



Construction Contract  
Closeout Audit of  
Packery Channel and Sidewalk  
Restoration  
Project No. 21200

for

City of Corpus Christi



ISSUE DATE: SEPTEMBER 5, 2024 – REVISED FINAL REPORT

## Table of Contents

EXECUTIVE SUMMARY .....	3
PROJECT BACKGROUND .....	4
AUDIT APPROACH.....	4
WORK PERFORMED .....	5
SCHEDULE OF FINDINGS, OBSERVATIONS AND RECOMMENDATIONS .....	5
Appendix A: Documents Reviewed & Interviews Conducted .....	11
Appendix B: Sample Weekly Owner/Architect/Contractor Meeting Minutes .....	12

## EXECUTIVE SUMMARY

Talson Solutions, LLC (Talson), an independent construction auditing and advisory firm, conducted a Construction Contract Closeout Audit of the City of Corpus Christi's (the City) Packery Channel & Sidewalk Restoration Improvements for City Parks and Recreation Project No. 21200 (Project). Callan Marine LTD. (Callan Marine) is the general contractor under a unit price agreement (Contract) with a current value of \$14.9 million. Engineering design and construction administration services are being provided by HDR Engineering, Inc. (HDR). Callan Marine and HDR are currently engaged by the City on other capital projects in various design and construction phases.

The closeout audit primarily focused on contractual compliance by Callan Marine but also included assessing the City's construction and engineering management of capital program areas including construction cost and change management, project administration, progress status, and cost reporting. Talson's audit objectives were to verify Callan Marine's compliance with the Contract, adherence to established controls and procedures, and assess the completeness and allowability of construction costs. The audit focused on the City, Callan Marine, and HDR's activities from Project commencement through May 2024.

Audit activities revealed that the Project did not achieve Substantial Completion by the revised milestone date of April 5, 2023. The City issued a Notice of Substantial Completion on May 3, 2024 or after a 380 calendar day delay with an expectation that Callan Marine would complete the remaining work in June 2024. Communication of Project details and administration of financial controls between the City, Callan Marine, and HDR was deemed adequate and timely with minor exceptions. As part of the audit, Talson noted the preparation of a Risk Analysis Worksheet to monitor the identification and mitigation of Project risks. The lack of managing risk per the City's Risk Management Procedure QA.2 was an observation in three of the previous audits.

The audit resulted in one finding of contract non-compliance related to the City granting extensions to the Contract Time without receiving a revised Critical Path Method (CPM) schedule showing the impact of the added scope of work on the project completion date. In addition, four observations in the areas of change management, cost management, and project administration were also noted.

One of the more notable observations is the length of time the review and acceptance of quantities for Callan Marine's Pay Estimate No. 16. As of Talson's site visit in February 2024, Pay Estimate No. 16, totaling approximately \$3 million, for the period of September 2023 had not been approved resulting in Callan Marine being without payment for completed and ongoing work from October 2023 through May 2024. Callan Marine continued performing the scope of work without payment in order to continue making progress on the Project. It is recommended that the City establish a process for resolving quantity discrepancies and set an acceptable number of days to resolve disputed quantities and discrepancies to maintain cash flow to the contracting community. The revised procedure should be considered for City-wide implementation.

The audit included a detailed review of various Project documents and interviews with representatives of the City and Callan Marine. The City Auditor's Office and Engineering Services Department were accessible and provided beneficial support to the audit.

## PROJECT BACKGROUND

The Project consists of repairs to shoreline protection and related appurtenances at the Packery Channel, a tidal channel connecting Corpus Christi Bay to the Gulf of Mexico that supports recreational boat traffic. Work includes demolition and removal of damaged articulating block mat revetment, concrete walkway, and bollard/cable barriers; construction riprap revetment; placement of rip rap as toe protection along the landside section of two jetties; re-setting displaced riprap and armor stone blocks along two jetties; construction of new concrete walkway; construction of a drainage swale lined with concrete block mats; improvements to five existing storm drains; construction of five new storm drains; and replacement of a section of aluminum handrail along one jetty. This project is partially funded by the Federal Emergency Management Agency (FEMA).

On November 15, 2021, the City of Corpus Christi entered into an agreement with Callan Marine Ltd. for construction services at a unit price of \$12.3 million. Substantial completion was to occur within 390 calendar days from the Notice to Proceed, date January 10, 2022. The City issued one change order in July 2022 increasing the contract value by \$2.6 million to \$14.9 million and extending the contractual duration to 450 calendar days. The change order allowed for additional quantities of work, differing site conditions, and lost time performing additional investigations and surveys of the eroding shoreline within the jetties due to Hurricane Harvey. The original Substantial Completion date of February 4, 2023, was extended to April 5, 2023.

As of Payment Estimate No. 15 for the period of June 1 to August 31, 2023, Callan Marine has invoiced fifty-eight percent (58%) of the adjusted contract value. As of Talson's site visit on February 13, 2024, the Project's anticipated final completion date was not known.

## AUDIT APPROACH

Talson conducted the audit in alignment with the International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors. Those standards require planning and performing the audit to obtain sufficient and appropriate evidence to provide a reasonable basis for observations and conclusions within a detailed audit plan based on the audit objectives. Talson believes that the evidence obtained provides a reasonable basis for our observations and conclusions based on our audit objectives.

Talson utilized a comprehensive risk-based approach to assess compliance with contract provisions and identify any risks to successful Project completion, specifically within budget and on-time. Talson assessed Project Management's (e.g., City, general contractor, designers, and subcontractors) alignment with industry best practices throughout the engagement, facilitated knowledge-sharing discussions, and collaborated with the project teams to ensure transparency of the audit work but also maintained independence.

## WORK PERFORMED

Talson reviewed Project documents followed by fieldwork in the City's offices on February 13 & 14, 2024. Fieldwork consisted of a site visit to the Packery Channel, a review of documents, and Project team interviews. Specific audit activities included reviewing the following:

1. Unit Price Agreement between the City and Callan Marine inclusive of terms and deliverables.
2. Certified payroll reports to verify hourly wage rates compliance with Davis-Bacon requirements.
3. Owner Change Order No. 1 to confirm proper approval, reasonableness, and appropriateness of changes ensuring the work is not duplicated. Review of contract-allowed costs and mark-ups, review of supporting documentation, and timely billing by Callan Marine.
4. Callan Marine's Payment Estimate No. 15, inclusive of supporting documentation: Material on Hand and change order billing.
5. Project documentation: RFIs, submittals, meeting minutes, and a monthly schedule update to determine any potential risks that may warrant further review.
6. Professional Services Agreement between the City and HDR Engineering, including terms, conditions, Scope of Services, and task list with a billing breakdown by phase.
7. Amendment Nos. 1 to 5 confirming proper approval, reasonableness, and appropriateness of fee and mark-ups.
8. HDR Engineering's Invoice No. 1200580327 dated December 14, 2023, inclusive of supporting documentation.
9. Project administration by the City, Callan Marine and HDR.

A complete list of documents reviewed and interviews conducted is listed in Appendix A.

## SCHEDULE OF FINDINGS, OBSERVATIONS AND RECOMMENDATIONS

As a result of noted contractual and procedural areas of non-compliance, the audit yielded one Finding and four Observations. A recommendation for the Finding is also provided for consideration by the City. The following classifications are provided to ensure alignment within our approach and methodology. For this assessment, the definition of a ***Finding*** and an ***Observation*** are as follows:

- ***Finding*** is an issue where a party (the City or other) is non-compliant with a contractual provision, a stated policy, or procedure. A finding may also be identified in situations of impact to the schedule or budget, or an immediate control risk has been identified. Corrective action must be taken, and a management response provided.
- ***Observation*** does not mean there is an issue of non-compliance; however, the auditor has determined that the issue poses a potential risk of becoming a finding in the future and ***may*** require a management response. An observation might also be a process enhancement that can be incorporated in a project going forward or on future capital projects.

The following **Finding** has been discussed with the City:

**Finding No. 1 – Time Extension Requests**

Callan Marine is non-compliant with the conditions for requesting time extensions to Contract Time. Evidence includes:

Callan Marine submitted one change proposal requesting additional calendar days be added to the Contract Time. The change proposal did not include a revised schedule showing the impact of the work on the contract completion date. *General Conditions 27.04 Schedule Revisions require a revised schedule to be included with a Change Proposal if a change in Contract Time is requested.*

Additionally, the City granted one-time extension totaling 60 calendar days in approved Change Order No. 1 for lost time associated with the investigation and survey of the eroding shoreline within the jetties. An updated schedule showing the impact of the changes to the project completion date was not included in the change proposal to support the request.

**Recommendation**

The City should require that all future time extension requests to include a revised schedule showing the impacts or delays to ensure the critical path and the project completion date are affected by the delay.

**Management Response:**

Management agrees. All time extensions requests require a revised schedule showing the impact(s) or delay(s) to ensure the critical path and the project completion date are not affected by the delay. However, sometimes these are not included with the time extension request as stated in the contract; but these are included once the time extension request is approved. Management is updating our written procedures and will conduct training on Time Impact Analysis.

**Corrective Action Due Date: December 31, 2024**

The following **Observations** have been discussed with the City:

**Observation No. 1**

Per Callan Marine, Pay Estimate No. 16 for the period of September 1 to September 30, 2023, experienced an unusually long delay in receiving acceptance of the quantities for work performed due to disputed quantities by HDR Engineering and issues with Callan Marine providing accurate support to survey data. As of the interview conducted on February 14, 2024, installed quantities reported in Pay Estimate No. 16 had not been accepted by HDR Engineering which took approximately eight months to resolve. Callan Marine continued to work on the project and incurred costs and expenses, which could not be invoiced in a timely manner due to the delay in resolving the discrepancies of installed quantities being billed in Pay Estimate No. 16. Callan Marine estimated the value of Pay Estimate No. 16 to be approximately \$3 million and was ultimately processed in May 2024. Callan Marine did not take exception to the payment delays due to other work in the City.

**Recommendation**

The City should consider revising the Pay Estimate Procedure to include a process for resolving quantity discrepancies and establish an acceptable number of days to resolve pay estimate disputes and discrepancies to maintain cash flow to the contracting community with allowance for unusual circumstances in which the contractor is uncooperative or in conflict with contractual obligations.

**Observation No. 2**

The Material on Hand (MOH) tracking sheet categories (i.e., streets, stormwater, water, wastewater, etc.) are not reflective of the Project's scope of work per the schedule of values (SOV). Pay Estimate No. 15 SOV categories are Channel Restoration, Sidewalk, and Storm Sewer. The Storm Sewer scope of work has an original value of \$89,586. However, the MOH Tracker shows approximately \$1.4 million paid for materials under Storm Sewer and \$10,651 charged to Streets. The invoices paid should be applied to/accrued against the appropriate scope of work. It should not be possible to pay for MOH in an amount greater than the value of the original or current value of the line item.

**Recommendation**

The City should revise the MOH tracker to reflect the Project's scope of work and verify the amounts paid for materials have been applied correctly. Second, the City should develop a policy and standard operating procedure specific to MOH for implementation.

**Observation No. 3**

Talson noted a lack of independent cost verification being performed by the City to ensure that costs are fair and reasonable for the scope of work and local market conditions, and that contract provisions have been correctly applied. Evidence includes:

- a) Change Order No. 1 added approximately \$2.6 million to the contract value. The proposal submitted by Callan Marine does not meet the criteria established in *GC 12.02 Change Proposal* for a detailed breakdown of the cost of the change including a detailed labor breakdown. Also missing from the Change Order package is the basis for accepting the proposed pricing and workpapers that support the pricing as fair and reasonable for the current market conditions.

Talson was unable to determine if the costs incorporated into the contract value are fair and reasonable and that the contract mark-ups have been applied correctly. Talson requested from the Engineering Department on multiple occasions work papers establishing that the proposal pricing had been reviewed the City or HDR and did not receive any documentation to support that the accepted pricing had been reviewed and is fair and reasonable with appropriately applied mark-ups.

This condition is an opportunity to instill impartiality into how change proposal pricing is evaluated and accepted to ensure the pricing is fair, reasonable, and submitted in accordance with contract provisions.

**Recommendation**

The City should employ means to independently verify change proposal pricing and confirm the correct application of contract provisions for allowable costs as part of the approval process, document the results in writing, and include the documentation in the change order support information.

**Observation No. 4**

The Progress Meeting minutes are deficient of detail recording the meeting attendees, the Project status, missing documentation of verbal direction given, and any issues or outstanding items that may impact the timely completion. Meeting minutes are an official record of the project's status and progress and can be instrumental in the resolution of claims or disputes, if any. Article 20.04.B Progress Meeting indicates that the Owner Authorized Representative (OAR) will prepare minutes of meetings. HDR is preparing meeting minutes.

**Recommendation**

The City should create a meeting minute template to be used City-wide on all design and construction projects. By creating a meeting minute template, the City will ensure that the design and construction meetings discuss the topics listed in *Article 20.04.B, Progress Meeting* to ensure project progress, issues, and directions given are recorded with sufficient detail so they can be used in the resolution of potential claims or disputes.

For reference, Talson has included a sample page from the minutes of a Weekly Owner/Architect/Contractor (OAC) meeting. The sample highlights four enhancements to the meeting minute format that are consistent with industry best practices. The highlighted items are:



- 1) Meeting Number
- 2) Attachments List (3-week look ahead schedule, RFI, Submittal, and Change Order Logs)
- 3) Attendee List (name, company, contact information and attendance)
- 4) Agenda Item Data (item no., meeting origin, item description/ title with noted discussion, responsible party, due date, priority, and status of new, open, or closed).

Additional samples of OAC meeting minutes and other templates can be provided upon request. See Appendix B for further details.

Contract Article 20.04.B Progress Meeting identifies a minimum of nine agenda topics that the attendees should be prepared to discuss. They include:

- 1) Status of overall Project schedule
- 2) Contractor's detailed schedule for the next month
- 3) Anticipated delivery dates for equipment, if applicable
- 4) Coordination with the Owner
- 5) Status of documents
- 6) Information or clarification of the Contract Documents
- 7) Claims and Proposed Modifications to the Contract
- 8) Field observations, problems, or conflicts
- 9) Maintenance of quality standards

**Collective Observations Management Response:**

**Observation No. 1**

The Engineering Services Department is required to follow Contract terms when a Pay Estimate is submitted and accepted. This contract requires the contractor to submit a survey to the consultant for review and validation of quantities. For pay estimate #16, the required survey was not provided; therefore, the consultant was unable to validate and/or approve the quantities. This project is unique since the work performed was done underwater. The original amount submitted on Dec. 21, 2023 by the contractor was \$3,075,409.93; however, it did not have the required survey. Engineering waited until Jan. 19th for the survey before returning it back to contractor for not meeting contract review/validation requirements. Finally, a pay estimate with the survey was provided on April 10th for an acceptable amount of \$1,690,296.90 and paid on May 3, 2023. Our review process helps us mitigate the risk of paying for services not yet provided. If the contract gets terminated for any reason, the City will possibly not be able to able to recover overpayments.

If the City accepts the risk of potentially overpaying a contractor, Engineering will work with the Legal Department to determine an acceptable way to issue payment without proper validation of work performed.

**Observation No. 2**

In this specific situation the formula in the tracker was incorrect; however, INFOR, which is the official system of record for the City, has the correct information. This information was validated by the Business Manager, materials were paid out of the correct fund. Additionally, INFOR has controls in place to prevent any payment amounts greater than the budgeted amount. Our trackers are manual and at risk of user errors. However, due to this observation, Engineering provided Excel training to all Engineering Project Specialists to ensure formulas in the different trackers accurately reflect the information processed through INFOR. Engineering is in the process of updating/correcting the MOH tracker to reflect the project's scope of work and trained staff on how to verify amounts paid for materials have been applied correctly.

**Observation No. 3**

Engineering Services Department worked with the consultant to ensure quantities and prices were fair and reasonable. The consultant provided a memo with a detailed explanation on additional work required which was reviewed and validated by HDR through surveys and City inspectors by physical observations. This document was uploaded to eBuilder for auditor's review on 4/12/24 and was attached to the Change Order when it was approved.

*Auditor Note: The uploaded documentation in April 2024 did not provide an opinion or commentary of the reasonableness of the change by HDR on the proposed pricing. Engineering Services was subsequently advised of the need for further support.*

**Observation No. 4**

Management concurs that meeting minutes could improve. A better template will be developed and implemented before the end of the calendar year.

**Closeout Audit of Packery Channel and Sidewalk Restoration**

**Appendix A: Documents Reviewed & Interviews Conducted**

**Documents Reviewed: City of Corpus Christi**

Contract Documents for Construction of Packery Channel Restoration, dated November 15, 2021  
Request for Bid, dated August 2, 2021  
Request for Bid Addendum NO. 1, dated September 1, 2021  
Tabulation of Bids, dated September 15, 2021  
Agenda Memorandum, dated August 9, 2022  
Construction Status Report, undated  
Notice of Award, dated October 27, 2021  
Notice to Proceed, dated January 10, 2022  
Notice to Proceed Amendment NO. 1 – 5, dated September 28, 2018 – May 24, 2022  
Payment Application NO's. 1 & No. 15, dated March 2, 2022 & September 21, 2023  
Executed Change Order NO. 1, dated August 12, 2022  
Certificate of Liability Insurance, dated January 30, 2024  
Performance Bond & Payment Bond, dated November 4, 2021  
Certificate of Interested Parties, dated November 12, 2021  
Certification of Funds – FEMA, dated October 26, 2021  
Packery Channel TDEM Award Letters, dated June 2, 2021 & September 13, 2021  
FEMA Appeal Narrative, dated July 24, 2023  
State Transmission of Appeal, dated July 26, 2023  
Packery Channel Delegation Letter, dated September 12, 2023

**Documents Reviewed: Callan Marine, Ltd**

Master Services Agreement for Peninsula Marine, dated February 18, 2021  
Master Services Agreement for Coastal Maintenance Concepts, dated April 5, 2022  
PO Requisition Form from Industrial Fabrics, dated February 9, 2022  
PO Requisition Form from Kennedy Wire and Rope, dated April 5, 2022  
PO Requisition Form from Strike Products/Banks Outdoors, dated February 9, 2022  
Project Schedule, dated January 18, 2024  
Change Order NO. 1, dated August 12, 2022  
Certificate of Liability Insurance, dated January 30, 2024  
RFI Log, undated  
Submittal Log, undated

**Documents Reviewed: HDR Engineering, Inc.**

Executed Professional Services Contract, dated August 8, 2018  
Executed HDR Amendment NO. 1 – 5, dated September 28, 2018 – May 24, 2022  
Fee Summary Amendment NO. 4, dated December 20, 2021  
Invoice Authorization Payment, dated January 17, 2024

**Project Management Team Interviews:**

**City of Corpus Christi**

Edwin Santillan – Engineer Level 5  
John Webster – Senior Project Manager

**Callan Marine, Ltd**

Oliver Jones – VP of Construction

**Closeout Audit of Packery Channel and Sidewalk Restoration**

**Appendix B: Sample Weekly Owner/Architect/Contractor Meeting Minutes**



**Meeting #13**

P. Agnes, Inc.  
 2101 Penrose Ave.  
 Philadelphia, Pennsylvania 19145  
 Phone: (215) 755-6900  
 Fax: (215) 463-9760

Project: 20007 - RIDDLE MP-PKG 8-POST PAVILION  
 1068 W. Baltimore Pike  
 Media, Pennsylvania 19063  
 Phone: 267-738-9407

**OAC Meeting - Off Week Agenda Minutes**

MEETING DATE: 04/02/2024 MEETING TIME: 1:00 PM - Eastern Time (US & Canada)

MEETING LOCATION: Virtual - Teams

OVERVIEW:  
 Owner, Architect, Contractor Bi-Weekly Meeting for maximum coordination and communication.

NOTES:

ATTACHMENTS:

ATTENDEES:

Name	Company	Phone Number	Email	Attendance
Christopher Braz	Balinger	Cell: (610) 392-4023	cbraz@balinger.com	Present
Trish Jones	Best Healthcare Planning, LLC	Cell: (215) 622-8972	trish@bhplan.com	Present
Brian Boettger	Callison RTKL	Cell: (469) 767-3768	brian.boettger@crtl.com	Present
Jeffrey Bargull	P. AGNES, INC.	Cell: (267) 601-6095	jbargull@pagnes.com	Absent
Kevin Dahms	P. AGNES, INC.	Cell:	kdahms@pagnes.com	Present
John Gillis	P. AGNES, INC.	Cell: (215) 399-8069	jgillis@pagnes.com	Present
Kevin Rafuse	P. AGNES, INC.	Cell: (267) 738-9407	krafuse@pagnes.com	Present
Nikko Smith	P. AGNES, INC.	Cell:	nsmith@pagnes.com	Present
Bill Milliken	Pure PM	Cell: (484) 883-4251	bill.milliken@purepm.com	Present
Nathaniel Papa	Pure PM	Cell:	nathaniel.papa@purepm.com	Present
Allison Smith	Z&F Consulting, Inc.	Cell:	asmith@zfengr.com	Absent
Jack Yocom	Z&F Consulting, Inc.	Cell:	jyocom@zfengr.com	Present

**Construction Progress**

No	Meeting Origin	Title	Assignment	Due Date	Priority	Status
1.1	1	Construction Progress	Kevin Rafuse (P. AGNES, INC.)			Open

Description:

1. Kitchen Decanting
2. Ground Floor East
3. First Floor Center Core
4. Second Floor ICU
5. Second Floor 3-4 Pipe
6. Third Floor North Wing
7. Third Floor 3-4 Pipe

These meeting minutes are believed to be an accurate reflection of those items discussed and the conclusions that were reached during the referenced meeting.

Please contact P. Agnes, Inc. if there are any discrepancies or questions with the content of these minutes.

September 5, 2024

George H. Holland  
City Auditor  
Corpus Christi, Texas

Re: Construction Contract Closeout Audit Report: Packery Channel and Sidewalk Restoration  
Project No. 21200

We have carefully reviewed the issues presented in the audit report referenced above, and our plans to correct the issues are described here within.

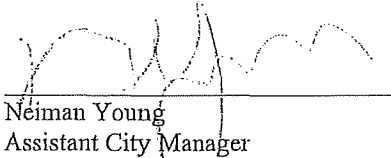
We are committed to correcting the issues in the audit report by implementing the action plans in a timely fashion.

Sincerely,



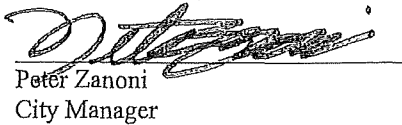
Jeffrey H. Edmonds  
Director of Engineering Services

9/10/24  
Date



Neiman Young  
Assistant City Manager

9/10/24  
Date



Peter Zanoni  
City Manager

9-17-24  
Date