



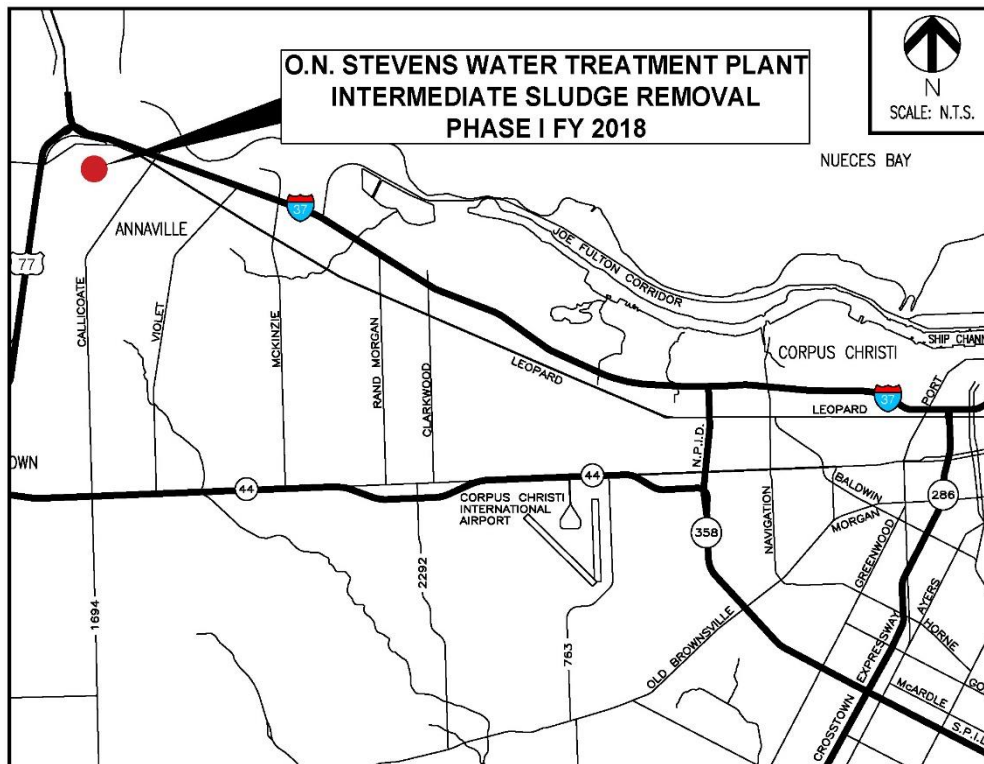
O.N. Stevens Water Treatment Plant Intermediate Sludge Removal Phase 1



**Council Presentation
August 22, 2017**



Project Location





Project Vicinity





Project Scope



The project bid with two base options; Option A and Option B. Both options dredge solids from the ONSWTP lagoon 5, 6 and 7 then haul the sludge residuals to an offsite location as follows:

Option A – Involves dewatering the sludge and hauling the sludge residuals to Cefe Landfill to be mixed with mulch for reuse as Alternate Daily Cover.

Option B – Involves hauling the sludge with or without dewatering for disposal by land application at a site chosen and certified, with TCEQ, by the Bidder.

The project was advertised to be awarded within the available funds of \$3.75 million to maximize the cost efficiencies and maximum benefit for continued operations at ONSWTP.



Beneficial Use of Water Treatment Residuals



DATE	MILESTONE
<i>April 2017</i>	TCEQ received request for a Temporary Authorization (TA) to create Alternate Daily Cover (ADC) by mixing Water Treatment Residuals (WTR) and Mulch.
<i>May 2017</i>	TCEQ granted the Temporary Authorization.
<i>June 2017</i>	Sector 3C started receiving and stockpiling all of the WTR, nothing goes anymore to the working face.
<i>Aug 2017</i>	Finalizing construction and reporting requirements to start the production of Alternate Daily Cover.

- **Daily Cover:**

- Daily Cover requirements: 139 CY
- Annual Daily Cover Requirements: 36,140 CY (for 260 days only)
- Annual Estimated Production of ADC: 155,268 CY

- **Other benefits-** "Top Soil" (fist 12" of native soil):

- One goal is to use on-site native soils as "Top Soil" on key projects: Intermediate Cover for 4 sectors (approximately 20 acres) requiring approximately 16, 133 CY of "Top Soil".
- The 2017 estimated cost for trucking "Top Soil" to Cefe is \$20/CY.



Bid Evaluation Factors



	Option A (reuse as ADC)	Option B Land Application
1. Actual Bid Construction Cost	\$2,640,640.12	\$2,753,326.61
2. Indirect costs and benefits		
Extended construction duration based on contractor proposed project duration	\$39,750	\$42,400
Water loss	\$14,462	\$3,535
Energy consumption	\$35,820	No Bid
Landfill cost benefit to reduce requirement for clean fill in lieu of reuse of sludge residual/mulch as Alternate Daily Cover	(\$72,346)	N/A
Street impacts with truck hauling	\$9,900	\$19,440
Indirect Cost Comparison	\$27,586	\$65,375



Project Schedule



2017							2018							
Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Bid & Award			Construction											

Project Construction Estimate: 365 Days = 1 Year

Schedule reflects City Council construction award in August 2017 with completion by September 2018