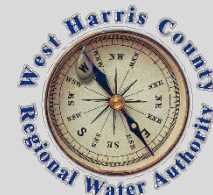
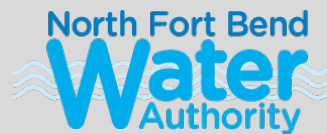




WATER PURIFICATION PLANT EXPANSION

NEWPP Expansion Project Update

Transportation, Technology & Infrastructure Committee
October 17, 2018



CONTENTS

1 Background

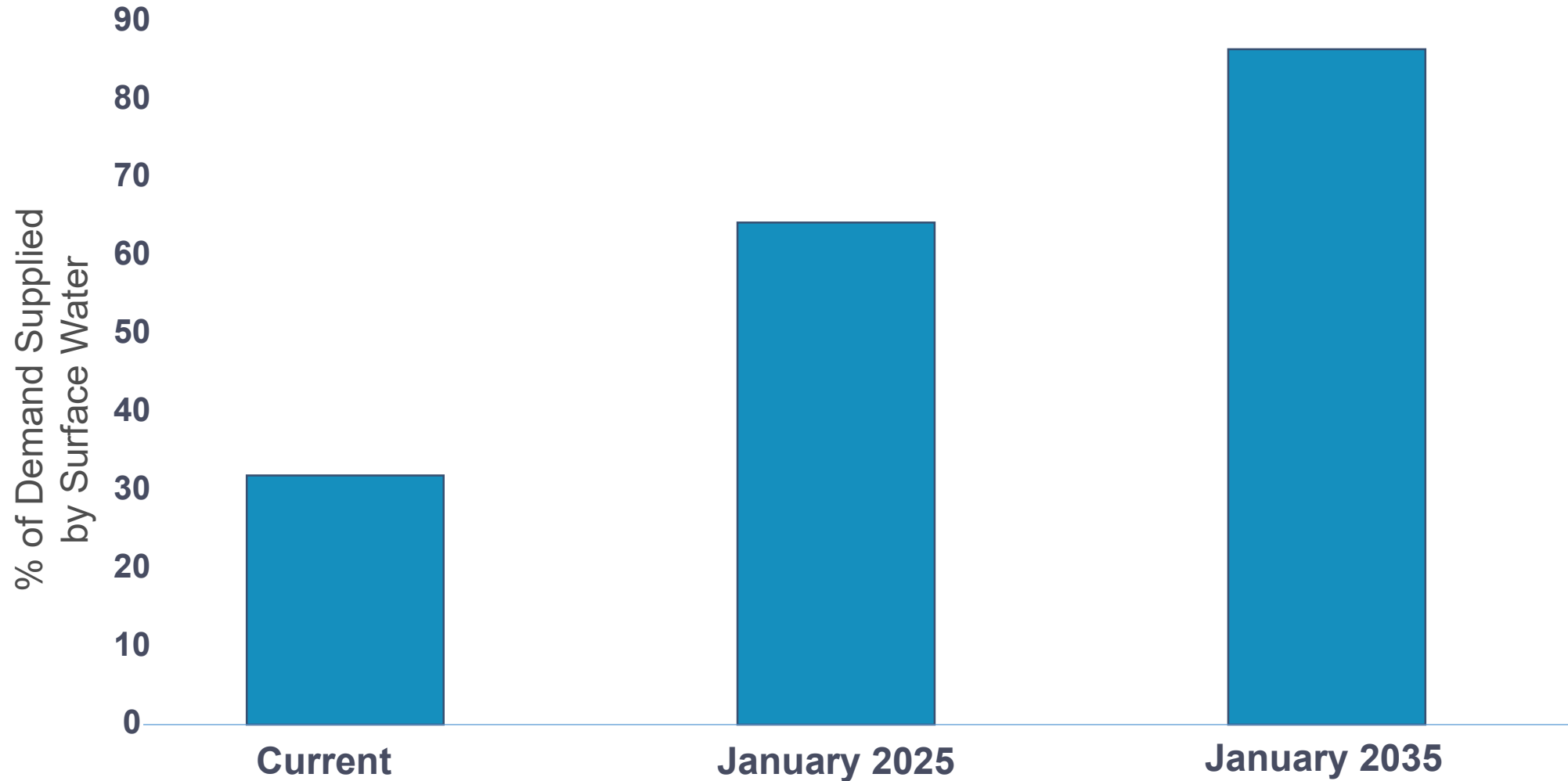
2 Early Work Package 6

3 Status

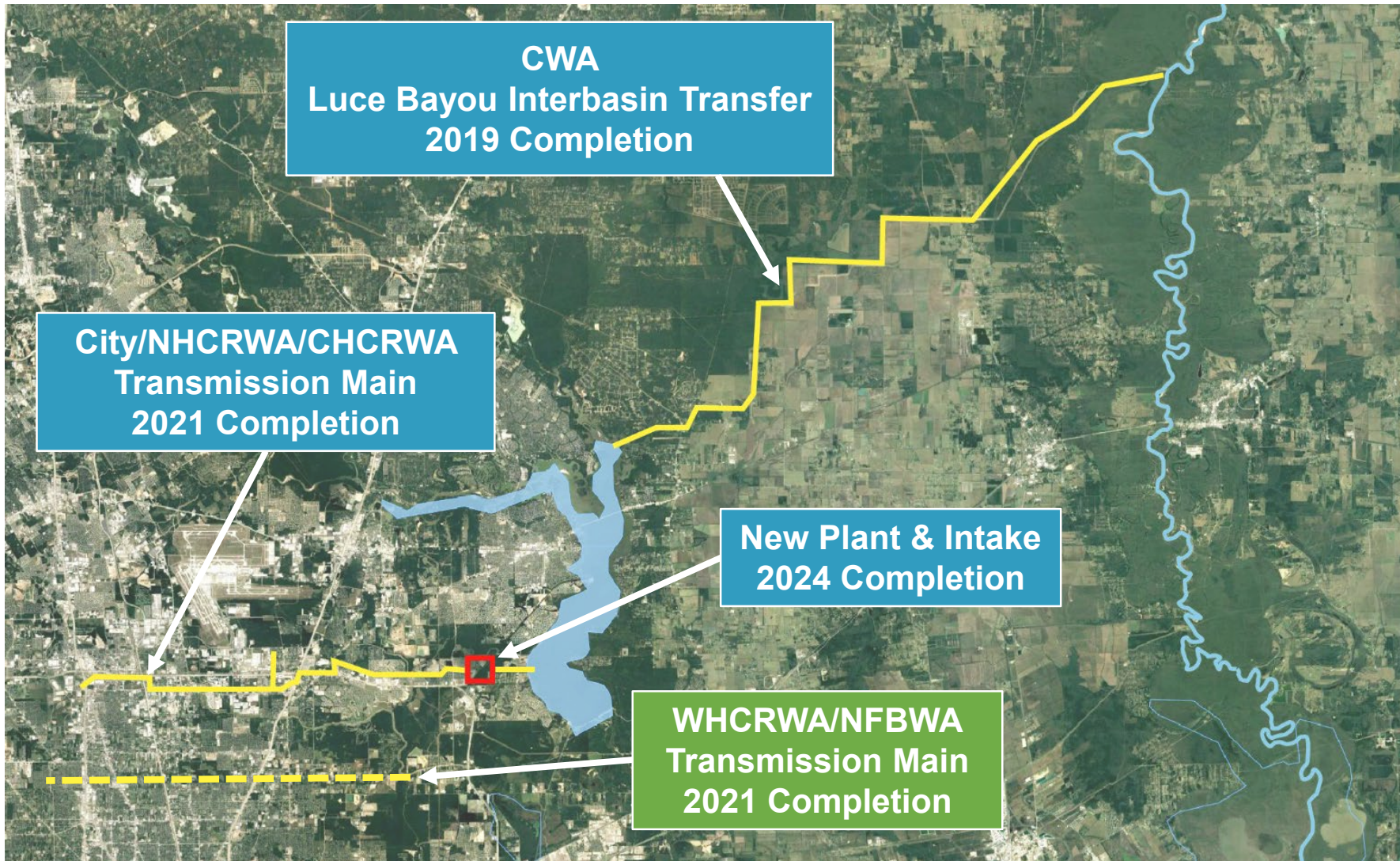
4 Requests for Council Action

1 | BACKGROUND

SUBSIDENCE REQUIREMENT



BIG PICTURE PLAN



LEGEND

Project with City participation

Project by others

CONSTRUCTION



Treatment Facilities*

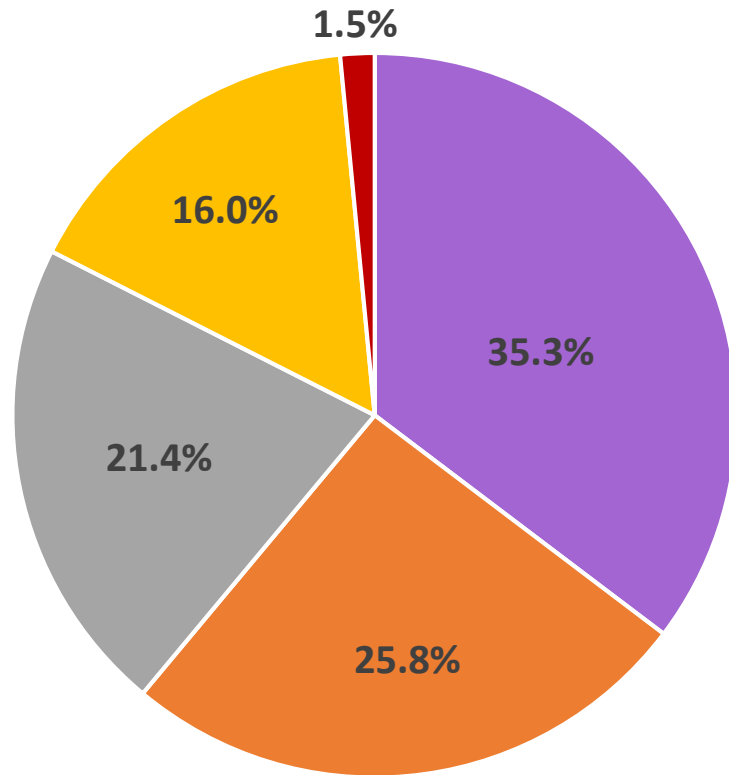


Intake Pump Station*

Raw Water Pipelines*

***Renderings of future facilities at completion of construction**

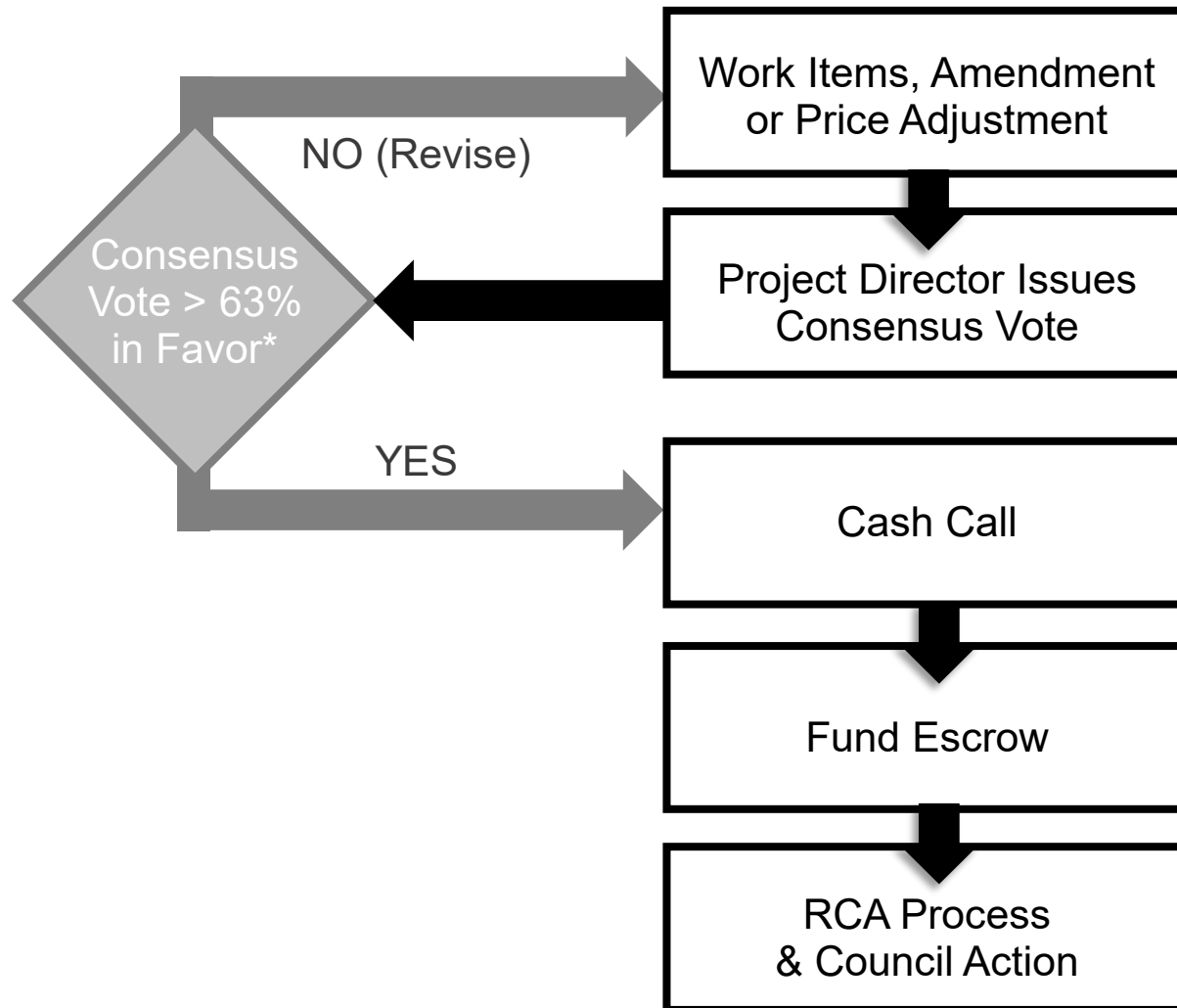
PARTNERSHIP



NEWPP Expansion Cost Share

- North Harris County Regional Water Authority
- West Harris County Regional Water Authority
- North Fort Bend Water Authority
- City of Houston
- Central Harris County Regional Water Authority

AGREEMENT



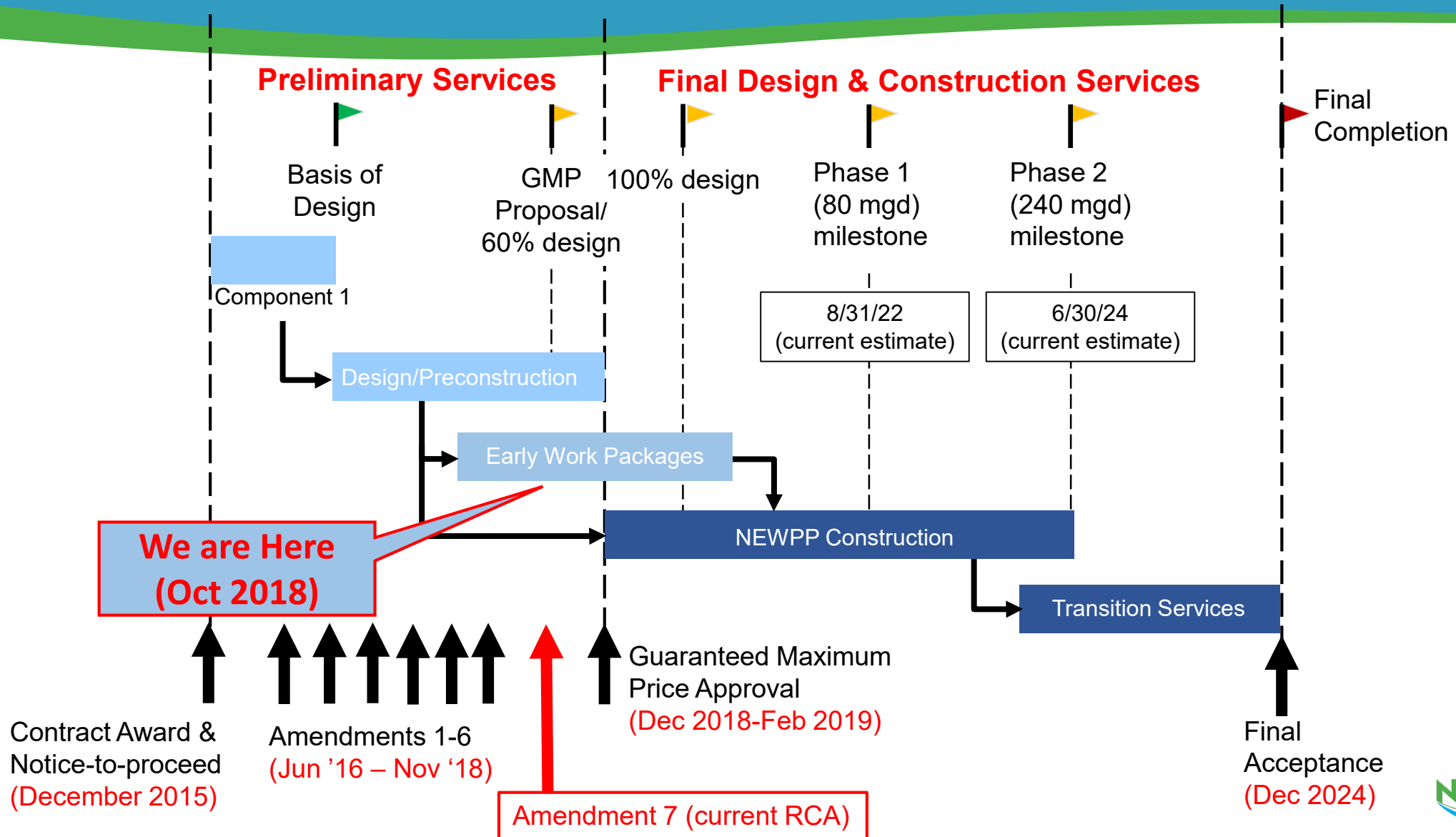
Article VI of the Second Supplement Contracts between each Authority and the City requires Authority consensus for approval of all contract amendments. A weighted vote that exceeds 63% must be achieved to approve each item.

* *Weighted consensus based on the following cost share percentages:*

- NHCRWA – 35%
- WHCRWA – 25.8%
- NFBWA – 21.4%
- Houston – 16%
- CHRWA – 1.5%

2| EARLY WORK PACKAGE 6

SCHEDULE



OVERVIEW



Early Work Package 6 ≈ \$230M

INTAKE PUMP STATION



Renderings of future facilities at completion of construction

- **\$69.9M**
- McCarthy Construction
- Construction of intake, pump station, bridge deck, building, on-shore electrical building, associated piping & mechanical

NORTH PLANT STRUCTURES



Rendering of future facilities at completion of construction

- **\$20.5M**
- Balfour Beatty Construction
- Concrete structures for rapid mix, floc/sed, recycle facilities for Train 2
- Structure on critical path for reaching Phase 1 milestones

EQUIPMENT, PIPING & OTHER ALLOWANCES



Total Allowances - \$96.2M

- **Yard Piping - \$50.9M**
 - 108" Raw Water
 - 120" Finished Water
 - Other Piping Systems
- **Equipment - \$33.0M**
 - Large Valves
 - Vertical Turbine Pumps
 - Ozone Equipment
 - Adjustable Speed Drives
- **Concrete Batch Plant - \$5.0M**
- **Other - \$7.3M**

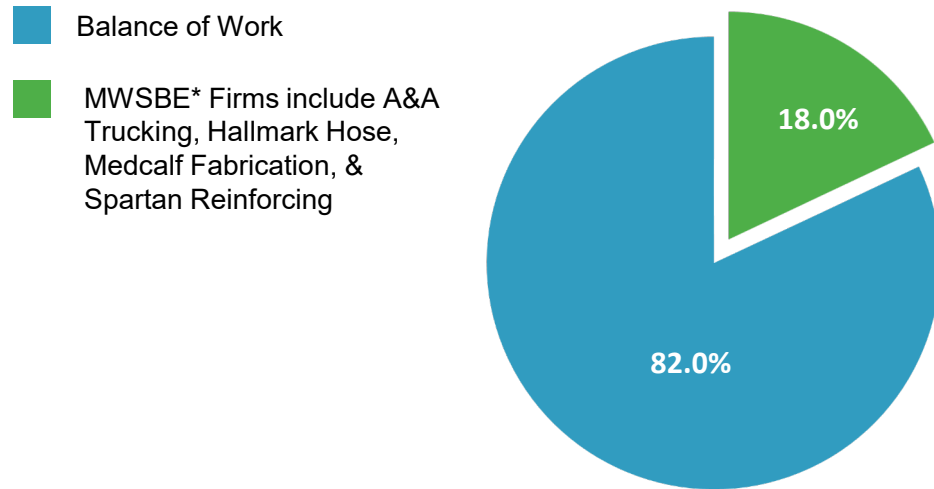


INDIRECT COSTS

Description	Amount
Professional Services	\$15.1M
General Conditions	\$7.4M
Fee	\$10.7M
Bonds	\$4.2M
Contingency	\$6M
TOTAL	\$43.4M

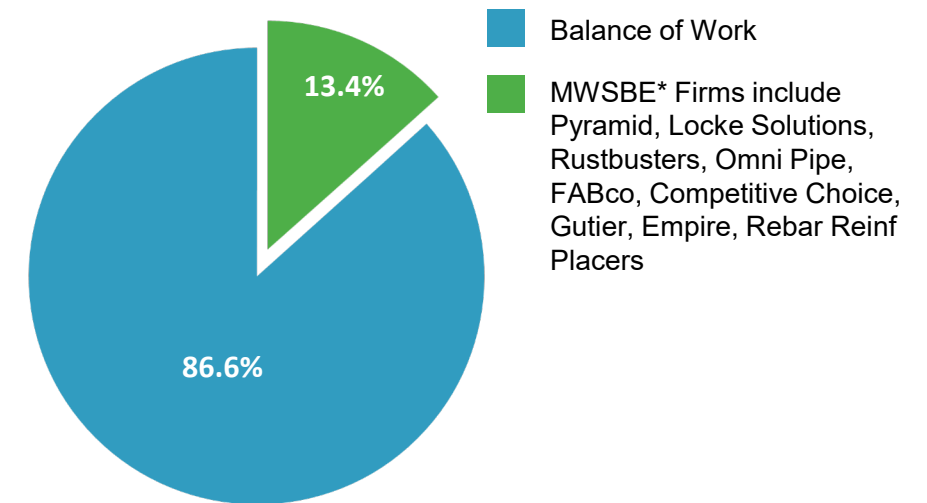
MWSBE PARTICIPATION EARLY WORK PACKAGE 6

**MWSBE Participation for North Plant
Balfour Beatty**
\$3.7M of \$20.5M direct construction cost



*Capacity Study indicated 18% participation achievable

**MWSBE Participation for Intake Pump Station
McCarthy Construction**
\$9.4M of \$70.0M direct construction cost



*Capacity Study indicated 12% participation achievable

3 | STATUS

EARLY WORK PACKAGE (EWP) OVERVIEW

EWP 2A – Phase 1 Filter/Transfer Pump Station Structures

\$45.5M - McCarthy Construction

Project Description

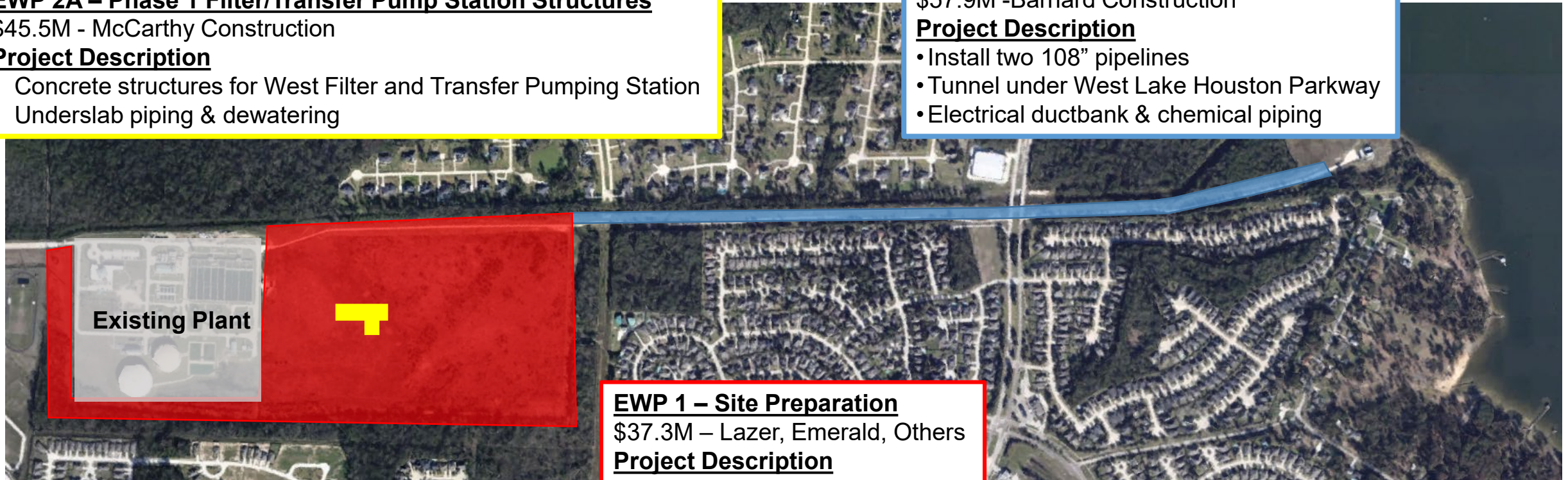
- Concrete structures for West Filter and Transfer Pumping Station
- Underslab piping & dewatering

EWP 4 – Raw Water Pipelines

\$57.9M - Barnard Construction

Project Description

- Install two 108" pipelines
- Tunnel under West Lake Houston Parkway
- Electrical ductbank & chemical piping



EWP 1 – Site Preparation

\$37.3M – Lazer, Emerald, Others

Project Description

- Clear and grub 90 acre site
- Stormwater management
- Roads, trailers, fence
- Mass excavation

EWP 1 – SITE PREP



Anticipated completion – Spring 2019, on budget

EWP 2A – PHASE 1 FILTER + TRANSFER PUMP STATION STRUCTURES



Night-time Concrete Pour

Foundation for Transfer Pump Station



Anticipated completion – Spring 2020, on budget

EWP 4 – RAW WATER PIPELINES



Tunneling under West Lake Houston Parkway is ongoing

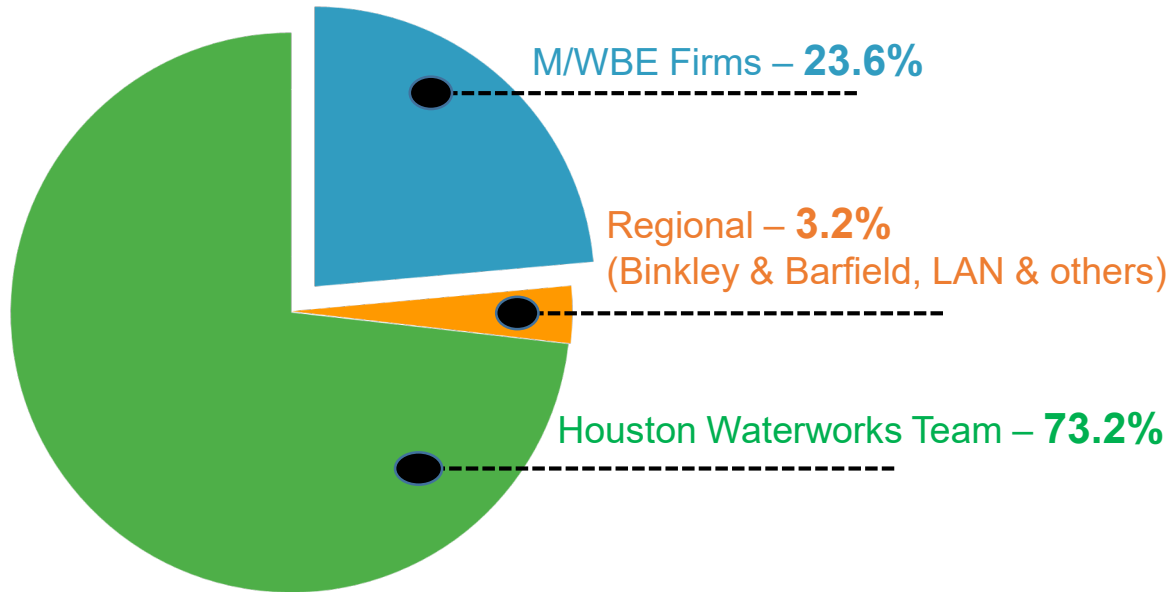
108" raw water pipes are being installed



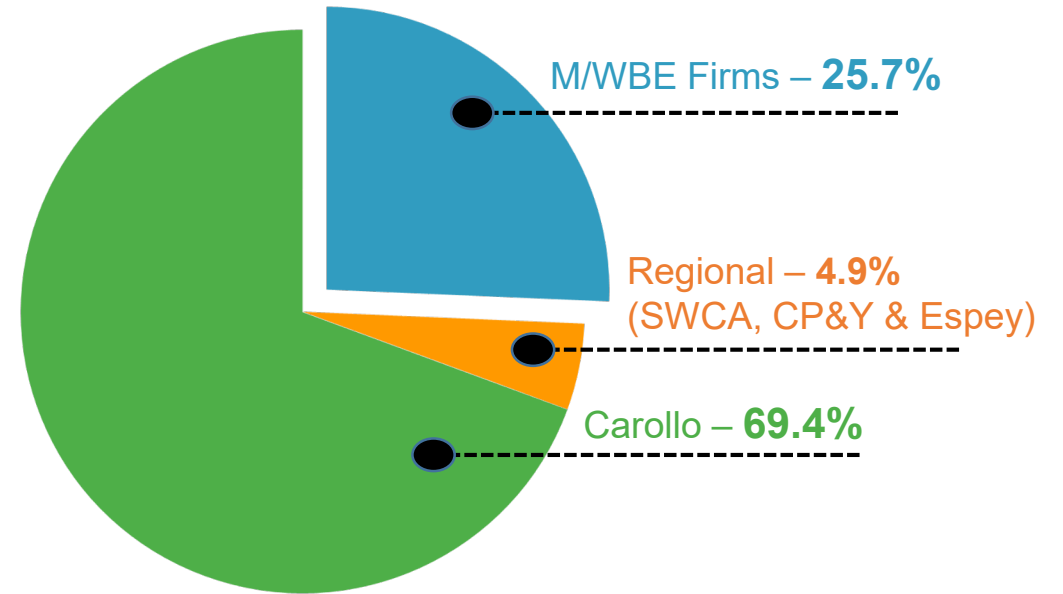
Anticipated completion – Spring 2020, on budget

OVERALL M/WBE PARTICIPATION

Design-Builder Subconsultant Participation



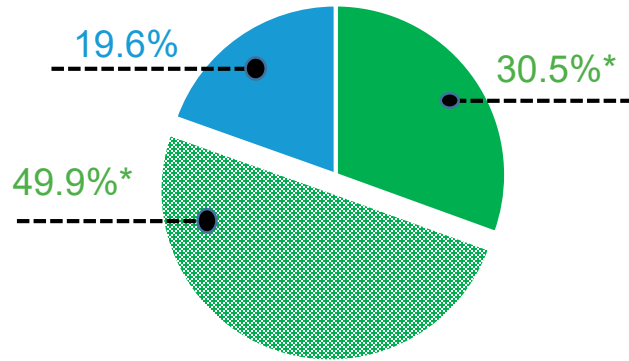
Project Advisor/Technical Consultant Subconsultant Participation



As of October 2018

OVERALL MWSBE PARTICIPATION

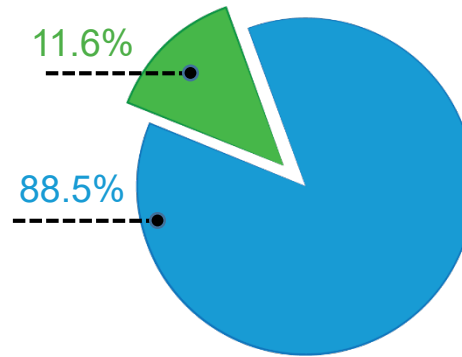
MWSBE Participation for EWP 1
\$13.8M of \$17.2M
direct construction cost



- Balance of Work - HWT
- M/WBE Firms include Landtech, Fence Master, Lazer and Emerald

*80.4% Commitment of which 49.9% paid through Oct 2018 & 30.5% remaining to be paid

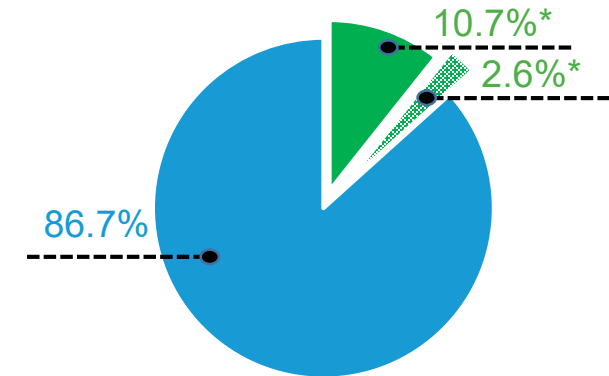
MWSBE Participation for EWP 2A
\$3.8M of \$35.5M
direct construction cost



- Balance of Work - McCarthy
- M/WBE Firms include Rebar Reinforcement Placers, Cohen Industrial Supply, and C&B Waterworks, Inc.

As of October 2018

MWSBE Participation for EWP 4
\$4.3M of \$32.2M
direct construction cost



- Balance of Work - Barnard
- M/WBE Firms include Republic Traffic Safety, J. Simmons, Fierro Group, Z Logistics, M&D Foundation, AGS Consultants, All Steel

*13.3% Commitment of which 2.6% paid through Oct 2018 & 10.7% remaining to be paid

COMMUNITY OUTREACH

Website: greaterhoustonwater.com

Hotline: 281-520-3777

Public Meetings:

October 25, 2017

November 15, 2017

May 1, 2018

September 4, 2018

January 2019 - TBA

Quarterly public meetings

Construction notifications distributed

Over 75 contractor outreach events

4| REQUESTS FOR COUNCIL ACTION

RECENT & UPCOMING REQUESTS FOR COUNCIL ACTION

Approval Action	Date	Amount
Original Appropriation	December 9, 2015	\$3.3M
Amendments #1 - #3	Dec 2016 – May 2017	\$84.3M
Amendment #4 – EWP 1	December 19, 2017	\$37.4M
Amendment #5 – EWP 4	February 28, 2018	\$57.9M
Amendment #6 – EWP 2A	April 18, 2018	\$45.5M
Legal Amendment	July 25, 2018	\$154K
Amendment #7 – EWP 6	November 2018	\$230M
Guaranteed Maximum Price Amendment	Late 2018/ Early 2019	TBD
Project Advisor/Technical Consultant Amendment		

QUESTIONS?

greaterhoustonwater.com