

SIXTH AMENDMENT TO RESTATED AGREEMENT BETWEEN BROWARD COUNTY AND
LIFTECH CONSULTANTS, INC., FOR CONSULTANT ENGINEERING SERVICES FOR CRANES
(RLI # N1038712R1)

This Sixth Amendment (“Sixth Amendment”) to the Restated Agreement (hereinafter defined) is made and entered into by and between Broward County, a political subdivision of the State of Florida (“County”), and Liftech Consultants, Inc., a California corporation authorized to transact business in the State of Florida (“Consultant”) (collectively, the “Parties”).

RECITALS

A. The Parties entered into the Restated Agreement between Broward County and Liftech Consultants, Inc., for Consultant Engineering Services for Cranes, dated April 8, 2016, which was amended by a First Amendment, dated March 14, 2017; a Second Amendment, dated June 12, 2018; a Third Amendment, dated June 10, 2019; a Fourth Amendment, dated February 25, 2020; and a Fifth Amendment, dated March 10, 2021 (collectively, as amended, the “Restated Agreement”).

B. The Parties desire to further amend the Restated Agreement to extend the Restated Agreement by two years and to provide for additional work and related compensation for the consulting engineering services related to the relocation of one Samsung crane (“SP-4”); upgrades to all existing Samsung cranes (“SP-1 through SP-7”); painting SP-1 through SP-7, one Paceco crane (“P-2”), and one Gottwald mobile harbor crane (“MHC-1”) (collectively, “All Existing Cranes”); and procurement of three new ZPMC cranes (“SP-11 through SP-13”).

C. The compensation for the additional work in this Sixth Amendment includes a maximum amount not-to-exceed of Two Million Seven Hundred Seventy-four Thousand Two Hundred Ten Dollars (\$2,774,210.00) and a lump sum amount of Five Hundred Eighteen Thousand Five Hundred Eighty-six Dollars (\$518,586.00), resulting in a total increase of Three Million Two Hundred Ninety-two Thousand Seven Hundred Ninety-six Dollars (\$3,292,796.00). If Optional Services as established in section 5.1.3 are fully exercised, the total increase will be Three Million Seven Hundred Ninety-two Thousand Seven Hundred Ninety-six Dollars (\$3,792,796.00).

D. County has determined that the additional work effort is in the County’s best interest.

E. The Parties met and negotiated the additional work and related compensation, all in accordance with the Broward County Procurement Code, and this Sixth Amendment incorporates the results of such negotiation.

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree to the following:

1. The above Recitals are true and correct and are incorporated herein by reference.
2. Amendments made to the Restated Agreement by this Sixth Amendment are indicated by use of strikethroughs to indicate deletions and underlining to indicate additions, unless otherwise stated.
3. All references to “Exhibits A, A-1, A-2, and A-4” in Sections 3.1, 4.2, and 7.3 of the Restated Agreement are hereby revised to reference “Exhibits A, A-1, A-2, A-4, and A-6.” Exhibit A-6, attached hereto, is incorporated into and made a part of the Restated Agreement.
4. Section 4.1 of the Restated Agreement is hereby amended to read as follows:

4.1 Consultant shall perform the services described in Exhibits A, A-1, A-2, ~~and A-4,~~ and A-6 within the time periods specified in the Project Schedule included in each Exhibit; said time periods shall commence from the date of each Notice to Proceed for such services. The term of this Agreement, having commenced on March 19, 2013, shall terminate on December 31, ~~2023~~2025, unless sooner terminated as provided herein.

5. Section 4.6 of the Restated Agreement is hereby amended to read as follows:

4.6 In the event Consultant fails to complete the phases of services identified in Exhibits A ~~and~~ A-1, A-2, A-4, or A-6 on or before the applicable Time for Performance, Consultant shall pay to County the sum of dollars identified below for each calendar day after the applicable Time for Performance, plus approved time extensions thereof, until completion of the phase:

Project Phase 2	Amount
Task 1 – New Cranes Procurement	\$ 100.00
Task 2 – Upgrades to Existing Cranes	\$ 100.00
Task 3 – Upgrades to Landside Infrastructure	\$ 100.00
Project Phase 3	
Task 1 – Construction Support Services	\$ 100.00
<u>Project Phase 4: SP-4 Relocation</u>	<u>\$ 100.00</u>
<u>Project Phase 5: Upgrading and Painting</u>	
<u>SP-1 through SP-7, P-2, and MHC-1</u>	<u>\$ 100.00</u>
<u>Project Phase 6: Procurement of SP-11 through SP-13</u>	<u>\$ 100.00</u>

6. Section 5.1 of the Restated Agreement is hereby amended to read as follows (original underlining omitted):

5.1 AMOUNT AND METHOD OF COMPENSATION

5.1.1 Maximum Amount Not-To-Exceed Compensation. Compensation to Consultant for the performance of Basic Services and attendance at meetings and site visits in the U.S. and abroad at site of crane manufacturer for Phase 2 identified in Exhibits A and A-1 as payable on a “Maximum Amount Not-To-Exceed” basis, and as otherwise required by this Agreement, shall be based upon the Salary Costs as described in Section 5.2 up to a Maximum Amount Not-To-Exceed of ~~Nine Hundred Seventy-eight Thousand Seven Hundred Twenty-six Dollars (\$978,726.00)~~ Five Hundred Thirty-eight Thousand Six Hundred Seventeen and 79/100 Dollars (\$538,617.79). The Maximum Amount Not-To-Exceed compensation of ~~Nine Hundred Seventy-eight Thousand Seven Hundred Twenty-six Dollars (\$978,726.00)~~ Five Hundred Thirty-eight Thousand Six Hundred Seventeen and 79/100 Dollars (\$538,617.79) shall be paid out up to a maximum for each task in accordance with the percentage amount as follows:

Project Phase 2	Fee%	Fee Amount/Task
Exhibit A:		
Task 1 – New Cranes Procurement	19.40 <u>35.25</u> %	\$189,888.00
Task 2 – Upgrades to Existing Cranes	52.78 <u>14.19</u> %	\$516,516.00 <u>\$76,407.79</u>
Task 3 – Upgrades to Landside Infrastructure, Tasks 3.8 and 3.9	25.48 <u>46.30</u> %	\$249,385.00
Exhibit A-1:		
Task 3 – Revise 100% Design Documents for Electrical Infrastructure	2.34 <u>4.26</u> %	\$22,937.00
	=====	=====
	100%	\$978,726.00 <u>\$538,617.79</u>

...

For Basic Services identified in Exhibit A-6, Phase 4 as payable on a “Maximum Amount Not-To-Exceed” basis, compensation to Consultant shall be based upon the Salary Costs as described in Section 5.2 up to a maximum not-to-exceed amount of One Hundred Twenty Thousand Dollars (\$120,000.00).

<u>Project Phase 4</u>	<u>Fee %</u>	<u>Fee Amount/Task</u>
<u>SP-4 Relocation from Berth 31 to Berth 30</u>	<u>100%</u>	<u>\$120,000.00</u>

For Basic Services identified in Exhibit A-6, Phase 5 as payable on a “Maximum Amount Not-To-Exceed” basis, compensation to Consultant shall be based upon the Salary Costs as described in Section 5.2 up to a maximum not-to-exceed amount of One Million Two Hundred Fifty-eight Thousand Seven Hundred Ninety-two and 21/100 Dollars (\$1,258,792.21).

<u>Project Phase 5</u>	<u>Fee %</u>	<u>Fee Amount/Task</u>
<u>Crane Upgrades & Painting SP-1 through SP-7, P-2, and MHC-1 (Includes Remaining NTE Amounts for Phase 2, Task 2)</u>	<u>100%</u>	<u>\$1,258,792.21</u>

For Basic Services identified in Exhibit A-6, Phase 6 as payable on a “Maximum Amount Not-To-Exceed” basis, compensation to Consultant shall be based upon the Salary Costs as described in Section 5.2 up to a maximum not-to-exceed amount of One Million Eight Hundred Thirty-five Thousand Five Hundred Twenty-six Dollars (\$1,835,526.00).

<u>Project Phase 6</u>	<u>Fee %</u>	<u>Fee Amount/Task</u>
<u>Procurement of SP-11 through SP-13</u>	<u>100%</u>	<u>\$1,835,526.00</u>

...

5.1.2 Lump Sum Compensation. Compensation to Consultant for the performance of all Basic Services identified in Exhibits A, A-1, A-2, ~~and A-4,~~ and A-6 as payable on a “Lump Sum” basis, and as otherwise required by this Agreement, shall be not more than the total lump sum amounts as follows:

...

County agrees to pay Consultant, as compensation for performance of all Basic Services related to A, A-1, A-2, and A-4, and A-6, for Phase 2, Tasks 1 - 3, including Phase 2 Addition, Phase 2 Addition 2, and Phase 2 Task 3.11 and Task 3.12, that are required under the terms of this Agreement, a lump sum of ~~Four Million~~

~~Twenty-seven Thousand Eighteen Dollars (\$4,027,018.00)~~ Four Million Two Hundred Sixty-nine Thousand Four Dollars (\$4,269,004.00).

The lump sum compensation of ~~Four Million Twenty-seven Thousand Eighteen Dollars (\$4,027,018.00)~~ Four Million Two Hundred Sixty-nine Thousand Four Dollars (\$4,269,004.00) shall be paid out in accordance with the percentage amount set forth below:

Project Phase 2	Fee%	Fee Amount/Task
Exhibit A:		
Task 1 – New Cranes Procurement, Tasks 1.1 – 1.8	23.74 <u>22.39</u> %	\$956,000.00
Task 2 – Upgrades to Existing Cranes, Tasks 2.1 – 2.8	15.32 <u>20.12</u> %	\$617,000.00 <u>\$858,986.00</u>
Task 3 – Upgrades to Landside Infrastructure, Tasks 3.1 – 3.7, 3.11, and 3.12, Phase 2 Addition, and Phase 2 Addition 2	54.56 <u>51.47</u> %	\$2,197,116.00
Exhibit A-1:		
Task 2 – Feasibility Study	1.71 <u>1.62</u> %	\$69,000.00
Exhibit A-4:		
Task 3 – Upgrades to Landside Infrastructure Tasks 3.13 – 3.14	4.67 <u>4.40</u> %	\$187,902.00
	=====	=====
	100%	\$4,027,018.00 <u>\$4,269,004.00</u>

...

For Basic Services identified in Exhibit A-6, Phase 6 as payable on a "Lump Sum" basis, compensation to Consultant shall be a total lump sum of Two Hundred Seventy-six Thousand Six Hundred Dollars (\$276,600.00).

<u>Project Phase 6</u>	<u>Fee %</u>	<u>Fee Amount/Task</u>
<u>Procurement of SP-11 through SP-13</u>	<u>100%</u>	<u>\$276,600.00</u>

...

5.1.3 Optional Services. County has established an Maximum Amount Not-To-Exceed of ~~\$0~~ Five Hundred Thousand Dollars (\$500,000.00) for potential Optional Services which may be utilized pursuant to Article 6. Unused amounts of these Optional Services monies shall be retained by County. ~~A Work Authorization for Optional Services shall specify the method of payment, Maximum Amount Not To Exceed, Lump Sum or combination thereof, applicable to that Work Authorization.~~

5.1.4 Reimbursable Expenses. Reimbursable Expenses. County has established a Maximum Amount Not-To-Exceed of Six Hundred Ten Thousand Ninety-nine Dollars (\$610,099.00) for potential reimbursable expenses for Phase 2, ~~and Phase 3, and Phase 6~~ work, which may be utilized pursuant to Section 5.3. Unused amounts of those monies established for reimbursable expenses shall be retained by County.

...

7. Section 5.3 of the Restated Agreement is hereby amended to read as follows (original underlining omitted):

5.3 REIMBURSABLES. For reimbursement of any travel costs, travel-related expenses, or other direct nonsalary expenses directly attributable to this Project permitted under this Agreement, Consultant agrees to adhere to Section 112.061, Florida Statutes, except to the extent, ~~if any, that Exhibits A-2 or B-1 expressly provide to the contrary otherwise stated herein.~~ County shall not be liable for any such expenses that have not been approved in advance, in writing, by the Contract Administrator. Reimbursable subconsultant expenses ~~are limited as described herein when the subconsultant agreement provides for reimbursable expenses~~ must also comply with the requirements of this section.

8. Section 6.4 of the Restated Agreement is hereby amended to read as follows:

Consultant may, at the Contract Administrator's discretion, be authorized to perform Optional Services as delineated in Exhibit ~~A-6~~, Scope of Services, up to the maximum fee amount established for Optional Services under Article 5.1.3. Any Optional Services to be performed by Consultant pursuant to the terms of this Agreement shall first be authorized by the Contract Administrator in writing by a "Work Authorization," in accordance with this Article. Prior to issuing a Work Authorization, the Contract Administrator must provide the Office of the County Attorney with the written description of the work to be undertaken as required by Section 6.4.4.1 and must obtain a written concurrence from the Office of the County Attorney that the work proposed to be performed pursuant to the Work Authorization is within the scope of services of this Agreement.

9. Section 10.32 is hereby added to the Restated Agreement to read as follows (underlining to indicate additions omitted):

10.32 Verification of Employment Eligibility. Consultant represents that Consultant and each Subconsultant has registered with and uses the E-Verify system maintained by the United States Department of Homeland Security to verify the work authorization status of all newly hired employees in compliance with the requirements of Section 448.095, Florida Statutes, and that entry into this Agreement will not violate that statute. If Consultant violates this section, County may immediately terminate this Agreement for cause and Consultant shall be liable for all costs incurred by County due to the termination.

10. Preparation of this Sixth Amendment has been a joint effort of County and Consultant, and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the parties than the other.

11. Except as expressly modified herein, all other terms and conditions of the Restated Agreement remain in full force and effect.

12. This Sixth Amendment is effective upon complete execution by the Parties.

13. This Sixth Amendment may be executed in multiple originals, and may be executed in counterparts, each of which will be deemed to be an original, but all of which, taken together, will constitute one and the same document.

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IN WITNESS WHEREOF, the Parties have made and executed this Sixth Amendment to the Restated Agreement: Broward County, through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Mayor authorized to execute same by Board action on the _____ day of _____, 20____, and Liftech Consultants, Inc., signing by and through its _____, duly authorized to execute same.

County

ATTEST:

BROWARD COUNTY, by and through
its Board of County Commissioners

Broward County Administrator, as
ex officio Clerk of the Broward County
Board of County Commissioners

By _____
Mayor

____ day of _____, 2021

Approved as to form by
Andrew J. Meyers
Broward County Attorney
Port Everglades Department
1850 Eller Drive, Suite 502
Fort Lauderdale, Florida 33316
Telephone: (954) 523-3404
Telecopier: (954) 468-3690

By Antonio Lozada 5/7/21
Antonio Lozada (Date)
Assistant County Attorney

By Russell J. Morrison 5/7/21
Russell J. Morrison (Date)
Sr. Assistant County Attorney

RJM:cr
05/06/21
Liftech Amend 6-Restated_Final
#12-3009.01

SIXTH AMENDMENT TO RESTATED AGREEMENT BETWEEN BROWARD COUNTY AND LIFTECH CONSULTANTS, INC., FOR CONSULTING ENGINEERING SERVICES FOR CRANES (RLI# N1038712R1)

Consultant

ATTEST:



Corporate Secretary

Catherine A. Morris, VP, Secretary

(Print/Type Name)

(Corporate Seal)



OR

WITNESSES:

Signature

Print/Type Name

Signature

Print/Type Name

LIFTECH CONSULTANTS, INC.

By 

President or Vice-President

Erik G. Soderberg, President FL-70124

(Print/Type Name and Title)

6th day of May, 2021

EXHIBIT A-6

PHASE 4: RELOCATION OF CRANE SP-4

The Port Everglades Department (PED) of Broward County plans to relocate Crane SP-4 (Crane) from Berth 31 to Berth 30 and place it east of Crane SP-6. Consultant shall provide engineering services related to relocating the Crane over land. PED will provide allowable bearing pressure on the paving structure along the Crane relocation path. The following services are payable on a Maximum Amount Not-To-Exceed basis.

PRE-AWARD

- Crane and Route Layout – Consultant shall prepare a layout of the crane route over the wharf and container yard and review with PED. The layout will show the proposed location of other cranes and boom positions.
- SP-4/ B30/30 Extension Interface – Consultant shall confirm that the Crane stow pins and tie-down anchors align with wharf hardware on Berth 30/30 Extension. If the Crane stow pins and tie-down anchors may not align properly, Consultant will request authorization from PED for additional engineering services to address the concern.
- Technical Specifications – Consultant shall prepare technical specifications to relocate the Crane on land and include provisions to test Crane cable and modify software for Crane position control.
- Procurement Documents – Consultant shall review procurement documents prepared by PED for consistency with the technical documents and provide comments and recommendations.

SOLICITATION SUPPORT

Consultant shall:

- Participate in remote meetings with PED and the prospective contractors to clarify technical issues.
- Respond to Requests for Information (RFIs) from prospective bidders and issue technical addenda, as required.
- Review technical aspects of submitted proposals and provide comments for evaluation by PED.

POST-AWARD

Consultant shall:

- Participate in a kick-off meeting with the Contractor. Consultant shall ensure Consultant's Site Representative (SR) will attend the meeting in person and Liftech Oakland engineers will attend remotely. Consultant shall prepare an agenda and provide it to participants at least 24 hours in advance of the meeting. Consultant shall record and maintain minutes for these meetings.
- Observe site conditions with the Contractor upon mobilization and document the conditions for comparing those with conditions observed after the completion of the Crane relocation.
- Review Contractor's submittals for Crane relocation related to the Crane structure and return submittals within two weeks with "No Comments Noted" or request additional information.
- Compare bearing pressures from Crane relocation equipment provided by the Contractor with the allowable pressure and provide comments. If necessary, Consultant shall retain the services of Craven Thompson & Associates, Inc. and Tierra

EXHIBIT A-6

South Florida, Inc. to review the paving design and provide recommendations. If the bearing pressures from the Crane relocation equipment exceed the allowable pressure, Consultant shall advise the Contractor to revise the equipment arrangement to comply with the allowable bearing pressure.

- Provide an engineer to visit the site to:
 - Observe the interface between the Crane and Contractor's lifting equipment and provide comments and recommendations about structural design issues that may require corrective measures by the Contractor.
 - Witness Crane relocation, report issues that need attention, and provide a site visit report.
- Provide services of a Site Representative for up to 108 hours as directed by PED during the Contractor's work.
- Retain Hall Engineering Group for electrical work, as needed, related to disconnecting and reconnecting Crane cable at the vaults.
- Observe the wharf surface and crane areas for damage or unfinished work after the relocation and prepare a report with comments and recommendations.

Consultant shall provide engineering services to modify crane SP-4 for the interface with SP-11 through SP-13 under a separate Notice to Proceed.

SCHEDULE

Pre-Award

Consultant shall provide technical specifications for Crane relocation to PED for review and comment within three weeks from the date of issuance of the Notice to Proceed.

Post-Award

Consultant shall review and provide to PED comments and recommendations on Contractor's submittals within two weeks of receiving the specified documentation and information.

PHASE 5: UPGRADING CRANES SP-1 THROUGH SP-7 AND PAINTING CRANES SP-1 THROUGH SP-7, P-2, AND MHC-1

Consultant has provided engineering services to upgrade cranes SP-1 through SP-7 (Cranes) under the Agreement. Consultant provided additional engineering services to upgrade the Cranes as noted below and incorporated findings into the technical specifications under Lump Sum Work Performed, which is payable on a Lump Sum Basis. Additionally, Consultant shall provide engineering services to replace operator's cabins on the Cranes with Brieda cabins (SP-1 through SP-7) and paint the Cranes, Paceco crane (Crane P-2), and the Gottwald mobile harbor crane (MHC-1) (All Existing cranes), which are payable on a Maximum Amount Not-To-Exceed basis.

LUMP SUM WORK PERFORMED

Consultant previously provided engineering tasks to incorporate the following into the upgrade design drawings and specifications for Cranes:

Analysis and Revised Design for Heavier Boom after Crane Weighing

Analysis and Revised Design for New Transformer House Solution including Structural, Mechanical, and Electrical Drawings and/or Specifications. House is to be design-build with a performance specification.

Anti-Racking Retrofit Using Transponder System for New Gantry Drive System

Updated Specifications for Initial Plan of SP4 Relocation by Barge

Revised Crane Modification Schedule of Modified and New Cranes

Main Hoist Machinery Design for Replacement Emergency Motors and Drives

T/L/S/S Hydraulic System Replacement included in Design and Specifications.

Boom Machinery Replacement Component Design due to AC Conversion

Trolley Machinery Replacement Component Design due to AC Conversion

Gantry Machinery Replacement Design due to AC Conversion

Electrical Control Room Inclusion in Pre-Bid Package

Trolley Anti-sway System Removal and Design of New Sheave Block Assembly

Ground Level Communications Included in Specifications

Boom Energy Chain Replacement & Other Cable Replacement

MV Stationary Cabling Replacement

Addition of Maintenance & Diagnostic Laptop to Specifications

Associated Project Management related to the above

Consultant has provided an updated set of plans and specifications for the above tasks.

NOT-TO-EXCEED LABOR COSTS – CRANE UPGRADES

Consultant shall provide the following services:

Work is to include the balance of the scope not previously performed under Phase 2, Task 2.

Engineering Support for Expanded Work

Consultant shall provide additional engineering support for the expanded scope of work during the procurement phase and crane upgrade phase.

On-site Construction Support

Consultant shall provide services of a Site Representative (SR), for up to 40 hours per week and a project manager for 6 hours per week to support PED with managing the crane upgrade project for approximately 10 months. Consultant may reduce SR hours on this task if the SR is needed to support the PED infrastructure project.

Inspection Agency Reports

PED will retain services of an independent structural inspection agency, if required, to inspect structural modification work performed by the Contractor. Consultant shall review the inspection reports, provide comments and recommendations, and advise PED to direct the Contractor to correct the work as needed.

Resolving Disputes Between County and Contractor

Consultant shall assist PED with resolving disputes with the Contractor. A budget has been included as a placeholder.

Engineering Services Related to Replacing Operator Cabins of Samsung Cranes

Consultant shall incorporate specifications and drawings to replace operator's cabins on the Samsung cranes with new Brieda cabins into the crane upgrade specifications. Consultant shall review proposed specification changes with PED and incorporate comments and recommendations into the documents.

Consultant shall respond to inquiries from the proposed bidders.

Consultant shall review Contractor submittals for cabin replacement and provide comments and recommendations to PED within two weeks of receiving the specified documentation and information.

Engineering Services Related to Painting All Existing Cranes

Consultant shall provide the following services:

- *Provide specifications and existing drawings or photos to paint All Existing Cranes as an attachment to the existing specifications.*
- *Incorporate provisions provided by PED for sandblasting or water blasting the cranes into the paint specifications.*
- *Provide sequencing and schedule to paint the cranes as part of the combined project.*

- *Review Contractor proposals for painting cranes as part of the combined project and provide comments and recommendations to PED.*
- *Review Contractor submittals for painting cranes as part of the combined project and provide review comments and recommendations to PED within two weeks of receiving the specified documentation and information.*
- *Provide construction support services related to painting All Existing Cranes, including review of paint inspection reports provided by the inspection agency retained by PED, and provide comments and recommendations for corrective action by the Contractor.*

SCHEDULE

Pre-Award

Consultant shall provide technical specifications to replace operator cabins on Samsung cranes and paint all nine cranes within five weeks from the date of issuance of the Notice to Proceed.

Post-Award

Consultant shall review Contractor's submittals and provide to PED comments and recommendations within two weeks of receiving the specified documentation and information.

PHASE 6: PROCUREMENT OF SP-11 THROUGH SP-13

Consultant shall provide procurement services for cranes SP-11 through SP-13 to be ordered by PED from ZPMC by June 30, 2021 and expected Substantial Completion within 25 months of PED's issuing a First Notice to Proceed to ZPMC.

LUMP SUM FEE

Manufacturing, Assembly, Shop Testing, and Seafastening Installation Review

Consultant shall retain Leader Firm to perform on-site crane manufacturing audit services for a 18 months of manufacturing at ZPMC's CX Island facility and to provide weekly inspection reports. Leader Firm lump sum cost for the three cranes is \$276,600. Potential additional costs associated with manufacturing delays are not included in the Lump Sum or Not-to-Exceed amounts.

NOT-TO-EXCEED (NTE) FEES

Crane Specifications Update and Design Review

Specification Addendum

Consultant shall compile and evaluate project documents for Base Cranes (SP-8, SP-9, and SP-10) and review with PED to update the specifications for the SP-11 through SP-13 based on lessons learned from the Base Crane project. Consultant shall prepare a specification addendum, review it remotely with PED and ZPMC, and issue the agreed addendum.

Design Review

ZPMC's design for the SP-11 through SP-13 may differ from the Base Cranes to reflect changes found during the design review of the Base Cranes. Consultant shall compare SP-11 through SP-13 design drawings supplied by ZPMC with the current Base Crane drawings, document and evaluate design changes, and attend a remote meeting with ZPMC to review and confirm design changes.

Consultant shall review seafastening drawings and calculations prepared by ZPMC to ship SP-11 through SP-13 to Port Everglades and will provide comments and recommendations to PED and ZPMC to take corrective action, as needed.

Manufacturing & Crane Offload Document Review

Manufacturing, Assembly, Shop Testing, and Seafastening Installation Review

Consultant shall ensure one Liftech engineer, two McKay engineers, and two Liftech Shanghai Ltd. engineers attend a two-day manufacturing kickoff meeting at ZPMC's CX Island facility, review the manufacturing plan and schedule, and provide meeting notes documenting actions required.

Consultant shall ensure Liftech/McKay engineers and Liftech Shanghai Ltd. engineers periodically visit CX Island during crane manufacturing to observe select manufacturing milestones and commissioning activities and provide a report for each visit documenting actions required. For crane manufacturing observations, Consultant shall provide for up to four two-day visits by a structural designer/ engineer, two three-day visits by a mechanical engineer, two three-day visits by an electrical engineer, and weekly visits by a Liftech Shanghai Ltd. engineer averaging one day per week.

For crane commissioning observations at ZPMC's CX Island facility, Consultant shall provide two six-day visits by a mechanical engineer and two six-day visits by an electrical engineer to CX Island facility. Consultant shall provide a report for each visit documenting actions required.

A structural designer/ engineer shall visit CX Island for two days to observe crane seafastening installation. Consultant shall provide a report of the visit documenting actions required.

For each visit by a U.S.-based engineer to CX Island, Consultant will invoice an additional three days for visit preparation, travel time, and report preparation time. NTE fees are for the actual time spent performing services by Consultant personnel at the specified billing rates. Consultant shall provide timesheets documenting services performed for any NTE fees billed during travel time. Consultant shall adhere to Section 112.061, Florida Statutes, when invoicing travel-related expenses. If travel to China is impractical for any of the above meetings, U.S.-based engineers will attend meetings remotely.

Consultant shall ensure two Liftech Shanghai Ltd. engineers provide support for up to six three-day visits by PED personnel to ZPMC during crane manufacturing and commissioning.

Consultant shall review crane manuals, offload documents, and as-built documentation and provide comments and recommendations documenting actions required. Consultant shall prepare a punch list for crane acceptance. Consultant shall assist PED with preparing a spare parts inventory list.

Consultant shall ensure that Liftech and McKay engineers attend meetings in person, unless authorized to attend remotely by the Contract Administrator in writing, or unless there are government-issued travel advisories.

Crane Receiving, Commissioning Audit, and Acceptance at Port Everglades

After the cranes arrive at PED, Consultant shall support PED with attending up to 20 weekly remote meetings of one hour each and provide in-office engineering support to track significant commissioning issues through the Substantial Completion Date for cranes SP-11 through SP-13. Consultant shall provide notes for each meeting documenting actions required.

Consultant shall ensure one engineer will visit PED for three days to witness crane offloading. Consultant's engineers shall make periodic visits to PED to observe commissioning activities and witness endurance testing through the Substantial Completion Date for the three cranes. Consultant shall provide a report for each visit documenting actions required. Consultant has budgeted for one two-day visit by a structural designer/ engineer to observe structural condition of the cranes, four four-day visits by a mechanical engineer, two four-day visits by an electrical engineer, and office support time.

Assist with Resolving Disputes Between County and ZPMC, Review Change Order Requests

As requested by PED, Consultant shall review ZPMC change order requests and provide comments and recommendations.

Potential Manufacturing Delay

For up to three months of delay over the budgeted 18 months from the start of manufacturing at ZPMC's CX Island facility, Consultant shall provide manufacturing audit support by Liftech Shanghai Ltd. engineers and remote support by Liftech and McKay engineers.

Process ZPMC Payment Requests

Consultant shall review and provide comments on ZPMC payment requests based on payment milestones as was provided for the Base Cranes.

ELECTRONIC SUBMITTAL OF DELIVERABLES

All documents, reports, or other submissions required under this scope constitute deliverables. Except for all documents provided by Leader Firm, Consultant shall submit all deliverables under this scope in electronic digital format and in accordance with the Electronic Media Submittal Requirements previously set forth in Exhibit A, Attachment 2. Documents provided by Leader Firm to PED shall be in PDF or Microsoft Word Format.

OPTIONAL SERVICES

Upon prior written approval by Contract Administrator, Consultant shall provide the following optional services as authorized by PED or other services as requested by PED:

- *During relocation of Crane SP-4, if PED or the Contractor report unforeseen conditions requiring mitigation, Consultant shall visit PED to observe the unforeseen condition if needed, provide engineering services to mitigate the condition, observe the mitigation work, review inspection reports, and provide comments and recommendations for additional corrective action.*
- *During modification of the existing cranes, if PED or the Contractor report unforeseen conditions requiring mitigation, Consultant shall visit PED to observe the unforeseen condition if needed, provide engineering services to mitigate the condition, observe the mitigation work, review inspection reports, and provide comments and recommendations for additional corrective action.*
- *During painting of any of the crane, if PED or the painting Contractor reports cracking of welds or plates or significant degradation of structural areas of a crane, Consultant shall provide engineering services to repair, replace, or reinforce the subject areas. The Consultant shall also provide engineering services to observe the repairs if necessary, review inspection reports, and provide comments and recommendations for additional corrective action.*
- *Update crane upgrade sequencing and schedule as directed by PED and incorporate crane painting work, beyond the basic services as described in Phase 5, as needed.*
- *Participate in meetings requested by PED related to Florida Power and Light (FPL) switchgear testing protocol and provide engineering services requested by PED related to crane to wharf electrical interface.*

- *Provide engineering services to review structural condition of Samsung crane gantry truck assemblies and provide repair procedures as required.*
- *Beyond the 3 months of delay provided for under the basic services described in Phase 6, Consultant shall provide manufacturing audit support by Liftech Shanghai Ltd. engineers and remote support by Liftech and McKay engineers.*