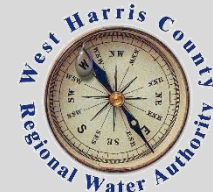


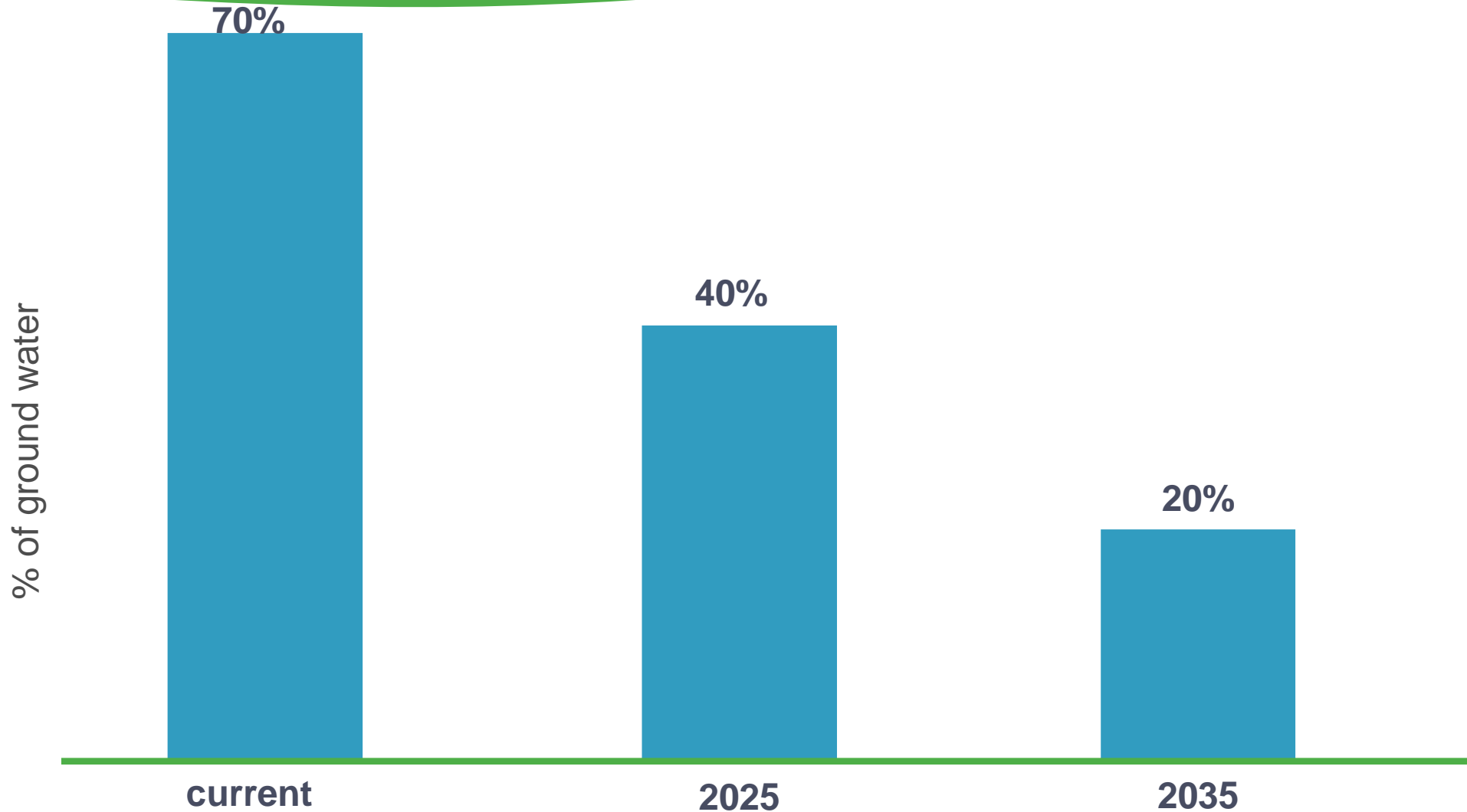


Northeast Water Purification Plant Expansion (Update)

Transportation, Technology & Infrastructure Committee
November 4, 2021

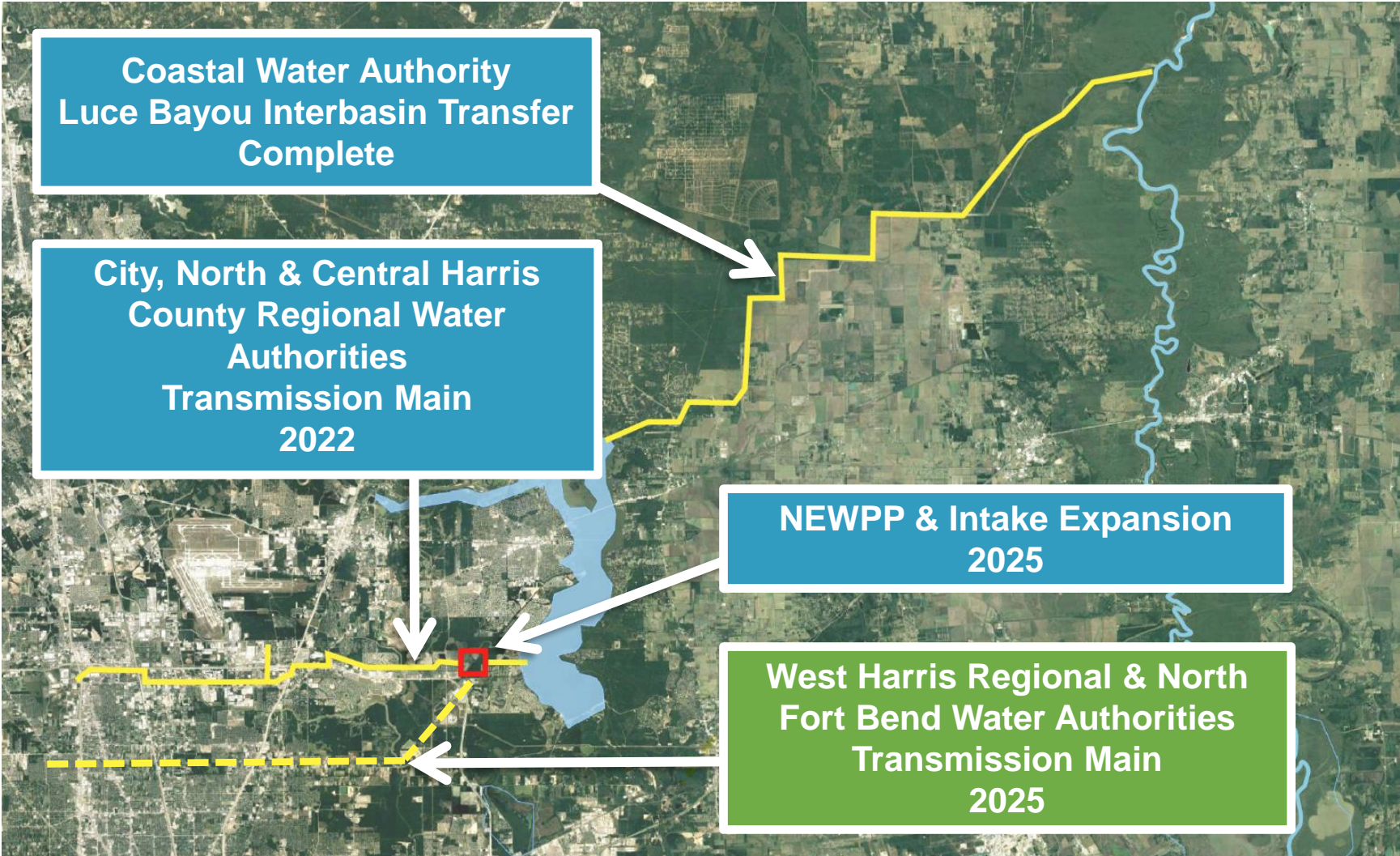


MAXIMUM GROUNDWATER USE



this requirement pertains to the Area 3 of the Harris Galveston Subsidence District and Area A of the Fort Bend Subsidence District

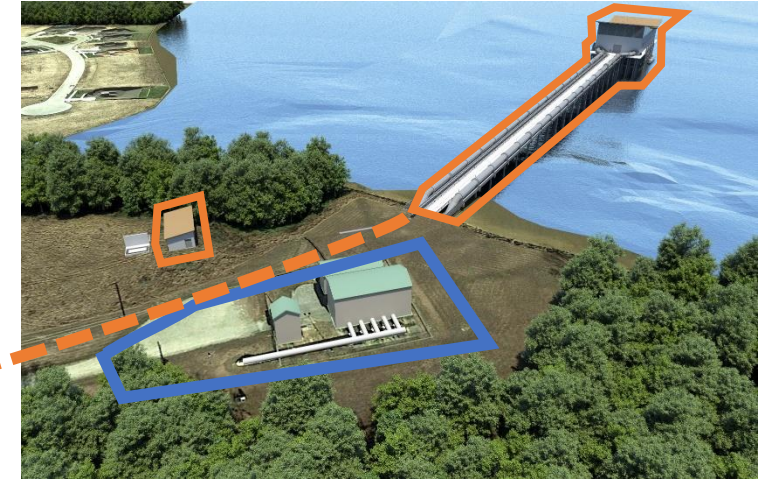
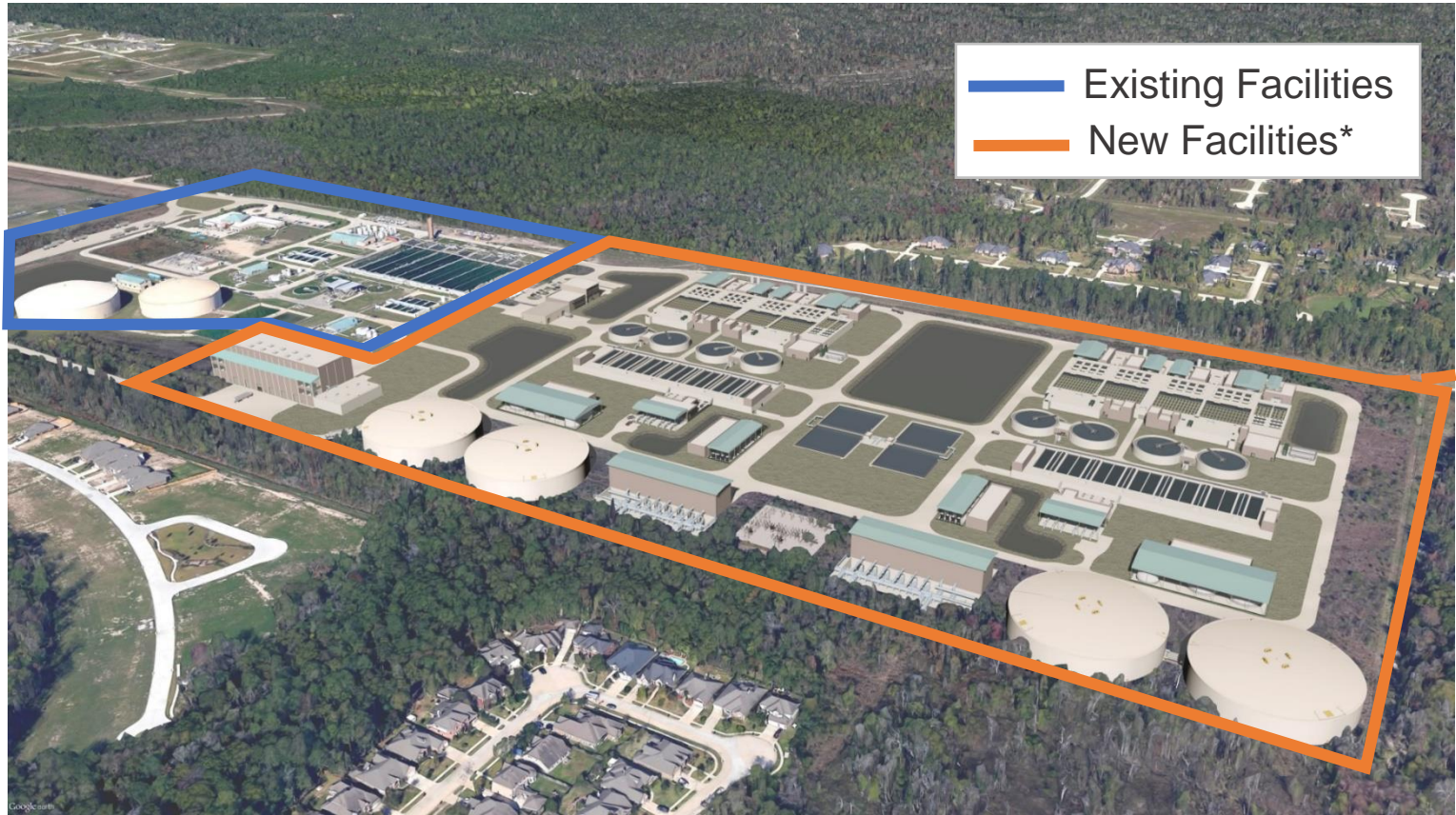
INTEGRATED SOLUTION



LEGEND

- projects with city participation
- project by others

NORTHEAST WATER PURIFICATION PLANT



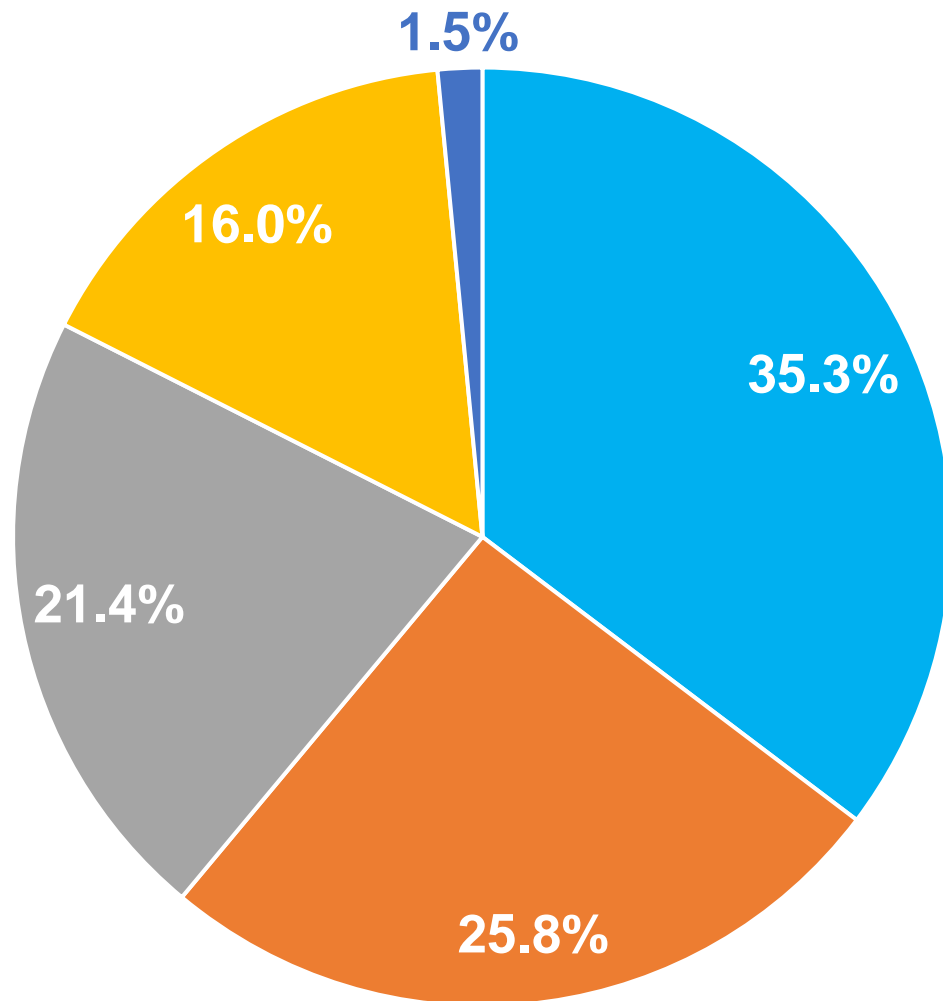
Intake Pump Station

Raw Water Pipelines*

Treatment Facilities

* new facilities shown are renderings of the completed project

PLANT COST & CAPACITY PARTNERS



- 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

VIDEO OF NORTHEAST PURIFICATION PLANT EXPANSION

GUARANTEED MAXIMUM PRICE (GMP)

AS APPROVED BY COUNCIL JULY 2019

GUARANTEED MAXIMUM PRICE (GMP)

- Progressive Design-Build Method of Delivery
- Single Entity Responsible for Design and Construction
- City Contracted with Houston Waterworks Team (HWT) in December 2015
- Amendment 8 Approved by Council in July 2019
 - Established GMP and Scheduled three Appropriations including Dollar amounts
 - First appropriation was part of Amendment 8
 - Two Scheduled Additional appropriations in December 2020 and December 2021
 - First Scheduled Additional appropriation was in December 2020
- Upcoming is the second of the scheduled additional appropriations

AS APPROVED BY COUNCIL JULY 2019

KEY PROVISIONS OF DESIGN-BUILD GMP

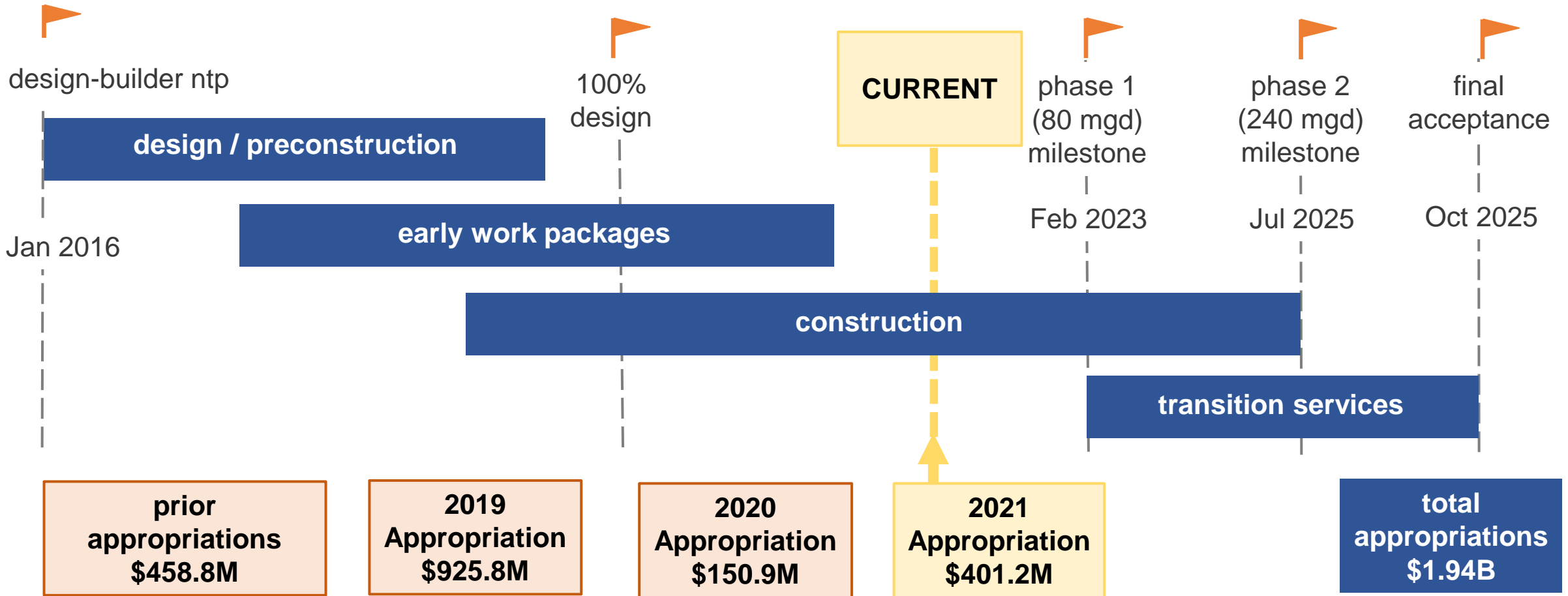
- plant expansion construction
- permitting
- construction supervision
- material testing / quality control
- inspection
- integration
- plant start-up
- final acceptance

GMP PRICE BREAKDOWN

task	Amount
Design ⁽¹⁾	\$174,225,383
construction ⁽¹⁾	\$1,120,085,461
construction management ⁽¹⁾	\$108,685,635
inspection / testing ⁽¹⁾	\$49,193,630
major equipment	\$83,843,499
design-build fee / contingency	\$180,049,719
performance bonds / payment bonds	\$49,449,507
guaranteed max price total	\$1,765,532,834

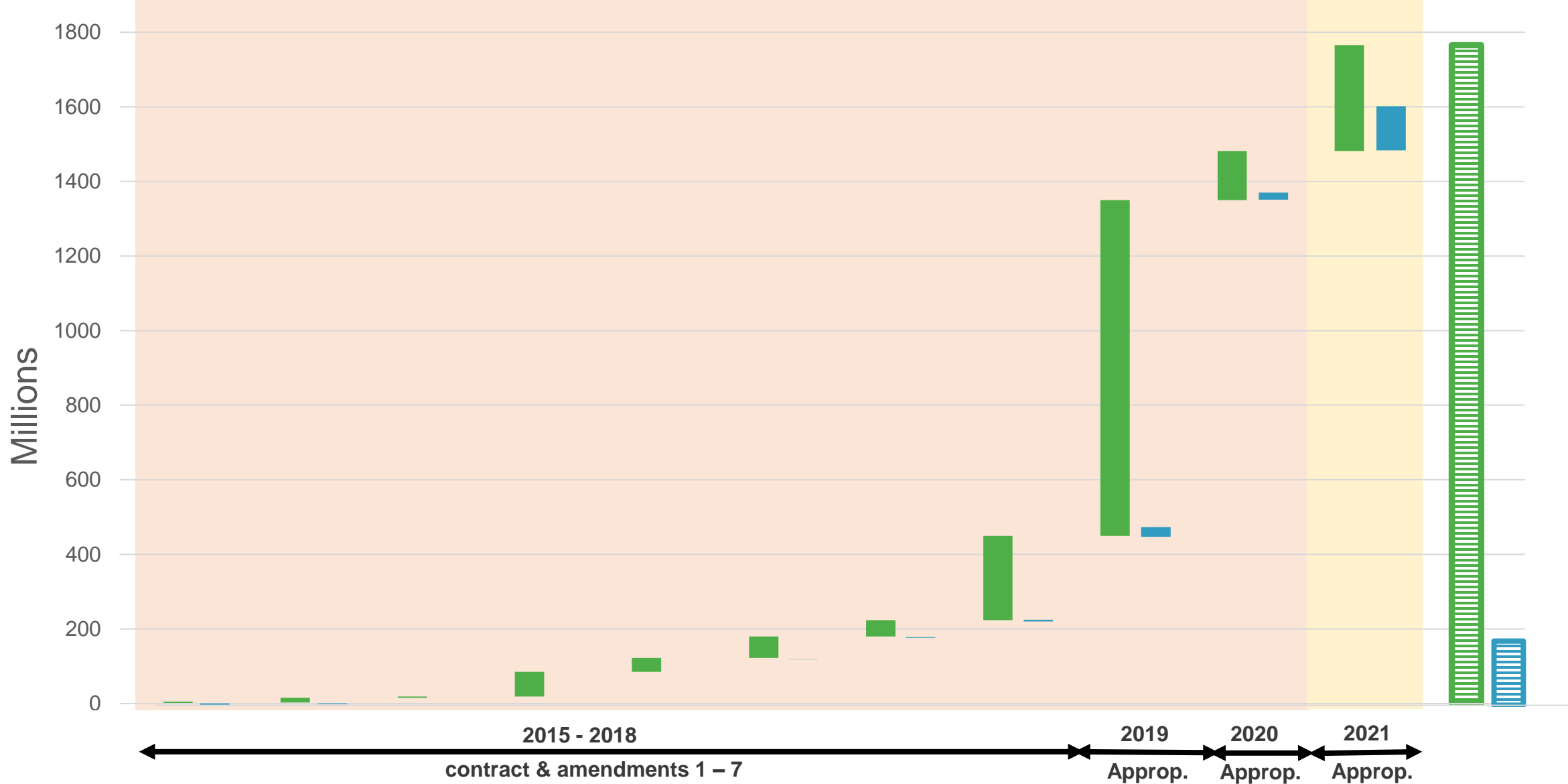
⁽¹⁾ eligible for MWSBE participation (\$1.452B)

TIMELINE



	Dec 2015	Nov 2016	Mar 2017	May 2017	Dec 2017	Feb 2018	Apr 2018	Dec 2018	July 2019	Dec 2020	Current	TOTAL
contract & amendment amount	\$2.8M	\$13.0M	\$3.0M	\$66.3M	\$37.3M	\$57.5M	\$43.8M	\$226.0M	\$900.0M	\$132.1M	\$283.7M	\$1,765.5M
city salary recovery & management reserve	\$0.4M	\$2.0M	\$0	\$0	\$0	\$0.5M	\$1.7M	\$4.5M	\$25.8M	\$18.8M	\$117.4M	\$171.1M

PROJECT APPROPRIATIONS



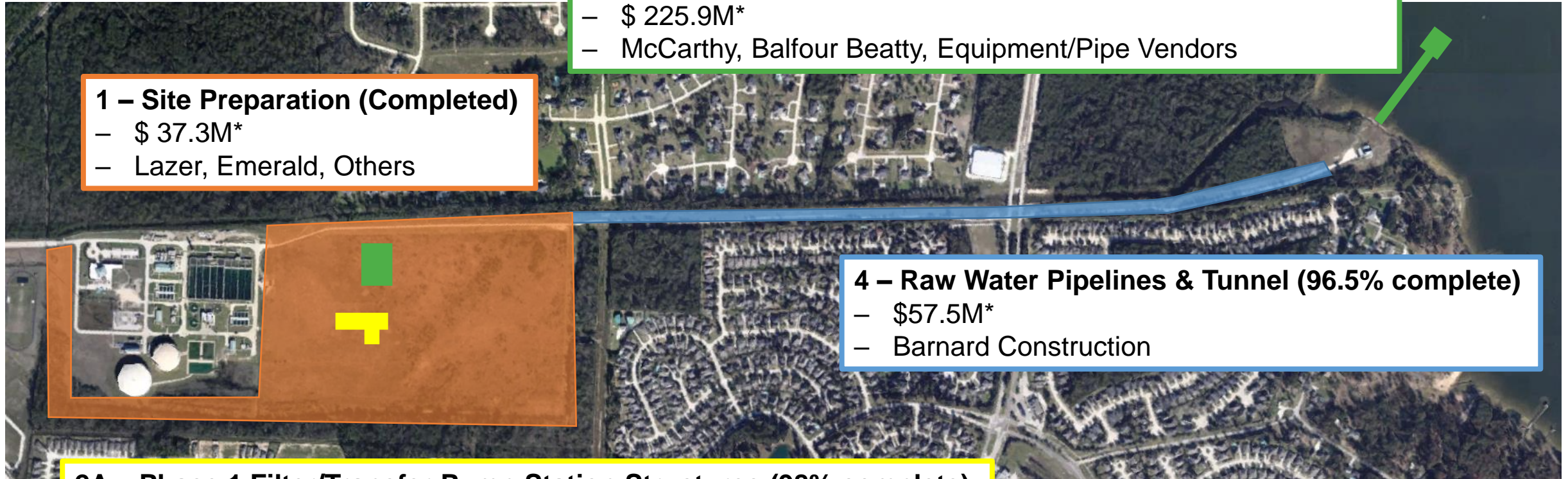
SUMMARY

approval action		contract amount	management reserve	city salary recovery	appropriation ¹
previous	contract & amendments 1-7	\$449.7M	\$6.7M	\$2.4M	\$458.8M
previous	8 th Amendment – 2019 Appropriation	\$900.0M	\$23.3M	\$2.5M	\$925.8M
previous	First Scheduled Additional Appropriation to 8 th Amendment to the Design-Build Services Contract – 2020 Appropriation	\$132.1M	\$16.3M	\$2.6M	\$150.9M
current	Second Scheduled Additional Appropriation to 8 th Amendment to the Design –Build Services Contract – 2021 Appropriation	\$283.7M	\$114.8M	\$2.6M	\$401.1M
total		\$1,765.5M	\$161.1M	\$10.0M	\$1,936.6M

1. appropriation includes management reserve & city salary recovery

PROGRESS TO DATE

EARLY WORK PACKAGES



6 – Intake Pump Station/Pretreatment/Allowances (89.5% complete)

- \$ 225.9M*
- McCarthy, Balfour Beatty, Equipment/Pipe Vendors

1 – Site Preparation (Completed)

- \$ 37.3M*
- Lazer, Emerald, Others

4 – Raw Water Pipelines & Tunnel (96.5% complete)

- \$57.5M*
- Barnard Construction

2A – Phase 1 Filter/Transfer Pump Station Structures (98% complete)

- \$43.8M*
- McCarthy Construction

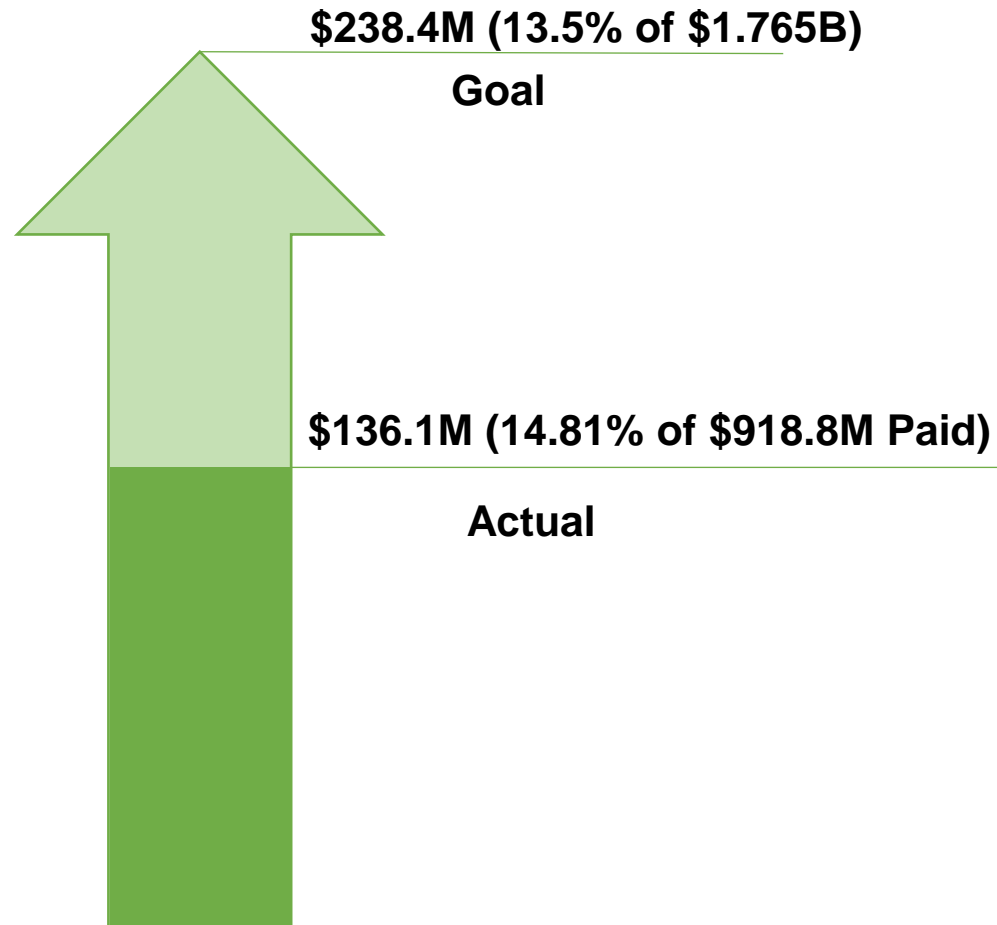
*Guaranteed Maximum Price does not include reserve & admin costs

PROJECT PROGRESS TO DATE

	planned	current	variance
progress	54.68%	55.36%	0.68% ahead
approved invoices	\$965.13M	\$977.11M	\$11.98M ahead
schedule*	Feb 9, 2023	Feb 25, 2023	17 days behind

*schedule for Phase I (80 mgd) milestone

MWSBE PROGRESS TO DATE



On plan to meet MWSBE goal

Total Project Goal
\$238.4M
66 Firms

MWSBE Actual Participation
\$136.1M Paid
131 Firms
257 Contracts

1000+ Jobs created

COST SHARING

approval action		appropriation ¹	City of Houston (16% + oversized) ²	water authorities (84%)
previous	contract & amendments 1-7	\$458.8M	\$99.3M	\$359.5M
previous	8 th Amendment – 2019 Appropriation	\$925.8M	\$253.0M	\$672.8M
previous	First Scheduled Additional Appropriation to 8 th Amendment to the Design-Build Services Contract – 2020 Appropriation	\$150.9M	\$2.6M	\$148.3M
current	Second Scheduled Additional Appropriation to 8 th Amendment to the Design –Build Services Contract – 2021 Appropriation	\$401.1M	\$81.4M	\$319.8M
total		\$1,936.6M ³	\$436.3M	\$1,500.3M

1.appropriation includes management reserve & city salary recovery

2.city is funding 100% of oversized facilities (\$75.5M) that will allow for future beneficial use of entirety of water rights in San Jacinto & Trinity River

3.total appropriations are unchanged since the Council approval in July 2019

UPCOMING COUNCIL ACTION

when	what	who	appropriation
Nov – Dec 2021	Second Scheduled Additional Appropriation to 8 th Amendment to the Design –Build Services Contract – 2021 Appropriation	Houston Waterworks Team	\$401.2m (city share \$81.4m)
Q1/Q2 – 2022	Chemical procurement contracts	Various vendors	\$0 (included in the city-controlled management reserve)

QUESTIONS?