Abridged Application

Due February 5, 2016 by 5:00pm
SWIFT@twdb.texas.gov

COURTESY COPY FOR REVIEW: ORIGINALLY SUBMITTED VIA ONLINE LOAN APPLICATION SYSTEM

By submitting this abridged application, you understand and confirm that the information provided is true and correct to the best of your knowledge and further understand that the failure to submit a complete abridged application by the stated deadlines, or to respond in a timely manner to additional requests for information, may result in the withdrawal of the abridged application without review.

GENERAL INFORMATION

Name of Entity	County	Regional Water Planning Area
City of Seabrook *ORIGINALLY SUBMITTED VIA OLA*	Harris	H

Entity Contact Information				
Contact Person	**Name**	**Mr. Kevin Padgett**		
	Title	**Assistant Director of Public Works**		
Mailing Address		1700 First Street		
		Seabrook, TX 7758-3540		
Phone Number		(281) 474-3286	**Fax Number**	(281) 474-4802
Email Address		kpadgett@seabrooktx.gov		

PROJECT DESCRIPTION

Name of Project *(As it appears in the 2016 regional water plan)*	**Municipal Conservation, Seabrook Water Loss Reduction, Seabrook**			
Where can the project be found in the most recent Regional Water Plan?	**Project described on page:**	**5-B-CNSV-003-02, 5-B-CNSV-003-6**	**Capital costs listed on page:**	**5-A-108, 5-A-120**

Please attach a list of all water systems served by the proposed project.

Phase(s) Applied For	☒ Planning	☒ Acquisition	☒ Design	☒ Construction
Population Served When Fully Operational	12,500			

Description of Proposed Project

Neptune AMI water meter conversion program will upgrade manual read water meters to AMI type installations. Project will also include the implementation of behavior-based software – such as WaterSmart, DropCountr, or other providers – using the data provided by the AMI system. This software will help customers identify leaks on the customer side of the meter, and will also promote municipal conservation measures appropriate to their homes or facilities.

The Region H water plan shows average water losses of 18.8% across the entire region (page 1-32). It also found a “high level of inaccuracy” in the reported data, suggesting that utilities should “refine their water accounting procedures” (page 1-31). The Region H plan considers water loss reduction to be part of “municipal conservation” (page 5-11). Smart meters are cited on page 5-B-CNSV-003-2, referencing the City of Houston’s experience with smart metering systems to recognize leaks on both the service and customer sides of the system.

The original cost estimate for water loss reduction for the City of Seabrook was based on the Alliance for Water Efficiency cost

effectiveness tool (see page 5-B-CNSV-003-6). The proposed cost takes into account the City of Seabrook's specific scope of work, including a software system to support leak detection and customer engagement (including promotion of the conservation measures listed on page 5-B-CNSV-003-2), and we will pursue an amendment as necessary to the State Water Plan to reflect the actual capital cost of our proposal. We will pursue this amendment in parallel with the TWDB's review of our application and, hopefully, the development of our final application.

As stated in the Region H plan on page 5-B-CNSV-003-3, water loss reduction is expected to provide a 1% efficiency improvement per year until a 10% real loss threshold is achieved and maintained. According to the Region H Plan, by 2040 the savings targets for Seabrook's Water Loss Reduction management strategy will provide a 2.4% reduction in water demand, and savings targets for municipal water conservation will provide another 3.6%. We anticipate that, with the use of software for customer engagement, this project will yield at least a 6% reduction in water demand by 2040.

Emergency *(select all that apply)*	☐ Applicant/entity's water supply will last less than 180 days. ☐ Water supply need occurs earlier than anticipated in the State Water Plan. ☐ Applicant has received or applied for Federal emergency funding. ☒ None of the above.

Agricultural Efficiency Project?	☐ Yes ☒ No	Efficiency improvement achieved by implementing the project *(Please provide an attachment showing the basis for your calculation.)* ☐ <1% ☐ 10%-13.9% ☐ 1%-1.9% ☐ 14%-17.9% ☐ 2%-5.9% ☐ ≥18% ☐ 6%-9.9%

Household Cost Factor *(Household Cost Factor for SWIFT prioritization is calculated by dividing the service area's average residential water bill by its annual median household income. For regional projects, these should represent the combined service areas of all participating entities.)*			
Estimated average annual residential water bill:	$526.68	**Annual Median Household Income:**	$84,333

The proposed project addresses:	☒ Conservation ☐ Water Loss ☐ N/A	**Annual Volume of Water Produced/Conserved by the Project** *(in acre-feet per year)*	110

Readiness to Proceed *(select all that apply)*	☒ Preliminary planning or design work (30% of total project) has been completed or is not required. ☒ Applicant is prepared to begin implementation or construction within 18 months of application deadline. ☒ Applicant has acquired all water rights associated with the proposed project, or none will be required.

ESTIMATED COSTS		
Estimated Project Costs	Low-interest Loan	$ 1,700,000
	Deferred Loan	$
	Board Participation	$
	Local Contribution	$
	Other:	$
	Total Estimated Project Costs	$ 1,700,000

Anticipated Commitments *Attach proposed schedule for multi-year commitments*	☒ One-Time Commitment	☐ Multi-Year Commitments

Project Information Form #282912

TABLE OF CONTENTS

1. General Information

Project Information

Funding Type: SWIFT

2. Contact Information

Entity Contact Information	Engineering Firm Contact Information
Name of Entity: Seabrook:3364	Name of New Entity: City of Seabrook
County: Harris	Prefix: no value entered by user
Prefix: no value entered by user	First Name: no value entered by user
First Name: no value entered by user	Last Name: no value entered by user
Last Name: no value entered by user	Addr 1: no value entered by user
Addr 1: no value entered by user	Addr 2: no value entered by user
Addr 2: no value entered by user	City: no value entered by user
City: no value entered by user	State: no value entered by user
State: no value entered by user	Zip: no value entered by user
Zip: no value entered by user	Phone: no value entered by user
Phone: no value entered by user	Fax: no value entered by user
Fax: no value entered by user	Suffix: no value entered by user
Suffix: no value entered by user	OrgName: no value entered by user
OrgName: no value entered by user	DeptName: no value entered by user
DeptName: no value entered by user	Title: no value entered by user
Title: no value entered by user	Email: no value entered by user
Email: no value entered by user	
Firm Name: Cobb Fendley	Make Changes: Y
Make Changes: Y	No Entity TxWISE Id

3. Service Area

Population Served: 12500

4. Project Description

Project Name: Municipal Conservation, Seabrook Water Loss Reduction, Seabrook

Where can Project be found in the most recent Regional Water Plan?
Project listed on page: : 5-B-CNSV-003-02, 5-B-CNSV-003-6
Capital costs on page: : 5-A-108, 5-A-120

Region: H - REGION H

Phase(s) Applied For
Planning: Y
Acquisition: Y
Design: Y
Construction: Y

Emergency
Applicant/entity's water supply will last less than 180 days.: N
Water Supply need occurs earlier than anticipated in the State Water Plan: N
Applicant has received or applied for Federal emergency funding.: N
None of the above.: Y

Agricultural Efficiency Project?: N

Estimated average annual residential water bill: $526.68
Annual Median Household Income: $84333.00

Project expected to produce water: Y
Project expected to conserve water: Y
Annual Volume of Water Produced or Conserved: 110.00

Project Long Desc: Neptune AMI water meter conversion program will upgrade manual read water meters to AMI type installations. Project will also include the implementation of behavior-based software – such as WaterSmart, DropCountr, or other providers – using the data provided by the AMI system. This software will help customers identify leaks on the customer side of the meter, and will also promote municipal conservation measures appropriate to their homes or facilities.

The Region H water plan shows average water losses of 18.8% across the entire region (page 1-32). It also found a “high level of inaccuracy” in the reported data, suggesting that utilities should “refine their water accounting procedures” (page 1-31). The Region H plan considers water loss reduction to be part of “municipal conservation” (page 5-11). Smart meters are cited on page 5-B-

CNSV-003-2, referencing the City of Houston’s experience with smart metering systems to recognize leaks on both the service and customer sides of the system.

The original cost estimate for water loss reduction for the City of Seabrook was based on the Alliance for Water Efficiency cost effectiveness tool (see page 5-B-CNSV-003-6). The proposed cost takes into account the City of Seabrook’s specific scope of work, including a software system to support leak detection and customer engagement (including promotion of the conservation measures listed on page 5-B-CNSV-003-2), and we will pursue an amendment as necessary to the State Water Plan to reflect the actual capital cost of our proposal. We will pursue this amendment in parallel with the TWDB’s review of our application and, hopefully, the development of our final application.

As stated in the Region H plan on page 5-B-CNSV-003-3, water loss reduction is expected to provide a 1% efficiency improvement per year until a 10% real loss threshold is achieved and maintained. According to the Region H Plan, by 2040 the savings targets for Seabrook’s Water Loss Reduction management strategy will provide a 2.4% reduction in water demand, and savings targets for municipal water conservation will provide another 3.6%. We anticipate that, with the use of software for customer engagement, this project will yield at least a 6% reduction in water demand by 2040.

Public Water Systems Served by Proposed Project

- City of Seabrook

5. Readiness to Proceed to Construction

Preliminary planning or design work (30% of total project) has been completed or is not required.: Y

Applicant is prepared to begin implementation or construction within 18 months of application deadline.: Y

Applicant has acquired all water rights associated with the proposed project, or none will be required.: Y

6. Estimated Costs

TWDB Requested Amount

Low-Interest Loan Amount: $1700000.00

Deferred Loan Amount: no value entered by user

Board Participation Amount: no value entered by user

Local Contribution Amount: no value entered by user

Other Amount: no value entered by user
Other Desc: no value entered by user

Total Estimated Project Costs: $1700000.00

City of Seabrook 2/2/16

1700 1st. Street

Seabrook, Texas 77586

Attn: Kevin Padget

Kevin,

Thank you for the opportunity to furnish a quote for the AMI water meter project.

This quote is just an estimate. A finale quote can be furnished after the Neptune Propagation Study can be completed.

If you have any questions, please feel free to contact me.

Infrastructure

997 – 5/8x3/4 Neptune R900i registers. 5 years or younger.	$195.00ea	$194,415.00
2326 – 5/8x3/4 Neptune Water Meters w/R900i 6 years or older	$230.00ea	$534,980.00
272 – ¾ Neptune R900i registers. 5 years or younger.	$195.00ea	$53,040.00
345 – ¾ Neptune Water Meters w/R900i 6 years or older	$300.00ea	$103,500.00
71 – 1” Neptune R900i registers. 5 years or younger	$195.00ea	$13,845.00
126 – 1” Neptune Water Meters w/R900i 6 years or older	$352.00ea	$44,352.00
10 – 1-1/2” Neptune R900i registers. 5 years or younger	$195.00ea	$1,950.00
38 – 1-1/2 Neptune Water Meters w/R900i 6 years or older	$555.00ea	$21,090.00
19 – 2” Neptune R900i registers. 5 years or younger	$195.00ea	$3,705.00
63 – 2” Neptune Water Meters w/R900i 6 years or older	$689.00ea	$43,407.00
1 – 2” Neptune TruFlo Comp Meter w/R900i 6 years or older	$1,782.00ea	$1,782.00
3 – 3” Neptune TruFlo Comp Meter R900i register (x2)	$390.00ea	$1,170.00

5 years or younger		
12 – 3” Neptune TruFlo Comp. Meter w/R900i	$2,410.00ea	$28,920.00
6 years or older		
2 – 4” Neptune TruFlo Comp. meter w/R900i	$3,025.00ea	$6,050.00
6 years or older		
5 – 6” Neptune TruFlo Comp. meter w/R900i	$4,850.00ea	$24,250.00
6 years or older		
1 – 10” Neptune Protectus III Water Meter register (x2)	$390.00ea	$390.00
5 years or younger		
12 – 3” Neptune bronze strainer	$675.00ea	$8,100.00
2 – 4” Neptune bronze strainer	$907.00ea	$1,814.00
5 – 6” Neptune bronze strainer	$1,769.00ea	$8,845.00
1 - MRX920 Drive –By unit. Less laptop	$6,875.00ea	$6,875.00
1 - Server, Per Neptune specs.	$10,000.00ea	$10,000.00
5 - Mono Poles, set in place	$30,000.00ea	$150,000.00
5 - Gateway w/AC power (Cell and Ethernet)	$11,000.00ea	$55,000.00
1 - N_Sight 5.0 Software	$6,250.00ea	$6,250.00
1 - Training	$5,000.00ea	$5,000.00

Installation

1377 - Retrofit 5/8”x3/4” meter 5 years and younger w/R900i	$45.00ea	$1,422.00
2326 – Install new 5/8x3/4 R900i meter on 6 year or older	$60.00	$139,560.00
271 – Retrofit ¾” meter 5 years and younger w/R900i	$45.00	$12,195.00
345 – Install new ¾ R900i meter on 6 year or older	$60.00	$20,700.00
71 – Retrofit 1” meter 5 year and younger w/R900i	$45.00	$3,195.00
126 – Install new 1” R900i meter on 6 year or older	$60.00	$7,560.00
10 – Retrofit 1 ½” meter 5 year or younger w/R900i	$45.00	$450.00
38 – Install new 1 ½ R900i meter on 6 years or older	$60.00	$2,280.00
19 – Retrofit 2” meter 5 years and younger w/R900i	$45.00	$855.00
63 – Install new 2 R900i meter on 6 year or older	$60.00	$3,780.00

1 – Install new 2 R900i compound meter 6 years or older	$300.00	$300.00
3 – Retrofit 3” compound meter 5 years or younger w/R900i	$90.00	$270.00
12 – Install new 3” R900i compound 6 years or older	$450.00	$5,400.00
2 - Install new 4” R900i compound 6 years or older	$650.00	$1,300.00
5 – Install new 6” R900i compound 6 years or older	$1000.00	$5,000.00
1 – Retrofit 10” Protectus Meter w/r900i register	$90.00	$90.00

Note: These prices are for estimation only. Final pricing will be done after the Neptune Propagation study and actual meter survey.

Grand Total of Project **$1,533,087.00**

Abridged Application

Due February 5, 2016 by 5:00pm
SWIFT@twdb.texas.gov

RECEIVED
2016 FEB -5 P 2:44
TWDB

By submitting this abridged application, you understand and confirm that the information provided is true and correct to the best of your knowledge and further understand that the failure to submit a complete abridged application by the stated deadlines, or to respond in a timely manner to additional requests for information, may result in the withdrawal of the abridged application without review.

GENERAL INFORMATION

Name of Entity	County	Regional Water Planning Area
City of Seabrook *ORIGINALLY SUBMITTED VIA OLA*	Harris	H

Entity Contact Information				
Contact Person	Name	Mr. Kevin Padgett		
	Title	Assistant Director of Public Works		
Mailing Address		1700 First Street		
		Seabrook, TX 77586-3540		
Phone Number		(281) 474-3286	Fax Number	(281) 474-4802
Email Address		kpadgett@seabrooktx.gov		

PROJECT DESCRIPTION

Name of Project *(As it appears in the 2016 regional water plan)*	Municipal Conservation, Seabrook Water Loss Reduction, Seabrook			
Where can the project be found in the most recent Regional Water Plan?	Project described on page:	5-B-CNSV-003-02, 5-B-CNSV-003-6	Capital costs listed on page:	5-A-108, 5-A-120

Please attach a list of all water systems served by the proposed project.

Phase(s) Applied For	☒ Planning	☒ Acquisition	☒ Design	☒ Construction
Population Served When Fully Operational	12,500			

Description of Proposed Project

Neptune AMI water meter conversion program will upgrade manual read water meters to AMI type installations. Project will also include the implementation of behavior-based software – such as WaterSmart, DropCountr, or other providers – using the data provided by the AMI system. This software will help customers identify leaks on the customer side of the meter, and will also promote municipal conservation measures appropriate to their homes or facilities.

The Region H water plan shows average water losses of 18.8% across the entire region (page 1-32). It also found a "high level of inaccuracy" in the reported data, suggesting that utilities should "refine their water accounting procedures" (page 1-31). The Region H plan considers water loss reduction to be part of "municipal conservation" (page 5-11). Smart meters are cited on page 5-B-CNSV-003-2, referencing the City of Houston's experience with smart metering systems to recognize leaks on both the service and customer sides of the system.

The original cost estimate for water loss reduction for the City of Seabrook was based on the Alliance for Water Efficiency cost effectiveness tool (see page 5-B-CNSV-003-6). The proposed cost takes into account the City of Seabrook's specific scope of work,

including a software system to support leak detection and customer engagement (including promotion of the conservation measures listed on page 5-B-CNSV-003-2), and we will pursue an amendment as necessary to the State Water Plan to reflect the actual capital cost of our proposal. We will pursue this amendment in parallel with the TWDB's review of our application and, hopefully, the development of our final application.

As stated in the Region H plan on page 5-B-CNSV-003-3, water loss reduction is expected to provide a 1% efficiency improvement per year until a 10% real loss threshold is achieved and maintained. According to the Region H Plan, by 2040 the savings targets for Seabrook's Water Loss Reduction management strategy will provide a 2.4% reduction in water demand, and savings targets for municipal water conservation will provide another 3.6%. We anticipate that, with the use of software for customer engagement, this project will yield at least a 6% reduction in water demand by 2040.

Emergency *(select all that apply)*	☐ Applicant/entity's water supply will last less than 180 days. ☐ Water supply need occurs earlier than anticipated in the State Water Plan. ☐ Applicant has received or applied for Federal emergency funding. ☒ None of the above.

Agricultural Efficiency Project?	☐ Yes ☒ No	Efficiency improvement achieved by implementing the project *(Please provide an attachment showing the basis for your calculation.)* ☐ <1% ☐ 10%-13.9% ☐ 1%-1.9% ☐ 14%-17.9% ☐ 2%-5.9% ☐ ≥18% ☐ 6%-9.9%

Household Cost Factor
(Household Cost Factor for SWIFT prioritization is calculated by dividing the service area's average residential water bill by its annual median household income. For regional projects, these should represent the combined service areas of all participating entities.)

Estimated average annual residential water bill:	$526.68	**Annual Median Household Income:**	$84,333

The proposed project addresses:	☒ Conservation ☒ Water Loss ☐ N/A	**Annual Volume of Water Produced/Conserved by the Project** *(in acre-feet per year)*	110

Readiness to Proceed *(select all that apply)*	☒ Preliminary planning or design work (30% of total project) has been completed or is not required. ☒ Applicant is prepared to begin implementation or construction within 18 months of application deadline. ☒ Applicant has acquired all water rights associated with the proposed project, or none will be required.

ESTIMATED COSTS		
Estimated Project Costs	Low-interest Loan	$ 1,700,000
	Deferred Loan	$
	Board Participation	$
	Local Contribution	$
	Other:	$
	Total Estimated Project Costs	$ 1,700,000

Anticipated Commitments *Attach proposed schedule for multi-year commitments*	☒ One-Time Commitment	☐ Multi-Year Commitments