

# Monthly Progress Report

Reporting Period: September 2023

## Project Information

Project Name	Port Lavaca Living Shoreline Breakwater
City Resolution	R-050922-5
CDBG-MIT Contract	20-087-001-D226
City PM	Jody Weaver
Mott MacDonald PM	Thomas Everett
Mott MacDonald Project Number	507107066
Date	10/13/2023

## Project Milestones

Milestone Description	Date (Actual=A)	Notes
<b>Task 1: Project Kickoff</b>		
Project Kickoff Meeting	6/8/2022 (A)	
Memorandum of Project Understanding	6/21/2022 (A)	
<b>Task 2: Data Collection and Analysis</b>		
Collect available coastal processes data	7/29/2022 (A)	
Collect USACE historical survey data		Not yet started
Collect new bathymetric and topographic data	8/3/2022 (A)	New data collection complete
Collect new geotechnical data	8/4/2023	Field data 6/26 to 29, 2023; lab work expected 8/4/2023
Collect new cultural resources data	8/31/2023	Work initiated; progressing
Collect new habitat data	7/21/2023 (A)	Field work complete 6/12-16 2023; draft report 7/21/2023
Technical memorandum on data collection	10/13/2023 (A)	Complete; as part of 30% report
<b>Task 3: Coastal Analysis, Alts Development, Alt Eval</b>		
Coastal Engineering Analysis	11/4/2022 (A)	Via presentation 11/4/2022
Alternatives Development	11/4/2022 (A)	Via presentation 11/4/2022
Meeting on Alternatives Development	11/4/2022 (A)	Completed in person on 11/4/2022
Alternatives Evaluation	2/20/2023 (A)	complete
Meeting on Alternatives Evaluation	2/22/2023 (A)	complete
Tech Memo on CEA and Alts Analysis	10/13/2023 (A)	Complete; as part of 30% report
<b>Task 4: Preliminary Design</b>		
Prelim design: 30% plans, cost, report	10/13/2023 (A)	Complete; submitted 10/13/2023
<b>Task 5: Regulatory Compliance</b>		
Prepare application and permit plans	11/1/2023	Delivery date updated to reflect new habitat and CR survey schedule
<b>USACE Regulatory Permitting</b>		
USACE pre-application meeting	11/14/2023	In development
Submit USACE Permit Application	12/5/2023	
Issuance of USACE Permit	8/18/2024	Assuming 9 months to issue permit
<b>TXGLO Coastal Lease</b>		
Submit coastal lease application to GLO	2/1/2024	Will time this to wait until we know USACE is preparing approved permit
<b>Task 6: Engineering Design</b>		
Submit 70% Design	3/1/2024	

Milestone Description	Date (Actual=A)	Notes
Submit 95% Design	6/29/2024	
Develop for proposal package	9/18/2024	Set to 1 month after receipt of permit
<b>Task 7: Construction Proposal Solicitation Assistance</b>		
Out to bid	11/2024	
Issue Construction NTP	12/2024	

## Project Budget

Budget Summary	% Complete by Budget	notes
Task 1: Develop Project Understanding	100%	
Task 2: Data Collection and Analysis	95% Mott / 86% by sub	Survey, Geotech, Habitat surveys complete; Geotech lab work in progress, Cultural Resources work in progress
Task 3: Coastal Analysis, Alts Development, Alts Eval	100%	
Task 4: Preliminary Design	100%	
Task 5: Regulatory Compliance	7%	Initiation coordination on habitat and CR surveys
Task 6: Final Design	0%	
Task 7: Bidding Phase Services	0%	
Task 8: Engineering Services during Construction	0%	
Task 9: Project Management	32%	
<b>Overall</b>	<b>41%</b>	

## Activities Performed This Period

<b>Activity Summary</b>
<b>Task 1: Project Kickoff</b>
<ul style="list-style-type: none"> <li>Task Completed</li> </ul>
<b>Task 2: Existing and New Data Collection</b>
<ul style="list-style-type: none"> <li>Bathy and magnetometer survey completed 8/3/2022; deliverable received 8/9/2022. Survey deliverable submitted</li> <li>Geotech data collection initiated. Work in field began 6/26/23. Deliverable expected 8/4/23</li> <li>Habitat Survey was conducted 6/12-6/22/2023. Deliverable received 7/21/23</li> <li>Cultural resources surveys have been given NTP; field survey expected in November.</li> </ul>
<b>Task 3: Coastal Analysis, Alts Development, Alts Evaluation</b>
<ul style="list-style-type: none"> <li>Coastal data processing and analysis is complete</li> <li>Coastal modeling of site is complete <ul style="list-style-type: none"> <li>Storm surge model is set up for existing conditions; runs complete.</li> <li>Local wave model is set up for existing conditions; runs for existing conditions complete.</li> <li>Modeling of flushing of harbor for existing and w/ project conditions complete.</li> </ul> </li> <li>Alternatives development <ul style="list-style-type: none"> <li>Completed development of alternatives for evaluation.</li> <li>Modeling of proposed alternatives are complete</li> </ul> </li> </ul>

## Activity Summary

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- Wave transmission through artificial reefs
    - Typical wave conditions
    - Storm wave conditions
    - Flushing of alternatives
  - Developed and evaluated breakwater modifications based on initial evaluation for improvements to water quality (flushing) and wave protection; work complete.
  - Reporting
    - Conducted meeting on CEA and alternatives development with the City and KSBR on 11/4/2022
    - Completed drafting of CEA and Alternatives Development and Evaluation memo.
    - Conducted meeting on Alternatives Analysis with the City and KSBR on 2/22/2023
  - Revisions to preferred alt required due to results of habitat survey. New alignment was developed and evaluated in the numerical model.
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### Task 4: Preliminary Design

- 30% design plans complete.
  - Completed developing preliminary geometric design of structures
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### Task 5: Regulatory Compliance

- Initiated permit application development. Coordination with subcontractor (Triton) on permit application progress.
  - Ongoing coordination with subcontractor (Gray and Pape) on Texas antiquities permit and cultural resources survey.
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### Task 6: Final Design

- Not yet started
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### Task 7: Bidding Phase Services

- Not yet started
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### Task 8: Construction Proposal Solicitation Assistance

- Not yet started
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### Task 9: Project Management

- Ongoing internal project management e.g. scheduling, invoicing, resourcing, etc.
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## Anticipated Effort Next Period

- Complete cultural resources investigations
- Complete preliminary geotechnical engineering
- Finalize 30% design plans; preliminary design documentation after receipt of field data (cultural resources) and discussions on Fisher Harbor protection
- Note in budget: After data collection and 30% design is complete, we will be at the end of our first draw of funding. We plan to start monthly invoicing against second milestone draw (Final Design).

## Outstanding Items

None

Please do not hesitate to contact me if you have any questions or comments.

Sincerely,

Handwritten signature of Thomas Everett in black ink.

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