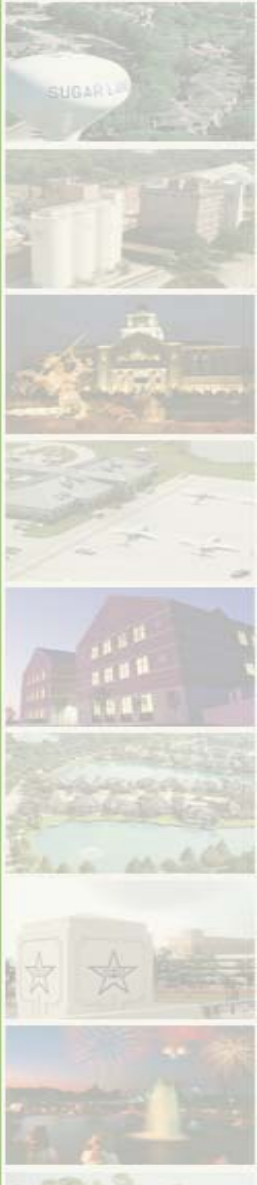


Agenda

- **Background**
- **Implementation**
- **Funding & Reimbursement**
- **Recommendation**
- **Questions**









Background – What is a Tiger Dam







- Water Filled Bladder
- Multiple Brands – Tiger Dam, Aqua Dam, Portadam, etc
- Utilized to divert or contain floodwaters
- The “Sandbag Replacement Option”



Background – What is a Tiger Dam

- 1 Tiger Dam replaces 500 sandbags
- 19" Tall, 50' long
- Life span of 17-20 years vs 8-12 months for sandbags
- Takes 4-6 minutes to fill
- Can be deployed as single dam or stacked to produce increased height

Single Tiger Dam 	Height	1' 6.5" (18.5")	
	Base Width	1' 9" (21")	
2-1 Configuration 	Height	2' 10" (34")	
	Base Width	3' 7" (43")	

3-2-1 Configuration 	Height	4' 1 " (49")	
	Base Width	5' 9" (69")	
4-3-2-1 Configuration 	Height	5' 4" (64")	
	Base Width	7' 11" (95")	



Background – Benefits

- **Reduces time to deploy**
- **Reduces time to clean-up**
- **Eliminates waste**



Implementation

- **Areas to Protect based on Engineering Analysis of Brazos River at 59'**
 - **Ditch “H” Diversion**
 - **Backwater Effects from Ditch H**
 - **SH6 North of 90A (Evacuation Route)**
 - **Backwater Effects from Ditch H & Oyster Creek**
 - **SH6 & University Intersection**
 - **Backwater Effects from Ditch H**



Implementation

- **Areas to Protect based on Engineering Analysis of Brazos River at 59'**
 - Protection would require the need of 100 Tiger Dams/50,000 Sandbags
 - Staff requested assistance from Fort Bend County and State
 - County provided 2 Tiger Dams and 500 Sandbags



Implementation

- **Purchasing**
 - Staff researched types of Dams available
 - Attempted to contact multiple vendors to locate materials
 - Based on availability, location, and quantity this vendor was selected
 - Staff purchased an initial 50 Tiger Dams and then an additional 50 with associated equipment for \$141,450



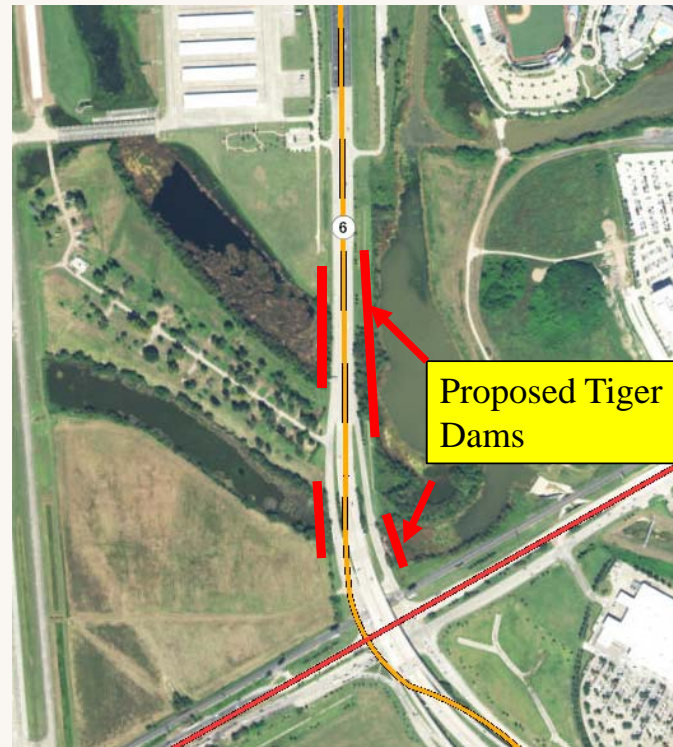
Implementation

- **Ditch H Diversion**
 - Did not implement based on revised river levels
 - Flows from Oyster Creek still entering Ditch H



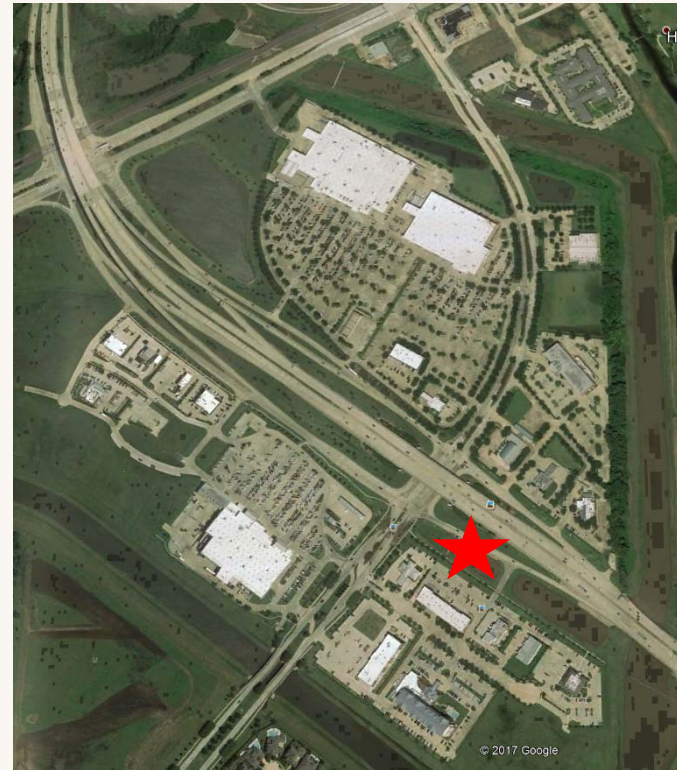
Implementation

- SH6 North of 90A (Evacuation Route)
 - Did not implement dam based on revised river level forecast



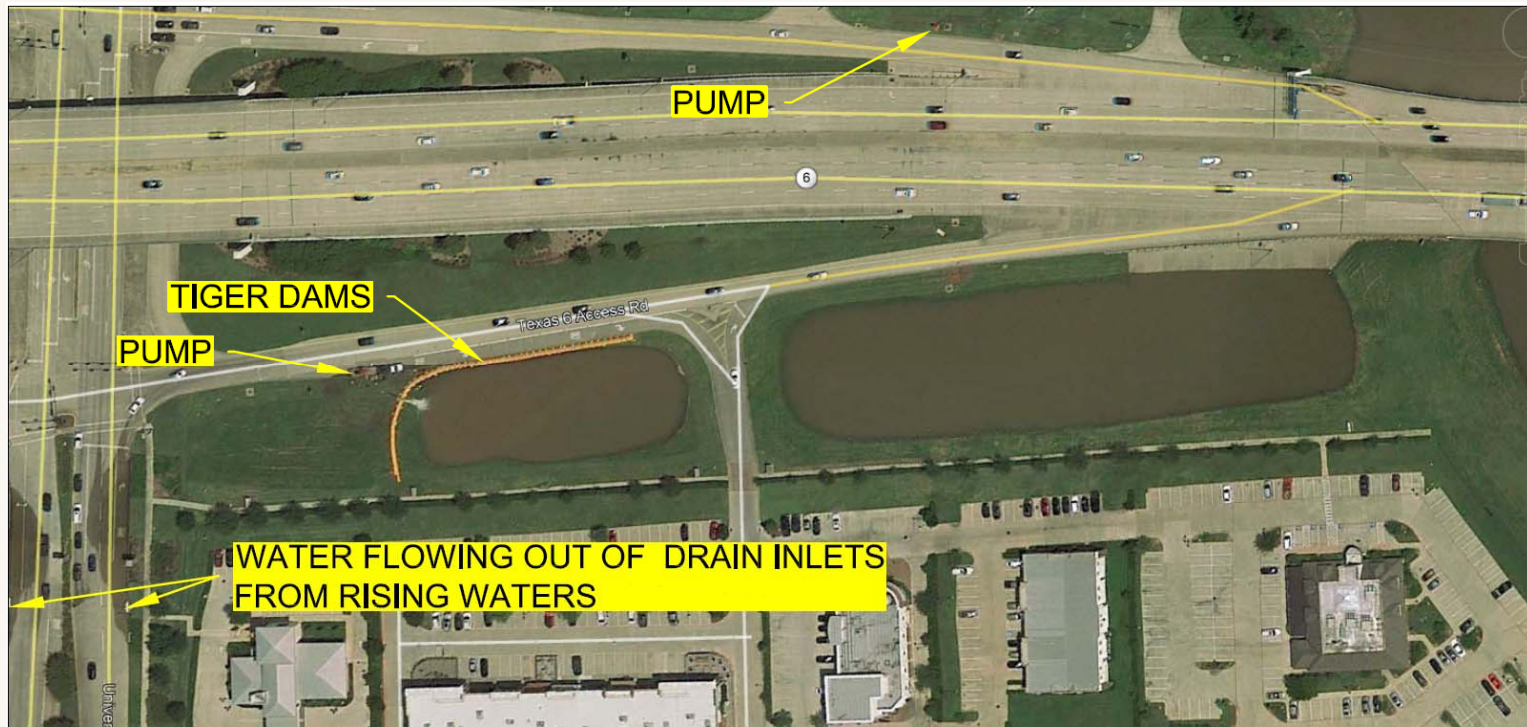
Implementation

- **SH6 & University Intersection**
 - Backwater Effects from Ditch H
 - We did implement this mitigation measure
 - Maintained the Intersection to be passable



Implementation

- SH6 & University Intersection



Implementation

- SH6 & University Intersection



Implementation

- SH6 & University Intersection



Implementation

- **SH6 & University Intersection**
 - Total of 4 hours from setup to completion
 - 12” and 6” Pump to redirect water
 - 18 Tiger Dams
 - Equivalent of 9000 Sandbags
 - Reduced Lanes on University but intersection was kept open
 - No impact to SH6 Feeder Road



Implementation

- **LID 7 Assistance**
 - **Purchased by LID 7**
 - **Delivered Tiger Dams from North Houston**
 - **Provided a light tower for night work**
 - **Provided a fire apparatus to help install the dams**



Funding & Reimbursement

- **Budget Amendment of \$141,450**
- **Reimbursement from FEMA**
 - **Emergency Preparedness**
 - **Typical: 75% reimbursement**
 - **Harvey: 100% reimbursement**
 - **Reimbursement Forms have been submitted**



Recommendation

- **Staff recommends City Council ratify the emergency purchase of Tiger Dams from U.S. Flood Control Corp. in the amount of \$141,450.00 and approval of a budget amendment in the amount of \$141,450.00 in revenue and expenses.**



Questions/Comments

