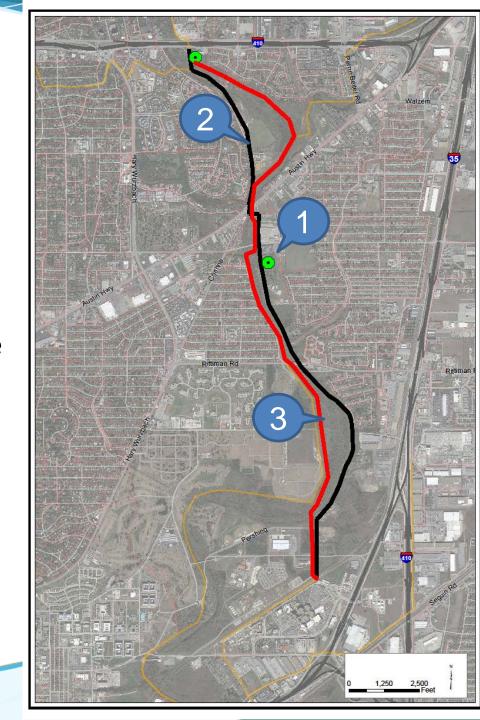
CCTV defect coding example

Distance	Video Ref	Code		0 1	Value				Circumferential Location			
(feet)			Modifier/	Defect	S/M/L	Inches		%	Joint	Circumferential Location		Remarks
(meters)			Severity			1st	2nd	76		At/From	То	
0.0		AMH										M15486
0.0		MWL						5				
12.5		TFA				6				3		
13.3		RN	MJ					25	J	2	5	
22.8		RI	FJ	S01					J	12	5	
35.1		RFJ DAGS		F01					J	12	5	
35.1								1 5	J	8	9	
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SAWS Information for use by BPC Concepts Developed by SAWS

- Alternatives:
 - 1. Off line storage -- 12 MG
 - 2. Upsize original to 78"
 - 3. Parallel relief 72" to provide inline storage
- Alternatives provided:
 - Hydraulic concept
 - Basic hydraulic design goals
 - Concept route corridor

Note: This is only an example of the type and level of detail for concepts



Outline - Scope of Services

Final Scope Developed During Contract Negotiations

- Analyze remedial locations and alternatives identified by SAWS
- Alternatives analyses for capacity constraints
- Alternatives analyses for condition deficiencies
- Field surveys for alternative analyses

Additional Requirements

- SAWS may select 1 to 3 BPCs
- BCP(s) shall use the InfoWorks ICM© software to perform hydraulic modeling (large diameter)
- The BPC(s) shall complete the work on or before December 15, 2017
 - Assessment work will be ongoing when the BPC starts
 - SAWS will complete condition and capacity assessments by the end of 2016

Additional Requirements

Work Expectations

- BPC develops multiple technically feasible alternatives based on SAWS concepts
- SAWS selects the final alternative
- BPC establishes how each alternative can be designed
 - 5. The BPC(s) will develop multiple technically feasible alternatives for remediating assigned condition defects and capacity constraints based on the concepts developed by SAWS. The consultant(s) will not be creating or developing other solution concepts unless specifically authorized by SAWS. SAWS will select the final alternative to place in its remedial measures plan that will be submitted to EPA, which can include a no-build alternative with continued monitoring. The consultant's findings will be limited to establishing how each alternative can be designed to meet SAWS requirements. The consultant(s) may be asked for an opinion on which alternative should move forward; however, that opinion is not binding on SAWS.



Additional Requirements

Eligibility for future work

- BPC not eligible to design collection system projects in their alternatives analysis
- Sub-consultants are eligible to design projects provided their work does not exceed 15% of the total BPC contract value
 - 7. The BPC(s) will not be eligible to design wastewater collection system projects (either a prime design firm or as a member of any team providing design services) which were part of the alternatives analysis work in the sewershed where they served as the BPC. The BPC will be allowed to perform design work in any basin if the project did not originate as part of the alternatives analysis. The BPC will be allowed to design alternative analysis projects in sewersheds where they did not serve as the BPC.
 - 8. Sub-consultants on a BPC team are eligible to provide design services on any future wastewater collection system project provided that their work does not exceed 15% of the total BPC's contract value. Where the sub-consultants work exceeds 15% of the total BPC's contract value, future design work in each sewershed is restricted as if the sub-consultant were the BPC as stated above.
 - The Program Management consultant, HDR Engineering, Inc., is prohibited from acting as a BPC. Sub-consultants employed by HDR Engineering, Inc. are eligible to act as a BPC either as a prime consultant or as a sub-consultant



Evaluation Criteria

- Project Approach (40%)
 - Identify key issues
 - Tasks, Resources and Timeline
 - Expand or comment on Scope of Work
- Team Experience (30%)
 - Clean Water Act CD's and SSORPs
 - CIP, Master Plans, Preliminary Designs for collection System capacity and condition improvements
 - Infoworks©, Info Master©, ESRI GIS, etc.
 - Previous Projects
 - References
- Project Organization and Availability of Key People (15%)
- Adherence to SMWB Goals (15%)



Evaluation Process

- Qualification statements are received
- Contracting reviews for responsiveness
- Technical Evaluation Committee will score qualification statements
- Good Faith Effort Plan will be scored
- Selection Committee reviews and recommends
- Interviews (if deemed necessary)
- Negotiation
- Board Award

Submitting a Response

- Responses limited to a maximum of <u>40</u> pages
 - Required forms, cover page, cover letter, tabs, etc., <u>do not</u> count toward the page limit. Full list is in the RFQ.
 - Response Format:
 - Submittal Response Checklist
 - Respondent Questionnaire
 - W-9 form
 - Project Approach
 - Team Experience
 - Project Organization and Availability of Key People
 - Resumes (not to exceed 2 pages per person)
 - Insurance requirements
 - Good Faith Effort Plan
 - SCTRCA Certificates
 - Conflict of Interest Questionnaire



SMWB Requirements

25% Aspirational Goal for Professional Services Contracts

- SMWB Certification accepted from the following entities:
 - South Central Texas Regional Certification Agency
 - > Texas H.U.B.
 - System for Award Management aka "SAM"
 - Small Business Administration (SBA)
- RFQ Scoring:
 - Minority and Women Owned Firms primes
 - Awarded 15 points
 - Small Business Enterprises (SBEs) primes
 - Award 5 points plus,
 - Subcontractor SMWB % participation X 20
 - Maximum of 10 points
 - ➤ Non-SMWB primes
 - Subcontractor SMWB % participation X 20
 - Maximum of 10 points
- Marisol Robles, SMWB Program Manager (210) 233-3420

Marisol.Robles@saws.org



Solicitation and Contracting Schedule

Solicitation Schedule

Date	Event				
January 13, 2016 by 4:00 p.m.	Receipt of Written Questions Due				
January 18, 2016 by 4:00 p.m.	Q & A Posted to Website				
January 26, 2016 by 2:00 p.m.	Proposals Due				
January-February 2016	Proposals Evaluated				
February 2016	Interviews, if Necessary				
April 5, 2016	SAWS Board Consideration and Award				
April 2016	Non-Selection Notices Mailed				
May 2016	Start Work				

Schedule is subject to change without notice.



Communication Reminders

- Upon release of the RFQ until the contract is awarded, there should not be any RFQ-related communication with any SAWS' staff including:
 - Project Directors
 - Engineers
- This includes phone calls, emails, letter, or any direct or indirect discussion of the RFQ

Technical Questions

Respondents may submit technical questions concerning the services in this RFQ in writing. Electronic inquiries by e-mail will be accepted. The contact person for this solicitation is:

Maria Franco, Contract Administration
San Antonio Water System Customer Center Building
2800 U.S. Hwy 281 North, Suite 171
San Antonio, TX 78212

Email: maria.franco@saws.org

All questions due by January 13, 2016 by 4:00 p.m. CT

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