



# **O.N. Stevens Water Treatment Plant Maintenance Building**



Council Presentation  
October 31, 2017



# ONSWTP Raw Water Influent Cost



Items	Engineer's Estimate (\$)
Existing raw water infrastructure demolition	\$860,000
Site Piping and electrical work	\$5,730,000
Raw water metering structure	\$1,100,000
Raw water junction structure	\$1,160,000
CL2 and LAS pumped diffusion flash mix and splitter structure	\$1,645,000
Plant 1 pump diffusion flash mix and metering vault	\$1,080,000
Plant 2 pump diffusion flash mix and metering vault	\$1,080,000
Mobilization (5%)	\$633,000
OH&P (15%)	\$1,900,000
Contingency (20%)	\$2,200,000
<b>Total (Estimate)</b>	<b>\$17,388,000</b>

\* Demolition of Maintenance building is included with estimation \$45,000



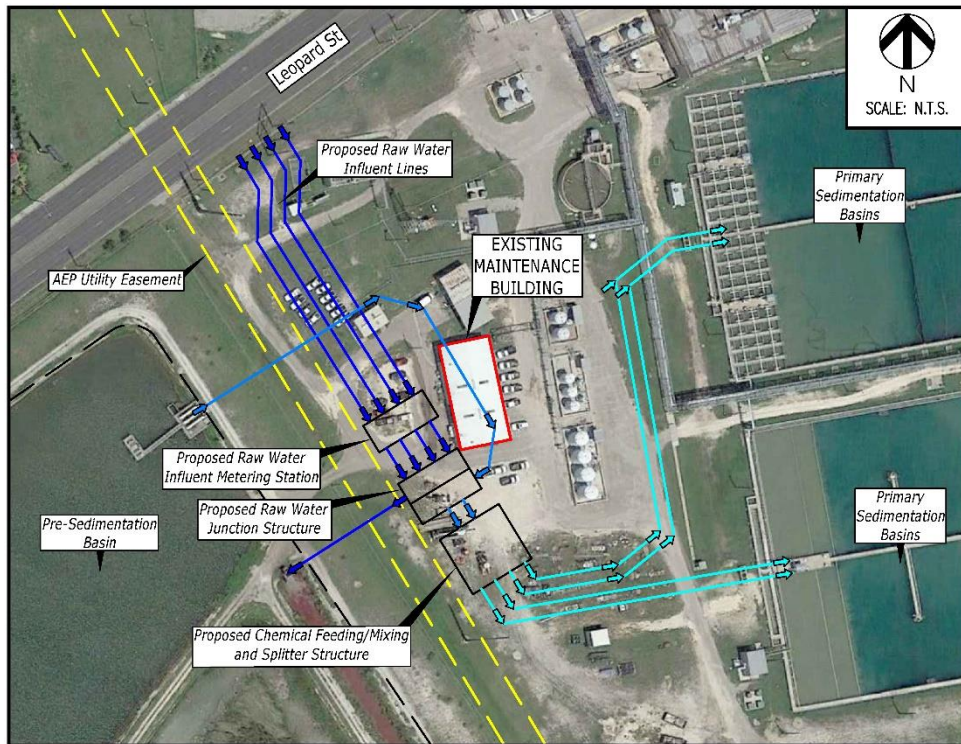
# ONSWTP Chemical Feed Cost Analysis



Items	Engineer's Estimate (\$)
Existing chemical feed infrastructure demolition	\$32,500
Site Piping and electrical work	\$4,016,000
West chemical storage	\$1,653,000
East chemical storage	\$592,000
Plant 1 rapid mix and sedimentation	\$465,000
Plant 2 rapid mix and sedimentation	\$465,000
Cl <sub>2</sub> and LAS flash mix pumped diffusion	\$230,000
Mobilization (5%)	\$373,000
OH&P (15%)	\$1,190,000
Contingency (20%)	\$1,490,000
<b>Total (Estimate)</b>	<b>\$10,506,500</b>



# Why this project is needed



- Blocks pipe routing for ONSWTP Raw Water Capacity/Quality Improvements projects
- In the midst of chemical feed tanks and near chlorine delivery area (TCEQ and Safety issues)



# Existing Maintenance Facility

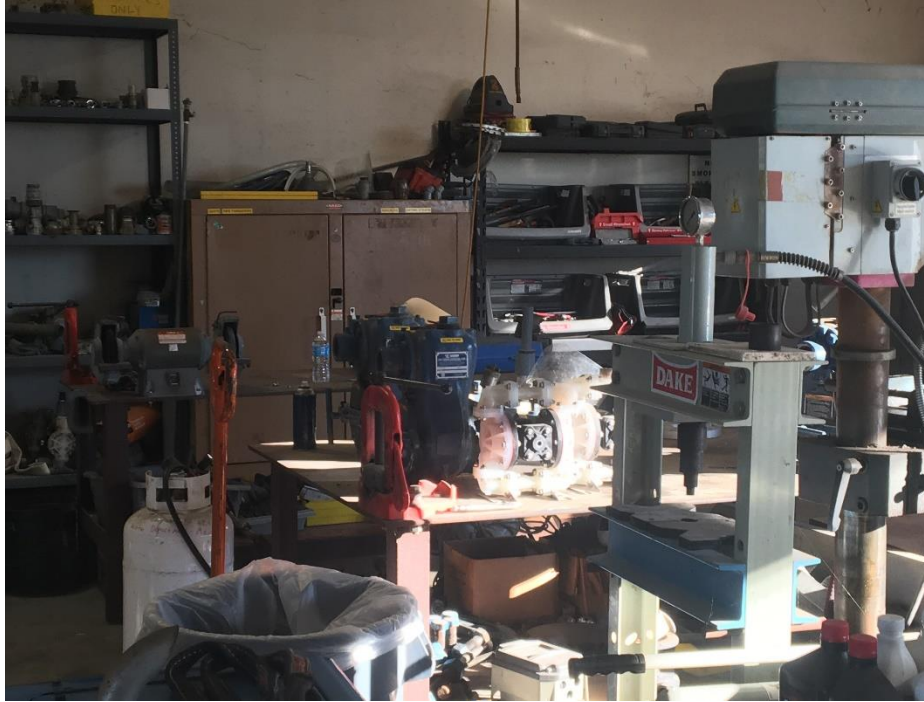


- A modified shell installed in 1990's
- No lift equipment for large repairs/maintenance
- Inadequate work space for 20 FTEs





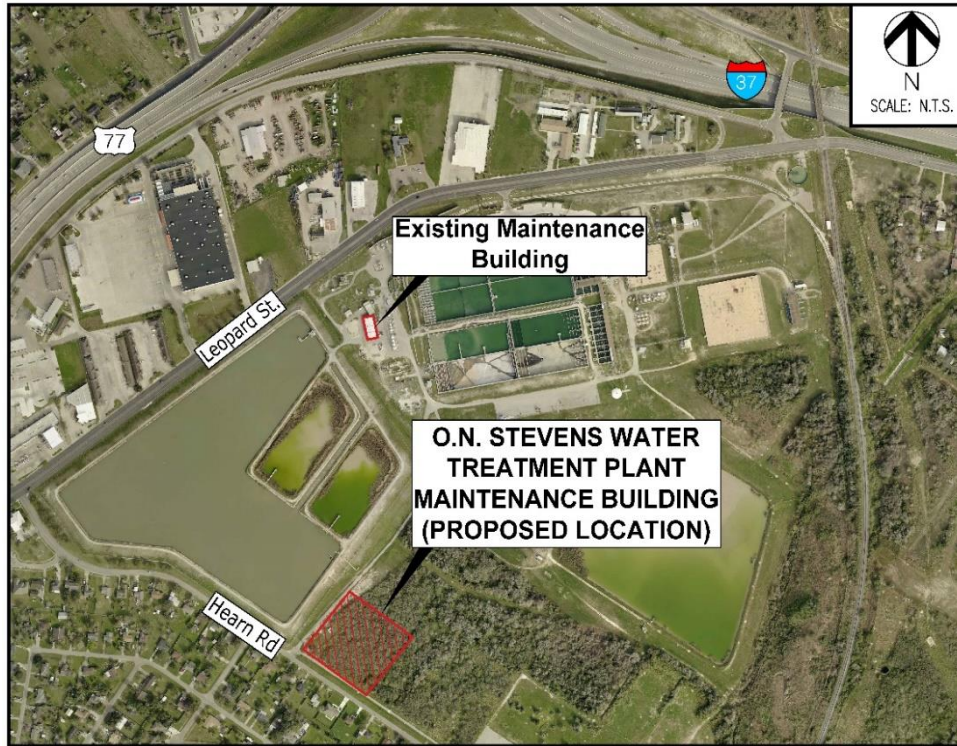
## Existing Maintenance Facility (Cont.)



- Unable to carry out repairs and maintenance of large parts
- External contactors for moving heavy equipment



# Project Highlights



## New maintenance building

- Pre-engineered metal building (8,400 SF), one-story
- 20 staff working area
- Two-ton bridge crane
- Three workshops
- Part storage/warehouse
- Concrete foundation
- Windstorm certification
- Emergency vehicle access
- Site work



# Construction Bid Cost



Items	Cost (\$)	Unit price (\$/SF)
Mobilization (bonds, insurance, traffic control, Storm water pollution protection, etc.)	\$99,155	\$11.80
Site improvements	\$304,650	\$36.27
Water line improvements	\$17,676	\$2.10
Wastewater line improvements	\$23,233	\$2.77
Gas line improvements	\$6,915	\$0.82
Electrical conduit for future I.T	\$30,825	\$3.67
Maintenance building	\$1,104,936	\$131.54
Allowance	\$75,000	\$8.93
<b>Total</b>	<b>\$1,662,390</b>	<b>\$197.90</b>

- \$175,000 lower than the Engineer's Estimate (OPCC)
- \$75,000 allowance accounts for unexpected conditions, may not be needed.





# Construction Bid



## Reasons for one bid received:

- Existing contractor has cost-saving advantages as already working on site
- Construction market booming

## Re-Bid will result in:

- Mobilization \$125,000
- More expenditures in consulting fee, administrative fees of construction bids, and construction delay

**Recommend: Award to current bidder is in best interest of the City**