

AGREEMENT BETWEEN BROWARD COUNTY AND AECOM TECHNICAL SERVICES, INC. FOR CONSULTANT SERVICES FOR ENGINEERING DESIGN SERVICES FOR SHORE POWER ELECTRIFICATION FOR PORT EVERGLADES (RFP# PNC2129696P1)

This agreement (“Agreement”) is between Broward County, a political subdivision of the State of Florida (“County”), and AECOM Technical Services, Inc., a California corporation (“Consultant”) (each a “Party” and collectively referred to as the “Parties”).

RECITALS

A. County issued RFP No. PNC2129696P1 for engineering design services for shore power electrification for Port Everglades.

B. Consultant represents that it is experienced in, and capable of, providing the engineering services necessary for designing a shore power electrification system.

C. Negotiations were undertaken between County and Consultant, and this Agreement incorporates the results of such negotiations.

D. This Agreement is subject to the requirements of Section 287.055, Florida Statutes, the Consultants’ Competitive Negotiation Act, as amended (“CCNA”), and County has met the requirements of the CCNA and has selected Consultant to perform the Services stated herein.

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

ARTICLE 1. DEFINITIONS

1.1. **Applicable Law** means all applicable laws, codes, advisory circulars, rules, regulations, and ordinances of any federal, state, county, municipal, or other governmental entity, as amended.

1.2. **Board** means the Board of County Commissioners of Broward County, Florida.

1.3. **Code** means the Broward County Code of Ordinances.

1.4. **Contract Administrator** means the Director of the Port Everglades Department, Seaport Engineering and Construction Division, the Assistant Director of the Port Everglades Department, Seaport Engineering and Construction Division, or such other person designated by the Director of the Port Everglades Department, Seaport Engineering and Construction Division, in writing. The Contract Administrator is the representative of County concerning the Project.

1.5. **Contractor** shall mean the person, firm, corporation, or other entity (if any) that enters into an agreement with County to perform construction work for the Project.

- 1.6. **County Business Enterprise** or **CBE** means an entity certified as meeting the applicable requirements of the Broward County Business Opportunity Act, Section 1-81, et seq., of the Code.
- 1.7. **Notice to Proceed** means a written authorization issued by the Contract Administrator for Consultant to proceed with the Services or a specific phase or task of the Services.
- 1.8. **Project** means the design and construction of a shore power electrification system as described in Exhibit A].
- 1.9. **Purchasing Director** means County’s Director of Purchasing.
- 1.10. **Services** means the work set forth in the Scope of Services, attached as Exhibit A, and any Optional Services procured under this Agreement, and includes civil, structural, mechanical, and electrical engineering, architectural services, and other professional services as applicable for the Project.
- 1.11. **Small Business Enterprise** or **SBE** means an entity certified as meeting the applicable requirements of the Broward County Business Opportunity Act, Section 1-81, et seq., of the Code.
- 1.12. **Subconsultant** means any entity or individual, including any subcontractor and any third party issued a Form 1099 by Consultant, that provides Services to County through Consultant, regardless of tier.

ARTICLE 2. EXHIBITS

Exhibit A	Scope of Services
Exhibit B	Maximum Billing Rates
Exhibit B-1	Reimbursables for Direct Non-Salary Expenses
Exhibit C	Minimum Insurance Requirements
Exhibit D	Work Authorization Form
Exhibit E	Schedule of Subconsultants
Exhibit F	CBE Subconsultants and Letters of Intent
Exhibit G	Port Everglades Security Requirements
Exhibit H	Fiscal Year 2024 Port Infrastructure Development Program Grant

ARTICLE 3. SCOPE OF SERVICES

- 3.1. Consultant shall provide all Services as set forth in Exhibit A (the “Scope of Services”), including all necessary, incidental, and related activities required for full and complete performance of this Agreement.
- 3.2. This Agreement does not delineate every detail and minor work task required to be performed by Consultant to complete the Project. If Consultant determines that work should be performed to complete the Services and, in Consultant’s opinion, that work is outside the level of effort originally anticipated, whether or not the Scope of Services identifies the work items, Consultant will promptly notify the Contract Administrator in writing and seek written approval

of the Contract Administrator before proceeding with the work. If Consultant proceeds with such work without notifying the Contract Administrator and obtaining the Contract Administrator's written approval, the work shall be deemed to be within the original level of effort, whether or not specifically addressed in the Scope of Services, with no additional compensation or time for such work. Notice to the Contract Administrator does not constitute authorization or approval by County to Consultant to perform the work. In addition, any such work that would entail additional compensation to Consultant by County, or additional time for performance, requires an amendment to this Agreement pursuant to Section 6.1 or to the applicable Work Authorization. Unless there is an executed amendment or a dispute as set forth in Section 6.4, any work performed by Consultant outside the originally anticipated level of effort without prior written County approval shall be at no additional cost to County.

3.3. Consultant has no right to be retained for other phases of the Project or other services not included in Exhibit A. County shall have the right to procure services for other Project phases not included within this Agreement from any other source.

3.4. County will place at Consultant's disposal all information County reasonably has available that is pertinent to the Services, including previous reports and any other data regarding the Project. County shall arrange for access to, and make all provisions for, Consultant to enter upon public and private property if required for Consultant to perform the Services. Deliverables and documents required to be submitted by Consultant to County under this Agreement will be reviewed by County and responded to in writing with any comments within the time for such comments, if any, stated in Exhibit A.

3.5. Notwithstanding any other remedy otherwise available to County, where the work product of Consultant is found to be deficient for the purpose for which it was produced, Consultant shall correct the deficiency at no cost to County. Pursuant to Section 558.005(1), Florida Statutes, the Parties agree to opt out of the requirements of Section 558.005, Florida Statutes.

3.6. If the Services relate to a construction project, Consultant acknowledges that it is aware of all the duties and responsibilities and agrees to perform such duties and responsibilities as set forth in County's standard form documents or those County documents governing forms of construction delivery. Consultant agrees to meet with County at reasonable times after reasonable notice.

ARTICLE 4. TIME FOR PERFORMANCE; DAMAGES

4.1. Consultant shall perform the Services within the time periods specified in Exhibit A. Time periods shall commence from the date of the applicable Notice to Proceed.

4.2. Consultant must receive a Notice to Proceed from the Contract Administrator prior to commencement of Services (and prior to commencing any phase or task of Services for which a separate Notice to Proceed is required per Exhibit A). The Contract Administrator may, at their discretion, require Consultant to submit the deliverables and documents from one phase

identified in Exhibit A for the Contract Administrator's review and approval prior to Consultant commencing Services for another phase.

4.3. If the Contract Administrator determines that Consultant is unable to timely complete all or any portion of the Services because of delays resulting from untimely review by County or other governmental agencies having jurisdiction over the Project and such delays are not the fault of Consultant, or because of delays caused by factors outside the control of Consultant, the Contract Administrator has authority, in their sole discretion, and subject to a written amendment to either this Agreement or a Work Authorization, to grant a reasonable extension of time for completion of the Services and additional reasonable compensation, if deemed appropriate. It shall be the responsibility of Consultant to notify the Contract Administrator in writing whenever a delay in approval by a governmental agency is anticipated or experienced, and whenever a delay has been caused by factors outside of Consultant's control, and to inform the Contract Administrator of all facts and details related to the delay, along with an estimate of expected additional time necessary to complete the applicable Services and any request for additional compensation. Consultant must provide such written notice to the Contract Administrator within three (3) business days after the occurrence of the event causing the delay.

4.4. This section is only applicable if (a) the Project involves construction work, (b) County has retained a Contractor for the Project, and (c) the Services include construction engineering and inspection services related to Contractor's work. If Contractor fails to substantially complete the Project on or before the substantial completion date specified in its agreement with County through no fault of Consultant, or if Contractor is granted an extension of time beyond said substantial completion date and Consultant's Services are extended beyond the substantial completion date through no fault of Consultant, then Consultant shall be compensated in accordance with Article 5 for all Services rendered by Consultant beyond the substantial completion date. If Contractor's failure to substantially complete the Project on or before the substantial completion date specified in its agreement with County is caused in whole or in part by Consultant, a Subconsultant, or anyone acting by, through, or under Consultant, then Consultant shall pay to County its proportional share of any claim for damages to Contractor arising out of the delay. The provisions for the computation of delay costs, damages, or any other amounts, whether direct or indirect, in the agreement between the Contractor and County are incorporated herein. This section shall not affect the indemnification rights or obligations of either Party otherwise set forth in this Agreement.

ARTICLE 5. COMPENSATION AND METHOD OF PAYMENT

5.1. Amount and Method of Compensation. The amounts set forth in this Article 5 are the total compensation payable to Consultant for Services and constitute a limitation upon County's obligation to compensate Consultant for all Services, but do not constitute a limitation of any sort upon Consultant's obligation to perform all Services. Compensation for Services is subject to the following limitations, based upon the applicable method of compensation expressly stated in Exhibit A:

5.1.1. Maximum Amount Not-To-Exceed Compensation. For Services expressly identified in Exhibit A as payable on a “Maximum Amount Not-To-Exceed” basis, compensation to Consultant is based upon the Salary Costs as defined in Section 5.2, up to a maximum not-to-exceed amount of \$3,309,652.

5.1.2. Lump Sum Compensation. For Services expressly identified in Exhibit A as payable on a “Lump Sum” basis, compensation to Consultant shall not exceed a total lump sum of \$0.

5.1.3. Optional Services. County may procure Optional Services pursuant to Article 6 up to a maximum amount of \$149,514. Unused Optional Services amounts shall be retained by County.

5.1.4. Reimbursable Expenses. County will reimburse Consultant for authorized Reimbursable Expenses as defined in Section 5.3 up to a maximum amount of \$480,000. Any unused amounts shall be retained by County.

5.1.5. Subconsultant Fees. Consultant shall bill County for Subconsultant fees using the employee categories for Salary Costs on Exhibit B and Reimbursable Expenses defined in Section 5.3. Consultant shall bill Subconsultant fees with no mark-up and within any applicable maximum amount.

5.1.6. Phased Amounts. Payments for Services shall be made as specified in Exhibit A and shall not exceed the amount set forth below for the applicable phase. The invoiced amount for each phase is subject to retainage as set forth in Section 5.5.

Phase (Design Package 1)	Fee %	Amount
Phase I: Pre-Design	38.8%	\$1,284,093
Phase II: Construction Documents	58.1%	\$1,923,027
Phase III: Bidding	3.1%	\$102,532
Phase IV: Administration of the Construction Contract	TBD%	\$TBD
Phase V: Warranty Administration & Post Construction Services	TBD%	\$TBD
Total Maximum Amount Not-To-Exceed Services Fee	100%	\$3,309,652
Optional Services		\$149,514
Reimbursable Expenses		\$480,000
Total Maximum Compensation		\$3,939,166

The Contract Administrator may, in their discretion, by written notice to Consultant, reallocate funding from any phase shown above to any other phase, provided that the Total Maximum Amount Not-to-Exceed Services Fee is not increased.

5.2. Salary Costs. The term “Salary Costs” as used herein means the hourly rate actually paid to the personnel engaged in performing Services, adjusted by an overall multiplier that consists of the following: 1) a fringe benefits factor; 2) an overhead factor; and 3) a final operating margin. Said Salary Costs are to be used only for time directly attributable to the Services. The fringe

benefit and overhead rates shall be Consultant's most recent and actual rates determined in accordance with Federal Acquisition Regulation ("FAR") guidelines and audited by an independent Certified Public Accountant. For the purposes of this Agreement, the rates must be audited for fiscal periods of Consultant within eighteen (18) months preceding the execution date of this Agreement. These rates shall remain in effect for the duration of this Agreement except as provided for in this Agreement.

5.2.1. Consultant shall require all of its Subconsultants to comply with the requirements of Section 5.2.

5.2.2. Salary Costs shown in Exhibit B are the maximum billing rates for each Consultant and Subconsultant employee category, and are provisional subject to audit of actual costs; if the audit discloses that the actual costs are less than the costs set forth on Exhibit B for Consultant or any Subconsultant, Consultant will promptly reimburse County based upon the actual costs determined by the audit. County may withhold the amount Consultant is required to reimburse County from any payment due Consultant under this Agreement.

5.2.3. Unless otherwise noted, the Salary Costs stated above are based upon Consultant's "home office" rates. Should it become appropriate during the course of this Agreement that a "field office" rate be applied, Consultant must submit a supplemental Exhibit B reflective of such rates to the Contract Administrator for review and, subject to Contract Administrator's written approval, may invoice County accordingly.

5.2.4. The total hours payable by County to Consultant for any "nonexempt" personnel (i.e., personnel subject to overtime pay) shall not exceed forty (40) hours per employee in any week. If the Services require Consultant's or Subconsultant's nonexempt personnel to work in excess of forty (40) hours per week, any additional hours for nonexempt personnel must be authorized in advance, in writing, by the Contract Administrator. If approved, Consultant shall invoice Salary Costs for such additional hours provided by nonexempt employees at no more than one and one-half of the employee's hourly rate and in a manner consistent with Consultant's or Subconsultant's applicable certified FAR audit and all other provisions of Section 5.2. If a "Safe Harbor" rate is elected for use by Consultant or Subconsultant, then the additional hours for both "exempt" (i.e., not subject to overtime pay) and nonexempt employees are payable at no more than the employee's regular rate.

5.2.5. Consultant and any of its Subconsultants may alternatively use a "Safe Harbor" combined fringe benefit and overhead rate of 110% in lieu of providing fringe benefit and overhead cost factors certified by an independent Certified Public Accountant in accordance with the FAR guidelines. The Safe Harbor rate, once elected, shall remain in place for the duration of this Agreement, shall be applicable for use as "home" and "field" fringe benefit and overhead rates, if applicable, and shall not be subject to audit under this Agreement. All other provisions of Section 5.2 remain in place.

5.2.6. Indemnification Related to Paycheck Protection Program Forgiveness. If the State of Florida, federal government, or any other authority seeks recovery from County, whether through offset or any other means, of Paycheck Protection Program (“PPP”) funds received by Consultant or any Subconsultant under the Coronavirus Aid, Relief, and Economic Security (“CARES”) Act and/or any forgiveness of such funds pursuant to Section 1106 of the CARES Act, Consultant must indemnify and hold harmless County and its employees and agents from any and all claims, causes of action, losses, fines, penalties, damages, judgments, and liabilities of any kind, including attorneys’ fees, litigation expenses, and court costs, arising from or relating thereto.

5.3. Reimbursable Expenses. Reimbursement of any travel costs, travel-related expenses, or other direct non-salary expenses directly attributable to the Services (collectively, “Reimbursable Expenses”) shall be limited to those permitted under Section 112.061, Florida Statutes, except as otherwise stated herein or detailed in Exhibit B-1, Reimbursables for Direct Non-salary Expenses. Mileage for travel within Palm Beach, Broward, and Miami-Dade Counties is not reimbursable. County shall not be liable for any Reimbursable Expenses that have not been approved in writing in advance by the Contract Administrator. Reimbursable Expenses of Subconsultants must also comply with the requirements of this section. Reimbursables for Direct Non-salary Expenses shall only be invoiced or reimbursed to the extent stated in Exhibit B-1, which may be modified with advance written approval by the Contract Administrator.

5.4. Method of Billing.

5.4.1. For Maximum Amount Not-To-Exceed Compensation. Consultant shall submit invoices to the Contract Administrator in a timely manner, no more frequently than on a monthly basis, for all Salary Costs and Reimbursable Expenses attributable to the Services. Invoices are due within fifteen (15) days after the end of the month covered by the invoice, except that the final invoice must be received no later than sixty (60) days after the expiration or earlier termination of this Agreement. Consultant’s unexcused delayed submission of any invoice by more than sixty (60) days, absent good cause approved in writing by the Contract Administrator, may, at the Contract Administrator’s reasonable discretion, result in a waiver of any right to payment for the invoiced Services. Invoices must identify the specific project number, the nature of the Services performed, the total hours performed, and the employee category of the applicable individuals. Invoices must itemize and summarize all expenses by category and identify the personnel incurring the expense and the nature of the Services with which such expense was associated. Where prior written approval by Contract Administrator is required for the expense, a copy of said approval must accompany the invoice for such reimbursable. Invoices must also indicate the cumulative amount of CBE participation to date. The statement must show a summary of Salary Costs and Reimbursable Expenses with accrual of the total and credits for portions paid previously. External Reimbursable Expenses and Subconsultant fees must be documented by copies of paid invoices or receipts that describe the amount and

nature of the expenses and contain a project number or other identifier that clearly indicates the expense is identifiable to the Services. Subsequent addition of the identifier to the invoice or receipt by Consultant is not acceptable except for meals and travel expenses. Internal expenses must be documented by appropriate Consultant's cost accounting forms with a summary of charges by category. When requested, Consultant must provide backup for past and current invoices that records hours and Salary Costs by employee category, expenses by category, and Subconsultant fees on a task basis, so that total hours and costs by task may be determined.

5.4.2. For Lump Sum Compensation. Consultant shall submit invoices to the Contract Administrator in a timely manner, no more frequently than on a monthly basis. Invoices are due within fifteen (15) days after the end of the month covered by the invoice, except that the final invoice must be received no later than sixty (60) days after the expiration or earlier termination of this Agreement. Consultant's unexcused delayed submission of any invoice by more than sixty (60) days, absent good cause approved in writing by the Contract Administrator, may, at the Contract Administrator's reasonable discretion, result in a waiver of any right to payment for the invoiced Services. These invoices must identify the specific project number, the nature of the Services performed, the phase of work, and the estimated percent of Services accomplished on each phase. Invoices for each phase shall not exceed the amounts allocated to said phase. Invoices must also indicate the cumulative amount of CBE participation to date. The statement must show a summary of fees with accrual of the total and credits for portions paid previously. When requested, Consultant must provide backup for past and current invoices that record hours, salary costs, and expense costs on a task basis, so that total hours and costs by task may be determined.

5.5. Method of Payment.

5.5.1. County shall pay Consultant within thirty (30) days after receipt of Consultant's proper invoice, as defined by County's Prompt Payment Ordinance, minus any applicable retainage or other deductions permitted by this Agreement. To be deemed proper, all invoices must: (a) comply with all applicable requirements, whether set forth in this Agreement or the Code; (b) be submitted pursuant to instructions prescribed by the Contract Administrator; and (c) be submitted to both the County's Accounting Division (via email at AccountsPayable@Broward.org) and to the Contract Administrator.

5.5.2. Unless otherwise provided in this section, County shall have the right to retain an amount equal to ten percent (10%) of each invoice ("retainage") until satisfactory completion of each of the applicable phases specified in Exhibit A. When the Services to be performed are at least fifty percent (50%) complete, upon written request by Consultant and written approval by the Contract Administrator that Services have progressed in a satisfactory manner, the Contract Administrator, in the Contract Administrator's sole discretion, may authorize the reduction of retainage, if any, to five percent (5%) of each invoice for subsequent payments. No amount shall be withheld from

payments for Reimbursable Expenses or for Services performed during the construction phase, if applicable. Any decision by County not to retain amounts as provided for in this section shall not be construed as a waiver of any right or claim that County may have associated with any failure of Consultant to properly complete the applicable phase. County may set off any amounts Consultant owes to County under this Agreement against any amounts County owes to Consultant under this Agreement. If County elects to exercise a discretionary set-off not otherwise authorized in this Agreement, it shall provide Consultant with written notice describing the basis and amount of the proposed set-off, and Consultant shall have thirty (30) days to respond before such discretionary set-off is applied. Nothing in this paragraph shall limit or delay County's right to withhold, retain, or set off payments as otherwise provided in this Agreement or Applicable Law.

5.5.3. Upon Consultant's completion of each phase to the satisfaction of the Contract Administrator, County shall remit to Consultant any amounts withheld as retainage for that phase. Final payment for the Services must be approved by the Purchasing Director.

5.5.4. Payment will be made to Consultant at the address for notices in Section 11.11, unless otherwise requested by Consultant in writing and approved by the Contract Administrator in writing.

5.6. Fiscal Year. The continuation of this Agreement beyond the end of any County fiscal year (October 1 through September 30) is subject to both the appropriation and the availability of funds, pursuant to Chapter 129 and, if applicable, Chapter 212, Florida Statutes. If amounts to be paid by County under this Agreement are budgeted to be funded with transportation surtax proceeds pursuant to Section 212.055(1), Florida Statutes, and such proceeds are not appropriated or available for any reason, County shall have no obligation to use ad valorem funds or any other funding source to make any payment(s) required under this Agreement and County may terminate this Agreement for convenience pursuant to Article 8.

5.7. Payments to Subconsultants. Consultant must pay Subconsultants and suppliers within fifteen (15) days after receipt of payment from County for such subcontracted work or supplies. If Consultant withholds an amount as retainage from a Subconsultant or supplier, Consultant shall release such retainage and pay the same within fifteen (15) days after receipt of payment of retained amounts from County. The Contract Administrator may, at its option, increase allowable retainage or withhold progress payments unless and until Consultant demonstrates timely payments of sums due to all Subconsultants and suppliers. Consultant shall include requirements substantially similar to those set forth in this section in its contracts with Subconsultants and suppliers.

5.8. Withholding by County; Overcharges. Notwithstanding any provision of this Agreement to the contrary, County may withhold payment, in whole or in part, (a) in accordance with Applicable Law, or (b) to the extent necessary to protect itself from loss on account of (i) inadequate or defective work that has not been remedied or resolved in a manner satisfactory to the Contract Administrator, or (ii) Consultant's failure to comply with any provision of this Agreement. The amount withheld shall not be subject to payment of interest by County. In the

event of an overcharge by Consultant in any amount, Consultant shall promptly refund to County such overcharged amount. If the overcharge exceeds five percent (5%) of the total amount charged in the invoice where the overcharge occurred, Consultant shall, in addition to refunding the overcharged amount, pay liquidated damages in the amount of fifteen percent (15%) of the overcharged amount within thirty (30) days after demand by County as just compensation for damages incurred by County due to the overcharge, including, but not limited to, County's administrative costs and loss of potential investment returns (including interest).

5.9. Foreign Entity Tax Withholding. Amounts due to certain foreign persons or entities may be subject to backup withholding taxes under federal law. If Consultant is a foreign person or entity that is required to complete an Internal Revenue Service ("IRS") form to evidence exemption from backup withholding (e.g., Form W-8ECI) ("Foreign Tax Form"), Consultant shall provide County a copy of Consultant's current Foreign Tax Form prior to issuance of any invoice or payment under this Agreement. If Consultant fails to timely provide a completed, current Foreign Tax Form, County will withhold all backup withholding taxes from the amounts due Consultant, remit such sums to the IRS, and pay Consultant only the remainder. County makes no representation regarding the tax treatment of amounts due to Consultant, and Consultant releases and holds County harmless from any claims or damages in any way relating to or arising from any tax withholding by County pursuant to this section.

ARTICLE 6. OPTIONAL AND ADDITIONAL SERVICES; CHANGES IN SERVICES

6.1. County or Consultant may request changes that would increase, decrease, or otherwise modify the Services to be provided under this Agreement. Unless otherwise expressly permitted herein, such changes must be made in accordance with the provisions of the Broward County Procurement Code and must be contained in a written amendment.

6.2. If Services under this Agreement are identified as optional ("Optional Services"), County may select the type, amount, and timing of such services pursuant to a work authorization ("Work Authorization") in substantially the form attached as Exhibit D executed by Consultant and County pursuant to Section 6.3. No such selection, when combined with those Services required under this Agreement, may result in a payment obligation exceeding the applicable maximum amount stated in Article 5. A Work Authorization for Optional Services must specify the scope of services and method of compensation applicable to that Work Authorization and the required time for completion of the Optional Services.

6.3. Notwithstanding anything to the contrary in this Agreement, Work Authorizations (and amendments thereto) for Optional Services shall be executed on behalf of County as follows: (a) the Contract Administrator may execute Work Authorizations for which the total aggregate cost to County is less than \$50,000; (b) the Purchasing Director may execute Work Authorizations for which the total aggregate cost to County is within the Purchasing Director's delegated authority; and (c) any Work Authorization above the Purchasing Director's delegated authority requires express approval by the Board. Consultant shall not commence work on any Work Authorization until receipt of a purchase order and a Notice to Proceed issued by the Contract Administrator.

6.4. If a dispute between the Contract Administrator and Consultant arises over whether any work requested by County is within the scope of contracted Services and such dispute cannot be resolved by the Contract Administrator and Consultant, such dispute shall be promptly presented to the County Administrator or the County Administrator's designee for resolution, whose decision shall be in writing and shall be final and binding on the Parties. During the pendency of any dispute, Consultant shall promptly perform the disputed work.

ARTICLE 7. REPRESENTATIONS AND WARRANTIES

7.1. Representation of Authority. Consultant represents and warrants that this Agreement constitutes the legal, valid, binding, and enforceable obligation of Consultant, and that neither the execution nor performance of this Agreement constitutes a breach of any agreement that Consultant has with any third party or violates Applicable Law. Consultant further represents and warrants that execution of this Agreement is within Consultant's legal powers, and each individual executing this Agreement on behalf of Consultant is duly authorized by all necessary and appropriate action to do so on behalf of Consultant and does so with full legal authority.

7.2. Claims Against Consultant. Consultant represents and warrants that there is no action or proceeding, at law or in equity, before any court, mediator, arbitrator, governmental or other board or official, pending or, to the knowledge of Consultant, threatened against or affecting Consultant, the outcome of which may (a) affect the validity or enforceability of this Agreement, (b) materially and adversely affect the authority or ability of Consultant to perform its obligations under this Agreement, or (c) have a material and adverse effect on the consolidated financial condition or results of operations of Consultant or on the ability of Consultant to conduct its business as presently conducted or as proposed or contemplated to be conducted.

7.3. Solicitation Representations. Consultant represents and warrants that all statements and representations made in Consultant's proposal, bid, or other supporting documents submitted to County in connection with the solicitation, negotiation, or award of this Agreement, including during the procurement or evaluation process, were true and correct when made and are true and correct as of the date Consultant executes this Agreement, unless otherwise expressly disclosed in writing by Consultant.

7.4. Contingency Fee. Consultant represents and warrants that it has not employed or retained any person or entity, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement, and that it has not paid or agreed to pay any person or entity, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement. If this Agreement is subject to Section 287.055, Florida Statutes, the Parties agree and stipulate that the statutory language stated in Section 287.055(6)(a) is deemed included and fully incorporated herein.

7.5. Truth-In-Negotiation Representation. Consultant's compensation under this Agreement is based upon its representations to County, and Consultant certifies that the wage rates, factual unit costs, and other information supplied to substantiate Consultant's compensation, including,

without limitation, in the negotiation of this Agreement, are accurate, complete, and current as of the date Consultant executes this Agreement. Consultant's compensation may be reduced by County, in its sole discretion, to correct any inaccurate, incomplete, or noncurrent information provided to County as the basis for Consultant's compensation in this Agreement.

7.6. Public Entity Crime Act. Consultant represents that it is familiar with the requirements and prohibitions under the Public Entity Crime Act, Section 287.133, Florida Statutes, and represents that its entry into this Agreement will not violate that statute. Consultant further represents that there has been no determination that it committed a "public entity crime" as defined by Section 287.133, Florida Statutes, and that it has not been formally charged with committing an act defined as a "public entity crime" regardless of the amount of money involved or whether Consultant has been placed on the convicted vendor list.

7.7. Discriminatory Vendor and Scrutinized Companies Lists; Countries of Concern. Consultant represents that it has not been placed on the "discriminatory vendor list" as provided in Section 287.134, Florida Statutes, and that it has not been identified as a company or other entity subject to scrutiny under Sections 215.473 or 215.4725, Florida Statutes. Consultant represents and certifies that it is not, and for the duration of the Agreement will not be, ineligible to contract with County on any of the grounds stated in Section 287.135, Florida Statutes. Consultant represents that it is, and for the duration of this Agreement will remain, in compliance with Section 286.101, Florida Statutes.

7.8. Verification of Employment Eligibility. Consultant represents that Consultant and each Subconsultant have registered with and use 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.

7.9. Warranty of Performance. Consultant represents and warrants that it possesses the knowledge, skill, experience, and financial capability required to perform and provide all required and Optional Services under this Agreement, and that each person and entity that will provide Services is duly qualified and, to the extent required, licensed and certified by all appropriate governmental authorities to perform Services, and is sufficiently experienced and skilled in the area(s) for which such person or entity will render Services. Consultant represents and warrants that the Services shall be performed in a skillful and respectful manner, that it has or will obtain all necessary permits and approvals by applicable regulatory entities to perform the Services unless otherwise expressly stated herein, and that the quality of all Services shall equal or exceed prevailing industry standards for the provision of such services.

7.10. Prohibited Telecommunications. Consultant represents and certifies that Consultant and all Subconsultants do not use, and for the duration of this Agreement will not provide or use, any equipment, system, or service that uses covered telecommunications equipment or services as a

substantial or essential component of any system, or as critical technology as part of any system, as such terms are used in 48 C.F.R. §§ 52.204-24 through 52.204-26.

7.11. Criminal History Screening Practices. If this Agreement is subject to the requirements of Section 26-125(d) of the Code, Consultant represents and certifies that Consultant will comply with Section 26-125(d) of the Code for the duration of the Agreement.

7.12. Entities of Foreign Concern. The provisions of this section apply only if this Agreement provides access to an individual's personal identifying information. By execution of this Agreement, the undersigned authorized representative of Consultant hereby attests under penalty of perjury as follows: Consultant is not owned by the government of a foreign country of concern, is not organized under the laws of nor has its principal place of business in a foreign country of concern, and the government of a foreign country of concern does not have a controlling interest in Consultant; the undersigned authorized representative of Consultant declares that they have read the foregoing statement and that the facts stated in it are true. Terms used in this section that are not otherwise defined in this Agreement shall have the meanings ascribed to such terms in Section 287.138, Florida Statutes.

7.13. Domestic Partnership Requirement. Unless this Agreement is exempt from the provisions of the "Broward County Domestic Partnership Act," Section 16½-157 of the Code ("Act"), Consultant certifies and represents that it shall at all times comply with the provisions of the Act. The contract language referenced in the Act is deemed incorporated in this Agreement as though fully set forth in this section. |

7.14. Breach of Representations. Consultant acknowledges that County is materially relying on the representations, warranties, and certifications of Consultant stated in this article, and County shall be entitled to exercise any or all of the following remedies if any such representation, warranty, or certification is untrue: (a) recovery of damages incurred; (b) termination of this Agreement without any further liability to Consultant; (c) set off from any amounts due Consultant the full amount of any damage incurred; and (d) debarment of Consultant.

ARTICLE 8. TERMINATION

8.1. Termination for Cause. This Agreement or any Work Authorization issued under this Agreement may be terminated for cause by the aggrieved Party if the Party in breach has not corrected the breach within ten (10) days after receipt of written notice from the aggrieved Party identifying the breach. This Agreement may be terminated for cause by County for reasons including, but not limited to, any of the following:

8.1.1. Consultant's (a) failure to suitably or continuously perform the Services in a manner calculated to meet or accomplish the objectives in this Agreement or Work Authorization, (b) suspension or debarment by a state or federal governmental entity or by a local governmental entity with a population in excess of one million people, or (c) repeated submission (whether negligent or intentional) for payment of false or incorrect bills or invoices;

8.1.2. By the County Administrator or the Director of Office of Economic and Small Business Development (“OESBD”) for fraud, misrepresentation, or material misstatement by Consultant in the award or performance of this Agreement or that violates any applicable requirement of Section 1-81, et seq., of the Code; or

8.1.3. By the Director of OESBD upon the disqualification of Consultant as a CBE or SBE if Consultant’s status as a CBE or SBE was a factor in the award of this Agreement, or upon the disqualification of one or more of Consultant’s CBE or SBE participants by the Director of OESBD if any such participant’s status as a CBE or SBE firm was a factor in the award of this Agreement.

Unless otherwise stated in this Agreement, if this Agreement was approved by Board action, termination for cause by County must be by action of the Board or the County Administrator; in any other instance, termination for cause may be by the County Administrator, the County representative expressly authorized under this Agreement, or the County representative (including any successor) who executed this Agreement on behalf of County. If County erroneously, improperly, or unjustifiably terminates this Agreement or any Work Authorization for cause, such termination shall be deemed a termination for convenience pursuant to Section 8.2 effective thirty (30) days after such notice was provided and Consultant shall be eligible for the compensation provided in Section 8.2 as its sole remedy.

8.2. Termination for Convenience; Other Termination. This Agreement or any Work Authorization may also be terminated for convenience by the Board with at least thirty (30) days advance written notice to Consultant. Consultant acknowledges that it has received good, valuable, and sufficient consideration for County’s right to terminate this Agreement or any Work Authorization for convenience, including in the form of County’s obligation to provide advance written notice to Consultant of such termination in accordance with this section. This Agreement or any Work Authorization may also be terminated by the County Administrator upon such notice as the County Administrator deems appropriate under the circumstances if the County Administrator determines that termination is necessary to protect the public health, safety, or welfare. If this Agreement or any Work Authorization issued under this Agreement is terminated by County pursuant to this section, Consultant shall be paid for any Services properly performed through the termination date specified in the written notice of termination, subject to any right of County to retain any sums otherwise due and payable, and County shall have no further obligation to pay Consultant for Services under this Agreement.

8.3. Notice of termination shall be provided in accordance with the “Notices” section of this Agreement, except that notice of termination by the County Administrator to protect the public health, safety, or welfare may be oral notice that shall be promptly confirmed in writing.

8.4. In addition to any termination rights stated in this Agreement, County shall be entitled to seek any and all available contractual or other remedies available at law or in equity, including recovery of costs associated with Consultant’s failure to comply with any term(s) of this Agreement.

ARTICLE 9. INSURANCE

9.1. For the duration of the Agreement, Consultant shall, at its sole expense, maintain the minimum insurance coverages stated in Exhibit C in accordance with the terms and conditions of this article. Consultant shall maintain insurance coverage against claims relating to any act or omission by Consultant, its agents, representatives, employees, or Subconsultants in connection with this Agreement. County reserves the right at any time to review and adjust the limits and types of coverage required under this article.

9.2. Consultant shall ensure that "Broward County" is listed and endorsed as an additional insured as stated in Exhibit C on all policies required under this article.

9.3. On or before the date this Agreement is fully executed or at least fifteen (15) days prior to commencement of Services, as may be requested by County, Consultant shall provide County with a copy of all Certificates of Insurance or other documentation sufficient to demonstrate the insurance coverage required in this article. If and to the extent requested by County, Consultant shall provide complete, certified copies of all required insurance policies and all required endorsements within thirty (30) days after County's request.

9.4. Consultant shall ensure that all insurance coverages required by this article remain in full force and effect without any lapse in coverage for the duration of this Agreement and until all performance required of Consultant has been completed, as determined by Contract Administrator. Consultant or its insurer shall provide notice to County of any cancellation or modification of any required policy at least thirty (30) days prior to the effective date of cancellation or modification, and at least ten (10) days prior to the effective date of any cancellation due to nonpayment, and shall concurrently provide County with a copy of its updated Certificates of Insurance evidencing continuation of the required coverage(s).

9.5. All required insurance policies must be placed with insurers or surplus line carriers authorized to conduct business in the State of Florida with an A.M. Best rating of A- or better and a financial size category class VII or greater, unless otherwise approved by County's Risk Management Division in writing.

9.6. If Consultant maintains broader coverage or higher limits than the insurance requirements stated in Exhibit C, County shall be entitled to all such broader coverages and higher limits. All required insurance coverages shall provide primary coverage and not require contribution from any County insurance, self-insurance, or otherwise, which shall be in excess of and shall not contribute to the required insurance provided by Consultant.

9.7. Consultant shall declare in writing any self-insured retentions or deductibles over the limit(s) prescribed in Exhibit C and submit to County for approval at least fifteen (15) days prior to the date this Agreement is fully executed or commencement of Services. Consultant shall be solely responsible for and shall pay any deductible or self-insured retention applicable to any claim against County. County may, at any time, require Consultant to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim

administration, and defense expenses within the retention. Any deductible or self-insured retention may be satisfied by either the named insured or County, if so elected by County, and Consultant shall obtain the same in endorsements to the required policies.

9.8. Unless prohibited by the applicable policy, Consultant waives any right to subrogation that any of Consultant's insurers may acquire against County and shall obtain the same in an endorsement of Consultant's insurance policies.

9.9. Consultant shall require that each Subconsultant maintains insurance coverage that adequately covers the Services provided by that Subconsultant on substantially the same insurance terms and conditions required of Consultant under this article. Consultant shall ensure that all such Subconsultants comply with these requirements and that "Broward County" is named as an additional insured under the Subconsultants' applicable insurance policies. Consultant shall not permit any Subconsultant to provide Services unless and until all applicable requirements of this article are satisfied.

9.10. If Consultant or any Subconsultant fails to maintain the insurance required by this Agreement, County may pay any costs of premiums necessary to maintain the required coverage and deduct such costs from any payment otherwise due to Consultant. If requested by County, Consultant shall provide, within one (1) business day, evidence of each Subconsultant's compliance with this article.

9.11. If any of the policies required under this article provide claims-made coverage: (1) any retroactive date must be prior to the date this Agreement is fully executed; (2) the required coverage must be maintained after termination or expiration of the Agreement for at least the duration stated in Exhibit C; and (3) if coverage is canceled or nonrenewed and is not replaced with another claims-made policy form with a retroactive date prior to the date this Agreement is fully executed, Consultant must obtain and maintain "extended reporting" coverage that applies after termination or expiration of the Agreement for at least the duration stated in Exhibit C.

ARTICLE 10. EQUAL EMPLOYMENT OPPORTUNITY AND CBE/SBE COMPLIANCE

10.1. Consultant and Subconsultants shall not discriminate on the basis of race, color, sex, religion, national origin, disability, age, marital status, political affiliation, pregnancy, or any other basis prohibited by Applicable Law in the performance of this Agreement. Consultant shall include the foregoing or similar language in its contracts with any Subconsultants, except that any project assisted by U.S. Department of Transportation funds shall comply with the nondiscrimination requirements in 49 C.F.R. Parts 23 and 26.

10.2. Consultant shall comply with all applicable requirements of the Broward County Business Opportunity Act, Section 1-81, et seq., of the Code, in the award and administration of this Agreement. Failure by Consultant to carry out any of the requirements of this article shall constitute a material breach of this Agreement, which shall permit County to terminate this Agreement or exercise any other remedy provided under this Agreement or Applicable Law, all such remedies being cumulative.

10.3. Consultant must meet or exceed the required CBE goal by utilizing the CBE firms listed in Exhibit F (or a CBE firm substituted for a listed firm, if permitted) for twenty-five percent (25%) of total Services (the "Commitment") for the scope of work and the percentage of work amounts identified on each Letter of Intent. Promptly upon execution of this Agreement by County, Consultant shall enter into formal contracts with the CBE firms listed in Exhibit F and, upon request, shall provide copies of the contracts to the Contract Administrator and OESBD.

10.4. Each CBE firm utilized by Consultant to meet the CBE goal must be certified and their participation approved in advance by OESBD. Consultant shall inform County immediately when a CBE firm is not able to perform or if Consultant believes the CBE firm should be replaced for any other reason, so that OESBD may review and verify the good faith efforts of Consultant to substitute the CBE firm with another CBE firm, as applicable. Whenever a CBE firm is terminated for any reason, Consultant shall provide written notice to OESBD and, upon written approval of the Director of OESBD, shall substitute another CBE firm in order to meet the CBE goal, unless otherwise provided in this Agreement or agreed in writing by the Parties. Such substitution shall not be required if the termination results from modification of the Services and no CBE firm is available to perform the modified Services; in which event Consultant shall notify County, and OESBD may adjust the CBE goal by written notice to Consultant.

10.5. The Parties stipulate that if Consultant fails to meet the Commitment, the damages to County arising from such failure are not readily ascertainable at the time of contracting. If Consultant fails to meet the Commitment and County determines, in the sole discretion of the OESBD Program Director, that Consultant failed to make Good Faith Efforts (as defined in Section 1-81.1 of the Code) to meet the Commitment, Consultant shall pay County liquidated damages in an amount equal to fifty percent (50%) of the actual dollar amount by which Consultant failed to achieve the Commitment, up to a maximum amount of ten percent (10%) of the total contract amount, excluding costs and reimbursable expenses. An example of this calculation is stated in Section 1-81.7 of the Code. As elected by County, such liquidated damages amount shall be either credited against any amounts due from County, or paid to County within thirty (30) days after written demand. These liquidated damages shall be County's sole contractual remedy for Consultant's breach of the Commitment, but shall not affect the availability of administrative remedies under Section 1-81, et seq. Consultant acknowledges and agrees that the liquidated damages provided in this section are proportionate to an amount that might reasonably be expected to flow from a breach of the Commitment and are not a penalty. Any failure to meet the Commitment attributable solely to force majeure, changes to the scope of work by County, or inability to substitute a CBE Subconsultant where the OESBD Program Director has determined that such inability is due to no fault of Consultant, shall not be deemed a failure by Consultant to meet the Commitment.

10.6. Consultant acknowledges that the Board, acting through OESBD, may make minor administrative modifications to Section 1-81, et seq., of the Code, which shall become applicable to this Agreement if the administrative modifications are not unreasonable. Written notice of any such modification shall be provided to Consultant and shall include a deadline for Consultant to notify County in writing if Consultant concludes that the modification exceeds the authority

under this section. Failure of Consultant to timely notify County of its conclusion that the modification exceeds such authority shall be deemed acceptance of the modification by Consultant.

10.7. County may modify the required participation of CBE firms in connection with any amendment, extension, modification, change order, or Work Authorization to this Agreement that, by itself or aggregated with previous amendments, extensions, modifications, change orders, or Work Authorizations, increases the initial Agreement price by ten percent (10%) or more. Consultant shall make a good faith effort to include CBE firms in work resulting from any such amendment, extension, modification, change order, or Work Authorization, and shall report such efforts, along with evidence thereof, to OESBD.

10.8. Consultant shall provide monthly utilization reports, using the form available at <https://www.broward.org/EconDev/SmallBusiness/Pages/Compliance.aspx> or such other form or system as may be designated by OESBD, to the Contract Administrator, to OESBD at SBCOMP@broward.org, and to the Small Business Specialist identified by OESBD. In addition, Consultant shall allow County to engage in onsite reviews to monitor Consultant's progress in achieving and maintaining the Commitment. The Contract Administrator, in conjunction with OESBD, shall perform such review and monitoring, unless otherwise determined by the County Administrator.

10.9. The presence of a "pay when paid" provision in a Consultant's contract with a CBE firm shall not preclude County or its representatives from inquiring into claims of nonpayment or exercising any right stated in Section 5.8. |

ARTICLE 11. MISCELLANEOUS

11.1. Contract Administrator Authority. The Contract Administrator is authorized to coordinate and communicate with Consultant to manage and supervise the performance of this Agreement. Consultant acknowledges that the Contract Administrator has no authority to make changes that would increase, decrease, or otherwise materially modify the Services except as expressly set forth in this Agreement or, to the extent applicable, in the Broward County Procurement Code. Unless expressly stated otherwise in this Agreement or otherwise set forth in the Code or the Broward County Administrative Code, the Contract Administrator or designee may exercise ministerial authority in connection with the day-to-day management of this Agreement provided that such instructions and determinations do not change the Services. The Contract Administrator may also approve in writing minor modifications to the Services that do not increase the total cost to County or waive any rights of County. Consultant shall notify Contract Administrator in writing of Consultant's representative(s) to whom matters involving the Services shall be addressed.

11.2. Rights in Documents and Work. Except as provided in the section of this Agreement titled "Reuse of Materials, Deliverables, and other Work Product," any and all documents, reports, studies, photographs, surveys, drawings, maps, models, photographs, specifications, materials, or other work created by Consultant specifically for County in connection with performing

Services, in their native file format, whether finished or unfinished (“Documents and Work”), shall be owned by County, and Consultant hereby transfers to County all right, title, and interest, including any copyright or other intellectual property rights, in or to the Documents and Work, and shall provide any documentation necessary to effectuate such transfer. Unless otherwise expressly stated herein, County has the right to use, reproduce, modify, distribute, and publicly display the Documents and Work, in whole or in part, in any medium and for any purpose, in perpetuity and without restriction. Consultant represents and warrants that it has all necessary legal rights to provide the Documents and Work and to grant County the rights stated in this Agreement. Consultant must deliver the Documents and Work to the Contract Administrator within ten (10) business days after expiration or termination of this Agreement. Any compensation due to Consultant may be withheld until all Documents and Work are provided as set forth herein. Consultant shall ensure that the requirements of this section are included in all Consultant’s agreements with Subconsultants.

11.3. Public Records. Notwithstanding any other provision in this Agreement, any action taken by County in compliance with, or in a good faith attempt to comply with, the requirements of Chapter 119, Florida Statutes, shall not constitute a breach of this Agreement. If Consultant is acting on behalf of County as stated in Section 119.0701, Florida Statutes, Consultant shall:

11.3.1. Keep and maintain public records required by County to perform the services under this Agreement;

11.3.2. Upon request from County, provide County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time and at a cost that does not exceed that provided in Chapter 119, Florida Statutes, or as otherwise provided by Applicable Law;

11.3.3. Ensure that public records that are exempt or confidential and exempt from public record requirements are not disclosed except as authorized by Applicable Law for the duration of this Agreement and after completion or termination of this Agreement if the records are not transferred to County; and

11.3.4. Upon completion or termination of this Agreement, transfer to County, at no cost, all public records in possession of Consultant or keep and maintain public records required by County to perform the services. If Consultant transfers the records to County, Consultant shall destroy any duplicate public records that are exempt or confidential and exempt. If Consultant keeps and maintains the public records, Consultant shall meet all requirements of Applicable Law for retaining public records. All records stored electronically must be provided to County upon request in a format that is compatible with the information technology systems of County.

If Consultant receives a request for public records regarding this Agreement or the Services, Consultant must immediately notify the Contract Administrator in writing and provide all requested records to County to enable County to timely respond to the public records request. County will respond to all such public records requests.

Consultant must separately submit and conspicuously label as “RESTRICTED MATERIAL – DO NOT PRODUCE” any material (a) that Consultant contends constitutes or contains its trade secrets under Chapter 688, Florida Statutes, or (b) for which Consultant asserts a right to withhold from public disclosure as confidential or otherwise exempt from production under Florida public records laws (including Chapter 119, Florida Statutes) (collectively, “Restricted Material”). In addition, Consultant must, simultaneous with the submission of any Restricted Material, provide a sworn declaration or affidavit in a form acceptable to County from a person with personal knowledge attesting that the Restricted Material constitutes trade secrets or is otherwise exempt or confidential under Florida public records laws, including citing the applicable Florida statute and specifying the factual basis for each such claim. Upon request by County, Consultant must promptly identify the specific applicable statutory section that protects any particular document. If a third party submits a request to County for records designated by Consultant as Restricted Material, County shall refrain from disclosing such material unless otherwise ordered by a court of competent jurisdiction, authorized in writing by Consultant, or the claimed exemption is waived. Any failure by Consultant to strictly comply with the requirements of this section shall constitute Consultant’s waiver of County’s obligation to treat the records as Restricted Material. Consultant must indemnify and hold harmless County and its employees and agents from any and all claims, causes of action, losses, fines, penalties, damages, judgments, and liabilities of any kind, including attorneys’ fees, litigation expenses, and court costs, relating to nondisclosure of Restricted Material in response to a third-party request.

IF CONSULTANT HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONSULTANT’S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (954) 468-3501, [EKENNEDY]@BROWARD.ORG, 1850 ELLER DRIVE, SUITE 605, FORT LAUDERDALE, FLORIDA, 33316.

11.4. Audit Rights and Retention of Records. Consultant and all Subconsultants shall preserve all Contract Records (as defined below) for a minimum period of three (3) years after expiration or termination of this Agreement or until resolution of any audit findings, whichever is longer. This section shall survive any dispute or litigation between the Parties, and Consultant expressly acknowledges and agrees to be bound by this section throughout the course of any dispute or litigation with County. Contract Records shall, upon reasonable notice, be open to County inspection and subject to audit and reproduction during normal business hours. County audits and inspections pursuant to this section may be performed by any County representative (including any outside representative engaged by County). County may conduct audits or inspections at any time during the duration of this Agreement and for a period of three (3) years after the expiration or termination of this Agreement (or longer if required by Applicable Law). County may, without limitation, verify information, payroll distribution, and amounts through interviews, written affirmations, and on-site inspections with Consultant’s employees, Subconsultants, vendors, or other laborers.

Contract Records include any and all information, materials and data of every kind and character, including, without limitation, records, books, papers, documents, subscriptions, recordings, agreements, purchase orders, leases, contracts, commitments, arrangements, notes, daily diaries, drawings, receipts, vouchers, memoranda, e-mails, and any and all other documents that pertain to rights, duties, obligations, or performance under this Agreement. Contract Records include hard copy and electronic records, written policies and procedures, time sheets, payroll records and registers, cancelled payroll checks, estimating work sheets, correspondence, invoices and related payment documentation, cost and expense reports, general ledgers, insurance rebates and dividends, and any other records pertaining to rights, duties, obligations, or performance under this Agreement, whether by Consultant or Subconsultants.

County shall have the right to audit, review, examine, inspect, analyze, and make copies of all Contract Records at a location within Broward County. Consultant hereby grants County the right to conduct such audit or review at Consultant's place of business, if deemed appropriate by County, with seventy-two (72) hours' advance notice. Consultant agrees to provide adequate and appropriate workspace. Consultant shall provide County with reasonable access to Consultant's facilities, and County shall be allowed to interview all employees to discuss matters pertinent to the performance of this Agreement. Consultant shall make all Contract Records available electronically, in common file formats, and/or via remote access if and to the extent requested by County.

Consultant shall, by written contract, require all Subconsultants to agree to the requirements and obligations of this section.

Any incomplete or incorrect entry in such books, records, and accounts shall be a basis for County's disallowance and recovery of any payment based upon such entry. Consultant shall refund to County any overcharged amount identified as a result of an audit, regardless of the amount of the overcharge. If the overcharge exceeds five percent (5%) of the total contract charges audited by County, Consultant shall, in addition to refunding the overcharged amount, pay liquidated damages in the amount of fifteen percent (15%) of the overcharged amount as just compensation for damages incurred by County due to the overcharge, including, but not limited to, County's administrative costs and loss of potential investment returns (including interest). Any adjustments or payments due as a result of such audit must be made within thirty (30) days after presentation of County's findings to Consultant.

11.5. Subconsultants. Consultant shall utilize only the Subconsultants identified in Exhibit E, Schedule of Subconsultants, to provide the Services. Consultant shall obtain written approval of Contract Administrator prior to changing or modifying the Schedule of Subconsultants, which shall be automatically updated upon such written approval. Consultant shall bind in writing each and every approved Subconsultant to the terms stated in this Agreement, provided that this provision shall not, in and of itself, impose the insurance requirements set forth in Article 9 on Consultant's Subconsultants.

11.6. Subcontracting; Assignment; Change of Control. Neither this Agreement nor any interest herein shall be assigned, transferred, or encumbered without the written consent of the other Party. Any change of control (as defined herein) shall be deemed an assignment. Any assignment, transfer, encumbrance, or subcontract in violation of this section shall be void and ineffective, constitute a breach of this Agreement, and permit the nonassigning Party to immediately terminate this Agreement, in addition to any other remedies available to the nonassigning Party at law or in equity. County reserves the right to condition its approval of any assignment, transfer, encumbrance, or subcontract upon further due diligence and an additional fee paid to County to reasonably compensate it for the performance of any such due diligence.

For purposes of this section, “change of control” means: (a) a transfer of more than fifty percent (50%) of the ownership interests in Consultant, whether in a single transaction or a series of related transactions; (b) a merger, consolidation, or other reorganization that results in a change in voting control in Consultant or in the entity that controls Consultant’s business; or (c) the sale, lease, or transfer of all or substantially all of Consultant’s assets. A change of control does not include (i) a transfer to an entity wholly owned, directly or indirectly, by Consultant or its parent, or (ii) a transfer between existing owners of Consultant that does not result in a change in majority ownership; provided, however, that any such transfer shall not relieve Consultant of its obligations under this Agreement unless County expressly agrees otherwise in writing.

11.7. Confidential Information; Generative Artificial Intelligence. Unless expressly authorized in this Agreement or in writing in advance by the Contract Administrator, Consultant is strictly prohibited from disclosing, uploading, or otherwise making available to third parties, directly or indirectly, including but not limited to through utilization of generative artificial intelligence tools, any exempt, confidential, sensitive security, or personal information of County. Consultant must ensure that any use of generative artificial intelligence tools by Consultant or its Subconsultants does not involve the disclosure of exempt, confidential, sensitive security, or personal information, including without limitation for large language model learning or training. Consultant must implement and maintain appropriate technological and operational safeguards to ensure compliance with the obligations of this section.

11.8. Indemnification of County. If this Agreement constitutes a construction contract or a professional services contract with a design professional, then Section 11.8.1 shall apply. If this Agreement does not constitute a construction contract or a professional services contract with a design professional, then Section 11.8.2 shall apply. The terms “construction contract,” “professional services contract,” and “design professional” used in this section have the meanings set forth in Sections 725.06 or 725.08, Florida Statutes.

11.8.1. Construction and Professional Services Contracts. Consultant shall indemnify and hold harmless County and its current, past, and future officers and employees from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys’ fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of Consultant or other persons employed or utilized by Consultant in the performance of this Agreement.

11.8.2. Contracts Other than Construction or Professional Services. Consultant shall indemnify, hold harmless, and defend County and all of County's current, past, and future officers, agents, and employees (collectively, "Indemnified Party") from and against any and all causes of action, demands, claims, losses, liabilities, and expenditures of any kind, including attorneys' fees, court costs, and expenses, including through the conclusion of any appellate proceedings, raised or asserted by any person or entity not a party to this Agreement, and caused or alleged to be caused, in whole or in part, by any breach of this Agreement by Consultant, or any intentional, reckless, or negligent act or omission of Consultant, its officers, employees, or agents, arising from, relating to, or in connection with this Agreement (collectively, a "Claim"). If any Claim is brought against an Indemnified Party, Consultant shall, upon written notice from County, defend each Indemnified Party with counsel satisfactory to County or, at County's option, pay for an attorney selected by the County Attorney to defend the Indemnified Party.

11.8.3. The applicable provisions of Section 11.8 shall survive the expiration or earlier termination of this Agreement. If considered necessary by the Contract Administrator and the County Attorney, any sums due Consultant under this Agreement may be retained by County until all claims subject to indemnification have been settled or otherwise resolved. Any amount withheld shall not be subject to payment of interest by County.

11.9. Prior Agreements. This Agreement represents the final and complete understanding of the Parties regarding the subject matter of this Agreement and supersedes all prior and contemporaneous negotiations and discussions regarding the same. All commitments, agreements, and understandings of the Parties concerning the subject matter of this Agreement are contained herein.

11.10. Amendments. Unless otherwise expressly authorized herein, no modification, amendment, or alteration of any portion of this Agreement is effective unless contained in a written document executed with the same or similar formality as this Agreement and by duly authorized representatives of County and Consultant.

11.11. Notices. Unless otherwise stated herein, for notice to a Party to be effective under this Agreement, notice must be sent via U.S. first-class mail, hand delivery, or commercial overnight delivery, each with a contemporaneous copy via e-mail, to the addresses listed below and shall be effective upon mailing or hand delivery (provided the contemporaneous email is also sent). A Party may change its notice address by providing notice of such change in accordance with this section.

FOR COUNTY:

John Foglesong
1850 Eller Drive, Suite 504
Fort Lauderdale, Florida 33316 | Email address: jfoglesong@broward.org

FOR CONSULTANT:

Pedro "Pete" Hernandez
110 East Broward Blvd., Ste. 700
Ft. Lauderdale, FL 33301
Email address: pedro.hernandez@aecom.com

11.12. Interpretation. The titles and headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement. All personal pronouns used in this Agreement shall include any other gender, and the singular shall include the plural, and vice versa, unless the context otherwise requires. Terms such as "herein" refer to this Agreement as a whole and not to any particular sentence, paragraph, or section where they appear, unless the context otherwise requires. Whenever reference is made to a section or article of this Agreement, such reference is to the section or article as a whole, including all subsections thereof, unless the reference is made to a particular subsection or subparagraph of such section or article. Any reference to "days" means calendar days, unless otherwise expressly stated. Any reference to approval by County shall require approval in writing, unless otherwise expressly stated.

11.13. Consultant's Staff. Consultant will provide the key staff identified in Exhibit A (if none listed in Exhibit A, then identified in response to County's request for a proposal) as long as said key staff are in Consultant's employment. Consultant will obtain prior written approval of Contract Administrator to change key staff. Consultant shall provide Contract Administrator with such information as necessary for County to determine the suitability of the proposed new key staff. Contract Administrator will be reasonable in evaluating key staff qualifications. If Contract Administrator desires to request the removal of any of Consultant's staff, Contract Administrator shall first meet with Consultant and provide reasonable justification for said removal; upon such reasonable justification, Consultant shall use good faith efforts to remove or reassign the staff at issue.

11.14. Independent Contractor. Consultant is an independent contractor of County, and nothing in this Agreement shall constitute or create a partnership, joint venture, or any other relationship between the Parties. In providing Services, neither Consultant nor its agents shall act as officers, employees, or agents of County, except as authorized by the Contract Administrator for permitting, licensing, or other regulatory requirements. Consultant shall not have the right to bind County to any obligation not expressly undertaken by County under this Agreement. Consultant and each Subconsultant shall be responsible for any amounts owed to their respective employees for work performed in excess of forty (40) hours in any week if the employee was misclassified as "exempt."

11.15. Regulatory Capacity. Notwithstanding the fact that County is a political subdivision with certain regulatory authority, County's performance under this Agreement is as a Party to this Agreement and in the capacity as owner of the Project. If County exercises its regulatory authority, the exercise of such authority and the enforcement of Applicable Law shall have occurred pursuant to County's regulatory authority as a governmental body separate and apart

from this Agreement, and shall not be attributable in any manner to County as a Party to this Agreement.

11.16. Sovereign Immunity. Except to the extent sovereign immunity may be deemed to be waived by entering into this Agreement, nothing herein is intended to serve as a waiver of sovereign immunity by County nor shall anything included herein be construed as consent by County to be sued by third parties in any matter arising out of this Agreement.

11.17. Third-Party Beneficiaries. Neither Consultant nor County intends to primarily or directly benefit a third party by this Agreement. Therefore, the Parties acknowledge that there are no third-party beneficiaries to this Agreement and that no third party shall be entitled to assert a right or claim against either of them based upon this Agreement.

11.18. Conflicts. Neither Consultant nor its employees shall have or hold any continuing or frequently recurring employment or contractual relationship that is substantially antagonistic or incompatible with Consultant's loyal and conscientious exercise of judgment and care related to its performance under this Agreement. During the duration of this Agreement, none of Consultant's officers or employees shall serve as an expert witness against County in any legal or administrative proceeding in which they or Consultant is not a party, unless compelled by legal process. Further, such persons shall not give sworn testimony or issue a report or writing, as an expression of such person's expert opinion that is adverse or prejudicial to the interests of County in connection with any such pending or threatened legal or administrative proceeding unless compelled by legal process. The limitations of this section shall not preclude Consultant or any persons in any way from representing themselves, including giving expert testimony in support of such representation, in any action or in any administrative or legal proceeding. If Consultant is permitted pursuant to this Agreement to utilize Subconsultants to perform any Services, Consultant shall require such Subconsultants, by written contract, to comply with the provisions of this section to the same extent as Consultant.

11.19. Materiality and Waiver of Breach. Each requirement, duty, and obligation set forth in this Agreement was bargained for at arm's-length and is agreed to by the Parties. Each requirement, duty, and obligation set forth in this Agreement is substantial and important to the formation of this Agreement, and each is, therefore, a material term. County's failure to enforce any provision of this Agreement shall not be deemed a waiver of such provision or modification of this Agreement. A waiver of any breach shall not be deemed a waiver of any subsequent breach and shall not be construed to be a modification of this Agreement. To be effective, any waiver must be in writing and signed by an authorized signatory of the Party granting the waiver.

11.20. Compliance with Laws. Consultant and the Services must comply with all Applicable Law, including, without limitation, the Americans with Disabilities Act, 42 U.S.C. § 12101, Section 504 of the Rehabilitation Act of 1973, and the requirements of any applicable grant agreements, and all deliverables provided for online utilization must meet or exceed the World Wide Web Consortium/Web Content Accessibility Guidelines (WCAG) 2.1 Level AA standard or any higher standard as required by Applicable Law.

11.21. Severability. If any part of this Agreement is found to be unenforceable by any court of competent jurisdiction or contrary to Applicable Law, that part shall be deemed severed from this Agreement and the balance of this Agreement shall remain in full force and effect.

11.22. Joint Preparation. This Agreement has been jointly prepared by the Parties and shall not be construed more strictly against either Party.

11.23. Priority of Provisions. If there is a conflict or inconsistency between any term, statement, requirement, or provision of any document or exhibit attached to, referenced by, or incorporated in this Agreement and any provision within an article or section of this Agreement, the article or section shall prevail and be given effect.

11.24. Law, Jurisdiction, Venue, Waiver of Jury Trial. This Agreement shall be interpreted and construed in accordance with and governed by the laws of the State of Florida. The exclusive venue for any lawsuit arising from, related to, or in connection with this Agreement shall be in the state courts of the Seventeenth Judicial Circuit in and for Broward County, Florida. If any claim arising from, related to, or in connection with this Agreement must be litigated in federal court, the exclusive venue for any such lawsuit shall be in the United States District Court or United States Bankruptcy Court for the Southern District of Florida. **EACH PARTY HEREBY EXPRESSLY WAIVES ANY RIGHTS IT MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO THIS AGREEMENT. IF A PARTY FAILS TO WITHDRAW A DEMAND FOR A JURY TRIAL AFTER WRITTEN NOTICE BY THE OTHER PARTY, THE PARTY MAKING THE DEMAND FOR JURY TRIAL SHALL BE LIABLE FOR REASONABLE ATTORNEYS' FEES AND COSTS OF THE OTHER PARTY TO CONTEST THE DEMAND FOR JURY TRIAL, AND SUCH AMOUNTS SHALL BE AWARDED BY THE COURT IN ADJUDICATING THE MOTION.**

11.25. Reuse of Materials, Deliverables, and other Work Product. County may, at its option, reuse (in whole or in part) the work product, materials, or deliverables resulting from Consultant's Services (including, but not limited to, drawings, specifications, other documents, and services as described herein and in Exhibit A) without additional compensation being owed to Consultant; and Consultant agrees to such reuse in accordance with this provision. This reuse may include preparation of reverse plans, changes to the program, provision for exceptional site conditions, preparation of documents for off-site improvements, provisions for revised solar orientation, provisions for revised vehicular and pedestrian access, and modifications to building elevations, ornament, or other aesthetic features. If County elects to retain Consultant in connection with a reuse assignment, Consultant will be paid a reuse fee to be negotiated between County and Consultant. In connection with any reuse assignment that County elects to retain Consultant to perform, Consultant shall revise the design documents to comply with building codes and other jurisdictional requirements current at the time of reuse for the new use or site location. Except for the reuse payment negotiated between County and Consultant, the terms and conditions of this Agreement shall remain in force for each reuse assignment, unless otherwise agreed by the Parties in writing.

11.26. Payable Interest.

11.26.1. Payment of Interest. Unless prohibited by Applicable Law, County shall not be liable for interest to Consultant for any reason, whether as prejudgment interest or for any other purpose, and Consultant waives, rejects, disclaims, and surrenders any and all entitlement to interest in connection with a dispute or claim arising from, related to, or in connection with this Agreement.

11.26.2. Rate of Interest. If the preceding section is inapplicable or is determined to be invalid or unenforceable by a court of competent jurisdiction, the annual rate of interest payable by County under this Agreement, whether as prejudgment interest or for any other purpose, shall be, to the full extent permissible under Applicable Law, one quarter of one percent (0.25%) simple interest (uncompounded).

11.27. Incorporation by Reference. Any and all Recital clauses stated above are true and correct and are incorporated in this Agreement by reference. The attached Exhibits are incorporated into and made a part of this Agreement.

11.28. Multiple Originals and Counterparts. This Agreement may be executed in multiple originals or in counterparts, whether signed physically or electronically; each of which shall be deemed to be an original, and all of which, taken together, shall constitute one and the same agreement.

11.29. Polystyrene Food Service Articles. Consultant shall not sell or provide for use on County property expanded polystyrene products or food service articles (e.g., Styrofoam), unencapsulated expanded polystyrene products, or single-use plastic straws or stirrers, as set forth in more detail in Section 27.172, Broward County Administrative Code.

11.30. Public Art and Design. If the Project includes artwork as defined by Section 1-88 of the Code, Consultant shall cooperate with the artist for the purpose of properly incorporating the artist's design(s) into the design of the Project. Consultant shall notify the artist in writing of all design meetings and shall provide the artist with a schedule of milestone dates. If requested by County, Consultant shall provide workspace for the artist during the preliminary design and design phases. The artist's design, as properly incorporated into the design of the Project, shall be included by Consultant in any applicable permitting as part of the master site or facility plan. Consultant's compensation pursuant to this Agreement includes the services to comply with the requirements set forth in this section. Consultant shall ensure that Subconsultants, if any, are informed of Broward County's Public Art and Design Program and any applicable requirements of working with the artist(s). If the Project is funded in whole or in part with proceeds from the transportation surtax, only artistic elements that are not prohibited under Section 212.055(1), Florida Statutes, may be funded through the surtax.

11.31. Anti-Human Trafficking. By execution of this Agreement by an authorized representative of Consultant, Consultant hereby attests under penalty of perjury that Consultant does not use coercion for labor or services, as such terms are defined in Section 787.06, Florida Statutes. Under

penalties of perjury, the undersigned authorized representative of Consultant declares that they have read the foregoing statement and that the facts stated in it are true.

11.32. Use of County Name or Logo. Consultant shall not use County’s name or logo in marketing or publicity materials without prior written consent from the Contract Administrator.

11.33. Additional Requirements. Consultant shall comply with the Port Everglades Security requirements attached hereto as Exhibit G.

11.34. Funding Requirements. This Agreement is subject to additional requirements based upon the funding source. Consultant shall comply with all applicable requirements as set forth in Exhibit H.

11.35. Iron and Steel Products. For any Project that constitutes a “public works project” as defined in Section 255.0993, Florida Statutes, any iron or steel product permanently incorporated in the Project must be produced in the United States, unless specifically exempted in writing by the Contract Administrator in accordance with Section 255.0993, Florida Statutes.

11.36. Emergency Response. If this Agreement is for Services related to emergency response for a natural emergency and Consultant breaches this Agreement during an emergency recovery period, as such period is defined in Section 252.505, Florida Statutes, Consultant must pay County a \$5,000 penalty plus damages, which shall be actual and consequential damages or, if expressly stated otherwise in this Agreement, liquidated damages, in accordance with Section 252.505, Florida Statutes.

(The remainder of this page is intentionally left blank.)

IN WITNESS WHEREOF, the Parties hereto have made and executed this Agreement: Broward County, through its Board of County Commissioners, signing by and through its Mayor or Vice-Mayor, authorized to execute same by Board action on the _____ day of _____, 20__; and Consultant, signing by and through its duly authorized representative.

COUNTY

ATTEST:

Broward County, by and through
its Board of County Commissioners

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

By: _____
Mayor
____ day of _____, 20__

Approved as to form by
Andrew J. Meyers
Broward County Attorney
Port Everglades Department
1850 Eller Drive, Suite 302
Fort Lauderdale, Florida 33316
Telephone: (954) 523-3404

By: **ANTONIO**
LOZADA Digitally signed by
ANTONIO LOZADA
Date: 2026.05.22
09:36:10 -04'00'

Antonio Lozada (Date)
Senior Assistant County Attorney

By: **CARLOS A.**
RODRIGUEZ- Digitally signed by CARLOS A.
CABARROCAS RODRIGUEZ-CABARROCAS
Date: 2026.05.22 09:56:02
-04'00'

Carlos Rodriguez-Cabarrocas (Date)
Senior Assistant County Attorney

AL/cr
AECOM Shore Power FINAL
05/18/2026
#80040-1035

**AGREEMENT BETWEEN BROWARD COUNTY AND AECOM TECHNICAL SERVICES, INC.
FOR CONSULTANT SERVICES FOR ENGINEERING DESIGN SERVICES FOR SHORE POWER
ELECTRIFICATION FOR PORT EVERGLADES (RFP# PNC2129696P1)**

CONSULTANT

AECOM TECHNICAL SERVICES, INC.

By: 
Authorized Signer

Michael J. Girman Jr.
Print Name and Title SR. Vice President

21ST day of MAY, 2026

**EXHIBIT A
SCOPE OF SERVICES**

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EXHIBIT A SCOPE OF SERVICES

PORT EVERGLADES CRUISE TERMINAL SHORE POWER ELECTRIFICATION PROJECTS

I BACKGROUND

Pursuant to the Port Everglades Master Plan, Port Everglades is advancing initiatives to reduce greenhouse gas emissions by installing shore power electrification infrastructure that will allow cruise ships to shut off their generators while in port. The plan is for the shore power systems to eventually be capable of delivering up to 16 megawatts of electricity simultaneously to each of the eight cruise berths in accordance with IEC/IEEE 80005 standards. The implementation shall occur in phases herein called “Design Packages.”

Cruise Berths intended for potential electrification are depicted in Exhibit A-2, Location of Port Everglades Cruise Berths, and include berths 2 and 4 in Northport and berths 18, 19, 21, 25, 26 and 29 in Midport. The Project includes design of: 1) new shore power electrification duct bank extending from a new Florida Power and Light (“FPL”) substation at the southwest corner of the FPL Port Everglades Next Generation Clean Energy Center to the relevant berths, and 2) berth side electrical infrastructure as needed to provide fully functional shore power electrification service to berthed cruise ships, including, but not limited to, transformer, switch gear, and cable management systems (CMS).

An initial shore power Master Plan titled *Port Everglades Shore Power and Electrification Master Plan for Cruise Ship Terminals* (PEV Shore Power MP) was prepared in 2023 and has been provided to Consultant for their use. FPL has prepared preliminary duct bank layouts that have been provided to Consultant for their use. Both the 2023 Master Plan and the preliminary duct bank layouts are provided for reference and informational purposes only and are not intended to dictate design requirements for this Project.

PRIMARY STAKEHOLDERS

The primary stakeholders (“Stakeholders”) include: FPL; the cruise lines that call on Port Everglades; various divisions of the Port Everglades Department, including Seaport Engineering and Construction, Operations, Facilities Maintenance, Security, and IT; the City of Hollywood; the City of Dania Beach; the State of Florida; and Federal Grant Agencies; jurisdictional permitting agencies; and Port tenants/terminal operators. A brief description of the Stakeholders’ expected roles in the Project follows.

FPL

FPL will provide the power and own the cables that FPL will place in County-owned duct bank. FPL will own the transformer/meter vaults and the power transmission equipment up to the meter. FPL has design requirements that will need to be met and will be a key partner in reviewing and commenting on all iterations of the design drawings. FPL is also vested in this Project in that they will be providing County with funding for a portion of the anticipated revenue from the Project.

Cruise Lines

Several of the cruise ship lines calling on the Port have requested this Project as they have air emission reduction goals that this Project will help meet. Coordination will be needed to make sure the ships can be energized effectively while minimizing impacts to operations.

Port Everglades Seaport Engineering and Construction Division (SECD)

SECD will manage the Project on a day-to-day basis on behalf of County. AtkinsRealis USA, Inc., is currently providing Program Management support to SECD and will assist in managing the Project. Other divisions within County may be brought in as needed and coordinated by SECD.

Port Everglades Operations Division (Ops)

Ops, particularly Cruise Operations, will be a key resource for forecasting vessel traffic, coordinating on-site investigations, and coordinating the placement and selection of permanent berth side facilities. Consultant shall coordinate any in-water or berth area work with the Harbormaster. All operational functions of the Port are overseen by Ops including the Harbormaster's office, stevedoring, gantry crane operation, line handlers, coordination with the Pilots, and special event logistics. If the Port elects to manage the shore-to-ship power connections, that responsibility would fall under Ops.

Port Everglades Facilities Maintenance Division (PEFMD)

PEFMD may be responsible for maintaining the systems installed for this Project and must be afforded the opportunity to provide input on the specified facilities.

Port Everglades Security and IT Divisions

The Port Everglades Security and IT Divisions work together to maintain the fiberoptic security communication network within the Port. The Security division will also be involved in any maintenance of traffic reviews and anything that might affect the entry checkpoints.

Local Municipalities

A building permit will be required from the City of Hollywood for facilities installed in all areas related to this Project. It is unlikely, but possible, that a building permit will be needed from the City of Dania Beach if facilities are placed west of SE 14th Avenue.

State and Federal Grant Agencies

County has received two federal grants to support this Project and may receive other federal or state grants in the future. The two federal grants that have been awarded are through the following agencies, followed by a brief description:

U.S. Environmental Protection Agency: Funding has been allocated under the Diesel Emissions Reduction Act (DERA) for the construction of the Project. It is the Parties' understanding that NEPA authorization will not be needed for this grant.

U.S. Department of Transportation Maritime Administration (MARAD): Community Project Funding has been allocated under the FY 2024 Port Infrastructure Development Program (PIDP) for design of the duct bank portion of the Project. Because this grant is specific to duct bank design, Consultant will need to separate effort related to the duct bank design on all relevant invoices. It is the Port's understanding that NEPA authorization will not be needed for this grant.

Consultant shall consider that Buy America, Buy American (including the Build America Buy America Act (BABA)), or other grant related restrictions may be placed on the Project in its performance of all Services under this Agreement.

Jurisdictional Agencies

The US Army Corps of Engineers (USACE), Florida Department of Environmental Protection (FDEP), South Florida Water Management District (SFWMD), and Broward County's Environmental Permitting Division (each individually referred to as a "Jurisdictional Agency" or collectively "Jurisdictional Agencies") are primary Stakeholders. Consultant shall meet all applicable permitting requirements of these agencies to obtain approval for environmental resource permits and licenses, surface water management license, dewatering licenses, and any other permits or licenses required for lawful completion of the Project.

Port Tenants

There are various tenants that have land leases adjacent to some of the proposed duct bank routes. Tenants who have infrastructure or operations that may be interfered with shall be engaged for input and consideration.

II BASIC SERVICES

Consultant shall provide necessary professional engineering and design services as described in each of the following Phases of the Basic Services (Payable on a Maximum Amount Not-To-Exceed basis, unless otherwise indicated):

Design Package 1 (DP-1):

- Cruise Terminals 25 and 26 (DERA Grant Pilot Project)

Future Design Package(s):

- Cruise Terminal 21
- Cruise Terminals 18 and 19
- Cruise Terminals 2 and 4
- Cruise Terminal 29

The order of future Design Packages will be evaluated and assigned in conjunction with County needs. Future Contract Amendment(s) will set forth the sequencing and scope of services for each respective future Project. See Exhibit A-2 titled "Location of Port Everglades Cruise Berths" for berth locations and identification.

Deliverables

Consultant shall submit all deliverables in electronic digital format in accordance with Exhibit A-3 titled "Electronic Media Submittal Requirements." Deliverable submittal timeline shall be in accordance with Exhibit A-1, Schedule of Deliverables.

1 Phase 1 – Pre-Design Phase Services (Design Package 1 or DP-1)

These services apply only to DP-1 and shall include the review and utilization of available information including the PEV Shore Power MP, preliminary FPL duct bank layout, 2025 Port Master Plan Update,

best available information on existing utilities, bi-annual bulkhead inspection reports, bulkhead construction as-built drawings, terminal design and as-built drawings, utility atlas files, geographic information system data, berth utilization information, fuel pipeline and bunkering drawings, petroleum contamination information, sea level rise assessments, remedial action plan reports, cruise vessel characteristics, and agreements, approvals, and authorizations with regulatory agencies.

In collaboration with County, Consultant shall conduct pre-design workshops with Project Stakeholders for the purpose of establishing Project design and construction parameters, including, but not limited to: port operational requirements, site access and traffic flow, vessel calls and berth utilization, port security protocols, Project budgets, Project timelines, and phasing of future Design Packages and how that will affect DP-1 duct bank requirements.

Consultant shall prepare a Basis of Design Report ("BODR") that provides conceptual berth duct bank and equipment siting for DP-1. The BODR will then compile and justify the approach, method of execution, schedule, and estimate the costs for the delivery of DP-1. The duct bank serving DP-1 shall be designed to accommodate future duct bank extensions to the other cruise terminals.

1.1 Document Review

County will provide to Consultant utility atlas information for the DP-1 conceptual duct bank layout and all available information related to existing conditions of all DP-1 Project areas. Information will be entered by the Port Everglades' Program Management consultant (PEPM) into a data log and saved to the Project's SharePoint site, which will be set up and maintained by the PEPM. Consultant shall evaluate the information provided and identify any information gaps.

Along with the typical information related to existing Port facilities, Consultant shall perform the following document reviews:

- 1) Broward County and the Florida Department of Environmental Protection (Division of Waste Management) have filed a Memorandum of Agreement (MOA) for remediation with controls for addressing petroleum contamination within the "Common Area Site" at Port Everglades which was formally executed on 06/08/2020. The DP-1 limits may traverse the Common Area Site and it is therefore understood that Consultant shall become familiar with the terms outlined in the MOA as it relates to management of petroleum contamination in the Common Area Site. Any improvements within the footprint of the Common Area Site must abide by the imposed covenants, conditions and restrictions specified in the MOA. It is not the intent of this scope for Consultant to embark in remediation-related design efforts, but to prepare designs that convey and support the Contractor's compliance with the terms of the MOA.
- 2) Consultant shall review the sea level rise technical memorandum provided to Consultant by the Port Everglades Department. Consultant shall also consider relevant information gathered for other nearby clients on sea level rise issues.
- 3) Consultant shall review DERA and MARAD grant information
- 4) Consultant shall perform a Phase I Environmental Site Assessment (ESA) for the anticipated duct bank route to the DP-1 berths and aprons to determine the potential presence of contamination. The ESA will be used to inform the conceptual layout of the proposed duct bank route based on the findings.

Deliverables

- i. Consultant shall provide a document data log containing source and type of information, relevant dates, data descriptions, field visit notes, and notes indicating whether the information is complete or requires supplemental site investigations.
- ii. Consultant shall provide a technical memorandum (Common Area Approach Memorandum), to be incorporated into the draft BODR, outlining the approach for design of site-civil and structural scopes to mitigate the need for remediation on Project sites which overlap with the Common Area Site. The memorandum must outline how the design concepts would address the presence of contamination.
- iii. Consultant shall provide a Sea Level Rise Design Criteria Memorandum that provides elevation recommendations for electrical equipment and discusses potential design of CMS and other proposed infrastructure to accommodate future sea level rise conditions. Consultant shall consider shore power system design life, potential design impacts and the cost implications associated with any proposed "future proofing" and summarize these considerations in the technical memorandum.
- iv. Consultant shall provide a Grant Review Memorandum outlining the requirements and constraints of the DERA and MARAD grant documents.
- v. Consultant shall provide a Phase I Environmental Site Assessment of the anticipated duct bank routes to the DP-1 berths and aprons.

1.2 Site Investigations

This task includes further defining and performing site investigations as outlined below for DP-1. These services include field verifications of existing site conditions represented by as-builts or other data provided by County. Where discrepancies are found that may impact the design, Consultant shall document and bring them to County's attention for consideration, resolution, and appropriate direction by the County.

1.2.1 Proposed Site Investigations

Consultant shall review the existing facility information provided and consider that, along with site visit observations and the conceptual design layout, to recommend further site investigations as necessary to inform design.

Deliverables

- i. Consultant shall prepare a "Proposed Investigations Memorandum" that identifies, defines, justifies, and lays out a schedule for proposed site investigations. All site investigation activities must match descriptions listed on Exhibit B-1 (Reimbursables). Consultant shall receive written approval from County prior to undertaking site investigations which will consist of the following sub-tasks.

1.2.2 Utility and Subsurface Locates

Where utilities are within the design corridor, upon written approval by the Contract Administrator, Consultant shall perform subsurface investigations and location services utilizing subsurface instruments, including electromagnetic instruments and two-dimensional ground penetrating radar, to confirm location of features and utilities, including petroleum lines. With Contract Administrator's written approval, Consultant shall perform "soft dig test holes" to locate existing infrastructure and resolve potential design conflicts. Subsurface location surveys are to include the apron areas,

potential berth side shore power equipment location areas, potential duct bank paths, and any other areas required to inform a complete design.

Consultant shall coordinate geotechnical borings and all other excavation related site investigations to avoid underground utilities and structural features. Internal video survey of existing piping is not included.

Deliverables

- i. Consultant shall provide subsurface survey drawings and incorporate into AutoCAD base model. Consultant shall provide record of "soft dig" locates.

1.2.3 Geotechnical Investigations

Consultant shall perform geotechnical investigations as necessary to support the design of DP-1.

Deliverables

- i. Consultant shall provide a geotechnical report including findings and recommendations that take into consideration all available existing and recently obtained data, including, but not limited to any data gathered by Consultant in the performance of the Services. The report must be signed and sealed by a State of Florida registered Geotechnical Engineer.

1.2.4 Boundary and Topographic Surveys

Consultant shall perform boundary and topographic surveys which at a minimum shall include relevant apron areas, potential berth side shore power equipment location areas, potential duct bank corridors, and any other areas required to inform a complete DP-1 design.

Horizontal survey controls are to be relative to NAD83(2011) and vertical control relative to NAVD88.

Surveys are to locate and identify all surface materials and fixed above-ground facilities and are to be used as the base for contract document level drawing preparation. Survey baselines are to be established where needed for design and/or construction layout.

Within the survey limits, Consultant shall provide ground and pavement elevations at a minimum 50-foot grid and all high and low points as needed to represent drainage patterns or any elevation irregularities.

Consultant shall survey and record all site investigation features such as soil borings, soft dig locations, etc.

Deliverables

- i. Consultant shall provide 2 full size and two true half size hard copies of the topographic survey signed and sealed by a State of Florida Professional Land Surveyor. Consultant shall provide drawings that include the aforesaid requirements and incorporate into AutoCAD base model. Consultant shall also submit deliverables in electronic digital format in accordance with Exhibit A-3 titled "Electronic Media Submittal Requirements."

1.2.5 Pre-Design Phase Meetings & Presentation

All meetings must be guided by a Consultant prepared agenda with County input.

Initial Kick-Off Meeting

An in-person Project kick-off meeting between County and Consultant's team shall be held to begin the Project and discuss work tasks and schedule. Consultant's team shall perform a site visit with County staff as part of the kick-off meeting. Draft minutes shall be provided to County by Consultant by end of the following workday and will clearly list agreed upon task assignments. By the end of the following workday after receipt of County comments on the draft minutes, Consultant shall revise the draft minutes and submit final minutes reflecting County input County.

Stakeholder Kick-Off Meeting

A virtual kick-off meeting between County, Consultant's team, and applicable Stakeholders shall be held within 14 calendar days after the Initial Kick-Off Meeting to make introductions and discuss desired Stakeholder involvement throughout design. Consultant's team shall arrange for a site visit with Stakeholders within 30 calendar days of the Stakeholder Kick-off Meeting. Draft minutes shall be provided to County by Consultant by end of the following workday and will clearly list agreed upon task assignments. By the end of the following workday after receipt of County comments on the draft minutes, Consultant shall revise the draft minutes and submit final minutes reflecting County input County.

Status Meetings

Conduct bi-weekly meetings throughout the pre-design phase with County staff and relevant Stakeholders (as needed) to discuss the Project status and work activities. Meetings will be guided by a Consultant prepared agenda with County input. Meeting objectives will be clearly stated and will include at a minimum: discussions regarding Stakeholder responsibilities, necessary coordination with operations, and milestone schedule status. Draft minutes shall be provided to County by end of the following workday and will clearly list agreed upon task assignments. By the end of the following workday after receipt of County comments on the draft minutes, Consultant shall revise the draft minutes and submit final minutes reflecting County input County.

Status meetings will be virtual with the option for meetings to be conducted in-person at the Port Administration Building as needed.

Presentations

In addition to the kick-off and status meetings, Consultant shall hold an in-person presentation to Stakeholders summarizing findings, anticipated schedule, initial order of magnitude cost, next steps, and to facilitate Stakeholder input. Presentation timing must be proposed in the baseline schedule and agreed upon with Project team.

1.3 Basis of Design Report (BODR) for DP-1

The BODR must contain at least the following:

- Summary of key Project design requirements, assumptions, decisions, and directives made during the Pre-Design and Construction Document phases to record preferred and mutually agreed upon direction.
- Summary of the Project approach, goals and objectives
- Summary of key Stakeholders and their roles
- Summary of major challenges
- A listing of applicable codes, standards and guidelines to be used

- Environmental factors and design considerations
- Permitting Matrix
- Civil, structural, geotechnical, and electrical criteria.
- A sequencing plan that considers maintenance of operations and long lead time items.
- Analysis of the various cruise ships that currently and potentially will call at the Port to determine power loads, voltages, shore power connection locations, and berthing positions. Analysis of optimal shore power connection location(s) for each berth using the berthing arrangement of the ships, location of the shell doors for shore power (and provisioning, gangways, etc.), location of the landside infrastructure (i.e. water boxes, bollards, etc) with recommendations based on operability, flexibility, lead times, and cost.
- Analysis and recommendation of possible at-berth shore power equipment and connection locations and best-use CMS. Anticipated service life of the various equipment must be summarized.
- Conceptual level analysis of alternatives for branching off the initial DP-1 duct bank to serve future design packages must be included with cost comparisons for alternatives. At a minimum, alternatives will include: 1) placing adequate conduit in the DP-1 duct bank design to branch off and serve the other 6 cruise berths in the future, and 2) to only construct the conduit needed for DP-1. Analysis of alternative 2 shall include rough order of magnitude costs that would be expected in the future if a whole new run(s) of conduit were needed from the FPL Substation vs. option 1 (i.e. if the conduit is not included now, how much more might it cost in the future).
- Using the survey as a base, provide conceptual level shore power duct bank and berth side facility designs to include a site plan, general layout plan, summary of necessary site-civil improvements, proposed shore power substation infrastructure locations, and proposed CMS at Berths 25 and Berth 26 (unless otherwise directed in writing by Contract Administrator).
- A tailored commissioning plan that outlines system specific testing procedures, safety verification steps for the terminal and vessels, timelines, acceptance criteria, documentation, and coordination with the Port, cruise lines, cruise terminal operators and FPL. An analysis of related capital and maintenance costs shall also be included.
- Appendices to be included:
 - Common Area Approach Memorandum (Deliverable 1.1.ii)
 - Sea Level Rise Design Memorandum (Deliverable 1.1.iii)
 - Grant Review Memorandum (Deliverable 1.1.iv)
 - Phase I ESA (Deliverable 1.1.v)
 - Geotechnical Report (Deliverable 1.2.3)
 - Boundary & Topographic Surveys (Deliverable 1.2.4)
 - Opinion of Probable Construction Costs (OPCC)
 - Estimated Project Construction Schedule, to include any time that would be saved by expedited ordering of long lead items.

The BODR will be considered a living document that evolves along with the design of the Project.

Deliverables

- i. Consultant shall provide a Draft BODR to include a table of contents, abbreviations, executive summary, objective, appendix, construction cost estimate (order of magnitude for draft)/critical path Project milestone schedule (in Primavera P6 or approved equivalent) and the other aforesaid requirements that have been developed to that point for delivery of the Draft BODR. Consultant shall provide BODR revisions/additions at the 50%/90% and final plan submittal milestones.

2 Phase II - Construction Documents (CDs, DP-1)

To supplement the information provided, Consultant shall undertake necessary site investigations and site surveys of all relevant areas in support of the design phase services as approved through the deliverable 1.2.i. The investigations shall include, but are not limited to: bulkhead structural support, mooring hardware/mooring line arrangements, fender systems, dockside utilities, berth apron pavement, passenger loading facilities, berth apron domestic water and fire prevention facilities, geotechnical explorations, and berth apron topographic and location surveys.

Consultant shall prepare design drawings and specifications for the Design Package 1 Project in accordance with International Electrotechnical Commission (IEC)/Institute of Electrical and Electronics Engineers (IEEE) 80005-1,-2 standards along with local code requirements including those of the National Electric Code (NEC), International Building Code (IBC), Occupational Safety and Health Administration (OSHA), Florida Building Code, State of Florida, FPL, and all applicable regulatory requirements into the designs for the Project. All applicable codes, standards, guidelines, and regulatory requirements must be referenced in the CDs and listed in the BODR.

Consultant shall prepare construction drawings and technical specifications, including the necessary bidding information, that set forth details of required demolition, required relocations, and new construction, including but not limited to: materials, workmanship, testing, and verification procedures required for proposed improvements.

The CDs must be sufficient in detail to obtain contractor's bids, applicable Jurisdictional Agency permits, and building department construction permits. Shore power system design service life must be in line with industry standards. Consultant shall assist County with the preparation of the Division 1- General Conditions Section of the specifications.

The CDs must address all necessary design and construction disciplines, including but not limited to:

Civil Engineering

Consultant shall provide Civil Engineering design services to include, but not be limited to:

- Demolition/relocation of up to two existing County-owned underground utilities such as potable/fire water mains, sanitary sewer, stormwater. Consultant shall provide typical, infrastructure specific details (pressurized water/sewer, drainage, gravity sewer) for any relocations needed over and above the two included. The two relocations covered by this scope will be agreed upon between the Port and Consultant.
- Coordinate resolution of franchise utility conflicts including electrical, fiber optic, and telecommunication cables. Design around wall caps, security fence or other at grade facilities

and foundations as needed to provide functional areas to house and transmit the electrification service to the berthing cruise vessels.

- Relocations/removals with owners of any franchise utilities that may be impacted by the proposed improvements.
- Hydrogeological calculations as needed to support the dewatering permit application.
- Duct bank must be designed with structural engineering input to conform with the standards agreed to with FPL.
- CDs shall indicate staging areas that the Stakeholders have agreed to allow for use by the Contractor.
- Design or relocation of petroleum infrastructure is excluded from these scopes of services. The design of improvements to the petroleum infrastructure is the responsibility of the individual petroleum companies. Consultant shall coordinate with relevant petroleum industry companies in the case where design requires changes to their facilities.

Structural Engineering

Consultant shall provide Structural Engineering design services to include, but not be limited to:

- Review of existing bulkhead construction, and design to mitigate impacts of new shore power systems on existing bulkheads.
- Design of foundations for berth side equipment, cable trenches, connection pits, etc.
- Concrete encased duct bank design support as needed.

Electrical Engineering

Consultant shall provide Electrical Engineering design services to include, but not be limited to:

- All design of electrical transmission and distribution appurtenances, switch gear, transformers, raceways, and other berth side equipment as needed to provide fully functional shore power system service to the berthing cruise vessels.
- Consultant shall coordinate and incorporate into design all FPL requirements, CMS requirements, etc. to ensure system is fully functional.
- Assist civil engineer with duct bank design as needed.

Environmental Engineering

Consultant shall provide Environmental Engineering services to include, but not be limited to:

- Design drawings and specifications to address relevant environmental aspects of the Project
- Turbidity Control Plan(s)
- Storm Water Pollution Prevention Plan(s)
- Development and approval of mitigation plans, as required by the regulatory agencies

- Consultant shall prepare environmental drawings, permit sketches, specifications, and plans in accordance with applicable federal, state, county, and municipal regulations and shall be sufficient to apply for Jurisdictional Agency permits.

Architectural

If necessary, as determined in writing by Contract Administrator, Consultant shall provide architectural design of the transformer and switch gear housing racks/vaults. Architectural design shall include mechanical, electrical, plumbing, and structural engineering services as required.

2.1 30% Submittal

The 30% submittal will consist of the below deliverables.

Deliverables

- i. Specifications (Outline)
- ii. Draft BODR
- iii. Phase II ESA (if necessary, as determined by the Phase I ESA, and approved under a duly authorized Work Authorization for Optional Services)

2.2 50% CDs

The 50% CDs deliverable includes designs for all construction disciplines, with drawings that must be sufficiently complete to hold pre-application meetings with federal, state, county, and municipal jurisdictional agencies. Drawings, specifications, work and staging areas, construction sequencing and methodologies, opinions of probable cost, schedule, and applicable supporting data must be updated in the BODR deliverable. Environmental permit applications shall be submitted to the applicable regulatory agencies upon County approval. Applications to the building department will also be submitted as a dry-run upon County approval.

At this milestone, Consultant shall develop procurement documents for long-lead items so County, either directly or through a Managing General Contractor (MGC), can procure these critical components in a timely manner.

Deliverables

- i. Construction drawings including phasing plans and staging areas
- ii. Draft technical specifications
- iii. Design calculations
- iv. Updated BODR
- v. Updated Schedule
- vi. Final permit applications, exhibits and other supporting documents
- vii. Procurement Documents for long-lead items

2.3 90% CDs

The 90% CDs deliverables include near final designs for all construction disciplines. The 90% CDs deliverable is a near complete design submission considered to be biddable. These drawings will be used to make formal application for building permits. Drawings, specifications, opinions of probable

construction cost, schedule, and applicable supporting data must be updated from the 50% CDs deliverable.

Deliverables

- i. Construction drawings including phasing plans and staging areas
- ii. Technical specifications
- iii. Design calculations
- iv. OPCC
- v. Construction schedule
- vi. Updated BODR Document
- vii. Building Permit Application

2.4 Final CDs

Final CDs deliverable consists of the deliverables listed below updated to address and incorporate comments by regulatory agencies and County.

Deliverables

- i. Updated final construction drawings
- ii. Updated technical specification revisions
- iii. Updated design calculations
- iv. Updated OPCC
- v. Updated construction schedule.
- vi. Updated BODR Document.

Deliverables for consideration by applicable regulatory agencies and County shall be signed and sealed by State of Florida licensed professionals as applicable.

2.5 Permitting

Consultant shall prepare and submit all documents necessary to obtain the required permits for the Design Package 1 Project, including any required dewatering permits. This permitting scope includes preparing and providing drawings, technical specifications, and supporting computations as necessary.

When submitting permit applications, Consultant shall initially pay for all permit-related plan review fees and permit application processing fees. County will reimburse Consultant for these costs as a pass-through reimbursable expense without markup, in accordance with the Agreement. Consultant shall submit all permit applications for the Design Package 1 Project and provide follow-up until all permits are issued.

Consultant shall prepare responses to Requests for Additional Information (“RAI”) from permitting agencies in a timely manner to facilitate and expedite the regulatory review process. Consultant shall coordinate with and obtain County’s approval of all RAI responses prior to submittal. If Consultant determines that additional research, supplemental surveys, studies, investigations, testing, agency

coordination efforts, or meetings are outside the scope of services, Consultant shall notify County in writing.

Consultant shall schedule meetings in coordination with County and the regulatory agencies.

Deliverables

Consultant shall provide the following to County:

- i. Up to three (3) hard copies and one (1) electronic digital format Portable Document Format (PDF) of all documents included in all permit application packages. Documents are to be submitted in conformance with Jurisdictional Agency requirements.
- ii. Original hard copies and scanned electronic digital copies of all permits obtained in PDF

Paid permit fee receipts shall be included with relevant invoices for reimbursement.

2.6 Phase II Construction Documents Phase Meetings & Presentation

All meetings will be guided by a Consultant prepared agenda with County input.

Status Meetings

Conduct bi-weekly meetings throughout the Construction Document phase with County and relevant Stakeholders (invited as needed) to discuss the Project status and work activities. Meetings will be guided by a Consultant prepared agenda with County input. Meeting objectives will be clearly stated and will include at a minimum: discussions regarding Stakeholder responsibilities, necessary coordination with operations, and milestone schedule status. Draft minutes shall be provided by end of the following workday and will clearly list agreed upon task assignments.

Status meetings will be virtual with the option for meetings to be conducted in-person at the Port Administration Building as needed.

Regulatory Agency Meetings

Consultant shall schedule and attend meetings as necessary to coordinate with all applicable regulatory agencies.

Presentation

In addition to the status meetings, Consultant shall hold a presentation to Stakeholders summarizing the Project design, anticipated schedule, estimated cost, next steps, and to facilitate Stakeholder input. Presentation shall be held shortly after the 90% CD submittal.

3 Phase III – Bidding (DP-1)

The bidding for Design Package 1 is anticipated to be undertaken by a County selected MGC.

Consultant shall provide bidding service support to include:

- Assist County/MGC with establishing the requirements for pre-qualification of contractors.
- Participate in pre-bid meetings and site visits organized by County/MGC for the Project.
- Respond to requests for information/clarifications (RFIs) from bidders related to the Construction Documents.

- Issue formal addenda to the Construction Documents resulting from RFI responses.
- Issue signed and sealed Contract Documents revised as needed to reflect County authorized changes identified during the bidding process.
- Collaborate with County/MGC on review of subcontractor bids, identification of bid irregularities, and comparison with Consultant's OPCC.

Meetings

Consultant shall attend pre-bid meetings with bidders, and any additional meetings necessary with County/MGC to discuss potential addenda, review bids, etc.

Deliverables

Consultant shall provide revised CDs to County:

- Up to three (3) sets of full-size 24" x 36" and true half-size paper drawings;
- One (1) electronic digital copy containing CD drawings in AutoCAD (dwg) version 2019 or later format and PDF searchable format; and
- One (1) electronic digital copy containing CDs technical specifications in PDF searchable format.

Consultant shall submit deliverables in electronic digital format in accordance with Exhibit A-3 titled "Electronic Media Submittal Requirements."

Time

Consultant shall provide all Bidding phase deliverables within 10 calendar days of request by County.

4 Phase IV – Administration of the Construction Contract (Deferred)

The Administration of the Construction Contract is not currently included in Consultant's Basic Services. The intent is to define and agree on the scope for this phase at a future date when the scope and duration of construction can be more readily defined.

5 Phase V – Warranty Administration and Post-Construction Services (Deferred)

The Warranty Administration and Post-Construction Services phase is not currently included in Consultant's Basic Services. The intent is to define and agree on the scope for this phase at a future date when the scope and duration of construction can be more readily defined.

III OPTIONAL SERVICES

Upon County's request and pursuant to a Work Authorization and Notice to Proceed issued by County's appropriate awarding authority under the Agreement, Consultant shall provide the following Optional Services:

i. Emissions Analysis (All 8 Cruise Berths)

The primary goal of providing shore-to-ship power connections is for the cruise ships to be able to turn off the ships auxiliary engines while they are docked. Emissions analysis can be performed to estimate

the quantities of emissions displaced/reduced from the berthed ships connected to shore power systems.

Using a base year and the proposed cruise ship call information at the Port, Consultant shall estimate the pre and post shore power hoteling emissions at the 8 cruise ship berths. Arrival dates and berthing durations shall be obtained for each ship, along with the corresponding International Maritime Organization (IMO) number for each ship. Forecasting of pre and post shore power emissions is to be done for a period ten years past the base year.

U.S. Environmental Protection Agency (USEPA) guidance document, "Port Emissions Inventory Guidance: Methodologies for Estimating Port-Related and Goods Movement Mobile Source Emissions", shall be used to determine the applicable method for calculating the expected emissions from cruise ship auxiliary engines while hoteling for the base year. The proper emission factors shall be determined for Nitrogen Oxides (NO_x), Brake Specific Fuel Consumption (BSFC), Particulate Matter (PM₁₀ and PM_{2.5}), Diesel Particulate Matter (DPM₁₀ and DPM_{2.5}), Black Carbon (BC), Volatile Organic Compounds (VOC), Carbon Monoxide (CO), Methane (CH₄), Nitrous Oxide (N₂O), Carbon Dioxide (CO₂), and Sulfur Dioxide (SO₂).

The emission factors are based on engine type, fuel type, and keel-laid year. Based on USEPA's guidance, if auxiliary engine information is not available for a ship, the missing auxiliary engine type data can be assumed to be medium-speed diesel (MSD). Ships are also likely to be assumed to be using distillate marine gas oil (MGO) while hoteling based, unless otherwise determined to be using alternative fuels (LNG, methanol).

Hourly emission factors shall be calculated for each contaminant using the emission factors and the auxiliary engine total power (in kW), which shall be obtained from Sea-Web™. Ship emissions shall be determined by using each vessel's hoteling in port as determined by the arrival and departure times identified in the base year. Berthing durations shall be reasonably estimated when historical hoteling information is unavailable during the base year. The emissions calculated for all stops for each individual ship shall be totaled to find the total annual emissions each ship is expected to produce during any given year. These values shall then be totaled to find the total annual emissions for each contaminant due to all cruise ship hoteling activities at each cruise terminal during the base year, and each year included in the Emissions Analysis.

Carbon dioxide equivalent, CO₂e, is used by the USEPA to show the global warming potential of greenhouse gasses (GHGs) in terms of CO₂ by mass. One metric ton of CO₂, CH₄, and N₂O are generally equivalent to one, 25, and 298 tons of CO₂, respectively. The CO₂e of all three contaminants shall be totaled and can be used as a baseline reference for the total global warming potential of the GHGs being released.

Deliverables

The results shall be summarized, and a technical report produced to present the base year emissions for all contaminants from auxiliary engines during cruise ship hoteling at the terminals that could potentially be displaced/reduced by supplying shore power during hoteling. The displacement/reductions shall be provided so that the benefits of providing Shore power at each individual cruise berth can be quantified. This report shall be appended to the BODR. Consultant shall submit deliverables in electronic digital format in accordance with Exhibit A-3 titled "Electronic Media Submittal Requirements".

Time

Consultant shall complete these Optional Services within the number of calendar days stipulated in the Work Authorization and Notice to Proceed.

ii. Phase 2 Environmental Site Assessment (extents to be determined)

A Phase 2 Environmental Site Assessment shall be performed for those areas where it is deemed beneficial to inform the design and permitting of the DP-1 Project.

Deliverables

The results shall be summarized, and a Phase 2 ESA report produced and incorporated into the BODR. Consultant shall submit deliverables in electronic digital format in accordance with Exhibit A-3 titled "Electronic Media Submittal Requirements".

Time

Consultant shall complete these Optional Services within the number of calendar days stipulated in the Work Authorization and Notice to Proceed.

IV. PROJECT RELATED INFORMATION

The following Project related documentation, site access, and coordination will be provided by County to Consultant where available.

Facility Documentation

If available from County records, County will provide the following information for the Design Package 1 Project.

- Facility as-builts and/or construction drawings.
- Previous site surveys, including any known environmental resources within or adjacent to the Project area.
- Facility inspection and evaluation reports.
- Atlas of known site area utilities.
- Previous site geotechnical data and reports.
- Previous Sea Level Rise memoranda.
- DERA and MARAD grant information
- Memorandum of Agreement (MOA) between Broward County and the FDEP Division of Waste Management for Remediation with Controls.
- Vessel Type and Class only, Consultant shall research vessel characteristics:

Site Access

County will provide reasonable access to Project sites for the performance of site investigations.

Coordination

- County will facilitate the exchange of berth usage information between the Harbormaster, Pilots, and Consultant.

- County will coordinate and participate in design review meetings.
- County will review all Consultant deliverables and furnish comments to Consultant.

END OF SCOPE OF SERVICES

Exhibit A-1

Scope Section	Basic Services Deliverables (All for DP-1 Only unless otherwise noted)	calendar days after NTP*
1.1 Document Review		
1.1.i	Document Data Log	90
1.1.ii	Common Area Approach Memorandum	90
1.1.iii	Sea Level Rise Design Criteria Memorandum	90
1.1.iv	Grant Review Memorandum	90
1.1.v	Phase 1 Environmental Assessment (DP-1 berths and duct bank routes)	120
1.2 Site Investigations		
1.2.1	Proposed Investigations Memorandum	120
1.2.2	Subsurface Utility Survey Drawings	180
1.2.3	Geotechnical Investigations	180
1.2.4	Boundary and Topographic Surveys	180
1.3 Basis of Design Report		
	Basis of Design Report (Initial Draft)	210
2.0 Construction Documents		
2.1	30% Submittal, Draft BODR, Specification Outline, Phase II ESA (if necessary)	210
2.2	50% CDs, Updated BODR, and Permit Applications	390
2.3	90% CDs & Updated BODR	450
2.4	Final CDs, Updated BODR, Permits in hand	540

* The timeframes above include reasonable County review time. Consultant shall coordinate with County to submit interim and final deliverables sufficiently in advance of the applicable deadline to allow County to conduct reasonable review, provide comments, and allow Consultant to incorporate County comments into the applicable deliverable within the schedule above. County staff will review deliverables and return to Consultant within 14 days of receipt. Delays resulting from untimely County review, agency review, or other circumstances outside Consultant's control shall be addressed in accordance with Section 4.3 of the Agreement.

Exhibit A-2 Location of PEV Cruise Berths

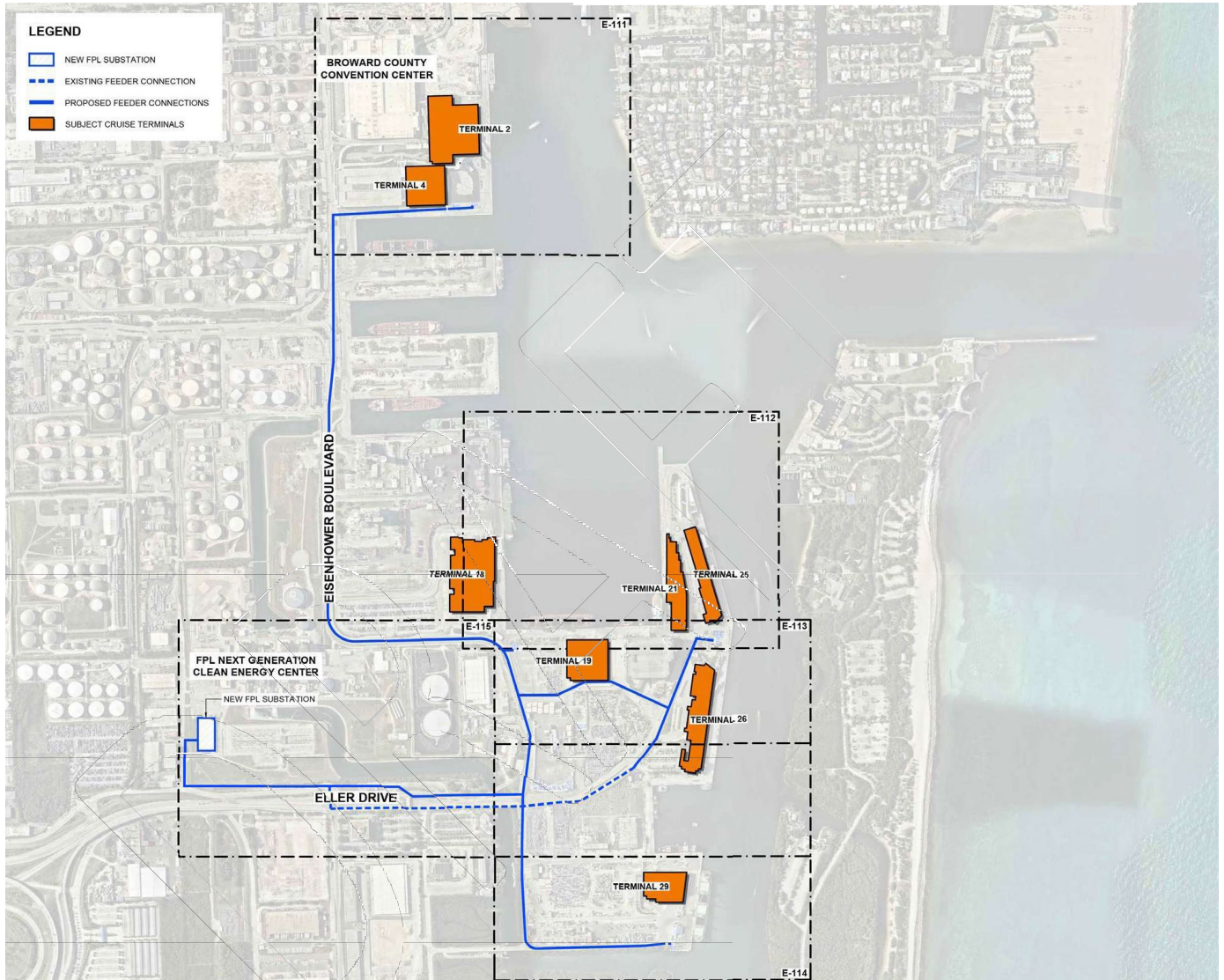


EXHIBIT A-3

BIM and Electronic Media Submittal Requirements

Introduction

The Contract Administrator will be utilizing electronic media as the principal way it develops, communicates and archives information concerning its various construction programs for the County. To that end, County's standard Professional Services Agreements for Consultant services and Construction Agreements for construction services require submittal of documents produced on electronic media. The County requires Building Information Modeling (BIM) based design, documentation and construction deliverables, scaled to the County's needs, especially for all major projects, including all new construction. These BIM processes are achieved through collaborative efforts of the Consultant and the Contractor and generally conclude with the completion of the Consultant's Design Model and a Contractor's As-Constructed Model as outlined in the Scope of Work and in the BIM Project Execution Plan (BIM PxP).

For projects utilizing BIM delivery, Consultant and Contractor will provide native BIM format and Industry Foundation Class (IFC) electronic BIM deliverables in addition to all other electronic copies of hardcopy submissions and other files that support the intent of the project at all project milestones. Data interoperability is important to the County. Design Authoring software shall be used throughout the project lifecycle and shall be parametric. It is also important that nationally defined standards and protocols be used when developing BIM's so that data may be normalized for multiple uses, now and in the future. Most current versions of standards such as the National BIM Standards, BIMForum LOD Specification Part 1 and Commentary, OmniClass, Unifomat and MasterFormat, should be used whenever possible.

The Consultant will derive any two-dimensional (2D) deliverables from the Building Information Model. Further, it is the intent of the County to require open-standard facility management data as a project deliverable at all milestones. An important goal for the Construction Management Division is to not only enhance the value of all team efforts to efficiently design and construct lean, new and renovated construction projects using BIM, but also to assist in achieving a dependable use and development of BIM across multiple building types and for a wide range of County agencies.

Predictable, reliable, and uniform data will help to ensure a building dataset that will facilitate ongoing building operation and maintenance protocols. Project Consultant shall initiate and jointly develop BIM and Construction Operations Building Information Exchange (COBie) information to be completed by the Contractors throughout their corresponding phases of the project.

Definitions and Identifications for BIM terms used in this Attachment, requirements for electronic media, the BIM/CADD Standard of Care, LOD, COBie and other requirements are presented in Sections 1, 2 and 3 of this Attachment 2. The detailed BIM PxP Template is provided in Section 4 and is required to be developed at project initiation to provide a master information and data management plan and assignment of roles and responsibilities for model creation and data integration. Wherever possible, the BIM PxP will be developed through a collaborative approach

involving all Project Consultants, Contractors and applicable County staff. A small sample of the Model Progression Schedule/Agent Responsible Matrix Template (MPS) is provided in Section 5 and will be made available in its native Excel format upon request. The County template includes minimum LODs but will be adapted if needed for the Project. An Introduction and directions for completion are described on the first page of the document.

Table of Contents - Attachment 2:

Introduction

Section 1 - Definitions and Identifications

Section 2 - Electronic Media

Section 3 - BIM/ CADD Standard of Care, Level of Development (LOD), COBie

Section 4 - BIM Execution Plan (BIM PxP) *(Template to be completed)*

**Section 5 - Model Progression Schedule/
Agent Responsible Matrix (MPS) *(Template to be completed)***

Section 1 Definitions and Identifications

The following BIM oriented definitions and identifications in this Section apply to this Attachment 2 unless the context, the Agreement in which the word or phrase is used, requires a different definition. In the event of a conflict, the Contract Administrator will determine its final resolution:

- 1.1 **3D Coordination & Conflict Analysis:** A process in which clash detection software is utilized during the coordination process to determine field conflicts by comparing 3D models of building systems. The goal of clash detection is to eliminate the major system conflicts prior to installation.
- 1.2 **As-Constructed BIMs:** Multiple Construction BIMs, delivered and validated by the Contractor before closing-up spaces and reviewed by the Consultants that represent the final As-Constructed building and components, including embedded data as required by the Contract Documents.
- 1.3 **Asset Management:** A process in which an organized management system will efficiently aid in the maintenance and operation of a facility and its assets. Asset Management utilizes the data contained in a record model to determine cost implications of changing or upgrading building assets, segregate costs of assets for financial tax purposes, and maintain a current comprehensive database that can produce the value of a company's assets.
- 1.4 **Augmented Reality Simulation (AR):** A Model Use where 3D models - combined with other technologies - allow users to experience virtual objects superimposed on top of physical objects or places, thus allowing images from the physical and virtual worlds to appear as one. AR is typically experienced through hand-held screens, wearables, holograms and projections.
- 1.5 **BIM:** Building Information Modeling as such term is defined by the US National Building Information Model Standard Project Committee. BIM is not a specific product or technology, instead it's a collection of software applications and processes designed to

facilitate coordination and project collaboration through a facilities lifecycle. BIM is a process for developing design, construction and operations and maintenance documentation by virtually constructing a building, bridge or other form of infrastructure – before anything is built. As used herein, the BIM may also refer to a specific model derived from the BIM process (sometimes redundantly identified as a BIM model). References to Building Information Model, BIM, or the Model, include the primary design model or models and all linked, related, affiliated or subsidiary models developed for design, analysis, estimating, detailing, fabrication, construction, operation or maintenance of the project, or any portion or element of the project.

- 1.6 **BIM Project Execution Plan (BIM PxP or PxP):** A document that defines the appropriate uses for Building Information Modeling on a project (e.g., design authoring, design review and 3D coordination), along with a detailed design and documentation process for executing BIM throughout a facility’s lifecycle, team contacts, team responsibilities, team roles, definitions, delivery methods / formats, LOD matrix, work flow and process maps are among other information outlined in the BIM PxP.
- 1.7 **Building Maintenance Scheduling:** A process in which the functionality of the building structure (walls, floors, roof, etc.) and equipment serving the building (mechanical, electrical, plumbing, etc.) are maintained over the operational life of a facility.
- 1.8 **BIM2Field:** See definition for Digital Layout.
- 1.9 **CAD/CADD:** Computer Aided Design/Computer Aided Design and Drafting. Interchangeably used terms interpreted as 2D, (Two Dimensional) representations in electronic format. CAD represents all pre-BIM digital tools and their 2D/3D deliverables.
- 1.10 **CAD/BIM Manager:** The System Administrator and/or person responsible for leading the BIM implementation processes within an organization and supporting it in developing/delivering new BIM services and model-based efficiencies. Also responsible for the management of all CAD and BIM data and processes.
- 1.11 **CAFM – Computer Aided Facility Management:** A software platform that streamlines facilities management and maintenance. CAFM software spans space and workplace management, asset management, project management, building operations, preventive maintenance, and more. These systems leverage facilities data and drawings into performance metrics and planning tools to optimize the process of managing facilities.
- 1.12 **CIM - Sub-Surface:** Civil Information Modeling and subsurface utility mapping that relates and is coordinated with the building modeling.
- 1.13 **Clash Detection - Clash Rendition:** A process in which clash detection software is used during the coordination process to determine field conflicts by comparing 3D models of building systems prepared by different disciplines. Rendition or the visual representation of the native-format model file is be used specifically for spatial coordination processes. The key benefit is to eliminate major system conflicts prior to installation, reducing errors, and hence costs, prior to commencement of construction.
- 1.14 **CMMS:** Computerized Maintenance Management System. A software system that provides maintenance managers a detailed look into the maintenance of a facility and keeps track of work costs and orders, machine history, labor records and critical equipment and can generate preventive maintenance work orders.

- 1.15 **COBie:** Construction Operations Building Information Exchange specifications as administered through the buildingSMART alliance, National Institute of Building Sciences, Washington, DC. http://www.nibs.org/?page=bsa_cobie.
- 1.16 **Code Validation:** A process in which code validation software is utilized to check model parameters against specific codes.
- 1.17 **Commissioning:** The process of verifying in new construction that agreed upon building systems achieve the County's project requirements.
- 1.18 **Compatible Data:** Data that can be accessed directly by the target BIM or CADD system upon delivery to the County, without further translation or post-processing of the electronic digital data files. It is the responsibility of Consultant to ensure this minimum level of compatibility.
- 1.19 **Constructability - PEER Review:** Constructability can be defined as a review of the building model along with drawings, specifications to determine feasibility to assemble the project in the manner documented. The review includes, but does not limit, evaluating and identifying efficiencies, assemblies, systems and obstacles to construction.
- 1.20 **Construction System Design:** A process in which 3D System Design Software is utilized to design and analyze the construction of a complex building system (e.g. form work, glazing, tiebacks, etc.) in order to improve planning.
- 1.21 **Cost Analysis:** A process in which a BIM can offer a preliminary analysis of the costs of constructing a Project during the design process and provide cost benefit effects of additions and modifications with potential to save time and avoid budget overruns. The accumulation, examination, and manipulation of cost data for comparisons and projections.
- 1.22 **Cost Estimation:** A process in which a BIM is used to develop accurate quantity take-offs for the purpose of creating or validating cost estimates.
- 1.23 **Design Authoring:** A process in which 3D software is used to develop a BIM based on criteria that is important to the translation of the building's design. Design authoring tools are a first step towards BIM, connecting the 3D model with a database of properties, quantities, means and methods and schedules.
- 1.24 **Design for Maintenance:** An evaluation process where each object selected during design for inclusion in a BIM are evaluated for maintenance issues, such as recommended, or code required clearances to perform routine maintenance activates to include complete replacement of the object or any of its components.
- 1.25 **Design Model:** is an object-based 3D model generated by the Design Team (individually or as a group) for the purposes of design analysis, Clash Detection and documentation.
- 1.26 **Design Reviews:** A process in which a 3D model is used to showcase the proposed design to the stakeholders and to help evaluate whether it has met deliverable requirements.
- 1.27 **Digital Fabrication:** A process that utilizes machine technology to prefabricate objects directly from a 3D Model. The Model is spooled into appropriate sections and input into fabrication equipment for production of system assemblies.
- 1.28 **Digital Layout - BIM2Field:** A process that allows information in a BIM to be transferred to digital layout tools for layout in conformance to the model. This information can be used to validate (QA/QC) the physical facility against the model.
- 1.29 **Disaster Planning - EM Preparation:** A process in which emergency responders would have access to critical building information in the form of model and information system.

The BIM would provide critical building information to the responders, that would improve the efficiency of the response and, more importantly, minimize the safety risks. The dynamic building information would be provided by a building automation system (BAS), while the static building information, such as floor plans and equipment schematics, would reside in a BIM model. These two systems would be integrated via a wireless connection and emergency responders would be linked to an overall system. The BIM coupled with the BAS would be able to clearly display where the emergency was located within the building, possible routes to the area, and any other harmful locations within the building.

- 1.30 **Electrical Analysis:** A process in which intelligent modeling software uses the BIM model to determine the most effective electrical system based on engineering and design specifications. These analysis tools and performance simulations can significantly improve the design of the facility and its energy consumption during its lifecycle in the future.
- 1.31 **Energy Analysis:** A process in which intelligent modeling software uses the BIM model to determine the most effective facility energy plan based on engineering and design specifications. These analysis tools and performance simulations can significantly improve the design of the facility and its energy consumption during its lifecycle in the future.
- 1.32 **Existing Conditions Modeling:** A process in which a project team develops a parametric 3D model of the existing conditions for a site, facilities on a site, or a specific area within a facility. This model can be developed in multiple ways depending on what is desired and what is most efficient. Once the model is constructed, it can be queried for information, whether it be for new construction or a modernization project.
- 1.33 **Facility Data Exchange:** A process where a facility data schema is developed to ensure information is supplied to the BIM in electronic form so that it can be easily exchanged between the BIM and the organizations selected tool. The capability should include textural as well as graphic entities.
- 1.34 **Federated BIM:** A BIM model which links (does not merge) several single-discipline models together. Federated Models do not merge the properties of individual models into a single database. A federated model is useful for design coordination, clash avoidance and clash detection, approvals processes, design development, estimating and so on, but the individual models do not interact, they have clear authorship and remain separate. This means that the liabilities of the originators of the separate models are not changed by their incorporation into the federated model.
- 1.35 **IFC:** Industry Foundation Classes, open sharable standards for building information as defined by the buildingSMART alliance, National Institute of building Sciences, Washington, DC. <http://www.buildingSmart.org/compliance/certified-software>
- 1.36 **Information Manager:** The BIM Protocol refers to and provides for the appointment of 'Information Manager' by the Consultants, Contractors or County. This is the project manager, or BIM Manager who is responsible for managing the processes of information exchange on projects, using BIM procedures and methods.
- 1.37 **Integrated Project Delivery* (IPD):** The owner's goal who's primary motive is to bring the teams together early on in the project. A full implementation of BIM also requires the project teams to collaborate from the inception stage and formulate model sharing and ownership contract documents. *NOTE: True IPD employs various constructs, many of which the County is precluded from using by state law. (such as the use of multi-party

- contracts, and profit sharing). The County's integrated delivery approach leverages aspects of IPD that are allowed by law.
- 1.38 **Laser Scanning and Point Cloud Integration:** A process where the application is the controlled steering of laser beams followed by a distance measurement at every pointing direction. This is used to rapidly capture shapes of objects, buildings and landscapes. The point cloud generated is then interpreted by software to create a BIM of the existing conditions.
- 1.39 **Life Cycle Assessment** - Life-cycle assessment (LCA, also known as life-cycle analysis) is a cradle-to-grave environmental impact assessment for built assets, in terms of materials and energy. The energy and materials used, along with waste and pollutants produced as a consequence of a product or activity, are quantified over the whole life cycle; the result representing the environmental load of that asset. ISO 14040 defines LCA methodology.
- 1.40 **Lighting Analysis:** A process in which intelligent modeling software uses the BIM model to determine the most effective lighting method based on engineering and design specifications. These analysis tools and performance simulations can significantly improve the design of the facility and its energy consumption during its lifecycle in the future.
- 1.41 **LOD:** Level Of Development Specification for Building Information Models. See Section 3 – BIM/CADD Standards of Care and the current edition of the BIMForum LOD Specification for additional information. <http://BIMForum.org/lod>
- 1.42 **Maintenance & Repair Information:** A function to allow the collection and storage of maintenance and repair information about objects brought into a BIM.
- 1.43 **Mechanical Analysis:** A process in which intelligent modeling software uses the BIM model to determine the most effective mechanical system design based on engineering and design specifications. These analysis tools and performance simulations can significantly improve the design of the facility and its energy consumption during its lifecycle in the future.
- 1.44 **Model Progression Schedule/Agent Responsible Matrix (MPS):** A worksheet that is a guide for the project team to define model creation scope of work, minimum model level of development and responsible agent. The LOD will aid in determining the level of involvement of the project stakeholders from planning through facility turnover. This worksheet is intended to guide the project team in achieving project goals, accommodate required BIM uses, meet schedule requirements for the project and identify the responsible agents at differing phases of the project.
- 1.45 **OmniClass:** OmniClass Construction Classification System (OCCS), is a means of organizing and retrieving information specifically designed for the construction industry. This agreement incorporates Table 23 establishing National Standards for the classification of construction products. OmniClass uses MasterFormat and UniFormat as the basis of its Tables wherever possible. <http://www.omniclass.org/about>
- 1.46 **Owner (County) Approval:** A business process which takes advantage of information stored in a BIM to help validate progress as well as observing that the County's intent for the facility is being honored both conceptually and contractually.
- 1.47 **Phase Planning - 4D Modeling:** A process in which a 4D model (3D models with the added dimension of time) is utilized to effectively plan the phased occupancy in a renovation,

- retrofit, addition, allow construction scheduling or to show the construction sequence and space requirements on a building site.
- 1.48 **Programming:** A process in which a spatial program is utilized to efficiently and accurately assess design performance in regard to spatial requirements. Use of the BIM model allows the project team to critically analyze space and understand the complexity of space standards and regulations for discussion with the County and other stakeholders.
- 1.49 **PxP:** Abbreviated form of (BIM PxP). See definition for BIM Project Execution Plan.
- 1.50 **RAW Image Format:** A camera raw image file contains minimally processed data from the image sensor of either a digital camera, a motion picture film scanner, or other image scanner. Raw files are named so because they are not yet processed and therefore are not ready to be printed or edited with a bitmap graphics editor.
- 1.51 **Quality Assurance/Quality Control - QA/QC:** QA/QC as a BIM Use refers to ensuring that the BIMs follow County requirements and all components of the approved BIM Execution Plan, and that the BIMs accurately represent the building geometry and data to meet the purposes for which they are developed.
- 1.52 **Quantity Take Off (QTO):** A model use representing how 3D models are used to calculate the quantity of Furniture, Fixtures and Equipment or building material to create a detailed measurement of materials and labor needed to complete a construction project. Estimators review drawings, specifications and BIMs to find these quantities.
- 1.53 **Record BIMs:** The updated BIMs generated by the Architecture/Engineering Team of record that includes the Contractors' As-Constructed BIMs.
- 1.54 **Security - Key Management:** A process to identify and evaluate the security zones in the facility using BIM. The process includes identifying the door keys required for openings through the security perimeters established to ensure that the level of security defined is maintained.
- 1.55 **Site Analysis:** A process in which BIM/GIS tools are used to evaluate properties in a given area to determine the most optimal site location for a future project. The site data collected is used to first select the site and then the position the building based on engineering criteria (e.g. solar path, utility availability, hazardous material).
- 1.56 **Site Utilization Planning:** A process in which a 4D model is used to graphically represent both permanent and temporary facilities on site, with the construction activity schedule. Additional information incorporated into the model can include labor resources, materials and associated deliveries, and equipment location.
- 1.57 **Space Management:** A process in which BIM is utilized to effectively allocate, manage, and track space types, workspaces, occupancy and resources within physical spaces.
- 1.58 **Specification Production:** A data based three-part specification system linked to the objects selected in a BIM which responds to any changes or alternatives items added or subtracted from the model.
- 1.59 **Structural Analysis:** A process in which analytical modeling software utilizes the BIM design authoring model to determine the behavior of a given structural system. Based on this analysis further development and refinement of the structural design takes place to create effective, efficient, and constructible structural systems.
- 1.60 **Sustainability & LEED Evaluation:** A BIM process in which a project is evaluated based on LEED or other sustainability criteria. This can refer to materials, performance, or a process. Sustainability evaluations can be applied across all four phases of a construction

project, Planning, Design, Construction, and Operation. Sustainability evaluation is most effective when it is done in planning and design stages and then applied in construction and operations phase.

- 1.61 **Tolerance:** Acceptable dimension or variation from precise material, fabrication, or assembled condition as a unit of measure to be specified allowable variations in strength, stability, dimension, the mix of a material, the performance of a system, temperature ranges and so on.
- 1.62 **Total Cost of Ownership / Service Life:** A financial estimate intended to help buyers and owners determine all direct and indirect costs of a product or system.
- 1.63 **Virtual Design and Construction (VDC):** The management of integrated multi-disciplinary performance models of design-construction projects, the work processes and organization of the teams to support business objectives.
- 1.64 **Virtual Reality Simulation (VR):** A Model Use where 3D models are part of an Immersive Environment where users experience simulated places, objects and processes. As opposed to Augmented Reality Simulation, VR may require full 'immersion' within multi-projection rooms and/or through stereoscopic goggles and other specialized gear.
- 1.65 **Visualization:** Any technique for creating images, diagrams, or animations to communicate information. BIM can be used as a tool to show visual clarity of simple and complex systems and data to help understand project scope, design options, constructability, coordination and for QA/ QC.

Section 2 Electronic Media

2.1 General Requirements:

2.1.1 All Work, including drawings, land surveying work, maps, details or other drawing information to be provided in electronic media by Consultant shall be accomplished and developed using Computer-Aided Design and Drafting (CADD), or Building Information Modeling (BIM), or a coordinated combination of both as determined by the Contract Administrator and may also include other software and procedures conforming to the following criteria.

2.2 BIM and CAD/CADD Graphic Formats:

2.2.1 Provide all CAD/CADD data in Autodesk, Inc.'s AutoCAD release 2025 or higher for Windows in native .dwg electronic digital format. CAD/CADD data required for Contract submittals shall be provided in native .dwg format. Provide copies of all drawing sheets or other CAD/CADD and/or PDF format produced documents intended for hardcopy plotting or printing in plot (.plt) and drawing web format (.dwf) versions of all sheets/documents.

2.2.2 Provide all BIM models and data in Autodesk Revit 2025 or higher. Provide all BIM and data in any of the following software formats:

- a. Autodesk, Inc. Revit 2025 or higher.

- b. Alternative compatible BIM software formats that conform to the requirements of Section 2.2 of this Attachment if accepted in writing by the County's Contract Administrator.

2.2.3 BIM data required for Contract submittals shall be provided in their native (.rvt typical) format as well as .ifc format in conformance with IFC (Industry Foundation Classes) IFC2x4 or higher, as established by the buildingSMART International Alliance for Interoperability. Use of BIM vendor's or systems that incorporate the International Alliance for Interoperability IFC standard above are acknowledged but their use must be approved in writing in advance by the County's Contract Administrator and otherwise comply with this Attachment.

2.2.4 Building Positioning to be accomplished for the intended project site by using "Auto – by Shared Coordinates" process or similar. Obtain State Plane Coordinates from Project survey information and utilize this same positioning process for all BIM files.

2.2.5 CAD/CADD data required for Contract submittals shall be provided in native .dwg format or be contained within the structure of the BIM data required in Section 2.2.2.

- a. Ensure that all digital files and data (e.g., constructs, elements, base files, prototype drawings, reference files and images, blocks, attribute links, pen settings and all other files external to the drawing itself) are Compatible Data with the Contract Administrator's target BIM and/or CADD system (i.e., BIM and CADD software, platform, database software), and adhere to the standards and requirements specified herein.

2.2.6 Target platform: A personal computer with Windows 10 operating system that meets or exceeds the minimum manufacturer's requirements to operate the version of software utilized for the project.

2.2.7 Any non-graphical database delivered with prepared drawings must be provided in relational database format compatible with Microsoft Access 2016 or higher, or other compatible SQL format database. All database tables must conform to the structure and field-naming guidance provided upon request by the Contract Administrator.

- a. Maintain all linkages of non-graphical data with graphic elements, relationships between database tables, and report formats.

2.2.8 CAD/CADD Standards:

- a. Standard plotted drawing size: 24-inch x 36-inch sheets (Arch D-sized sheet)
- b. Coordinate with the Contract Administrator concerning the standard file naming protocol to be utilized.
- c. Drawing Set Organization and Sheet Identification per the United States National CAD Standard - V5. Provide dots in lieu of dashes at all uses.

2.2.9 CAD/CADD Layering:

- a. Conform to the guidelines defined by the American Institute of Architect's (AIA)

standard document, U.S. National CAD standards version 5 (V5). "CAD Layer Guidelines", 2nd edition or later.

- b. Provide an explanatory list of which layers are used at which drawing and an explanatory list of all layers which do not conform to the standard AIA CAD Layer Guidelines including any user definable fields permitted by the guidelines.
- c. Layering: The Contract Administrator may, from time to time, supplement the AIA CAD Layer Guidelines with the Contract Administrator's specific requirements for Facilities or Construction Management and other related information. Obtain latest Contract Administrator specific layering from Contract Administrator prior to production of documents and incorporate into drawings.

2.2.10 Attribute Definitions:

- a. Obtain latest guidance from the Contract Administrator concerning attribute definition, database linking and other information embedding requirements prior to production of documents.

2.2.11 Federated Models: The following colors shall be utilized for all federated models including Design, Construction, Coordination, As-Constructed, and Record Models:

- a. Architectural Models
 1. Architectural - White
 2. Envelope (Curtainwall, Precast, Other) - Default
 3. Masonry - Gray
- b. Civil & Site Improvement Model
 1. TBD
- c. Structural Models
 1. Steel – Maroon
 2. Concrete - Gray
 3. Masonry - Gray
- d. MEP/FP Models
 1. Mechanical Ductwork Supply - Blue
 2. Mechanical Ductwork Return - Magenta
 3. Mechanical Ductwork Exhaust – Medium Orchid
 4. Mechanical Piping Supply – Gold
 5. Mechanical Piping Return- Violet
 6. Electrical Conduit – Light Yellow
 7. Cable Tray- Dark Orange
 8. Electrical Lighting – Light Golden Rod Yellow
 9. Plumbing Domestic Water - Lime
 10. Plumbing Storm / Roof Drain – Dark Green
 11. Plumbing Waste / Vent - Olive

12. Medical Gas – Light Green
13. Fire Protection - Red
14. Fire Alarm – Golden Rod
15. Data/IT / Controls - Aqua
16. Pneumatic Tubing – Dark Slate Gray

e. Miscellaneous Models

1. Framing – Sandy Brown
2. Equipment Models (by Equip. Planners) – Burly Wood
3. Clearances - Dark Red

2.2.12 Deviations from Standards:

- a. Submit a written request for approval of any deviations from the Contract Administrator's established electronic media standards. Pre-coordinate the development, use and submittal of 3-D modeling, Building Information Models (BIM), photo-realistic renderings, animations, presentations and other visualization/information tools utilized during the design and construction process to ensure compatibility of submittal with County's intended use and information systems.
- b. No deviations from the County's established BIM/CADD standards will be permitted unless prior written approval of such deviation has been received from the Contract Administrator.
- c. Contract Administrator reserves the right to review, accept or reject AutoCAD files, BIMs and other Digital Deliverables. If the Digital Deliverables do not comply with the provisions of the agreement between County and the External Project Team member, the External Project Team member will be required to correct the work at no additional cost to County or delay to the Project Schedule.
- d. Contract Administrator also reserves the right to review, accept or reject Facility Data deliverables when required by contractual agreements. To ensure successful integration into County's CAFM software, milestone reviews may be conducted by County to export or link BIM data into these designated programs to ensure compatibility and capability. During the development of the BIM PxP, the required BIM outputs allowing for this integration will be determined. If the Facility Data integration with the computer aided facility management software fails because of the BIMs non-compliance with the provisions of the agreement between County and the External Project Team member, or the data imported does not accurately reflect the current state of the Project, the External Project Team member will be required to correct the work at no additional cost to the owner or delay to the Project Schedule.

2.3 Non-BIM/CADD Graphic Format:

2.3.1 Provide digital photography files and other miscellaneous graphics in High Resolution JPEG, PDF in 600 dots per inch (dpi) or higher resolution or PNG format. Provide RAW files when available.

2.4 Non-Graphic Format:

2.4.1 Provide word processing files in Microsoft Word 2016 or higher compatible file formats including all fonts, typefaces, bitmap and vector graphics and other information necessary for remote printing.

2.4.2 Provide spreadsheet files in Microsoft Excel 2016 or higher for windows compatible file formats including all fonts, typefaces, bitmap and vector graphics and other information necessary for remote printing.

2.4.3 Provide database files in relational database format compatible with Microsoft Access 2016 or higher, PDF or other compatible SQL format database including all tables, form and report formats, fonts, typefaces, bitmap and vector graphics and other information necessary for remote printing. Ensure integrity of relational database structure.

2.5 Delivery Media and Format:

2.5.1 Submit copies of all BIM/CADD data and other electronic files developed under this contract on electronic digital media as required for project phase submittals to 400 dots per inch (dpi) resolution.

2.5.2 Provide electronic digital data and files on labeled ISO-9660 CD-ROM., DVD's, Flash drives or other acceptable alternatives if approved by the Contract Administrator. Each device or disc shall contain identifying County project information in their disk name.

2.5.3 The electronic digital media shall be in the format which can be read and processed by the Contract Administrator's target CADD or BIM system. See also Section 2.2.

2.5.4 The external label or archival case for each electronic digital media shall contain, as a minimum, the following information:

- a. The Project Number, Project Title and date.
- b. The Facility Name
- c. The format and version of operating system software.
- d. The name and version of utility software used for preparation (e.g., compression/decompression) and copying files to the media.
- e. A list of the filenames, (a separate sheet will be accepted).

2.5.5 Before a CADD file is placed on the delivery electronic digital media, the following procedures shall be performed:

- a. Ensure that drawing sheets, viewports, paper-space, line weights, fonts, and other

- drawing components are correctly configured for Contract Administrator's viewing and plotting.
- b. Make sure all reference files are attached using a "relative" path setting and without device or directory specifications.
 - c. Transmit function should be used in AutoCAD to assemble files for submittal. For each 2D drawing, provide one bound file containing drawing sheet with associated XREFs and one un-bound file containing the associated XREFs.
 - d. Compress and reduce all design files using PKZIP, WINZIP or other compatible file compression/decompression software approved by the Contract Administrator. If the file compression/decompression software is different from that specified above, then an electronic digital media copy of the file compression/decompression software shall be purchased for the Contract Administrator and provided with the delivery media.
 - e. Include all files, both graphic and non-graphic, required for the project (i.e., color tables, pen tables, font libraries, block libraries, user command files, plot files, and other elements of drawing definition). All blocks not provided as Contract Administrator-furnished materials must be provided as a part of the electronic digital deliverables.
 - f. Make sure that all support files such as those listed above are in the same directory and that references to those files do not include device or directory specifications.
 - g. Document any fonts, tables, or other similar customized drawing element developed by Consultant or not provided among Contract Administrator-furnished materials. Contractor shall obtain Contract Administrator approval before using anything other than Contract Administrator's standard fonts, line types, tables, blocks, or other drawing elements available from Contract Administrator.
 - h. Include any standard sheets (i.e., abbreviation sheets, standard symbol sheets, or other listing) necessary for a complete project.
 - i. Check completed files are free of any known viruses or unrequired attachments.

2.6 Drawing Development Documentation:

2.6.1 Provide the following information for each finished drawing in the nonplot layer X****-NPLT:

- a. How the data were input (e.g., keyed in, downloaded from a survey total station instrument (include name and model), and other identification data).
- b. Brief drawing development history (e.g., date started, modification date(s) with brief description of item(s) modified, author's name, and other identifying data.).
- c. The names of the reference, blocks, symbols, details, tables, and schedule files required for the finished drawing.
- d. Layer assignments and lock settings.
- e. Text fonts, line styles/types used, and pen settings.

2.7 Submittals / Deliverables:

2.7.1 Submit as Project Record Documents specified above and as required for project phase submittals and project record documents.

2.7.2 Submit electronic media with a transmittal letter containing, as a minimum, the following information:

- a. The information included on the external label of each media unit (e.g., CD, DVD, flash drive, etc.), along with the total number being delivered, and a list of the names and issue dates of all files on the media.
- b. Brief instructions for transferring the files from the media.
- c. Confirm that all delivery media is free of known computer viruses. A statement including the name(s) and release date(s) of the virus-scanning software used to analyze the delivery media, the date the virus-scan was performed, and the operator's name shall also be included with the certification. The release or version date of the virus-scanning software shall be the current version that has detected the latest known viruses at the time of delivery of the digital media.
- d. The following "Plot File Development and Project Documentation Information" as an enclosure or attachment to the transmittal letter provided with each electronic digital media submittal:
 1. List of all new figures, symbols, tables, schedules, details, and other blocks created for the project, which were not provided to Consultant with the Contract Administrator-furnished materials, and any associated properties.
 2. List of all database files associated with each drawing, as well as a description and documentation of the database format and schema design.
 3. Recommended modifications which will be necessary to make the data available for GIS use.

2.7.3 Prime Contractors are responsible for ensuring that the Digital Deliverables prepared by their Subcontractors or Subconsultants comply with the standards and policies outlined in this document.

2.8 Ownership:

2.8.1 County has ownership and all rights to all finished or unfinished digital deliverables developed for this Project. Any digital deliverables generated under any County Consulting or Construction Agreements or Contracts, including those generated by the External Project Team Members' Subcontractors or Subconsultants, shall become the property of County. County will have unlimited use of the digital deliverables produced for the Project. County acknowledges that the digital deliverables are an instrument of service of the external project team member and that the author of the digital deliverable does not represent or guarantee that the digital deliverable will be useful to County for any purposes beyond those uses that they were authored.

2.8.2 County will have unlimited rights under the Agreement of which this document is a part to all information and materials developed under these and other contractual requirements and furnished to the Contract Administrator and documentation thereof,

reports, and listings, and all other items pertaining to the work and services pursuant to this agreement including any copyright.

2.8.3 Unlimited rights under this contract are rights to use, duplicate, or disclose text, data, drawings, and information, in whole or in part in any manner and for any purpose whatsoever without compensation to or approval from author except where otherwise limited within the Contract.

2.8.4 The Contract Administrator will at all reasonable times have the right to inspect the work and will have access to and the right to make copies of the above-mentioned items.

2.8.5 All text, electronic digital files, data, and other products generated under this contract shall become the property of County except where otherwise limited within the Contract.

2.9 Contract Administrator-Furnished Materials to the Construction Contractor:

2.9.1 The Contract Administrator and Consultant may make various electronic information available to the Contractor during the Pre-Construction and Construction phases of the Project. To this end, Consultant shall make the following information available to the Contractor in electronic format:

- a. Work-files: Selected work product files, copies of BIM and/or CAD files, reports, spreadsheets, databases, specifications, drawings and other documentation of Consultant's work in progress may be provided to the Contractor, Managing General Contractor, or other County consultant on an as required basis. Consultant shall cooperate and facilitate the secure exchange of these electronic media documents.
- b. Where electronic media submittals of final site surveys are required: Provide electronic copies of any existing site survey data already on electronic media conforming to Section 2.2 of this Attachment.
- c. Where Electronic Project Record Documents are required, Consultant will provide the Contractor one set of contract drawings in an electronic file format conforming to Section 2.2 of this Attachment, to be used for as-constructed drawing markups at the Contractor's option. Make electronic file drawings available on media in conformance with Section 2.5 of this Attachment.

2.10 Other Digital Information:

2.10.1 A variety of digital information may be generated by participants in the design process including the Contract Administrator, Consultant, Subconsultants, Contractor, subcontractors, the Contract Administrator's commissioning authority, local jurisdictional authorities and other project team members.

2.10.2 Consultant shall facilitate and participate in this digital exchange of information by conforming to the standards expressed above and as further described in Attachments.

Section 3 BIM/CADD Standards of Care

3.1 General Provisions:

3.1.1 The Model(s) shall be developed to include the systems described below as they would be built, the processes of installing them, and to reflect final As-Constructed construction conditions. The deliverable 3D Model at all phases shall be developed to include as many of the systems described below as are necessary and appropriate to the design/construction stage. The BIM shall be provided in an editable form and from its inception shall include automatic model positioning using a common reference point (Point of Origin), based on "Florida State Plane Coordinates" derived from the project survey.

3.1.2 The Model shall be developed using Building Information Modeling ("BIM") supplemented with Computer Aided Drafting and Design ("CADD") content as necessary to produce a complete set of Construction Documents.

3.1.3 Provide all Building Information Modeling (BIM) for Space Management and Program Validation in conformance to the General Service Administration's (GSA) "Building Information Modeling Guide 02 -Spatial Program Validation," dated May 21, 2015 or later. Provide space identification, charts and information in conformance with this Guide.

3.1.4 The parties shall utilize the appropriate Levels of Development (LOD) described below in completing the Model, which establishes the required LOD for each Model Element at each phase of the Project.

3.1.5 The following Level of Development (LOD) descriptions are summaries of Level Of Development Specification for Building Information Models as developed by BIMForum. (<http://bimforum.org/lod>), current edition (2017 or later). **Each subsequent LOD builds on the previous level and includes all the characteristics of previous levels.** See also "Section 5 BIM Model Progression Schedule" for examples and graphic descriptions of Levels of Development. The following list is a simplified summary of the adopted Levels of Development:

- **LOD 100** elements are not geometric presentations. They may be symbols or other generic representations of information that can be derived from other model elements. Any information derived from LOD 100 elements must be considered approximate.
- **LOD 200** elements are represented graphically but are generic placeholders, e.g., volume, quantity, location, or orientation. Any information derived from

- LOD 200 elements must be considered approximate.
- **LOD 300** elements are graphically represented as specific systems, objects, or assemblies from which quantity, shape, size, location, and orientation can be measured directly, without having to refer to non-modeled information such as notes or dimension callouts.
- **LOD 350** elements are enhanced beyond LOD 300 by the addition of information regarding interfaces with other building systems. For example, an LOD 350 masonry wall element would include jamb conditions, bond beams, grouted cells, dowel locations, and joints – information that enables the model user to coordinate the wall element with other systems in the structure.
- **LOD 400** elements are modeled at sufficient detail and accuracy for fabrication of the represented component.

NOTE - County and the LOD Specification do not address **LOD 500** since that LOD relates to field verification and is not an indication of progression to a higher level of geometry or information.

3.1.6 The parties shall utilize the appropriate Levels of Development (LOD) described below in completing the Model, which establishes the required LOD for each Model Element at each phase of the Project. LODs and Model Definition: There is no such thing as an “LOD ### model.” As previously noted, project models at any stage of delivery will invariably contain elements and assemblies at various levels of development. As an example, it is not logical to require an “LOD 200 model” at the completion of the schematic design phase. Instead, the “100% SD Model” will contain modeled elements at LOD 100 as well as various other levels of development. Consultants will be required to submit a LOD Model Progression as part of the Project Execution Plan.

3.2 **Level of Development (LOD) – Expanded Descriptions**

3.2.1 **LOD 100:** (Predesign preferred) and Schematic Design (Basic Services)

- a. **Model Content Requirements:** Overall building massing indicative of area, height, volume, location, and orientation may be modeled in three dimensions or represented by other data.
- b. **Potential Uses:**
 1. **Analysis:** The Model may be analyzed based on volume, all spaces, area, solar orientation and configuration by application of generalized performance criteria assigned to the representative Model Elements.
 2. **Cost Estimating:** The Model may be used to develop a cost estimate based on current area, volume or similar conceptual estimating techniques (e.g., square feet of floor area, etc.), as opposed to components.
 3. **Schedule:** The Model may be used for project phasing and overall duration.

3.2.2 **LOD 200:** Design Development (Basic Service)

- b. **Model Content Requirements:** Model Elements are modeled as generalized systems or assemblies with approximate quantities, size, shape, location, and

orientation. Non-geometric information may also be attached to Model Elements. Partitions and simple furniture models shall be included at this phase.

c. Potential Uses:

1. Analysis. The Model may be analyzed for performance of selected systems and orientation by application of generalized performance criteria assigned to the representative Model Elements.
2. Cost Estimating. The Model may be used to develop cost estimates based on the approximate data provided and conceptual estimating techniques (e.g., volume and quantity of elements or type of system selected).
3. Schedule. The Model may be used to show ordered, time-scaled appearance of major elements and selected systems.

3.2.3 **LOD 300:** Construction Documents (Basic Service)

- a. Model Content Requirements: Model Elements are modeled as specific assemblies accurate in terms of quantity, size, shape, location, and orientation. Non-geometric information may also be attached to Model Elements.
- b. Facility Management information: Consultant will be required to input all new products installed under the scope of work for this project in conformance with an agreed upon list in OmniClass Table 23 format per Table 1 herein. County and Consultant to meet to refine the scope of the COBie information following issuance of the Schematic Phase NTP.
- c. Potential Uses:

Suitable for the generation of traditional construction documents and shop drawings.

1. Analysis. The Model may be analyzed for performance of selected systems by application of specific performance criteria assigned to the representative Model Elements.
2. Cost Estimating. The Model may be used to develop cost estimates based on the specific data provided and industry estimating techniques.
3. Schedule. The Model may be used to show ordered, time-scaled appearance of detailed elements and systems.
4. Clash Detection. The Model may be used to identify architectural and engineering conflicts for primary systems and elements. Areas of study include HVAC ductwork and equipment, structural elements, above ground plumbing and drainage piping, fire sprinklers and risers.

3.2.4 **LOD 350:** Construction (Contractor to provide this LOD as part of its Scope of Work, using the Consultants model unless County elects Consultant to provide as Optional Service)

- a. Model Content Requirements: Model Elements are modeled as constructed assemblies, actual and accurate in terms of size, shape, location, quantity, and orientation. Clearances and access requirements to be included in model elements where applicable, (e.g. VAV access, HVAC access panels, equipment door swings, maintenance panel access, etc.). Non-geometric information

may also be attached to modeled elements.

- b. **Facilities Management information:** Consultant to provide complete BIM model(s) to Contractor for its use containing Construction Operations Building Information Exchange (COBIE) standards in conformance with Table 1 herein.
- c. Potential Uses:
 1. **Clash Detection.** The model may be used to coordinate the configuration, installation and positioning of all building elements.
 2. **Facility Management.** The Model may be utilized for maintaining, altering, and adding to the Project. Update and confirm As-Constructed COBie data and Space Management information.
 3. **Analysis.** The Model may be analyzed for performance of selected systems by application of specific performance criteria assigned to the representative Model Elements.
 4. **Cost Estimating.** The Model may be used to develop cost estimates due to change in project scope based on the specific data provided and estimating techniques.
 5. **Schedule.** The Model may be used to show ordered, time-scaled appearance of detailed elements and systems.

3.2.5 **Detailed BIM Delivery Breakdown for LOD 300 and 350:**

- a. **Architectural/Interior Design.** The Architectural systems Model may vary in level of detail for individual building elements, but at a minimum the model must include all features that would be included on a quarter inch (1/4" = 1'-0") scaled drawing. Where applicable and as required for construction documents, the model, or host platform will include additional scales as required to show necessary details. Additional minimum Model requirements include:
 1. **Spaces.** The Model shall include spaces defining actual net square footage, net volume and holding data to develop the room finish schedule including room names and numbers. Include program information to verify design space against programmed space, using this information to validate area quantities.
 2. **Walls and Curtain Walls.** Each wall shall be depicted to the exact height, length, width, materiality and ratings (thermal, acoustic, fire) to properly reflect wall types. The Model shall include all walls, both interior and exterior, and the necessary intelligence to produce accurate plans, sections and elevations depicting these design elements.
 3. **Doors, Windows and Louvers.** Doors, windows and louvers shall be depicted to represent their actual size, type and location. Doors and windows shall be modeled with the necessary intelligence to produce accurate window and door schedules.
 4. **Roof.** The Model shall include the roof configuration, drainage system, penetrations, specialties, and the necessary intelligence to produce accurate plans, building sections and wall sections where roof design elements are depicted.
 5. **Floors.** The floor slab(s) shall be developed in the Structural Model and then

referenced by the Architectural Model.

6. Ceilings. All heights and other dimensions of ceilings, including soffits, ceiling materials, or other special conditions shall be depicted in the Model with the necessary intelligence to produce accurate plans, building sections and wall sections where ceiling design elements are depicted.
 7. Vertical Circulation. All continuous vertical components (i.e., non-structural shafts, architectural stairs, ramps, conveying systems, handrails and guardrails) shall be accurately depicted and shall include the necessary intelligence to produce accurate plans, elevations and sections in which such design elements are referenced.
 8. Architectural Specialties. All architectural specialties (i.e., toilet room accessories, toilet partitions, grab bars, lockers, and display cases) and millwork (i.e., cabinetry and counters) shall be accurately depicted with the necessary intelligence to produce accurate plans, elevations, sections and schedules in which such design elements are referenced.
 9. Signage. The Model shall include all signage and the necessary intelligence to produce accurate plans and schedules.
 10. Schedules. Provide door, window, hardware sets using Builders Hardware Manufacturers Association (BHMA) designations, flooring, wall finish, and signage schedules from the Model, indicating the type, materials and finishes used in the design.
- b. **Furniture**. The furniture Model may vary in level of detail for individual elements, but at a minimum must include all features that would be included on a quarter inch (1/4" = 1'-0") scaled drawing and have necessary intelligence to produce accurate plans. Where applicable and as required for construction documents, the model, or host platform will include additional scales as required to show necessary details. Representation of furniture elements is to be 3D. 3D Examples of furniture include, but are not limited to, desks, furniture systems, seating, tables, and office storage. Additional minimum Model requirements include:
1. Furniture Coordination. Furniture that makes use of electrical, data or other features shall include the necessary intelligence to produce coordinated documents and data. Models shall be sufficient to enable their use to demonstrate complete furniture mounted electrical and data installation locations.
- c. **Equipment**. The Model may vary in level of detail for individual elements. Equipment shall be depicted to meet layout and clearance requirements with the necessary intelligence to produce accurate plans and schedules, indicating the configuration, materials, finishes, mechanical, electrical requirements and all other related utilities. Examples of equipment include but are not limited to copiers, printers, refrigerators, ice machines, microwaves, and equipment specifically related to the operations and functions of the facility.
1. Schedules. Provide furniture and equipment schedules from the model

indicating the materials, finishes, mechanical, and electrical requirements.

- d. **Structural.** The structural systems Model may vary in level of detail for individual elements, but at a minimum must include all features that would be included on a quarter inch (1/4" = 1'-0") scaled drawing. Where applicable and as required for construction documents, the model, or host platform will include additional scales as required to show necessary details. Additional minimum Model requirements include:
1. **Foundations.** All necessary foundation and/or footing elements, with necessary intelligence to produce accurate plans and elevations.
 2. **Floor Slabs.** Structural floor slabs shall be depicted with all necessary recesses, curbs, pads, closure pours, and major penetrations accurately depicted. Major penetrations shall include A/C duct chases and pipes larger than 6" dia. only.
 3. **Structural Steel.** All steel columns, primary and secondary framing members, and steel bracing for the roof and floor systems (including decks), including all necessary intelligence to produce accurate structural steel framing plans, related building/wall sections, and schedules.
 4. **Cast-in-Place Concrete.** All walls, columns, beams, including necessary intelligence to produce accurate plans and building/wall sections, depicting cast-in-place concrete elements.
 5. **Precast/Tilt-up/CMU.** All walls, columns, beams, including necessary intelligence to produce accurate plans and building/wall sections, depicting such elements.
 6. **Expansion Joints.** Joints shall be accurately depicted.
 7. **Stairs.** All framing members for stair systems, including necessary intelligence to produce accurate plans and building/wall sections depicting stair design elements.
 8. **Shafts and Pits.** All shafts and pits, including necessary intelligence to produce accurate plans and building/wall sections depicting these design elements.
 9. **Openings and Penetrations.** All major openings and penetrations.
- e. **Mechanical.** The mechanical systems Model may vary in level of detail for individual elements, but at a minimum must include all features that would be included on a quarter inch (1/4" = 1'-0") scaled drawing. Where applicable and as required for construction documents, the model, or host platform will include additional scales as required to show necessary details. Small diameter (less than 3/4" NPS) field-routed piping is not required to be depicted in the Model. Additional minimum Model requirements include:
1. **HVAC.** All necessary heating, ventilating, air-conditioning and specialty equipment, including air distribution for supply, return, ventilation and exhaust ducts, control systems, chillers, registers, diffusers, grills, and hydronic baseboards with necessary intelligence to produce accurate plans, elevations, building/wall sections and schedules.
 2. **Mechanical Piping.** All necessary piping and fixture layouts, and related equipment, including necessary intelligence to produce accurate plans,

- elevations, building/wall sections, and schedules.
3. **Equipment Clearances.** All Mechanical equipment clearances shall be modeled for use in interference management and maintenance access requirements.
- f. **Plumbing.** All necessary plumbing piping and fixture layouts, floor and area drains, and related equipment, including necessary intelligence to produce accurate plans, elevations, building/wall sections, riser diagrams, and schedules. Piping shall include slope requirements.
1. **Equipment Clearances.** All equipment clearances shall be modeled for use in interference management and maintenance access requirements.
- g. **Electrical/Telecommunications/Data.** The electrical and telecommunications systems Model may vary in level of detail for individual elements, but at a minimum must include all features that would be included on a quarter inch (1/4" = 1'-0") scaled drawing. Where applicable and as required for construction documents, the model, or host platform will include additional scales as required to show necessary details. Small diameter (less than 1" Ø) field-routed conduit is not required to be depicted in the Model unless banks of 3 or more conduits are run on racks. Additional *minimum* Model requirements include:
1. **Interior Electrical Power and Lighting.** All necessary interior electrical components (i.e., lighting, receptacles, special and general-purpose power receptacles, lighting fixtures, panel boards, cable trays and control systems), including necessary intelligence to produce accurate plans, details and schedules. Lighting and power built into furniture/equipment shall be modeled. Whips servicing lighting fixtures are required to be modeled.
 2. **Special Electrical.** All necessary special electrical components (i.e., mass notification, nurse call and other special electrical occupancy sensors, and control systems), including necessary intelligence to produce accurate plans, details and schedules.
 3. **Grounding.** All necessary grounding components (i.e., lightning protection systems, static grounding systems, communications grounding systems, cadweld locations and bonding), including necessary intelligence to produce accurate plans, details and schedules.
 4. **Telecommunications/Data.** All existing and new telecommunications service controls and connections, both above ground and underground, with necessary intelligence to produce accurate plans, details and schedules. Cable tray routing shall be modeled without detail of cable contents.
 5. **Exterior Building Lighting.** All necessary exterior lighting including all lighting fixtures, mounting details, relevant existing and proposed support utility lines and equipment with necessary intelligence to produce accurate plans, details and schedules.
 6. **Exterior Electrical Equipment.** All new transformers, pads, disconnects, site power receptacles, photocells, with necessary intelligence to produce accurate plans and details.

7. Photovoltaic Panel Systems. Panels, transformers, inverters, fuses, switches, disconnects, communication panels and all underground conduit 1-1/2" or larger in diameter, with necessary intelligence to produce accurate plans and details.
 8. Electric Car Charging Stations. All new charging stations and conduit to point of power connection, including devices and disconnects, with necessary intelligence to produce accurate plans and details.
 9. Equipment Clearances. All electrical equipment clearances shall be modeled for use in interference management and maintenance access requirements.
- h. **Fire Protection.** The fire protection system Model may vary in level of detail for individual elements, but at a minimum must include all features that would be included on a quarter inch (1/4" = 1'-0") scaled drawing. Where applicable and as required for construction documents, the model, or host platform will include additional scales as required to show necessary details. All fire protection piping should be modeled. Additional minimum Model requirements include:
1. Fire Alarms. Fire alarm/mass notification devices and detection systems, audible and visual, shall be indicated with necessary intelligence to produce accurate plans depicting them.
 2. Fire Protection System. All relevant fire protection components (i.e., branch piping, sprinkler heads, fittings, drains, pumps, tanks, sensors, control panels) with necessary intelligence to produce accurate plans, elevations, building/wall sections, riser diagrams, and schedules, including necessary intelligence to produce accurate plans, details and schedules.
 3. Exterior Fire Protection elements. All fire hydrants, fire department connections, valves and fire line piping shall be indicated with necessary intelligence to produce accurate plans depicting them on drawings.
- i. **Security.** The security system Model may vary in level of detail for individual elements, but at a minimum must include all devices and components that would be included on a quarter inch (1/4" = 1'-0") scaled drawing. Where applicable and as required for construction documents, the model, or host platform will include additional scales as required to show necessary details. Additional minimum Model requirements include, but not limited to:
1. Closed Circuit Television (CCTV). Security cameras, devices, components, and detection systems shall be indicated with necessary intelligence to produce accurate plans depicting them on drawings.
 2. Emergency Notification systems. All relevant security protection components (i.e. panic buttons, card readers, door controls, monitoring stations, security computer room, room/ corridor sensors, audible/visible annunciators, and security control panels) with necessary intelligence to produce accurate plans depicting the system(s).
 3. Burglar alarm systems. Building security including motion detectors, glass-break sensors, audible devices, and other intrusion detection devices as well control system for above shall be indicated on plans.

4. Public address system. Speakers, zone control reflected on plan.
 5. Low-voltage systems. Various systems for communication, or customer services including Wi-Fi, FIBS/BIDS boards, phone chargers, lighting, Public Art, induction systems, wayfinding, solar PV, wind, and other systems.
 6. Bi-Directional Antenna system (BDA). – Antennas, trunk lines, branch line, control boxes, repeaters, emergency or redundant power sources, primary interface components, & home run room.
 7. Distributed Antenna system (DAS). Antennas, splitters, feeders, nodes, headend and other distribution system and signal source equipment.
 8. Public Address system (PA). Speakers, amplifiers, microphone locations and backbone.
- j. **Conveying Systems.** The conveying systems models should indicate primary equipment, all necessary plumbing piping, electrical panels, fixture layouts and other related equipment, that would appear on a quarter inch ($\frac{1}{4}'' = 1'-0''$) scaled drawing. Clearly indicate equipment clearances.
1. Elevator Equipment. All necessary equipment and control systems, including necessary intelligence to produce accurate plans, sections and elevations depicting these design elements. Provide indicators and call buttons.
 2. Escalator and other Conveyance Equipment. All relevant components of the escalator/conveyance system including accurate modeling of stair tread, size and placement. Indicate areas where 6'-8" clear headroom exists below the finished escalator if applicable.
- k. **Landscape.** The Landscape Model may vary in level of detail for individual elements, but at a minimum must include all features that would be included on a quarter inch ($\frac{1}{4}'' = 1'-0''$) scaled drawing and have necessary intelligence to produce accurate plans. Representation of Landscape elements is to be diagrammatic. Examples of landscape material include but are not limited to trees and shrubs.
1. Irrigation system. Primary components, including pumps, wells, control valves, timers and main and secondary piping, ($1-1/4''$ in size and above).
 2. Site Elements. Benches, Bike Racks, Postal Equipment and Trash Receptacles.
- l. **Civil.** The Civil Model may vary in level of detail for individual elements, but at a minimum must include all features that would be included on a one inch ($1'' = 100'$ to $1'' = 20'$) scaled drawing. Additional *minimum* Model requirements include:
- m. Terrain (DTM). All relevant site conditions and proposed grading, including necessary intelligence to produce accurate Project site topographical plans and cross sections.
 - n. Drainage. All existing and new drainage piping and structures including upgrades thereto, including necessary intelligence to produce accurate plans and profiles for the Project site.
 - o. Cisterns. All new above or below ground water storage structures, pumps, filters, treatment equipment, backflow preventers, rainwater leaders, overflow piping,

automatic and manual shutoffs or valves and supply piping to the rainwater's intended use.

- p. Storm Water and Sanitary Sewers. All existing and new sewer structures and piping, cleanouts including upgrades thereto, with necessary connections to mains or other distribution points as appropriate, including necessary intelligence to produce accurate plans and profiles.
- q. Potable Water. All new water piping to the building, meters, backflow preventers, valves, distribution and access boxes, including interconnection to cistern makeup water connections.
- r. Utilities. All necessary new utilities connections from the Project building(s) to the existing or newly created utilities, and all existing above ground and underground utility conduits, including necessary intelligence to produce accurate plans and site-sections.
- s. Roads and Parking. All necessary roadways, parking lots, and parking structures, light poles, including necessary intelligence to produce accurate plans, profiles and cross-sections.
- t. Sidewalks and Paths. All concrete, paver, asphalt, rubber, synthetic turf or other permanent material used for activity areas, pedestrian walkways and bicycle paths.
- u. **Potential Uses:**
 - a. Suitable for the generation of traditional construction documents and shop drawings.
 - b. Analysis. The Model may be analyzed for performance of selected systems by application of specific performance criteria assigned to the representative Model Elements.
 - c. Cost Estimating. The Model may be used to develop cost estimates based on the specific data provided and conceptual estimating techniques.
 - d. Schedule. The Model may be used to show ordered, time-scaled appearance of detailed elements and systems.

3.2.6 **LOD 400:** BIM for Fabrication. (Optional Service).

- a. Model Content Requirements. Model Elements are modeled as specific assemblies that are accurate in terms of size, shape, location, quantity, and orientation with complete fabrication, assembly, and detailing information. Non-geometric information may also be attached to Model Elements.
- b. Potential Uses:
 - 1. Construction. Model Elements are virtual representations of the proposed element and are suitable for construction.
 - 2. Analysis. The Model may be analyzed for performance of approved selected systems based on specific Model Elements.
 - 3. Cost Estimating. Costs are based on the actual cost of specific elements at buyout.

4. Schedule. The Model may be used to show ordered, time-scaled appearance of detailed specific elements and systems including construction means and methods.

3.3 **BIM for Facility Management**

3.3.1 BIMs shall be provided by Contractor or Managing General Contractor (MGC). Contractor or MGC shall submit an As Constructed BIM to the A/E Consultant demonstrating the successful extraction and validation of COBie in Excel format for building operations, maintenance and management.

3.4 **As-Constructed Model Content Requirements**

- a. Model Content Requirements. Contractor shall model Elements as constructed assemblies, actual and accurate in terms of size, shape, location, quantity, and orientation. Non-geometric information may also be attached to modeled elements. Facilities Management/CAFM data completed with all requested information developed to County required Construction Operations Building Information Exchange (COBIE) standards. A model that accurately depicts rooms, names, uses, final room numbering, sizes and identifiers for on-going space management of the completed facility.
- b. Potential Uses:
 1. Facility & Construction Management. The Model may be utilized for maintaining, altering, and adding to the Project and generating reports.
 2. Project Record Documents. As-Constructed data accurately portrayed in the BIM model for future reference and reuse.

3.5 **COBie Data**

- a. **Within 30 days from the issuance of the Notice To Proceed (NTP) for Schematic Design**, the County and Consultant shall finalize and select items from the following OmniClass 23 table to establish the basis of COBie elements that need maintenance, to be tracked and delivered in the completed model.

23-11	Products
23-13	Structural and Exterior Enclosure Products
23-15	Interior and Finish Products
23-17	Openings, Passages, and Protection Products
23-21	Furnishings, Fixtures and Equipment Products
23-23	Conveying Systems and Material Handling Products
23-27	General Facility Services Products
23-29	Facility and Occupant Protection Products
23-31	Plumbing Specific Products and Equipment
23-33	HVAC Specific Products and Equipment
23-35	Electrical and Lighting Specific Products and Equipment
23-37	Information and Communication Specific Products and Equipment

Table 1.0 – Selected Excerpt from OmniClass Table 23

3.6 **BIM Project Execution Plan (BIM PxP or PxP)**

3.6.1 The BIM PxP template is included in this Attachment 2, as “Section 4 - Project Execution Plan (BIM PxP). The Consultants BIM PxP Coordinator for the Project has the responsibility of documenting the Project Execution Plan (PxP), gathering the required information from the External Project Team, scheduling and leading the PxP meetings and establishing and implementing protocols for revisions and sharing the PxP

3.6.2 The development of the PxP is a collaborative effort by all members of the Project team and will be reviewed and updated in meetings specifically scheduled for this purpose. All members of the Project team are required to submit initial information for their scope to the designated PxP Coordinator within 15 calendar days of commencing work. At a minimum PxP meetings shall be conducted at the end of each project phase and a revised PxP shall be issued to County and the External Project Team. A record PxP shall be provided to the owner at handover including all updated requirements.

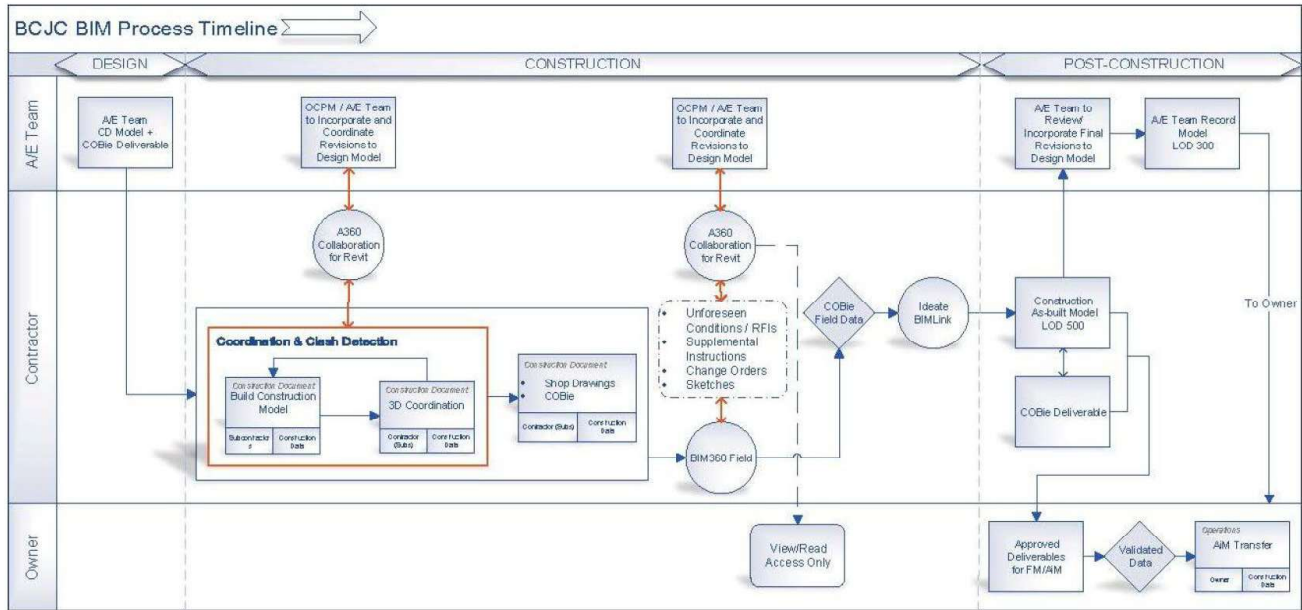
3.6.3 The PxP is subject to review and approval by County at each project phase.

3.6.4 The design & construction teams shall submit a written BIM PxP using the attached template, subject to review and written approval by County prior to proceeding with the process. The BIM PxP will outline all methods and procedures for collaboration between the design and construction teams as well as coordination of VDC/BIM efforts of the subcontractors. The Contract Administrator, Consultant, Contractor and all sub-consultants and subcontractors engaged in the BIM process will sign agreement to adhere to the BIM Project Execution Plan.

3.6.5 The BIM Project Execution Plan shall include as a minimum:

- a. Project Information
- b. Key Project Contacts
- c. Project VDC / BIM Uses
- d. Organizational Roles and Staffing
- e. VDC / BIM Process for preconstruction, construction and handover
- f. BIM Information Exchanges
- g. BIM and Facility Data Requirements
- h. Collaboration and coordination procedures
- i. Quality Control
- j. Technological Infrastructure Needs
- k. A Model Progression Schedule identifying LODs and Authors for each category of model (built) element.
- l. Clash detection approach
- m. Cost estimating level
- n. BIM Deliverables
- o. Signature approval page

3.6.6 A BIM Process Flow Chart provides a graphic visualization of the processes and approval points to be used during the life of the project. The County encourages the development of this chart as an effective practice and communication tool. An example BIM Flow Chart is provided below:



3.6.7 To promote efficiency and continuity, the 2D construction documents must be extracted directly from the Design Model and both the BIMs and the 2D Deliverables will be integral parts of the contract documents. Two dimensional (2D) details, enlargements, General Notes, externally generated Schedules, and specifications will take precedence over the Design Models.

3.7 **BIM Uses**

3.7.1 County has identified the Required, Preferred and Optional BIM uses as it relates to this project. The County acknowledges that Design and Construction Consultants will work together to achieve these Uses. Implementation of these uses and timing are to be documented and explained by the Consultant in the BIM PxP, Section E. Roles and Responsibilities.

3.7.2 The County’s typical BIM Uses for New Construction Projects are as follows:

County Typical BIM Use New Construction	
BIM Use	County Intent
3D Coordination / Conflict Analysis	Required
As Constructed Model	Required

BIM Use	County Intent
Asset Management	Required
CIM / Subsurface	Required
Constructability/Peer Review	Required
Design 4 Maintenance (D4M)	Required
Design Authoring	Required
Design Reviews	Required
Existing Conditions Modeling	Required
Facility Data Exchange	Required
Owner Approvals	Required
QA/QC	Required
Record Modeling	Required
Site Utilization Planning	Required
Spatial Analysis	Required
Visualization	Required
Commissioning	Preferred
Cost Estimation	Preferred
Energy / Mechanical Analysis	Preferred
Programming	Preferred
Program / Code Validation	Preferred
Quantity Take-Off	Preferred
Site Analysis	Preferred
Space Management / Tracking	Preferred
Structural Analysis	Preferred
Sustainability / LEED	Preferred
Total Cost Of Ownership	Preferred
BIM2field - Digital Layout	Optional
Building Maintenance Scheduling	Optional
Building System Analysis	Optional
Code Analysis	Optional
Construction System Design	Optional
Digital Fabrication	Optional
Disaster Planning	Optional
Electrical Analysis	Optional
Field and Material Tracking	Optional
Laser Scanning	Optional
Lighting Analysis	Optional
Pay Applications	Optional
Phase Planning 4D	Optional
Security / Key Management	Optional
Specification Production	Optional

3.8 **3D Coordination and Conflict Analysis**

3.8.1 The Design Team shall use BIM to employ a managed approach to advanced collaborative reviews, including automated element collision detection using software such as Autodesk Navisworks and model checkers such as Solibri by Nemetschek. By coordinating BIM data during the design phases, this can reduce the number of potential major conflicts that might arise during the construction phase.

3.8.2 This approach is not meant to replace the traditional quality control process, or the early airspace zone MEP strategy approach used by the project team and participating consultants but will enhance the ability of the project team to visualize the design and detect interferences between discipline components.

3.8.3 Consultant Team Coordination

- a. The Design Team shall produce a design in which all MEP/FP systems fit within the intended spaces provided, including necessary and required clearances, egress zones, and access zones. To help achieve this goal, the Design Team shall have a formal 3D spatial analysis and clash resolution process that forms the backbone of the QA/QC process. The spatial analysis and clash resolution process shall include regularly scheduled clash review meetings and the use of software tools to analyze and resolve clashes.
- b. County does not expect a completely “clash-free” design, however County expects a design that has been spatially analyzed and validated such that all systems are constructible within the space designed.
- c. Clash reports will be required at project milestone deliverables for both Design and Construction.
- d. Utilities coordination & invert elevations

3.8.4 Contractor Team Coordination

- a. Contractor shall carry out clash detection analysis and complete preliminary virtual design and construction (VDC) activities as part of the Constructability Reviews.
- b. Weekly, the CM shall conduct coordination meetings with each Contractor, Subcontractor, PM, County and Consultant Team as needed.
- c. The CM shall prepare clash detection reports and distribute minutes/ reports to all attendees.

3.9 **Model Content Requirements**

3.9.1 A Model Progression Schedule/Agent Responsibility Matrix (MPS) shall be used as a tool to help Model Contributors throughout the Design, Construction and Operation phases understand what should be included in the BIMs when at each project milestone.

- a. The Construction Models should reflect the exact geometric properties of the materials and/or systems being submitted. These models should reflect the exact material properties and performance data.
- b. It is the responsibility of the Design and Construction Team to use the MPS as part of the BIM PxP or JBIM PxP to establish how they progressively reach the County's expectations.
- c. See also Section 4 - BIM Project Execution Plan and Section 5 - Model Progression Schedule/Agent Responsibility Matrix templates for additional required information.

3.10 **Shop Drawings, Sleeve Drawings and Fabrication**

3.10.1 Shop Drawings shall be produced directly from the construction BIMs. No parallel 2D process will be accepted

- a. Sleeve Drawings -Sleeve drawings for cast-in-place or precast systems shall be produced after BIM Coordination is completed for the area of construction requiring the sleeve drawings.
- b. Fabrication & Preassembly -Whenever possible the Cont Team shall use the Construction BIMs to fabricate or preassemble their systems.

3.11 **BIM in the field for Installation**

3.11.1 The Contractor shall take measures to assure that what is being installed at the field is what was agreed upon on the Coordinated Federated Construction BIM. Any deviations must be documented as updates to the BIMs and the party responsible for resulting conflicts will be liable for costs associated with such deviations.

3.12 **Submittals**

3.12.1 Upon Substantial Completion, BIM files shall be submitted to County, and shall be cleaned of extraneous "scrap" or "working space", stories, abandoned designs, object creation and testing places, and other content which is typically produced in or during BIM construction coordination.

- a. The Contractor shall be responsible for providing the County an As-Constructed Model that includes all building systems. The Model shall be coordinated and "clash free" except as noted.
- b. Contractor shall provide a native file of the final As-Constructed Model for building systems used in the multi-discipline coordination process (version as agreed in BIM PxP)
- c. Contractor shall identify native file formats used in the final As-Constructed Model for building systems for the multi-discipline coordination process (version as agreed in BIM PxP)
- d. Contractor shall provide IFC files (ISO 16739) of As-Constructed models (version as agreed in BIM PxP)

- e. Contractor shall provide COBie / data compliant file containing room and product data information (version as agreed in BIM PxP)

3.12.2 County will not accept BIM files that have become un-useable, or too memory or C.P.U. intensive for normal use . Proper care shall be taken to strip all BIMs of any and all miscellaneous files that are not directly part of the BIMs. The BIM Compliance Checklist, shown below, is required to be submitted with each BIM Deliverable as part of the QA/QC process and to show compliance.

BIM Compliance Checklist	
Description	Y / N
Detach all BIM's from the Central File.	
Ensure the proper and updated completion of all information on the 'Start Screen' page for all Revit models.	
Scrub and remove all unused or alternative versions, elements and objects from the model.	
Ensure that drawing sheets, viewports, paper-space, line weights, fonts, and other drawing components are correctly configured for Contract Administrator's viewing and plotting.	
Make sure all reference files are attached using a "relative" path setting and without device or directory specifications.	
"Transmit a Model" function should be used in Revit to assemble files for submittal.	
Compress and reduce all design files using PKZIP, WINZIP or other compatible file compression/decompression software approved by the Contract Administrator.	
Include all files, both graphic and non-graphic, required for the project (i.e., color tables, pen tables, font libraries, block libraries, user command files, plot files, and other elements of drawing definition).	
Ensure that all support files such as those listed above are in the same directory and that references to those files do not include device or directory specifications.	
Model content is representative of their discipline developments according to the MPS.	
Model file name and folder structure conforms to County Standards.	
All annotations and title blocks are per the County standards.	
All floor plans types have been created for each floor or mezzanine in the project model.	
All schedules are populated with all the required data for the project.	
The model is correctly assembled as per visual inspection.	
The color code for Federated BIMs conforms to County Standards.	
All the model contents are correctly placed per their element categorization in the correct work set and conform to standards.	
All non-transmittal linked-in files (CAD/Revit) have been removed from the model.	
All non-required views / legends / schedules / sheets / images have been removed from the model.	

BIM Compliance Checklist	
Unwanted Design Options have been removed from the model (applicable for Contract Document Phase through Project completion and handover).	
All unnecessary groups have been removed from the model. All groups used to model the building have been ungrouped and purged from the deliverables to reduce the file size of the model.	
As a last step, the model has been purged (repeat the process three times -- materials are only removed after the parent object has been removed). This will reduce the file size.	
3D Solids Check – No wireframe or lines are accepted. Surface modeling shall be reserved for Topography modeling only. Other use of surface modeling shall require prior approval by County.	
Errors or Warnings - check that there are not any generated within the BIM Authoring software. It is the Design & Construction Teams’ responsibility to ensure BIM quality and data integrity.	
Model Elements are not duplicated. i.e. Columns in both Architectural and Structural models.	
Objects are correctly defined under the proper Revit Family Category and sub-category.	
Check completed files are free of any known viruses or unrequired attachments.	
Check for compliance with GIS and State Plane Coordinate model location	

3.13 **Responsibilities Related to the Final Record BIM**

3.13.1 Design Team Responsibilities

- a. The Design Team will update the Architectural and Structural Design Models as changes occur throughout the construction phase, incorporating all updates and/or revisions to the models as necessary to reflect design changes initiated by Architect’s Supplemental Instructions (ASI), Request for Information (RFI), Conformed Documents, Construction Change Directives, Owner Changes, coordination with existing conditions or other changes to the work.

3.13.2 Construction Team Responsibilities

- a. During the construction phase, and while the work is still visible, the Construction Team will maintain “red-line” As-Constructed drawings or demonstrate regular updates to the BIM models during the progress of the work.
- b. In preparation for Substantial Completion, the Contractor Team will:
 1. Make all necessary final updates and/or revisions to the models to reflect the As-Constructed information to the tolerance specified in the Standard or agreed upon in the BIM PxP. It is the responsibility of each subcontractor to keep accurate “red-line” markups and records from the field in order to produce accurate As-Constructed models and drawings.
 2. Final updates to material/equipment data and properties where installations differ from the “basis of design” included in the Design Team Models.
 3. Incorporation or linking of certain close-out documents to the Federated Model (as agreed in BIM PXP).

- c. All model updates by the Construction Team shall be complete one (1) week prior to Final Completion at which time all the required close out BIM deliverables shall be transmitted to the Consultant for review and to be incorporated with the updated Design Models to create the Record Model deliverable. (as agreed in BIM PXP).

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Section 4 BIM Execution Plan



**BIM PROJECT EXECUTION PLAN
(BIM PxP)**

FOR

Insert Project Name Here in Black Font

DEVELOPED BY

**Broward County - Construction Management Division
(County)**

This template is a required tool that is provided to assist in the development of a BIM Project Execution Plan (BIM PxP) as required by Contract.

Consultants and Contractors are required to "Track" changes when editing this document so BROWARD COUNTY - CONSTRUCTION MANAGEMENT DIVISION (County) can review and accept any additions and modifications as part of the review process.

BIM PROJECT EXECUTION PLAN

FOR

Insert Project Name Here in Black font

BIM PxP Table of Contents

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Introduction

This template exists to document the decisions made by the Design and Construction Teams working through the BIM process. To successfully implement BIM on both the project and organizational levels, Broward County Construction Management Division has developed this BIM Project Execution Plan (BIM PxP) to improve accuracy and consistency of BIM deliverables. This plan will delineate roles and responsibilities while detailing BIM scope of information to be shared that is relevant to the BIM project process. The document is intended to cover both model creation and data integration.

Instructions

Submission Schedule

The Design and Construction Teams are required to submit a completed BIM PxP within 30 days of their contract execution. This plan shall identify the entire project team including consulting engineers, specialty consultants and contractors. The BIM PxP should be considered a living document and maintained and updated throughout the project.

Please note: Instructions and examples to assist with the completion of this guide are displayed in italicized blue font. The text can and should be modified to suit the needs of the organization filling out the template. If modified, the format of the text should be changed to match the rest of the document (non- italicized and in black, 12-point, Calibri font typical) and “tracked changes” shall be submitted in electronic form for Broward County Construction Management Division review and approval.

The overall section headings of this template shall remain, but the BIM PxP Coordinator may propose any other changes or additions to this template including expansion of the content of the sections and additional sections and attachments. Changes & additions shall be agreed to by the project team and submitted to Broward County Construction Management Division for approval.

This BIM PxP document is based on the National BIM Standard-United States™ Version 3 and the Pennsylvania State University BIM Project Execution Plan Version 2.0 and customized for Broward County Construction Management Division.

Section A: BIM Project Execution Plan Overview

The Broward County Construction Management Division requires the use of Building Information Modeling (BIM) as a tool in the planning, design, construction and operation of our facilities worldwide. A well-executed BIM project facilitates the collaboration and communication between the owner, the design team and the construction team in order to best meet the project's goals.

The purpose of this process change is to ensure maximum benefit from our assets by improving the building's design and construction, reduce the total cost and time of delivery and improve operations and management after handover. BIM allows for a more complete, efficient, iterative design and construction process. The clearest benefits are the enhanced visualization of the project at all stages of development, the creation of higher quality design and construction deliverables and the reduction of construction coordination conflicts in the field. At the end of construction, the Building Information Models serve as rich databases of digital data captured during design and construction about the building's assets. This single centralized source of information is invaluable to the Facilities Department for the on-going operations and management of the building to ensure our facilities are sustainable and resilient.

To successfully implement Building Information Modeling (BIM) on a project, the project team has developed this detailed template BIM Project Execution Plan.

INSERT ADDITIONAL INFORMATION HERE IF APPLICABLE.

With the help of the project team, develop a brief mission statement here that will give an overview of BIM objectives that are specific to this project. This can be developed at a collaborative brainstorming session at the first BIM PxP meeting. Extensive additional information can be included as an attachment to this document.

Section B: Project Information

This section defines basic project reference information and determined project milestones

1. Client Name: Broward County Construction Management Division
2. Project Name:
3. Project Location and Address:
4. Contract Type / Delivery Method: Managing General Contractor (MGC)
5. Brief Project Description:
6. Additional Project Information: none
7. Project Identification Numbers: *Please complete table below*

Team Member	Project Number
Broward County Construction Management Division	
Architect of Record	
MEP Engineers	
Structural Engineer	
Landscape Architect	
Civil Engineer	
Contractor	

Section C: Delivery Strategy

Delivery and Contracting Strategy for the project:

This section is useful primarily when design delivery methods are being utilized that involve early collaboration of the design and construction teams (IPD, Design Assist, etc.). List the Project Delivery strategy for the project below (Design-Bid-Build, CM at Risk, IPD, Design Assist, etc.).

Please note what additional measures need to be taken to successfully use BIM with the selected delivery method and contract type?

Section C.1 - Project Schedule / Phases / Milestones:

In coordination with the project schedule, include BIM milestones, pre-design activities, major design reviews, stakeholder reviews and any other major events which occur during the project lifecycle.

Project Phase / Milestone	Estimated Start Date	Estimated Completion Date	Project Stakeholders Involved
Notice to Proceed			
BIM PxP Kick-off			
Programming			
County Review & Comments			
Design Team Review & Resubmit			
Schematic Design			
County Review & Comments			
Design Team Review & Resubmit			
Design Development			
County Review & Comments			
Design Team Review & Resubmit			
50% CD's			
County Review & Comments			
Design Team Review & Resubmit			
___% CD's			
County Review & Comments			
Design Team Review & Resubmit			
100% CD's			
County Review & Comments			
Design Team Review & Resubmit			

Project Phase / Milestone	Estimated Start Date	Estimated Completion Date	Project Stakeholders Involved
Award / Permit			
Pre-Construction			
Project Coordination Kickoff			
Underground Coordination			
Site Coordination			
Building Exterior Coordination			
Building Interior Coordination (First Floor)			
Building Roof Coordination			
Coordination Sign-Off			

Section C.2 - Project Deliverables

In this section, please check off the BIM Deliverables from Consultant and Contractor on the appropriate tables below that are relevant for this project. Note any and all deviations to these required deliverables below.

Schedule of Deliverables to Broward County Construction Management Division				
CONSULTING ARCHITECTURE AND ENGINEERING TEAM				
Phase	Deliverable	Include Y/N	Due	File Type
Contract Award	BIM PxP		30 days of ATP	Native & PDF
Programming / Feasibility Models	Massing models & Narrative Space & Program Validation Report		Per BIM PxP	Native & IFC & PDF Native & PDF
Planning	Design Models -		Per BIM PxP	Native & IFC (2x3) files
Schematic Design	Design Models -		Per BIM PxP	Native & IFC (2x3) files
Design Development	Existing Conditions Model Design & Analysis Models - Updated BIM PxP Coordination Reports BIM Compliance Checklist		Per BIM PxP	Native & IFC (2x3) files Native & IFC Native & PDF PDF PDF

Construction Documents	Design & Analysis Models 2D documents & Clash Report Updated BIM PxP Coordination Reports BIM Compliance Checklist COBie Data Set - Del 1		Per BIM PxP	Native & IFC (2x3) files PDF Native & PDF PDF PDF COBie2 2.40
Permitting / Conformance	Design Model 2D Documents		Per BIM PxP	Native files PDF
Construction - Approved Submittals	COBie Data Set - Del 2		Per BIM PxP	Native & IFC (2x3) files
Construction- Close-Out Close-Out Close-Out Close-Out Close-Out Close-Out	COBie Data Set - Del 3 COBie Data Set – Final Record Floor Plans Record BIMs Federated Record BIM Coordination Report Record Model Instruction Rpt. Final BIM PxP		Per BIM PxP	COBie2 2.40 COBie2 2.40 DWG Native & IFC (2x3) Native Native & PDF Native & PDF Native & PDF

**Schedule of Deliverables to
Broward County Construction Management
Division**

CONSTRUCTION TEAM				
Phase	Deliverable	Include Y/N	Due	File Type
Contract Award	BIM PxP		Within 30 days	Native & PDF
Pre-Construction	Coordination BIMs BIM Compliance Checklist		Per BIM PxP	
Project Close out	COBie Data Set – Del 3 As-Constructed BIMs BIM Compliance Checklist Coordination Report Federated As-Constructed BIM Final BIM PxP		Per BIM PxP	COBie2 2.40 Native & IFC (2x3) PDF PDF .NWD Native & PDF

Section D: Key Project Contacts

ROLE	CONTACT NAME	ORGANIZATION	EMAIL	PHONE
------	--------------	--------------	-------	-------

Owner PM		Broward County CMD		
Owners BIM Manager		Broward County CMD		
BIM PxP Coordinator				
Design Professional's Principal in Charge				
Design Professional's Project Manager				
Design Professional's BIM Manager				
Design Professional's BIM Project Lead				
Consultant's Principal in Charge				
Consultant's Project Manager				
Consultant's BIM Manager				
Consultant's BIM Project Lead (per discipline)				
Contractors PM				
Contractors BIM Manager				
Others				

Section E: Organizational Roles / Staffing

This section should be filled in at the choice of the BIM PxP Coordinator and extended team

BIM Roles and Responsibilities:

Broward County Construction Management Division (CMD): Broward County’s Construction Management Division is responsible for BIM, CAD support, coordination and integration. It is also their responsibility to ensure design and construction document/model compliance with Broward County Construction Management Division Standards while maintaining and facilitating access to record drawings and models.

Describe BIM roles and responsibilities such as BIM Managers, Project Managers, Draftspersons, etc.

Titles	Roles in Design	Roles in Construction
Broward County Construction Management Division	<ul style="list-style-type: none"> • BIM Oversight and Compliance Reviews 	<ul style="list-style-type: none"> • BIM Oversight and Compliance Reviews
Project Manager		
Model Manager		
BIM Coordinator		
Modeler		
COBie Coordinator		

Section F: BIM Uses

Broward County Construction Management Division has developed a BIM Use/Consultant Responsible Matrix for use in the planning and procurement of BIM projects. This matrix defines Broward County Construction Management Division’s priorities for the application of BIM Uses, the responsibilities of the External Team Members, and the phases to which the BIM Uses apply. BIM Uses should only be employed if they offer significant benefit to the Project without compromising cost or schedule.

Insert additional information as needed for this specific project. Items in RED are minimal required by Broward County Construction Management Division.

BIM Use	Consultant Responsible for Implementation	Required Proposed	Plan Design Construct Operate			
			P	D	C	O
Visualization	A & C.	Required	X	X	X	X

Programming						
Design Authoring	A, Trades	Required	X	X	X	
3D Coordination	A & C.	Required	X	X	X	
Structural Analysis						
Lighting Analysis						
Energy Analysis						
Mechanical Analysis						
Other Eng. Analysis						
Sustainability Evaluation						
Design4Maintenance Review	A & C.	Required		X	X	
Facility Data Exchange	A & C.	Required		X	X	X
Quality Assurance / Quality Control						
Owner Approvals	A	Required	X	X		
Code Validation						
Commissioning						
Construction System Design						
Digital Fabrication						
3D Control and Planning						
4D Phase Planning						
5D Cost Estimation						
Quantity Take Off						
BIM2Field						
Laser Scanning						
Point Cloud integration						
Security Key Management						

BIM Use	Consultant Responsible for Implementation	Required Proposed	Plan Design Construct Operate			
			P	D	C	O
Building Maintenance Scheduling						
Record Modeling	A	Required		X		
Way finding						
Virtual / Mixed Reality						
As-Constructed Modeling	C	Required			X	
Building System Analysis						
Asset Management	A & C	Required		X	X	X
Space Management / Tracking	A	Required		X	X	X
Disaster Planning						
Existing Conditions Model						

Section G: BIM Process Design

In an attachment, define the BIM Process and Workflows that the External Project Team will be implementing on this project as it relates to the BIM Uses that have been selected and contracted for this project. Define a detailed plan for implementing each BIM Use, define the specific exchanges of information and/or BIMs for each activity, the party responsible for each activity, and when in the schedule of the project it should occur. Process maps like those in the Penn State BIM Execution Plan may be included but are optional.

Section H: Model Progression Schedule / LOD

The template Model Progression Schedule/Agent Responsibility Matrix (MPS) template defining minimum requirements for model handover will be provided by the Project Manager and examples are included and referenced in Section 5 of this Attachment 2. The LOD levels and tolerances in the Handover section of the sample MPS define Broward County Construction Management Division’s requirements for the Existing Conditions, As-Constructed and Record BIMs. The External Project Team is to complete and submit a project specific MPS attachment for this project for all project phases as applicable. The columns pertaining to Existing Conditions, As-Constructed Modeling and Record Modeling along with requirements for tolerances and allowable deviations are to be included in the MPS.

The Model Element Rows in Broward County Construction Management Division’s template MPS are high level. The rows in the final project MPS may have a higher level of granularity to address the needs of the project and the best practices of the External Project Team.

The executed MPS shall be attached to this BIM PxP.

Section I: BIM and Facility Data Requirements

At a minimum and not limited to, Broward County Construction Management Division will require COBie data sets for all components on the Equipment List per the Construction Documents that require any of the following:

- ✓ Scheduled preventative maintenance i.e. Mechanical, Electrical,
- ✓ Routine maintenance/inspections: i.e. Plumbing
- ✓ Regulatory inspections i.e. life safety related: fire extinguisher, fire dampers, backflow preventers

The list to the right shows a sample Preliminary Asset Type List for Broward County Construction Management Division Projects. This list should be used and further detailed in the BIM PxP Template. The “Products” section of the MPS should track a full list of project items and should be attached to this schedule.

Shown In	BCAD Preliminary Asset Type List	OmniClass- Products Classification - Table 23
ARCH Model	AUTOMATIC EXTERNAL DEFIBULATOR (AED)	23-25 21 13
	BAGGAGE HANDLING CONVEYOR	23-23 17 15
	ELEVATOR	23-23 11 11
	ESCALATOR	23-23 11 13
	FIRE DOOR	23-17 11 32
	ICE MACHINE	23-21 21 29
	MOVING WALKWAY	23-23 15 11
	SLIDING DOOR	23-17 11 23
	TICKET COUNTER	23-21 19 15
	WATER COOLER	23-31 31 00
E		23-35 31 15
		23-35 11 15
		23-35 31 15
		23-35 31 23
		23-35 31 15
		23-35 17 15
	VARIABLE SPEED DRIVE	23-35 17 00
MECH Model	AC UNIT	23-33 39 11
	AIR HANDLER	23-33 25 00
	CHILLER	23-33 21 00
	CONDENSER WATER PUMP	23-27 17 00
	CONDENSING UNIT	23-33 43 00
	COOLING TOWER	23-33 23 00
	EXHAUST FAN	23-33 31 19
	FAN COIL UNITS	23-33 33 11
	FAN POWERED BOX	23-33 41 11
	FAN TERMINAL BOX	23-33 41 11
	FAN VARIABLE VOLUME BOX	23-33 41 11
	OUTSIDE AIR HANDLER UNIT	23-33 25 13
	PACKAGE AIR CONDITIONING UNIT	23-33 39 17
	PRIMARY CHILLED WATER PUMP	23-27 17 00
	ROOF TOP UNIT	23-33 25 17
	SECONDARY CHILLED WATER PUMP	23-27 17 00
SPLIT SYS CONDENSING UNIT	23-33 43 00	
SUPPLY FAN	23-33 31 19	
VARIABLE AIR VOLUME BOX	23-33 41 17	
PLUM Mo		23-27 21 00
		23-27 55 31
		23-33 11 22
	HEAT EXCHANGER	23-27 23 00
	HEAT PUMPS	23-33 17 00
	HOT WATER PUMP REHEAT	23-27 17 00
	SUMP PUMP	23-27 17 00
	TRASH PUMP	23-27 17 00
	WATER CIRCULATING PUMP	23-27 17 00
These assets types may be found in consultant 3D CAD models with limited information embedded. The information required on these asset types would be manual entered into the COBie deliverable worksheets.		
CIVIL	AIR FIELD LIGHTING RUNWAY	N/A
	AIRFIELD BEACON	N/A
	CRASH GATE	23-11 25 15
	CRASH PERIMETER GATE	23-11 25 15
	ENGINEERED MATERIAL ARRESTING SYSTEM - EMAS	N/A
	PEDESTRIAN GATE	23-11 25 15
PERIMETER GATE	23-11 25 15	
CONSULTANT	ABOVE GROUND STORAGE TANK	23-27 29 19
	BAG MEASUREMENT EQUIPMENT	23-23 17 15
	BAGGAGE DIMENSIONER	23-23 17 15
	BAGGAGE HANDLING CAROUSEL	23-23 17 15
	DIESEL FUEL STORAGE TANK	23-27 29 19
	HIGH SPEED DIVERTER	23-23 17 15
	JETWAY	23-23 15 15
	OVER SIZE BAG DOOR	23-23 17 15
SCALE	N/A	

Section J: Collaboration Procedures

Collaboration Strategy:

Provide a brief, general description of how and where the project team will collaborate. Include items such as environmental and equipment requirements, projection capabilities, room size, communication methods, document management and transfer, and record storage, etc.

FILE LOCATION	FILE STRUCTURE/ NAME	FILE TYPE	PASSWORD PROTECT	FILE OWNER	UPDATED
Collaboration SITE: SITE	Root Project Folder	FOLDER	YES	PT Project Mgr.	ONCE
Provide Further Information on Structure of Collaboration Site	Root Project Folder	FOLDER	YES	PMG Project Mgr.	ONCE
Provide Further Information on Structure of Collaboration Site	TBD	RVT	YES	PMG Project Mgr.	WEEKLY

Section J.1 - BIM Meeting Procedures:

There will be several types of collaboration and model review meetings needed for the project, including general progress meetings, design coordination meetings, etc. The following table includes, but is not limited to, some of the types of potential meetings necessary for the project, meeting host(s), required attendees, and required technology. Broward County Construction Management Division understands that these meetings may be in-person, virtual and/ or a combination of both. The following table describes the schedule for coordination meetings, clash detection meetings, and model walkthroughs. Items marked in Red will be REQUIRED.

The meetings listed below reflect typical Broward County Construction Management Division expectations for a project and should be customized for the needs of a project.

MEETING TYPE	DESIGN INTENT MODELS			
	STAGE	FREQUENCY	LOCATION	COMMENTS / PARTICIPANTS
Design Phase BIM Kick-off		1X within 15 days of start of project	On-site	General discussion to make sure all parties are aligned on BIM Requirements

BIM Project Execution Plan Presentation		1X within 30 days of start of project	On-site	BIM PxP Coordinator presents completed BIM PxP to entire team for final sign-off
Design Authoring Coordination Meetings		Weekly	In-Cloud	Coordination and Federation of Design Team Models.
Design Presentations/ Model Walk-throughs		As Needed	On-site	BIM presentations to Project Team for approval and reviews. Geared towards Owner and User Groups.
Design4Maintenance		DD / CD Phases 1X	On-site	BIMs to review equipment maintainability and "soft clash" for clearances.
Data Meeting		DD / CD Phases 1X	In-Cloud / On-site	Review BIMs for data compliance and test import.
Model Handover Meeting		1X	On-site	Meeting to discuss and test interoperability and file exchange.
Design Close-out		2X	On-site	Meeting to finalize Record BIMs and As-Constructed BIMs for close-out.
Construction Phase BIM Kick-off Meeting	STAGE	FREQUENCY	LOCATION	COMMENTS / PARTICIPANTS
Clash / Cord Meetings		Weekly	On-site	General Guidelines for model laying, area, trade sequencing and reserved zones.
Design4Maintenance			In-Cloud / On-site	
Contractor Handover/ Close-out			On-site	BIMs to review equipment maintainability and "soft clash" for clearances.
Contractor Handover/ Close-out			TBD	Meeting to finalize Record BIMs and As-Constructed BIMs for close-out.

Section J.2 - Model Delivery Schedule of Information Exchange for Submission and Approval:

Document the information exchanges and file transfers that will occur on the project. Modify the DISCIPLINE column to match the way that content is segregated into different models on a project.

DISCIPLINE	FILE TYPE	UPLOAD FREQUENCY	DOWNLOAD FREQUENCY
------------	-----------	------------------	--------------------

Architectural (Exterior)			
Architectural (Interior)			
Specialty Equipment			
Furniture			
Structural			
Mechanical			
Electrical			
Plumbing			
Fire Protection			
Civil			
Landscape			

Section J.3 - Electronic Communication Procedures:

The following document management issues should be resolved, and a procedure should be defined for each: Permissions / access, File Locations, FTP Site Location(s), File Transfer Protocol, File / Folder Maintenance, etc.

Section K: Quality Control

Overall Strategy for Quality Control:

Describe the strategy to control the quality of the model.

Quality Control Checks: The following checks should be performed to assure quality:

CHECKS	DEFINITION	RESPONSIBLE PARTY	SOFTWARE PROGRAM(S)	FREQUENCY
VISUAL CHECK	Ensure there are no unintended model components and that the design intent has been followed	A/E/C	REVIT / NAVIS	Ongoing
INTERFERENCE CHECK	Detect problems in the model where two building components are clashing including soft and hard	A/E/C	NAVIS	Bi-weekly

STANDARDS CHECK	Ensure that the BIM and County Standards have been followed (fonts, dimensions, line styles, family naming, shared coordinates, etc.)	A/E/C	REVIT / DATA NORMALIZATION	Weekly
MODEL INTEGRITY CHECKS	Describe the QC validation process used to ensure that the Project Facility Data set has no undefined, incorrectly defined or duplicated elements and the reporting process on non-compliant elements and corrective action plans	A/E/C	REVIT	Ongoing
DATA CONTENT CHECK	Conform to County BIM Requirements	A/E/C	DATA NORMALIZATION / MAXIMO	Weekly then monthly
ERROR / WARNING CHECK	Conform to County BIM Requirements	A/E/C	REVIT	Weekly

Section K.1 - Model Maintenance

The following table describes the recommended process for model maintenance. Each discipline shall be responsible for the maintenance of their models. Broward County Construction Management Division requires that all the below be conducted before submitting model at the completion of each phase of the development of the project. All the below except for removing unused design options shall be conducted before uploading models for exchange with other team members.

PROCESS	FREQUENCY (MINIMUM)
Auditing Central Files	
Compacting	
Verify that elements are on correct Worksets	
Removal of Unused Design Options and accept the Primary option (following archival of previous version.)	
Correcting Warning Messages where applicable	On-going (Warnings that have significance shall be resolved. Warnings shall be kept to a reasonable number. An export of warnings in the model shall accompany major milestone deliverables.)
Purging unused objects	
Purging DWG links/imports	
Deletion of unused Sheets & Views	

Purge duplicate elements	
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Section K.2 - Document Revisions

Revisions to documents will be tracked as follows:

DESCRIPTION	DESIGN/ RECORD	AS CONSTRUCTED MODEL	DESCRIPTION
RFI's			
Revit Model			
Navisworks			
CCD's			
ASI's			
CO's			

Section K.3 - Model Accuracy and Tolerances:

Models should include all appropriate dimensioning as needed for design intent, analysis, and construction.

PHASE	DISCIPLINE	TOLERANCE
EXISTING CONDITIONS MODEL	CIVIL (UNDERGROUND)	ACCURATE TO +/- (6") OF ACTUAL SIZE ACCURATE TO +/- (12") OF ACTUAL LOCATION
EXISTING CONDITIONS MODEL (ACCESSIBLE ITEMS)	ARCHITECTURAL STRUCTURAL MEPFP	ACCURATE TO +/- (1/8") OF DESIGN INTENT SIZE ACCURATE TO +/- (2") OF DESIGN INTENT LOCATION
DESIGN DOCUMENT MODELS	CIVIL ARCHITECTURAL STRUCTURAL MEP FP	ACCURATE TO +/- (1/8") OF DESIGN INTENT SIZE ACCURATE TO +/- (2") OF DESIGN INTENT LOCATION
SHOP DRAWINGS MODELS	CIVIL, INTERIORS ENVELOPE STRUCTURAL MEPFP	ACCURATE TO +/- (1/16") OF ACTUAL SIZE ACCURATE TO +/- (1") OF ACTUAL LOCATION

PHASE	DISCIPLINE	TOLERANCE
AS-CONSTRUCTED MODELS	INTERIORS NOT RELATED TO CODE	ACCURATE TO +/- (1/8") OF ACTUAL SIZE ACCURATE TO +/- (2") OF ACTUAL LOCATION
AS-CONSTRUCTED MODELS	INTERIORS RELATED TO CODE	ACCURATE TO +/- (1/8") OF ACTUAL SIZE ACCURATE TO +/- (1/4") OF ACTUAL LOCATION
AS-CONSTRUCTED MODELS	CIVIL, INTERIORS ENVELOPE STRUCTURAL MEP FP	ACCURATE TO +/- (1/16") OF ACTUAL SIZE ACCURATE TO +/- (1") OF ACTUAL LOCATION

Section K.4 - BIM Folder Structure for Deliverables:

The following folder structure is the standard folder structure for BIM-related files that will be used on Broward County Construction Management Division projects. No deviations from this folder structure will be permitted without a Proposed Variance Request. However, if desired, each project team may add subfolders where necessary, as defined in the BIM PxP and approved by Broward County Construction Management Division.

Project Documents for Design BIMs

- Design BIM Execution Plan (Owner, AE)
- Design BIM Analysis Reports (Owner, AE)
- Coordination Logs and Reports
- Design Model Deliverables (Public)
 - Models Used to Produce Schematic Design
 - Models Used to Produce Design Development
 - Models Used to Produce Construction Documents
 - Models Used to Produce Agency Submittals
 - Models for Permitting/ Conformance
 - Models for Construction Manager
- COBie Data Deliverables
- BIM Project Close-out
 - Record Floor Plans
 - Record BIMs
 - Federated Record BIM
 - COBie Data Final Deliverable
- Other

Project Documents for Construction BIMs

- Owner BIM Execution Plan (Owner, CM, BIM Subs)
- Construction BIM Analysis Reports (Owner, GC)

- Coordination Logs and Reports
- Coordination Models
- Trade Models
 - Models Used to Produce Final Shop Drawings
 - Models Used to Produce 4D
 - Schedule Data Used to Produce 4D
 - Models Used to Produce 5D
 - Model Quantities Used to Produce 5D
- COBie Data Deliverables
- BIM Project Close-Out
 - As-Constructed Models
 - Federated As-Constructed Models
 - Record Models
 - Federated Record Models
 - COBie Data Final Deliverable
- Other

Section L: Technological Infrastructure Needs

1. Software:

Broward County Construction Management Division uses Autodesk Revit for projects. Use of other IFC Compatible software than what is listed in the Broward County Construction Management Division BIM Standard requires approval by Broward County Construction Management Division.

List software used to deliver BIM. List any add-on software that is required to open, read or manipulate files as well. Indicate the 2D export deliverable file format for each software. The lines listed below are a sample and shall be modified for a project.

BIM USE	DISCIPLINE(S)	SOFTWARE	VERSION / BUILD	2D FILE FORMAT DELIVERABLE
Authoring				
Authoring				
Authoring				
Authoring				
Authoring				
Clash Detection				
Energy Analysis				
Cost Analysis				
Design Coordination				
COBie				
Collaboration				
Trades				

Section M: Model Structure

Section M.1 - File Naming Structure:

Determine and list the structure for model file names. Design Team CAD File names shall be listed in the Drawing List with Authoring Company and File Names attachment.

FILE NAMES (Design Intent Models)	
Architectural Model	
Civil Model	
Mechanical Model	
Plumbing Model	
Electrical Model	
Structural Model	
Energy Model	
Coordination Model	
Equipment	

FILE NAMES (Construction Models)	
Steel Model	
Mechanical Model	
Plumbing Model	
Electrical Model	
Construction Model	
Coordination Model	
Fire Protection Model	
Security Model	
Site Utilities Model	

Section M.2 - Model Structure:

Describe how the Model is separated, e.g., by building, by floors, by zone, by areas, and/or discipline. Indicate the connections and hierarchy of linked files, including CAD files. Broward County Construction Management Division requires that all paths in Revit files be relative and that files be overlaid instead of attached unless the project team makes a strong case for alternate strategies.

1. DESIGN PHASE MODEL STRUCTURE:

2. CONSTRUCTION PHASE MODEL STRUCTURE:

Section M.3 - Measurement and Coordinate Systems:

Broward County Construction Management Division requires use of State Plane Coordinates to place the Building on its site to act as the Site origin Point and to provide for future GIS integration. See Section 2.2.4 of this Attachment 2. Broward County Construction Management Division will also provide 2D and 3D AutoCAD blocks and a 3D generic model family to be placed at the origin of ALL Design Intent BIMs, Construction BIMs and CAD files to confirm that files are aligned.

All Revit files shall have their project base point at the Revit project startup location. All CAD and Revit files that are to be linked to the Revit file using the "Origin to Origin" option. All plan-based CAD files shall use the Broward County Construction Management Division Site Origin Point as well as their 0,0 WCS origin. The 0 level in the "Z" coordinate shall match the survey datum of "0" used by the Civil Engineer in their surveys. This will ensure that all files for all buildings across the Broward County Construction Management Division campus will align to a single origin and that Revit level tags will report the true elevations of the floors.

Civil AutoCAD 2D and Civil 3D files will need to be modified prior to linking because they use an origin point that is different than the Broward County Construction Management Division Site Origin Point. It is typically outside the distance allowed by Revit. Broward County Construction Management Division's CAD-BIM Manager can provide instructions on this.

Units shall be Imperial units. Civil 2D AutoCAD or Civil 3D files may be set with 1 unit equals 1 foot. Revit files will be set with 1 unit equals 1 foot. All other AutoCAD files including Revit exports shall be set with 1 unit equals 1 inch.

Section M.4 - Worksets:

Each discipline shall be responsible for the naming of the worksets within their files. The only required worksets are LinkCAD-Description and LinkBIM-Description. Any linked CAD files or BIM files shall be placed on these worksets so that Revit files can be opened without loading these worksets for ease of upgrading the files.

List Worksets used by discipline below:

DISCIPLINE	WORKSET	DESCRIPTION
Arch, M, E, P, Struct	LinkCAD-All	Workset for all CAD links
M, E, P, Struct	LinkBIM-Arch	Workset for Architectural Revit file
Arch, E, P, Struct	LinkBIM-Mech	Workset for Mechanical Revit file
Arch, M, P, Struct	LinkBIM-Elec	Workset for Electrical Revit file
Arch, M, E, Struct	LinkBIM-Plumb	Workset for Plumbing Revit file
Arch, M, E, P	LinkBIM-Struct	Workset for Structural Revit file
Arch, M, E, P, Struct	Levels and Grids	Levels, Grids
Arch	Shell	Building Shell
Arch Existing	Shell	Building Shell Existing
Arch	Core	Elevators, Stairs
Arch	Interior-B	Basement Interior Fit-out
Arch	Interior-1	1 st floor Interior Fit-out
Equipment		
Civil Utilities		

Section M.5 - Color Coding:

Federated models shall adhere to Exhibit "A" – Scope of Work Attachment 2, Section 2.2.12. If approved by the Contract Administrator, a modified color coding may be revised to follow the agreed upon trade colors listed below:

(insert any modified, Contract Administrator approved, color coding selections for this project below)

- a. Architecture: White
- b. Structural Steel: Maroon
- c. Concrete and Masonry: Gray
- d. HVAC Equipment: Gold
- e. HVAC Supply Duct/Diffuser: Blue
- f. HVAC Return Duct/Diffuser: Magenta
- g. HVAC Exhaust Ventilation Ductwork: Medium Orchid
- h. HVAC Piping Supply: Gold
- i. HVAC Piping Return: Violet
- j. Electrical Equipment: Dark Yellow
- k. Electrical Conduits: Light Yellow

- l. Communication Conduit: Light Blue
- m. Electrical Cable Tray: Dark Orange
- n. Electrical Lighting: Light Golden Rod Yellow
- o. Plumbing Domestic Water: Lime
- p. Plumbing Sewer Waste / Vent: Olive
- q. Plumbing Storm/Roof Drain: Dark Green
- r. Fire Protection: Red
- s. Fire Alarm: Golden Rod
- t. Pneumatic Tube: Dark Slate Gray
- u. Equipment: Burly Wood
- v. Specialty Gas: Light Green
- w. Steel: Rust
- x. Security Systems: Orange

Section N: Attachments

1. *List any project specific BIM PxP Attachments here*
- 2.

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Approvals:

By signing below, this BIM Project Execution Plan is adopted and agreed upon between the signed companies.

DISCIPLINE	NAME	SIGNATURE	DATE
BC Construction Management Division			
Architect			
Mechanical Engineer			
Electrical Engineer			
Plumbing Engineer			
Fire Protection Engineer			
Structural Engineer			
Landscape Architect			
Interior Designer			
Civil Engineer			
Surveyor			
BIM Consultant			
Contractor			
Construction Consultant			
Other			

End of Section 4 BIM Execution Plan

Section 5 BIM Model Progression Schedule/Agent Responsible Matrix (MPS) (Example of "Overview" Tab)

The MPS will be distributed by the Project Manager in an electronic format for use



Model Progression Schedule (MPS) Agent Responsible Matrix (ARM)

Overview and Intent of this Document.

Broward County Public Works Department and the Construction Management Division have created this Model Progression Schedule (MPS) and Agent Responsible Matrix (ARM) for use in the planning and procurement of BIM projects. This Matrix is based upon BIMForum's 2017 LOD (Level of Development) Specification and serves as a reference document. The BIMForum Specification reference enables practitioners to specify and articulate with a high level of clarity the content and reliability of BIMs at various stages in the design and construction process.

The County has prescribed minimum LOD's that are required at project milestones, but does not dictate workflow to achieve these requirements leaving the completion of the Model Progressions to the users in consultation with the County and project team.

This matrix defines Broward County's priorities for the development of project BIMs, the responsibilities of the External Team Members, and the phases to which the BIMs will be delivered and the LOD expected. The "Model Element Table" Tab includes the BIM Elements that are to be defined and the "LOD Definitions" tab includes example Level of Development definitions. This chart will be included in RFP's that require BIM and is a tool to be used for contract negotiation upon project award.

Instructions for completing this Document.

- 1 This MPS/ ARM will be included in the RFP for all BIM Projects. Upon Contract award, your team shall complete the MPS as part of the contract negotiation process, and be prepared to discuss "hand-off" & coordination of the BIM's.
- 2 Click on the "Model Element Table" Tab below to complete the MPS as is applicable to your project.
- 3 Insert the Level of Development (LOD) and the Agent Responsible and contracted to deliver that element.
- 4

- 5 Once agreed upon, this document will become a contract document and will be attached to the teams BIMPxP. When completing the MPS, Please check the box on the top of the MPS to show the stage of the MPS submittal i.e. RFP, Proposed, Approved as described below:

RFP: Required for this Project by Broward County, the initial stage of review.

Proposed: The Design or Construction Professional changes the status to "Proposed" for all elements that are to be included in the project models.

Approved: The Model Elements and Progression Schedule that is contracted by the Design Consultants and Contractors to be included in their Team's scope of work.

Please Note:

Questions, suggestions or concerns with completing this document during the RFP selection process should be directed to the BC-Purchasing Agent listed on the RFP. The Broward County Project Manager will serve as the primary contact and address all discussions or concerns during negotiations and subsequent Project Phases.

BIMForum Level of Development (LOD) Definitions ("LOD Definitions" Tab - Example)

Fundamental LOD Definitions		
LOD 100 - Massing / Planning Level	<p>The Model Element may be graphically represented in the Model with a symbol or other generic representation, but does not satisfy the requirements for LOD 200. Information related to the Model Element (i.e. cost per square foot, tonnage of HVAC, etc.) can be derived from other Model Elements.</p> <p>BIMForum Interpretation: LOD 100 elements are not geometric representations. Examples are information attached to other model elements or symbols showing the existence of a component but not its shape, size, or precise location. Any information derived from LOD 100 elements must be considered approximate.</p>	
LOD 200 - Generic Design Level	<p>The Model Element is graphically represented within the Model as a generic system, object, or assembly with approximate quantities, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element.</p> <p>BIMForum interpretation: At this LOD elements are generic placeholders. They may be recognizable as the components they represent, or they may be volumes for space reservation. Any information derived from LOD 200 elements must be considered</p>	
LOD 300 - Design Coordination Level	<p>The Model Element is graphically represented within the Model as a specific system, object or assembly in terms of quantity, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element.</p> <p>BIMForum interpretation: The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the model without referring to non-modeled information such as notes or dimension call-outs. The project origin is defined and the element is located accurately with respect to the project origin.</p>	
LOD 350 - Construction Coordination Level	<p>The Model Element is graphically represented within the Model as a specific system, object, or assembly in terms of quantity, size, shape, location, orientation, and interfaces with other building systems. Non-graphic information may also be attached to the Model Element.</p> <p>BIMForum interpretation: Parts necessary for coordination of the element with nearby or attached elements are modeled. These parts will include such items as supports and connections. The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the model without referring to non-modeled information such as notes or dimension call-outs.</p>	
LOD 400 - Fabrication Level	<p>The Model Element is graphically represented within the Model as a specific system, object or assembly in terms of size, shape, location, quantity, and orientation with detailing, fabrication, assembly, and installation information. Non-graphic information may also be attached to the Model Element.</p> <p>BIMForum interpretation: An LOD 400 element is modeled at sufficient detail and accuracy for fabrication of the represented component. The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the model without referring to non-modeled information such as notes or dimension call-outs.</p>	

* Definition from the "Level of Development Specification Part 1. November 2017 BIMFORUM.

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End of Attachment 2: BIM and Electronic Media Submittal Requirements

**Exhibit B
Maximum Billing Rates**

Project No: PNC2129696P1
 Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades
 Consultant/ Subconsultant: AECOM Technical Services, Inc.

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
Principal	\$133.94	X	2.43	=	\$350.00 (*)
Project Manager	\$145.10	X	2.43	=	\$300.00 (*)
Deputy Project Manager	\$108.94	X	2.43	=	\$264.72
Sr. Engineer	\$137.30	X	2.43	=	\$300.00 (*)
Engineer	\$89.69	X	2.43	=	\$217.95
Sr. Environmental	\$111.94	X	2.43	=	\$272.01
Environmental	\$83.07	X	2.43	=	\$201.86
Sr. Planner	\$119.75	X	2.43	=	\$290.99
Planner	\$77.69	X	2.43	=	\$188.79
Sr. Architect	\$76.50	X	2.43	=	\$185.90
Utility Coordinator	\$81.55	X	2.43	=	\$198.17
Estimator	\$75.91	X	2.43	=	\$184.46
Sr. Economist	\$141.34	X	2.43	=	\$300.00 (*)
Designer	\$53.25	X	2.43	=	\$129.40
Administrative	\$42.30	X	2.43	=	\$102.79

Multiplier of 2.43 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (81.3%)

FRINGE = HOURLY RATE x FRINGE (40.00%)

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (10.00%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE=

Note: *Negotiated Maximum Billing Rate

**Exhibit B
Maximum Billing Rates**

Project No: PNC2129696P1
 Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades
 Consultant/ Subconsultant: AECOM Technical Services, Inc.
 AREHNA Engineering, Inc.

TITLE	MAXIMUM HOURLY RATE (\$/R)	X	MULTIPLIER	=	MAXIMUM BILLING RATE
			3.00		(\$/HR)
Principal Engineer	\$100.38		3.00		\$300.00**
Project Manager 3	\$78.44		3.00		\$235.32
Senior Engineer 1	\$67.84		3.00		\$203.52
Engineer 1	\$63.53		3.00		\$190.59
Engineering Intern	\$38.22		3.00		\$114.66
Senior Designer	\$37.10		3.00		\$111.30
Senior Engineering Technician	\$38.16		3.00		\$114.48
Engineering Technician	\$27.56		3.00		\$82.68
Secretary/Clerical	\$29.68		3.00		\$89.04

Multiplier of *3.60 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (173.09%)

FRINGE = HOURLY RATE x FRINGE (54.51%)

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (10.0%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

*Negotiated Multiplier of 3.0

**Negotiated Maximum Billing Rate

**Exhibit B
Maximum Billing Rates**

Project No: PNC2129696P1
 Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades
 Consultant: AECOM Technical Services, Inc.
 Subconsultant: The Chappell Group, Inc.

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE
			2.31		(\$/HR)
Chief Scientist	\$101.92		2.31		\$235.44
Scientist	\$33.13		2.31		\$76.53

Multiplier of 2.31 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (100.00%)

FRINGE = HOURLY RATE x FRINGE (10.00%)

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (10.00%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

Notes:

The Chappell Group, Inc. has elected to use "Safe Harbor" combined fringe benefit and overhead rate of 110% in accordance with Section 5.2.5.

**Exhibit B
Maximum Billing Rates**

Project No: PNC2129696PI
 Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades
 Consultant/ Subconsultant: AECOM Technical Services, Inc. D3B Architecture

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
Principal	\$180.20		2.31		\$350.00*
Senior Project Manager	\$68.90		2.31		\$159.16
Designer III	\$42.40		2.31		\$97.94
Designer I	\$37.10		2.31		\$85.70

Multiplier of 2.31 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (100.0%)

FRINGE = HOURLY RATE x FRINGE (10.0%)

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (10%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

Notes:

Consultant/Subconsultant **D3B, LLC** has elected to use “Safe Harbor” combined fringe benefit and overhead rate of 110% in accordance with Section 5.2.5.

*Negotiated Maximum Billing Rate

**Exhibit B
Maximum Billing Rates**

Project No: RFP No. PNC2129696P1
 Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades
 Consultant/ Subconsultant: AECOM Technical Services, Inc.
 Dickey Consulting Services, Inc.

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
			2.31		
Principal	\$64.66		2.31		\$149.36
Project Director	\$37.10		2.31		\$85.70
Project Manager	\$31.80		2.31		\$73.46
Project Coordinator	\$25.44		2.31		\$58.77
Technician	\$23.32		2.31		\$53.87
Administrative Assistant	\$21.20		2.31		\$48.97
Intern	\$19.08		2.31		\$44.07

Multiplier of 2.31 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (100.0%)

FRINGE = HOURLY RATE x FRINGE (10.0%)

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (10%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

Notes:

Consultant/Subconsultant Dickey Consulting Services, Inc. has elected to use "Safe Harbor" combined fringe benefit and overhead rate of 110% in accordance with Section 5.2.5.

**Exhibit B
Maximum Billing Rates**

Project No: RFP No. PNC2129696P1
 Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades
 Consultant/ AECOM Technical Services, Inc/
 Subconsultant: The Engineering Company, LLC

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
Lead Engineer	\$106.00		2.31		\$244.86
Engineering Project Manager	\$53.51		2.31		\$123.61
Project Engineer	\$53.51		2.31		\$123.61
Senior Project / Construction Engineer	\$58.61		2.31		\$135.39
Construction Engineer / Inspector	\$42.40		2.31		\$97.94
Designer / Drafter	\$42.40		2.31		\$97.94

Multiplier of 2.31 is calculated as follows:

$$\text{OVERHEAD} = \text{HOURLY RATE} \times \text{OVERHEAD (100.0\%)}$$

$$\text{FRINGE} = \text{HOURLY RATE} \times \text{FRINGE (10.0\%)}$$

$$\text{OPERATING MARGIN} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE}) \times \text{OPERATING MARGIN (10\%)}$$

$$\text{MULTIPLIER} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE} + \text{OPERATING MARGIN}) / \text{HOURLY RATE}$$

Notes:

The Engineering Company, LLC has elected to use "Safe Harbor" combined fringe benefit and overhead rate of 110% in accordance with Section 5.2.5.

**Exhibit B
Maximum Billing Rates**

Project No: PNC2129696P1
 Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades
 Consultant: AECOM Technical Services, Inc
 Subconsultant: Hammond & Associates, Inc

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
Principal	\$124.22		2.31		\$286.95
Managing Director	\$99.38		2.31		\$229.57
Project Manager	\$64.73		2.31		\$149.53
Senior Electrical Engineer	\$92.75		2.31		\$214.25
Senior Mechanical Engineer	\$74.52		2.31		\$172.14
Design Engineer	\$64.31		2.31		\$148.56
BIM Manager	\$68.24		2.31		\$157.63
Project Administrator	\$39.60		2.31		\$91.48

Multiplier of 2.31 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (100.0%)

FRINGE = HOURLY RATE x FRINGE (10.0%)

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (10.0%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

Notes:

Consultant/Subconsultant **Hammond & Associates, Inc** has elected to use "Safe Harbor" combined fringe benefit and overhead rate of 110% in accordance with Section 5.2.5.

**EXHIBIT B
MAXIMUM BILLING RATES – HOME OFFICE**

Contract No: PNC2129696P1
 Contract Title: Engineering Design Services for Shore Power Electrification for Port Everglades
 Consultant: AECOM Technical Services, Inc.
 Subconsultant Name: **HBC Engineering Company, Inc.**

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER 2.77	=	MAXIMUM BILLING RATE (\$/HR)
Chief Engineer 2	\$99.64		2.77		\$276.00
Project Manager 1	\$94.28		2.77		\$261.16
Senior Engineer 2	\$95.40		2.77		\$264.26
Senior Engineer 1	\$94.28		2.77		\$261.16
Senior Electrical Engineer	\$94.28		2.77		\$261.16
Electrical Engineer	\$74.20		2.77		\$205.53
Engineer 2	\$76.45		2.77		\$211.77
Engineer 1	\$73.89		2.77		\$204.68
Engineering Intern	\$45.87		2.77		\$127.06
CADD/Computer Technician	\$39.32		2.77		\$108.92
Engineering Technician	\$48.41		2.77		\$134.10
Transportation Data Scientist	\$81.54		2.77		\$225.87
Transportation Data Analyst	\$42.04		2.77		\$116.45
Transportation Data Technician	\$37.96		2.77		\$105.15
Scheduler and Cost Estimator	\$56.72		2.77		\$157.11

Multiplier of 2.77 is calculated as follows:

OVERHEAD = HOURLY RATE X OVERHEAD (109.96) %

FRINGE = HOURLY RATE X FRINGE (41.54) %

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) X OPERATING MARGIN (10.00) %

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

**Exhibit B
Maximum Billing Rates**

Consultant: AECOM Technical Services, Inc.
 Project No: Contract No. PNC2129696P1
 Project Title: Engineering Design Services for Shore Power Electrification for Port
 Everglades
 Subconsultant: Longitude Surveyors, LLC

TITLE	AVERAGE MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
SUR Senior Surveyor 2	\$87.45		2.68		\$234.37
SUR Surveyor	\$76.44		2.68		\$204.86
Engineer 1	\$40.77		2.68		\$109.26
SUR Survey / GIS / SUE Analyst 3	\$52.72		2.68		\$141.29
SUR Survey / GIS / SUE Analyst 2	\$30.21		2.68		\$80.96
SUR Survey Project Manager 1	\$41.34		2.68		\$110.79
SUR UAS Operator	\$33.92		2.68		\$90.91
SUR Field Crew Supervisor	\$53.00		2.68		\$142.04
SUR SUE Technician 3	\$44.52		2.68		\$119.31
SUR SUE Technician 2	\$26.50		2.68		\$71.02
SUR SUE Technician 1	\$24.38		2.68		\$65.34
SUR Survey Crew Chief	\$27.83		2.68		\$74.58
SUR Survey Instrument Operator	\$20.49		2.68		\$54.91
SUR Survey Rod Person	\$16.96		2.68		\$45.45

Multiplier of 2.68 is calculated as follows:

OVERHEAD = HOURLY RATE X OVERHEAD (103.37%)

FRINGE = HOURLY RATE X FRINGE (40.41%)

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) X OPERATING MARGIN) (10.00%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

**Exhibit B
Maximum Billing Rates**

Project No: PNC2129696P1
 Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades
 Consultant: AECOM Technical Services, Inc.
 Subconsultant: Reina Engineering Services, LLC

TITLE	MAXIMUM HOURLY RATE* (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
Senior Engineer	\$79.50		3.00		\$238.50
Engineer Technician	\$30.57		3.00		\$91.71
Office Manager	\$37.99		3.00		\$113.97
Administrative Assistant	\$25.47		3.00		\$76.41

Multiplier of *3.60 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (163.41%)

FRINGE = HOURLY RATE x FRINGE (63.60%)

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (10.0%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

*Multiplier capped at 3% during negotiations.

**Exhibit B
Maximum Billing Rates**

Project No: PNC2129696P1
 Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades
 Consultant: AECOM Technical Services, Inc.
 Subconsultant: WSP USA Inc.

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE
			2.62		(\$/HR)
Senior Technical Director, Electrical Engineering	\$129.22		2.62		\$300.00*
Senior Technical Manager, Structural Engineering	\$83.99		2.62		\$220.05
Senior Professional, Electrical Engineering	\$65.38		2.62		\$171.30
Early Professional, Electrical Engineering	\$39.04		2.62		\$102.28
Senior Technician, Information Modelling	\$50.46		2.62		\$132.21

Multiplier of 2.62 is calculated as follows:

$$\text{OVERHEAD} = \text{HOURLY RTE} \times \text{OVERHEAD (102.88\%)}$$

$$\text{FRINGE} = \text{HOURLY RATE} \times \text{FRINGE (35.40\%)}$$

$$\text{OPERATING MARGIN} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE}) \times \text{OPERATING MARGIN (10\%)}$$

$$\text{MULTIPLIER} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE}) * \text{OPERATING MARGIN} / \text{HOURLY RATE}$$

*Negotiated Maximum Billing Rate

**EXHIBIT B-1
REIMBURSABLES FOR DIRECT NONSALARY EXPENSES**

CATEGORY	ITEM DESCRIPTION	UNIT	UNIT PRICE
General	Port Everglades (PEV) Identification Badges (IDs)	Each	\$25.00
General	Security Badges (TWIC)	Each	\$150.00
General	PEV Waterside Access Parking Permits	Each	\$125.00
Geotechnical Field and Laboratory Testing	Asphalt Pavement Coring - 6in dia with Base Depth Check	Each	\$325.00
Geotechnical Field and Laboratory Testing	Concrete Pavement Coring - 4in Dia	Each	\$288.00
Geotechnical Field and Laboratory Testing	Concrete Pavement Coring - 6in Dia	Each	\$325.00
Geotechnical Field and Laboratory Testing	Geo Auger Borings	LF	\$15.00
Geotechnical Field and Laboratory Testing	Geo Double Ring Infiltration ASTM D3385	Each	\$750.00
Geotechnical Field and Laboratory Testing	Geo Drill Crew Support Vehicle	Day	\$270.00
Geotechnical Field and Laboratory Testing	Geo Extra SPT Samples-Truck/Mud Bug 0-50 Ft	Each	\$92.00
Geotechnical Field and Laboratory Testing	Geo Extra SPT Samples-Truck/Mud Bug 50-100 Ft	Each	\$94.00
Geotechnical Field and Laboratory Testing	Geo Field Perm 0-10 Ft Open-End Borehole Method	Each	\$475.00
Geotechnical Field and Laboratory Testing	Geo Field Perm 10-25Ft Open-End Borehole Method	Each	\$635.00
Geotechnical Field and Laboratory Testing	Geo Grout Boreholes- Truck/Mud Bug 0-50 Ft	LF	\$8.25
Geotechnical Field and Laboratory Testing	Geo Grout Boreholes- Truck/Mud Bug 50-100 Ft	LF	\$10.00
Geotechnical Field and Laboratory Testing	Geo H& Auger with DCP (0-50 ft) ASTM D1452	LF	\$30.00
Geotechnical Field and Laboratory Testing	Geo Piezometer 2in 0-50 Ft	LF	\$61.00
Geotechnical Field and Laboratory Testing	Geo Rock Coring Truck/Mud Bug 0-50 Ft 4in ID & over	LF	\$79.50
Geotechnical Field and Laboratory Testing	GeoRocCoring Truck/MudBug 0-50 Ft less than 4in ID	LF	\$53.00
Geotechnical Field and Laboratory Testing	Geo Rock Coring Truck/Mud Bug 50-100 Ft 4in ID over	LF	\$87.00
Geotechnical Field and Laboratory Testing	GeoRocCoring Truck/MudBug 50-100 Ft les than 4in ID	LF	\$70.00
Geotechnical Field and Laboratory Testing	Geo SPT Truck/Mud Bug 0-50 Ft	LF	\$18.50
Geotechnical Field and Laboratory Testing	Geo SPT Truck/Mud Bug 50-100 Ft	LF	\$23.00
Geotechnical Field and Laboratory Testing	Geo Temp Casing 3in Truck/Mud Bug 0-50 Ft	LF	\$13.00
Geotechnical Field and Laboratory Testing	Geo Temp Casing 3in Truck/Mud Bug 50-100 Ft	LF	\$16.00
Geotechnical Field and Laboratory Testing	Geo Temp Casing 4in Truck/Mud Bug 0-50 Ft	LF	\$14.50
Geotechnical Field and Laboratory Testing	Geo Temp Casing 4in Truck/Mud Bug 50-100 Ft	LF	\$17.00
Geotechnical Field and Laboratory Testing	Geo Temp Casing 6in Truck/Mud Bug 0-50 Ft	LF	\$19.50
Geotechnical Field and Laboratory Testing	Geo Temp Casing 6in Truck/Mud Bug 50-100 Ft	LF	\$22.00
Geotechnical Field and Laboratory Testing	Geo Truck/Mud Bug Mobil (30 miles straightline distance)	Each	\$740.00
Geotechnical Field and Laboratory Testing	Geo Undisturbed Samples Truck/Mud Bug 0-50 Ft	Each	\$215.00
Geotechnical Field and Laboratory Testing	Geo Undisturbed Samples Truck/Mud Bug 50-100 Ft	Each	\$250.00
Geotechnical Field and Laboratory Testing	Geo Truck/Mudbug Drill Rig (including 2-person crew)	Hour	\$295.00
Geotechnical Field and Laboratory Testing	Geo Truck/Mudbug Drill Rig (including 3-person crew)	Hour	\$375.00
Geotechnical Field and Laboratory Testing	Geo Wash Boring, 0-50 Ft	LF	\$15.00
Geotechnical Field and Laboratory Testing	Geo Wash Boring, 50-100 Ft	LF	\$18.00
Geotechnical Field and Laboratory Testing	Mobilization Asphalt Coring Equipment	Each	\$480.00
Geotechnical Field and Laboratory Testing	Mobilization Concrete Coring	Each	\$480.00
Geotechnical Field and Laboratory Testing	Soils 1-D Consolidation AASHTO T216 (more than 12 loads)	Test	\$135.00
Geotechnical Field and Laboratory Testing	Soils 1-D Consolidation AASHTO T216 (up to 12 loads)	Test	\$804.00
Geotechnical Field and Laboratory Testing	Soils Consolidation - Constant Strain ASTM D4186	Test	\$665.00
Geotechnical Field and Laboratory Testing	Soils Consol-Extend Load Incrmnts AASHTO T216	Day	\$225.00
Geotechnical Field and Laboratory Testing	Soils Corrosion Series FM 5-550 through 5-553	Test	\$294.00
Geotechnical Field and Laboratory Testing	Soils Limerock Bearing Ratio (LBR) FM 5-515	Test	\$465.00
Geotechnical Field and Laboratory Testing	Soils Liquid Limit AASHTO T89	Test	\$76.00
Geotechnical Field and Laboratory Testing	Soils Materials Finer than 200 Sieve FM 1-T011	Test	\$60.00
Geotechnical Field and Laboratory Testing	Soils Moisture Content Laboratory AASHTO T265	Test	\$25.00
Geotechnical Field and Laboratory Testing	Soils Organic Content Ignition FM 1 T-267	Test	\$60.00
Geotechnical Field and Laboratory Testing	Soils Particle Size Anlys AASHTO T88 (No Hydrometer)	Test	\$90.00

CATEGORY	ITEM DESCRIPTION	UNIT	UNIT PRICE
Geotechnical Field and Laboratory Testing	Soils Particle Size Anlys AASHTO T88 (Incl. Hydrometer)	Test	\$225.00
Geotechnical Field and Laboratory Testing	Soils Plastic Limit & Plasticity Index AASHTO T90	Test	\$82.00
Geotechnical Field and Laboratory Testing	Soils Split Tensile Strgth of Rock Cores ASTM D3967	Test	\$185.00
Geotechnical Field and Laboratory Testing	Soils Unconfined Compression - Rock ASTM D7012, Method C	Test	\$212.00
Geotechnical Field and Laboratory Testing	Soils Unconfined Compress - Soil AASHTO T208/ASTM D2166	Test	\$253.00
Geotechnical Field and Laboratory Testing	MOT Plan	EA	\$300.00
Geotechnical Field and Laboratory Testing	Maintenance of Traffic - Lane Closure	Day	\$2,000.00
Geotechnical Field and Laboratory Testing	Maintenance of Traffic - Lane Closure with Flaggers	Day	\$2,300.00
Geotechnical Field and Laboratory Testing	Maintenance of Traffic - Intersection	Day	\$2,600.00
Geotechnical Field and Laboratory Testing	Light Tower (night work)	Night	\$210.00
Survey	Horizontal control points @ 1,000-1,200-ft for 8,080-ft.	Each	\$1.14
Survey	LS will show right of way for SE 14th Ave and Eller Dr. and show a Baseline inside the 50-ft. strip.	LF	\$0.45
Survey	Topographical Survey for proposed Electric Duct Bank Alignment of 50-ft. wide corrdor @ 6,000 LF	LF	\$3.71
Utilities Clearance	SUE QL "A" price per VVH.	LF	\$3.09
Utilities Clearance	SUE QL "A" price per VVH.	Each	\$800.00

EXHIBIT C

INSURANCE REQUIREMENTS

Project: Shorepower Design Consultant
Agency: Port Everglades Seaport Engineering

TYPE OF INSURANCE	ADDL INSD	SUBR WVD	MINIMUM LIABILITY LIMITS		
				Each Occurrence	Aggregate
GENERAL LIABILITY - Broad form <input checked="" type="checkbox"/> Commercial General Liability <input checked="" type="checkbox"/> Premises-Operations <input checked="" type="checkbox"/> XCU Explosion/Collapse/Underground <input checked="" type="checkbox"/> Products/Completed Operations Hazard <input checked="" type="checkbox"/> Contractual Insurance <input checked="" type="checkbox"/> Broad Form Property Damage <input checked="" type="checkbox"/> Independent Contractors <input checked="" type="checkbox"/> Personal Injury Per Occurrence or Claims-Made: <input checked="" type="checkbox"/> Per Occurrence <input type="checkbox"/> Claims-Made Gen'l Aggregate Limit Applies per: <input type="checkbox"/> Project <input type="checkbox"/> Policy <input type="checkbox"/> Loc. <input type="checkbox"/> Other _____	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bodily Injury		
			Property Damage		
			Combined Bodily Injury and Property Damage	\$1,000,000	\$2,000,000
			Personal Injury		
			Products & Completed Operations		
AUTO LIABILITY <input checked="" type="checkbox"/> Comprehensive Form <input checked="" type="checkbox"/> Owned <input checked="" type="checkbox"/> Hired <input checked="" type="checkbox"/> Non-owned <input checked="" type="checkbox"/> Any Auto, If applicable <i>Note: May be waived if no driving will be done in performance of services/project.</i>			Bodily Injury (each person)		
			Bodily Injury (each accident)		
			Property Damage		
			Combined Bodily Injury and Property Damage	\$1,000,000	
<input type="checkbox"/> EXCESS LIABILITY / UMBRELLA Per Occurrence or Claims-Made: <input checked="" type="checkbox"/> Per Occurrence <input type="checkbox"/> Claims-Made <i>Note: May be used to supplement minimum liability coverage requirements.</i>					
<input checked="" type="checkbox"/> WORKER'S COMPENSATION	N/A	<input checked="" type="checkbox"/>	Each Accident	STATUTORY LIMITS	
<input checked="" type="checkbox"/> EMPLOYER'S LIABILITY			Each Accident	\$1,000,000	
<input checked="" type="checkbox"/> POLLUTION LIABILITY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Each Claim:	\$1,000,000	\$2,000,000
			*Maximum Deductible:	\$100,000	
<input checked="" type="checkbox"/> PROFESSIONAL LIABILITY (ERRORS & OMISSIONS)	N/A		Each Claim:	\$1,000,000	\$2,000,000
			*Maximum Deductible:	\$100,000	
<input type="checkbox"/> CRIME / EMPLOYEE DISHONESTY			Each Claim:		

Description of Operations: "Broward County" shall be listed as Certificate Holder and endorsed as an additional insured for liability, except as to Professional Liability. County shall be provided 30 days written notice of cancellation, 10 days' notice of cancellation for non-payment. Contractors insurance shall provide primary coverage and shall not require contribution from the County, self-insurance or otherwise. Any self-insured retention (SIR) higher than the amount permitted in this Agreement must be declared to and approved by County and may require proof of financial ability to meet losses. Contractor is responsible for all coverage deductibles unless otherwise specified in the agreement. For Claims-Made policies insurance must be maintained and evidence of insurance must be provided for at least three (3) years after completion of the contract of work.

CERTIFICATE HOLDER:

Broward County
1850 Eller Drive
Fort Lauderdale, Florida 33316

Normagene Dmytriv 10/11/2024
Risk Management Division

Exhibit D
Work Authorization No. [] under
Agreement [] between Broward County and []
for []

1. This Work Authorization is issued pursuant to the Agreement between Broward County (“County”) and [] (“Consultant”) (collectively referred to as the “Parties”) for [], dated [] (as amended, the “Agreement”).

2. This Work Authorization directs Consultant to provide the services described in Exhibit A, attached hereto and incorporated into this Work Authorization, and is issued pursuant to Article 6 of the Agreement.

3. Compensation and Method of Payment.

3.1 Payment for the Services authorized by this Work Authorization shall be in accordance with Article 5 of the Agreement and the agreed method of compensation is as follows (check those boxes that apply):

3.1.1 Maximum Amount Not-To-Exceed Compensation. County shall pay Consultant for the performance of all Services identified in Exhibit A to this Work Authorization as payable on a “Maximum Amount Not-To-Exceed” basis based upon the Salary Costs as described in Section 5.2 of the Agreement and Exhibit B of this Work Authorization, up to a maximum not-to-exceed amount of \$[].

3.1.2 Lump Sum Compensation. County shall pay Consultant for the performance of all Services identified in Exhibit A to this Work Authorization as payable on a “Lump Sum” basis and as set forth in Exhibit B of this Work Authorization, in a total lump sum amount of \$[].

3.1.3 Reimbursable Expenses. County has established a maximum not-to-exceed amount of \$[] for potential Reimbursable Expenses for work under this Work Authorization, which may be utilized consistent with Section 5.3 of the Agreement. County will retain any unused amounts of those reimbursable expenses.

4. Consultant shall perform the Services described in Exhibit A within:
 [] calendar days (“Time for Performance”); or
 the time periods specified in Exhibit A. The Time for Performance shall commence on the date of the Notice to Proceed for such services.

5. CBE Goals.

5.1 In an effort to assist County in achieving its overall goal as set forth in the Agreement, Consultant agrees to meet the CBE participation goal of [_____] % by utilizing CBE firms for the Services provided under this Work Authorization and the dollar values described in Section 5.2 below.

5.2 In performing Services under this Work Authorization, County and Consultant hereby incorporate Consultant's participating CBE firms, addresses, scope of work, and dollar value identified in Exhibit C.

6. The terms and conditions of the Agreement are hereby incorporated into this Work Authorization. Nothing contained in this Work Authorization shall alter, modify, or change in any way the terms and conditions of the Agreement.

7. This Work Authorization is effective upon complete execution by County and Consultant. This Work Authorization may be executed in multiple originals or in counterparts, whether signed physically or electronically, each of which shall be deemed to be an original, and all of which, taken together, shall constitute one and the same agreement.

List of Exhibits:

Exhibit A – Scope of Services

Exhibit B – Negotiated Fee

Exhibit C – CBE Schedule

(The remainder of this page is intentionally left blank.)

IN WITNESS WHEREOF, the Parties have made and executed this Work Authorization No. [_____]: Broward County, by and through its [_____], as authorized pursuant to the Agreement; and Consultant, signing by and through its duly authorized representative.

COUNTY

Broward County

By _____

Its _____
(Print Name and Title)

____ day of _____, 20__.

Approved as to form by
Andrew J. Meyers
Broward County Attorney
115 South Andrews Avenue, Suite 423
Fort Lauderdale, Florida, 33301
Telephone: (954) 357-7600

By _____
Name _____ Date _____
Senior/Assistant County Attorney

By _____
Name _____ Date _____
Senior/Assistant County Attorney

CONSULTANT

[Insert Consultant Name]

By _____
Authorized Signer

Its _____
(Print name and title)

____ day of _____, 20__.

Exhibit E
Schedule of Subconsultants

Project No: PNC2129696P1
Project Title: Engineering Design Services for Shore Power Electrification for Port
Everglades
Facility Name: Port Everglades

No.	Firm Name	Discipline
1.	Arehna Engineering, Inc.	Geotechnical Engineering
2.	The Chappell Group, Inc.	Environmental Services
3.	D3B Architecture	Architecture
4.	Dickey Consulting Services, Inc.	Public Outreach
5.	The Engineering Company, LLC	Geotechnical Engineering
6.	Hammond & Associates, Inc.	Electrical
7.	HBC Engineering Company, Inc.	Traffic
8.	Longitude Surveyors, LLC	Survey
9.	Reina Engineering Services, LLC	Civil Engineering
10.	WSP USA Inc.	Engineering Services

EXHIBIT F



LETTER OF INTENT
BETWEEN BIDDER/OFFEROR AND
COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2129696P1

Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades

Bidder/Offeror Name: AECOM Technical Services, Inc.

Address: 110 East Broward Blvd., Suite 700 City: Fort Lauderdale State: FL Zip: 33301

Authorized Representative: Pete Hernandez Phone: 305-718-4817

CBE Firm/Supplier Name: AREHNA Engineering, Inc.

Address: 5839 N Nob Hill Road City: Sunrise State: FL Zip: 33351

Authorized Representative: Jessica McRory, President Phone: 954-495-1710

- A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.
- B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.
- C. By signing below, the above-named CBE is committing to perform the work described below.
- D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS ¹	CBE Contract Amount ²	CBE Percentage of Total Project Value
Geotechnical Engineering and Testing	541330	N/A	2 %
			%
			%

AFFIRMATION: I hereby affirm that the information above is true and correct.

CBE Firm/Supplier Authorized Representative

Signature: Title: President Date: 04/26/2025

Bidder/Offeror Authorized Representative

Signature: Title: VicePresident /Authorized Signatory Date: May 2, 2025
Pedro G. Hernandez, PE

¹ Visit Census.gov and select [NAICS](#) to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

² To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.



LETTER OF INTENT

BETWEEN BIDDER/OFFEROR AND COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2129696P1

Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades

Bidder/Offeror Name: AECOM Technical Services, Inc.

Address: 110 East Broward Blvd., Suite 700 City: Fort Lauderdale State: FL Zip: 33301

Authorized Representative: Pete Hernandez Phone: 305-718-4817

CBE Firm/Supplier Name: D3B, LLC former Dunlap Design & Development, LLC

Address: 2624 NE 29th Court City: Fort Lauderdale State: FL Zip: 33306

Authorized Representative: James Bowers, AIA, NCARB, LEED AP Phone: 954.552.6771

- A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.
- B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.
- C. By signing below, the above-named CBE is committing to perform the work described below.
- D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS ¹	CBE Contract Amount ²	CBE Percentage of Total Project Value
Architecture and Planning Services	541310	N/A	1.5 %
			%
			%

AFFIRMATION: I hereby affirm that the information above is true and correct.

CBE Firm/Supplier Authorized Representative

Signature: Title: Principal Date: 4/23/2025

Bidder/Offeror Authorized Representative

Signature: Title: Vice President/Authorized Signatory Date: 04/18/2025

¹ Visit Census.gov and select [NAICS](#) to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

² To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.



LETTER OF INTENT
BETWEEN BIDDER/OFFEROR AND
COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2129696P1

Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades

Bidder/Offeror Name: AECOM Technical Services, Inc.

Address: 110 East Broward Blvd., Suite 700 City: Fort Lauderdale State: FL Zip: 33301

Authorized Representative: Pete Hernandez Phone: 305-718-4817

CBE Firm/Supplier Name: Dickey Consulting Services, Inc.

Address: 1033 NW 6th Street, Suite 206 City: Fort Lauderdale State: FL Zip: 33311

Authorized Representative: Sheryl A. Dickey Phone: 954-467-6822

- A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.
- B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.
- C. By signing below, the above-named CBE is committing to perform the work described below.
- D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS ¹	CBE Contract Amount ²	CBE Percentage of Total Project Value
Public Outreach and Project Management	541430,541611, 541613,541618, 541690,541820,541720,541810,561110	N/A	1.5 %
			%
			%

AFFIRMATION: I hereby affirm that the information above is true and correct.

CBE Firm/Supplier Authorized Representative

Signature: [Signature] Title: President & CEO Date: 04/23/2025

Bidder/Offeror Authorized Representative

Signature: [Signature] Title: Vice President/Authorized Signatory Date: 04/18/2025

¹ Visit Census.gov and select [NAICS](#) to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

² To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.



LETTER OF INTENT BETWEEN BIDDER/OFFEROR AND COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2129696P1

Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades

Bidder/Offeror Name: AECOM Technical Services, Inc.

Address: 110 East Broward Blvd., Suite 700 City: Fort Lauderdale State: FL Zip: 33301

Authorized Representative: Pete Hernandez Phone: 305-718-4817

CBE Firm/Supplier Name: Hammond & Associates, Inc.

Address: 499 NW 70 Avenue Suite #201 City: Plantation State: FL Zip: 33317

Authorized Representative: Nathaniel Hammond, PE Phone: 404-769-6636


- A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.
- B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.
- C. By signing below, the above-named CBE is committing to perform the work described below.
- D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm


Description	NAICS ¹	CBE Contract Amount ²	CBE Percentage of Total Project Value
Electrical Design	541330	N/A	7 %
			%
			%

AFFIRMATION: I hereby affirm that the information above is true and correct.

CBE Firm/Supplier Authorized Representative

Signature:  Title: President Date: 4/28/2025

Bidder/Offeror Authorized Representative

Signature:  Title: Vice President/Authorized Signatory Date: 04/18/2025

¹ Visit Census.gov and select [NAICS](#) to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

² To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.



LETTER OF INTENT BETWEEN BIDDER/OFFEROR AND COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2129696P1

Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades

Bidder/Offeror Name: AECOM Technical Services, Inc.

Address: 110 East Broward Blvd., Suite 700 City: Fort Lauderdale State: FL Zip: 33301

Authorized Representative: Pete Hernandez Phone: 305-718-4817

CBE Firm/Supplier Name: HBC Engineering Company

Address: 5200 NW 33rd Ave, Suite 211 City: Fort Lauderdale State: FL Zip: 33309

Authorized Representative: Adebayo Coker, PE - President / CEO Phone: (305) 632-5280

- A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.
- B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.
- C. By signing below, the above-named CBE is committing to perform the work described below.
- D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS ¹	CBE Contract Amount ²	CBE Percentage of Total Project Value
Traffic	541330	N/A	1.8 %
			%
			%

AFFIRMATION: I hereby affirm that the information above is true and correct.

CBE Firm/Supplier Authorized Representative

Signature: Title: President Date: 4/28/2025

Bidder/Offeror Authorized Representative

Signature: Title: Vice President/Authorized Signatory Date: 04/28/2025

Pedro G. Hernandez, PE

¹ Visit Census.gov and select [NAICS](#) to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

² To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.



LETTER OF INTENT BETWEEN BIDDER/OFFEROR AND COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2129696P1

Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades

Bidder/Offeror Name: AECOM Technical Services, Inc.

Address: 110 East Broward Blvd., Suite 700 City: Fort Lauderdale State: FL Zip: 33301

Authorized Representative: Pete Hernandez Phone: 305-718-4817

CBE Firm/Supplier Name: Longitude Surveyors, LLC

Address: 800 W Cypress Creek Road Suite 340 City: Ft. Lauderdale State: FL Zip: 33309

Authorized Representative: Eduardo M. Suarez, PSM Phone: 305.463.0912

- A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.
- B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.
- C. By signing below, the above-named CBE is committing to perform the work described below.
- D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS ¹	CBE Contract Amount ²	CBE Percentage of Total Project Value
Survey	541360	N/A	2 %
			%
			%

AFFIRMATION: I hereby affirm that the information above is true and correct.

CBE Firm/Supplier Authorized Representative

Signature:  Title: President Date: 4/25/2025

Bidder/Offeror Authorized Representative

Signature:  Title: Vice President/Authorized Signatory Date: 04/18/2025

¹ Visit Census.gov and select [NAICS](#) to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

² To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.



LETTER OF INTENT

BETWEEN BIDDER/OFFEROR AND COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2129696P1

Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades

Bidder/Offeror Name: AECOM Technical Services, Inc.

Address: 110 East Broward Blvd., Suite 700 City: Fort Lauderdale State: FL Zip: 33301

Authorized Representative: Pete Hernandez Phone: 305-718-4817

CBE Firm/Supplier Name: Reina Engineering, LLC

Address: 6750 N. Andrews Ave, Suite 200 City: Fort Lauderdale State: FL Zip: 33309

Authorized Representative: Francisco Reina, P.E. Phone: 954-496-3027

- A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.
- B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.
- C. By signing below, the above-named CBE is committing to perform the work described below.
- D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm


Description	NAICS ¹	CBE Contract Amount ²	CBE Percentage of Total Project Value
Civil Engineering General Services	541330		2.2 %
			%
			%

AFFIRMATION: I hereby affirm that the information above is true and correct.

CBE Firm/Supplier Authorized Representative

Signature: Francisco Reina, P.E. Digitally signed by Francisco Reina, P.E. Date: 2025.04.28 13:02:59 -0400 Title: President Date: 04/28/2025

Bidder/Offeror Authorized Representative

Signature:  Title: _____ Date: _____

¹ Visit Census.gov and select [NAICS](#) to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

² To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.



LETTER OF INTENT BETWEEN BIDDER/OFFEROR AND COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2129696P1

Project Title: Engineering Design Services for Shore Power Electrification for Port Everglades

Bidder/Offeror Name: AECOM Technical Services, Inc.

Address: 110 East Broward Blvd., Suite 700 City: Fort Lauderdale State: FL Zip: 33301

Authorized Representative: Pete Hernandez Phone: 305-718-4817

CBE Firm/Supplier Name: The Engineering Company, LLC

Address: 942 NW 56th Street City: Fort Lauderdale State: FL Zip: 33309

Authorized Representative: Omar Herrera Phone: 786-543-8936

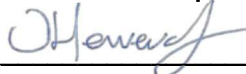
- A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.
- B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.
- C. By signing below, the above-named CBE is committing to perform the work described below.
- D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS ¹	CBE Contract Amount ²	CBE Percentage of Total Project Value
Engineering Services	541330		7.00 %
			%
			%

AFFIRMATION: I hereby affirm that the information above is true and correct.

CBE Firm/Supplier Authorized Representative

Signature:  Title: Principal Date: 05/02/2025

Bidder/Offeror Authorized Representative

Signature:  Title: Vice President/Authorized Signatory Date: 04/28/2025

¹ Visit Census.gov and select [NAICS](#) to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

² To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.

Exhibit G

Port Everglades Security Requirements

- A. The Port Everglades Department requires persons to present, at port entry, a valid driver license, and valid reason for wishing to be granted Port access in order to obtain a temporary/visitor ID badge. For persons who will visit the Port more than 15 times in a 90-day period, a permanent identification badge must be obtained and paid for by the contractor for all employees, subcontractors, and agents visiting or working on the Port project. A restricted access badge application process will include fingerprints and a comprehensive background check. Badges must be renewed annually and the fees paid pursuant to Broward County Administrative Code, Section [42.6](#). For further information, please call 954-765-4225.

- B. All vehicles that are used regularly on the dock apron must have a Dockside Parking Permit. Only a limited number of permits will be issued per business entity. The fee is \$100.00 per permit/vehicle. Individuals requesting a permit must possess a valid Port-issued Restricted Access Area badge with a "Dock" destination. Requests for Dockside Parking Permits must be submitted in writing, on company letterhead, to the ID Badge Office. Applicants must demonstrate a need for access to the dock apron. Requests shall be investigated, and approved, if appropriate justification is provided. Supporting documentation must be supplied, if requested. Dock permits are not transferable and must be affixed to the lower left corner of the permitted vehicle's windshield. Should the permit holder wish to transfer the permit to another vehicle during the term of issuance, the permit will be removed and exchanged at no charge for a new permit. Only one business entity representative will be permitted on the dock at a time at the vessel location.

- C. The Federal Government has instituted requirements for a Transportation Worker Identification Credential (TWIC) for all personnel requiring unescorted access to designated secure areas within Port Everglades. The contractor will be responsible for complying with the applicable TWIC requirements. For further information, please call 1-855-347-8371, or go online to <https://www.tsa.gov/for-industry/twic>.

EXHIBIT H

U.S. DEPARTMENT OF TRANSPORTATION MARITIME ADMINISTRATION

GRANT AGREEMENT UNDER THE FISCAL YEAR 2024 PORT INFRASTRUCTURE DEVELOPMENT PROGRAM (PIDP)

MARAD FY 2024 PIDP Grant No. 693JF72440044

70X1713E24 2025 1BC2440044 0000150000 41010 61006600 — \$850,000

This agreement is between the United States Department of Transportation Maritime Administration (“MARAD”) and the Broward, County of¹ (the “Recipient”).

This agreement reflects the selection of the Recipient to receive a PIDP Grant for the Broward County Port Everglades Shore Power Duct Bank Design Project.

The parties therefore agree to the following:

ARTICLE 1 GENERAL TERMS AND CONDITIONS

1.1 General Terms and Conditions.

- (a) In this agreement, “General Terms and Conditions” means the content of the document titled “General Terms and Conditions Under the Fiscal Year 2024 Port Infrastructure Development Program Grants,” dated August 2, 2024, which is available at <https://www.maritime.dot.gov/grants/federal-grant-assistance/federal-grant-assistance>. The General Terms and Conditions reference the information contained in the schedules to this agreement. The General Terms and Conditions are part of this agreement.
- (b) The Recipient states that it has knowledge of and agrees to the General Terms and Conditions.
- (c) The Recipient acknowledges that the General Terms and Conditions impose obligations on the Recipient and that the Recipient’s non-compliance with the General Terms and Conditions may result in remedial action, terminating of the PIDP Grant, disallowing costs incurred for the Project, requiring the Recipient to refund to MARAD the PIDP Grant, and reporting the non-compliance in the Federal-government-wide integrity and performance system.

¹ The Recipient is referred to here as “Broward, County of” because that is the name associated with the Recipient’s unique entity identifier, as required by 2 CFR 200.211(b)(1), but the rest of this agreement will refer to the Recipient by its legal name, “Broward County.”

ARTICLE 2
SPECIAL TERMS AND CONDITIONS

There are no special terms for this award.

**SCHEDULE A
ADMINISTRATIVE INFORMATION**

1. Application.

Application Title: Broward County Port Everglades Shore Power Systems
Infrastructure Project

Application Date: August 16, 2024

2. Recipient's Unique Entity Identifier.

Recipient's Unique Entity Identifier: P62KF2SJJ237

3. Recipient Contact(s).

Michelle George-Unik
Senior Contract / Grant Administrator
Broward County Port Everglades
1850 Eller Drive, Suite 605
Fort Lauderdale, FL 33316
(954) 468-0410
mgunik@broward.org

and

Natacha Yacinthe
Senior Planning Manager
Port Everglades
1850 Eller Drive, Suite 604
Fort Lauderdale, FL 33316
(954) 468-0213
nyacinthe@broward.org

4. Recipient Key Personnel.

None.

5. MARAD Project Contact(s).

Kelly Mitchell-Carroll
Grants and Cooperative Agreements Officer
DOT – Maritime Administration
1200 New Jersey Ave, SE
Washington, DC 20590
MAR-380
W26-422
Mailstop 5

(202) 366-9714
k.mitchell-carroll@dot.gov

and

David Bohnet
Grant Program Manager
DOT – Maritime Administration
1200 New Jersey Ave, SE
Washington, DC 20590
MAR-510
W21-226
Mailstop 3
(202) 366-0586
david.bohnet@dot.gov

6. Payment System.

MARAD Payment System: Delphi eInvoicing System

7. Federal Award Identification Number.

Federal Award Identification Number: 693JF72440044

SCHEDULE B PROJECT ACTIVITIES

1. General Project Description.

The Project will fund the design & permitting of an extensive duct bank system that will be used to house power cables and fiber optic lines that will provide power and related communication to Port Everglades' ("Port") eight (8) cruise ship berths.

2. Statement of Work.

The Project consists of one component with the following elements:

- **Pre-Design Phase Services:**
 - Review and utilization of available information including the recent Port Master Plan Update, topographic surveys, utility atlas files, geographic information system data, and fuel pipeline drawings to understand the site and plan the appropriate investigations and surveys moving forward.
 - Necessary site investigations and site surveys in support of the design phase services to include, but not be limited to, a corridor survey along the path of the proposed duct-bank, subsurface utility engineering investigations along the path of the proposed duct-bank, and geotechnical explorations as needed for Project design.
 - Conduct pre-design workshops with Project stakeholders for the purpose of establishing Project design and construction parameters including, but not limited to, Port operational requirements, site access and traffic flow, Port security protocols, Project budgets, and Project timelines.
 - Prepare a Pre-Design Report ("PDR") to contain a Basis Of Design that documents the principles, assumptions, rationale, criteria, and considerations used for calculations and decisions required during design. The PDR will include a Project execution plan to address the method of execution and schedules for the delivery of the Project. The PDR shall also include: an analysis of capital and maintenance costs, anticipated construction timelines, and a recommended construction methodology that minimizes traffic impacts and impacts to Port operations.

- **Design Phase Services:**
 - Investigation and design related to electrical duct-bank, subsurface utility, civil, structural, utility, and geotechnical engineering.
 - The design of approximately 20,000 linear feet of concrete encased duct-bank with manholes placed approximately every 500 to 800 feet. Structural design necessary to support the proposed duct-bank features, if necessary.
 - Estimates of probable construction cost and construction timelines at various stages of design. Prepare contracting requirements, general requirements, detailed construction drawings, and technical specifications.
 - The shore power system design shall be in accordance with International Electrotechnical (IEC)/Institute of Electrical and Electronics Engineers (IEEE) 80005-1 and 8005-2 standards along with local code requirements

including National Electrical Code (NEC), National Building Code (NBC), Occupational Safety and Health Administration (OSHA), State of Florida and Florida Power & Light (FPL) requirements.

- **Permitting Phase Services:**

- File for all required Federal, state, county, and municipal permits for this shore power Project. Submit construction documents to building departments of the City of Fort Lauderdale and City of Hollywood, Florida, for purposes of obtaining pre-permit approvals so that any permits that the contractor needs to obtain will not be delayed or cause last minute design changes.

3. Documents Describing Mitigation Activities and Permits.

None.

**SCHEDULE C
AWARD DATES AND PROJECT SCHEDULE**

1. Award Dates.

Budget Period End Date: January 31, 2028

Period of Performance End Date: May 31, 2028

2. Estimated Project Schedule.

Milestone	Schedule Date
Planned Project Start Date	September 1, 2025
Planned Project Completion Date	March 31, 2027

3. Special Milestone Deadlines.

None.

**SCHEDULE D
AWARD AND PROJECT FINANCIAL INFORMATION**

1. Award Amount.

PIDP Grant Amount: \$850,000

2. Federal Obligation Information.

Federal Obligation Type: Single

3. Approved Project Budget.

<u>Eligible Project Costs</u>	
	<u>Total</u>
PIDP Funds:	\$850,000
Non-Federal Funds:	\$1,110,000
Total:	\$1,960,000

4. Cost Classification Table.

Cost Classification	Total Costs	Non-PIDP Previously Incurred Costs	Eligible Costs
Architectural and engineering fees	\$1,960,000		\$1,960,000
Project Total	\$1,960,000		\$1,960,000

5. Approved Pre-award Costs.

None. MARAD has not approved under this award any requests for the use of non-Federal funds under 46 U.S.C. 54301(a)(10)(B) or any pre-award costs under 2 C.F.R. 200.458. Because unapproved costs incurred before the date of this agreement are not allowable costs under this award, MARAD will neither reimburse those costs under this award nor consider them as a non-Federal cost sharing contribution to this award. Costs incurred before the date of this agreement are allowable costs under this award only if approved in writing by MARAD before being included in the Project costs and documented in this section 5. See section 15.3 of the General Terms and Conditions.

**SCHEDULE E
CHANGES FROM APPLICATION**

Scope: None from submittal of SF424 application; however, when requesting Community Project Funding ("CPF") from its U.S. Representative, the Recipient anticipated receiving \$8,840,000 in total to also include the electrical power capital improvements to the Port's eight (8) cruise ship berths. However, since the Recipient was only awarded \$850,000 in CPF, this Project only includes design and engineering for the eventual Port Everglades Shore Power Systems Infrastructure construction project.

Schedule: None.

Budget: None from submittal of SF424 application; however, the Recipient originally requested \$8,840,000 from its U.S. Representative, but only received \$850,000 in CPF.

Other: None.

**SCHEDULE F
PIDP DESIGNATIONS**

1. Urban or Rural Designation.

Urban-Rural Designation: Urban

2. Capital or Planning Designation.

Capital-Planning Designation: Planning

3. Historically Disadvantaged Community Designation.

HDC Designation: No

4. Funding Act.

Funding Act: FY2024

5. Discretionary or Community Project Funding.

Discretionary-CPF: CPF

6. Security Risk Designation.

Security Risk Designation: Low

SCHEDULE G
PIDP PERFORMANCE MEASUREMENT INFORMATION

Reserved.

**SCHEDULE H
CIVIL RIGHTS AND TITLE VI**

1. Recipient Type Designation.

Recipient Type Designation: New

2. Title VI Assessment Information.

Title VI Assessment Completion Date: October 3, 2024

RECIPIENT SIGNATURE PAGE

The Recipient, intending to be legally bound, is signing this agreement on the date stated opposite that party's signature.

COUNTY

BROWARD COUNTY, by and through
its County Administrator

By:  **KEVIN KEENAN**
ASST. CO. ADMIN.
For

Monica Cepero, County Administrator

30th day of December, 2024



Approved as to form by
Andrew J. Meyers
Broward County Attorney
115 South Andrews Avenue, Suite 423
Fort Lauderdale, Florida 33301
Telephone: (954) 357-7600

By **ANTONIO LOZADA** Digitally signed by ANTONIO LOZADA
Date: 2024.12.27 08:18:06
-05'00'
Antonio Lozada (Date)
Assistant County Attorney

By **CARLOS A. RODRIGUEZ-CABARROCAS** Digitally signed by CARLOS A. RODRIGUEZ-CABARROCAS
Date: 2024.12.27 08:43:15
-05'00'
Carlos Rodriguez-Cabarrocas (Date)
Senior Assistant County Attorney

MARAD SIGNATURE PAGE

MARAD, intending to be legally bound, is signing this agreement on the date stated opposite that party's signature.

UNITED STATES DEPARTMENT OF
TRANSPORTATION MARITIME
ADMINISTRATION



12/31/2024
Date

Signature of MARAD's Authorized Representative

Kelly Mitchell-Carroll

Name

Grants and Cooperative Agreements Officer

Title

**U.S. DEPARTMENT OF TRANSPORTATION
MARITIME ADMINISTRATION**

**GENERAL TERMS AND CONDITIONS UNDER THE
FISCAL YEAR 2024 PORT INFRASTRUCTURE DEVELOPMENT PROGRAM
GRANTS**

August 2, 2024

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GENERAL TERMS AND CONDITIONS

The Infrastructure Investment and Jobs Act, Pub. L. No. 117-58 (Nov. 15, 2021), and the Consolidated Appropriations Act, 2024, Pub. L. No. 118-42 (Mar. 9, 2024) (“**Consolidated Appropriations Act, 2024**” or “**the Act**”) appropriated funds to the United States Department of Transportation (the “**USDOT**”) Maritime Administration (“**MARAD**”) for fiscal year (FY) 2024 under the heading “Port Infrastructure Development Program.” Of the amount appropriated, \$500,000,000 is available to make grants to improve port facilities at coastal seaports, inland river ports, or Great Lakes ports. The Consolidated Appropriations Act, 2024 also appropriated \$70,460,124 for Port Infrastructure Development Program (PIDP) grants for Community Project Funding (CPF), also known as Congressionally Directed Spending. The list of projects selected for CPF are found in the table entitled “Community Project Funding/Congressionally Directed Spending” included in the Act’s accompanying explanatory statement. The MARAD program administering these funds is the Port Infrastructure Development Program (the “**PIDP**”).

On December 27, 2023, MARAD posted a funding opportunity at Grants.gov with funding opportunity title “Port Infrastructure Development Program” and funding opportunity number MA-PID-24-001. The notice of funding opportunity posted at Grants.gov (the “**NOFO**”) solicited applications for Federal financial assistance under the FY 2024 PIDP for the available FY 2024 PIDP discretionary funding.

These general terms and conditions are incorporated by reference in a project-specific agreement under the FY 2024 PIDP. The term “Recipient” is defined in the project-specific portion of the agreement. The project-specific portion of the agreement includes schedules A through H. The project-specific portion of the agreement may include special terms and conditions in project-specific articles.

ARTICLE 1 PURPOSE

1.1 Purpose. The purpose of this award is to make grants to improve port facilities at coastal seaports, inland river ports, or Great Lakes ports. The parties will accomplish that purpose by achieving the following objectives:

- (1) timely completing the Project; and
- (2) ensuring that this award does not substitute for non-Federal investment in the Project, except as proposed in the Technical Application, if applicable, as modified by schedule D.

ARTICLE 2 MARAD ROLE

2.1 Administration. MARAD will administer this agreement.

2.2 MARAD Program Contacts.

Peter Simons
Director, Office of Port Infrastructure Development
DOT – Maritime Administration
1200 New Jersey Ave, SE
Washington, DC 20590
MAR-510
W21-308
Mailstop 3
(202) 366-8921
peter.simons@dot.gov

ARTICLE 3 RECIPIENT ROLE

3.1 Statements on the Project. The Recipient states that:

- (1) all material statements of fact in the Technical Application were accurate when that application was submitted; and
- (2) schedule E documents all material changes in the information contained in that application.

3.2 Statements on Authority and Capacity. The Recipient states that:

- (1) it has the authority to receive Federal financial assistance under this agreement;
- (2) it has the legal authority to complete the Project;
- (3) it has the capacity, including institutional, managerial, and financial capacity, to comply with its obligations under this agreement;
- (4) not less than the difference between the total eligible project costs listed in section 3 of schedule D and the PIDP Grant Amount listed in section 1 of schedule D is committed to fund the Project;
- (5) it has sufficient funds available to ensure that infrastructure completed or improved under this agreement will be operated and maintained in compliance with this agreement and applicable Federal law; and

- (6) the individual executing this agreement on behalf of the Recipient has authority to enter this agreement and make the statements in this article 3 and in section 18.7 on behalf of the Recipient.

3.3 MARAD Reliance. The Recipient acknowledges that:

- (1) if the Discretionary-CPF designation in section 5 of schedule F is “Discretionary”, MARAD relied on statements of fact in the Technical Application to select the Project to receive this award;
- (2) MARAD relied on statements of fact in both the Technical Application and this agreement to determine that the Recipient and the Project are eligible under the terms of the NOFO and Program Statute;
- (3) MARAD relied on statements of fact in both the Technical Application and this agreement to establish the terms of this agreement; and
- (4) if the Discretionary-CPF designation in section 5 of schedule F is “Discretionary”, MARAD’s selection of the Project to receive this award prevented awards under the NOFO to other eligible applicants.

3.4 Project Delivery.

- (a) The Recipient shall complete the Project under the terms of this agreement.
- (b) The Recipient shall ensure that the Project is financed, constructed, operated, and maintained in accordance with all Federal laws, regulations, and policies that are applicable to projects of MARAD.

3.5 Rights and Powers Affecting the Project.

- (a) The Recipient shall not take or permit any action that deprive it of any rights or powers necessary to the Recipient’s performance under this agreement without written approval of MARAD.
- (b) The Recipient shall act promptly, in a manner acceptable to MARAD, to acquire, extinguish, or modify any outstanding rights or claims of right of others that would interfere with the Recipient’s performance under this agreement.

3.6 Notification of Changes to Key Personnel. The Recipient shall notify MARAD within 30 calendar days of any change in key personnel who are identified in section 4 of schedule A.

ARTICLE 4 AWARD AMOUNT, OBLIGATION, AND TIME PERIODS

- 4.1 Federal Award Amount.** MARAD hereby awards a PIDP Grant to the Recipient in the amount listed in section 1 of schedule D as the PIDP Grant Amount.
- 4.2 Federal Funding Source.**
- (a) If section 4 of schedule F identifies the Funding Act as “IIJA,” then the PIDP Grant is from PIDP grant funding that was appropriated in division J of the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58 (Nov. 15, 2021).
 - (b) If section 4 of schedule F identifies the Funding Act as “FY2024,” then the PIDP Grant is from PIDP grant funding that was appropriated in the Consolidated Appropriations Act, 2024, Pub. L. No. 118-42 (Mar. 9, 2024).
 - (c) If section 4 of schedule F contains a table that lists separate amounts for “IIJA” and “FY2024,” then the amount listed for “IIJA” is from PIDP grant funding that was appropriated in division J of the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58 (Nov. 15, 2021) and the amount listed for “FY2024” is from PIDP grant funding that was appropriated in the Consolidated Appropriations Act, 2024, Pub. L. No. 118-42 (Mar. 9, 2024).
 - (d) If section 4 of schedule F identifies the Funding Act as something other than “FY2024” or “IIJA”, then the PIDP Grant includes PIDP grant funding that was appropriated under a different funding act than “FY2024” or “IIJA”.
- 4.3 Federal Obligations.** This agreement obligates for the budget period the amount listed in section 1 of schedule D as the PIDP Grant Amount.

ARTICLE 5 STATEMENT OF WORK, SCHEDULE, AND BUDGET CHANGES

- 5.1 Change Notification Requirement.** The Recipient shall notify MARAD within 30 calendar days of any change in circumstances or commitments that adversely affect the Recipient’s capacity or intent to complete the Project in compliance with this agreement. In that notice, the Recipient shall describe the change and what actions the Recipient has taken or plans to take to ensure completion of the Project. The notification requirement under this section 5.1 is separate from any requirements under this article 5 that the Recipient request modification of this agreement.
- 5.2 Scope and Statement of Work Changes.** If the Project’s activities differ from the activities described in schedule B, then the Recipient shall request a modification of this agreement to update schedule B.

5.3 Schedule Changes. If one or more of the following conditions are satisfied, then the Recipient shall request a modification of this agreement to update schedule C:

- (1) a completion date for the Project or a component of the Project is listed in section 2 of schedule C and the Recipient's estimate for that milestone changes to a date that is more than six months after the date listed in section 2 of schedule C;
- (2) a schedule change would require the budget period to continue after the budget period end date listed in section 1 of schedule C; or
- (3) a schedule change would require the period of performance to continue after the period of performance end date listed in section 1 of schedule C.

For other schedule changes, the Recipient shall follow the applicable procedures of MARAD and document the changes in writing.

5.4 Budget Changes.

- (a) The Recipient acknowledges that if the cost of completing the Project increases:
 - (1) that increase does not affect the Recipient's obligation under this agreement to complete the Project; and
 - (2) MARAD will not increase the amount of this award to address any funding shortfall.
- (b) The Recipient shall request a modification of this agreement to update schedule D if, in comparing the Project's budget to the amounts listed in section 3 of schedule D:
 - (1) the total "Non-Federal Funds" amount decreases; or
 - (2) the total eligible project costs amount decreases.
- (c) For budget changes that are not identified in section 5.4(b), the Recipient shall follow the applicable procedures of MARAD and document the changes in writing.
- (d) If there are Project Cost Savings, then the Recipient may propose to MARAD, in writing consistent with MARAD's requirements, to include in the Project specific additional activities that are within the scope of this award, as defined in section 1.1 and schedule B, and that the Recipient could complete with the Project Cost Savings.

In this agreement, "**Project Cost Savings**" means the difference between the actual eligible project costs and the total eligible project costs listed in section 3 of schedule D, but only if the actual eligible project costs are less than the total eligible project costs that are listed in section 3 of schedule D. There are no Project Cost Savings if the actual eligible project costs are equal to or greater than the total eligible project costs that are listed in section 3 of schedule D.

- (e) If there are Project Cost Savings and either the Recipient does not make a proposal under section 5.4(d) or MARAD does not accept the Recipient's proposal under section 5.4(d), then:
- (1) in a request under section 5.4(b), the Recipient shall reduce the PIDP award amount of the Federal Share by the Project Cost Savings; however, if the total eligible project costs that are listed in section 3 of schedule D are more than the total estimated project costs in the Technical Application, the Recipient may request to MARAD to only reduce the PIDP award amount of the Federal Share by the difference between the actual eligible project costs and the total estimated project costs in the Technical Application so long as the Recipient is providing under this agreement the non-Federal share amount committed to in the Technical Application; and
 - (2) if that modification reduces this award and MARAD had reimbursed costs exceeding the revised award, the Recipient shall refund to MARAD the difference between the reimbursed costs and the revised award.

In this agreement, “**Federal Share**” means the sum of the total “PIDP Funds” and “Other Federal Funds” amounts that are listed in section 3 of schedule D.

- (f) The Recipient acknowledges that amounts that are required to be refunded under section 5.4(e)(2) constitute a debt to the Federal Government that MARAD may collect under 2 C.F.R. 200.346 and the Federal Claims Collection Standards (31 C.F.R. parts 900–999).

5.5 MARAD Acceptance of Changes. MARAD may accept or reject modifications requested under this article 5, and in doing so may elect to consider only the interests of the PIDP grant program and MARAD. The Recipient acknowledges that requesting a modification under this article 5 does not amend, modify, or supplement this agreement unless MARAD accepts that modification request and the parties modify this agreement under section 17.1.

ARTICLE 6 GENERAL REPORTING TERMS

- 6.1 Report Submission.** The Recipient shall send all reports required by this agreement to all MARAD contacts who are listed in section 5 of schedule A and all MARAD contacts who are listed in section 2.2.
- 6.2 Alternative Reporting Methods.** MARAD may establish processes for the Recipient to submit reports required by this agreement, including electronic submission processes. If the Recipient is notified of those processes in writing, the Recipient shall use the processes required by MARAD.
- 6.3 Paperwork Reduction Act Notice.** Under 5 C.F.R. 1320.6, the Recipient is not required to respond to a collection of information that does not display a currently valid control

number issued by the Office of Management and Budget (the “OMB”). Collections of information conducted under this agreement are approved under OMB Control No. 2133- 0552.

ARTICLE 7 PROGRESS AND FINANCIAL REPORTING

- 7.1 Quarterly Project Progress Reports and Recertifications.** On or before the 20th day of the first month of each calendar year quarter and until the end of the budget period, the Recipient shall submit to MARAD a Quarterly Project Progress Report and Recertification, including a Federal Financial Report (SF-425) as an attachment, in the format and with the content described in exhibit C. If the date of this agreement is in the final month of a calendar year quarter, then the Recipient shall submit the first Quarterly Project Progress Report, Recertification, and SF-425 in the second calendar year quarter that begins after the date of this agreement.
- 7.2 Final Progress Reports and Financial Information.** No later than 120 days after the end of the budget period, the Recipient shall submit:
- (1) a Final Project Progress Report and Recertification in the format and with the content described in exhibit C for each Quarterly Project Progress Report and Recertification, including a final Federal Financial Report (SF-425); and
 - (2) any other information required under MARAD’s award closeout procedures.

ARTICLE 8 PERFORMANCE REPORTING

- 8.1 Baseline Performance Measurement.** If the Capital-Planning Designation in section 2 of schedule F is “Capital,” then:
- (1) the Recipient shall collect data for each performance measure that is identified in the Performance Measure Table in schedule G, accurate as of the Baseline Measurement Date that is identified in schedule G; and
 - (2) on or before the Baseline Report Date that is stated in schedule G, the Recipient shall submit a Baseline Performance Measurement Report that contains the data collected under this section 8.1 and a detailed description of the data sources, assumptions, variability, and estimated levels of precision for each performance measure that is identified in the Performance Measure Table in schedule G.
- 8.2 Post-construction Performance Measurement.** If the Capital-Planning Designation in section 2 of schedule F is “Capital,” then:

- (1) for each performance measure that is identified in the Performance Measure Table in schedule G with quarterly measurement frequency, for each of 12 consecutive calendar quarters, beginning with the first calendar quarter that begins after the Project substantial completion date, at least once during the quarter, the Recipient shall collect data for that performance measure;
- (2) for each performance measure that is identified in the Performance Measure Table in schedule G with annual measurement frequency, the Recipient shall collect data for that performance measure on at least three separate occasions: (i) once during the four consecutive calendar quarters that begin after the Project substantial completion date; (ii) once during the fourth calendar quarter after the first collection; and (iii) once during the eighth calendar quarter after the first collection; and
- (3) the Recipient shall submit to MARAD an annual Post-construction Performance Measurement Report by January 31 to report project performance for the prior calendar year. Post-construction reporting will begin one quarter after project substantial completion and continue for three years (12 quarters). All performance measures will be reported annually. The Post-construction Performance Measurement Report shall contain the data collected under this section 8.2 and shall state the dates when the data was collected.

If an external factor significantly affects the value of a performance measure collected under this section 8.2, then the Recipient shall identify that external factor in the Post-construction Performance Measurement Report and discuss its influence on the performance measure.

8.3 Project Outcomes Narrative. If the Capital-Planning Designation in section 2 of schedule F is “Capital,” then the final Post-construction Performance Measurement Report must also include a project outcomes narrative. The project outcomes narrative should include an overview of the project’s performance compared to the baseline and trend expectations. It should also include a discussion on the influence of external factors, if applicable.

ARTICLE 9 CIVIL RIGHTS AND TITLE VI

9.1 Civil Rights and Title VI.

- (a) Consistent with Executive Order 13985, “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government” (Jan. 20, 2021), Executive Order 14091, “Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government” (Feb. 16, 2023), and DOT Order 1000.12C, “The U.S. Department of Transportation Title VI Program” (June 11, 2021), the purpose of sections 9.1(b)–9.1(c) is to ensure that the Recipient has a plan to comply

with civil rights obligations and nondiscrimination laws, including Title VI and 49 C.F.R. part 21.

- (b) If the Recipient Type Designation in section 1 of schedule H is “Existing,” then the Recipient shall submit to MARAD either:
 - (1) not later than one month after the date of this agreement, documentation showing that the Recipient has complied with all reporting requirements under MARAD’s implementation of Title VI; or
 - (2) not later than six months after the date of this agreement, both a Title VI Plan and a Community Participation Plan, as those plans are described in chapter II, sections 3–4 of DOT Order 1000.12C.
- (c) If the Recipient Type Designation in section 1 of schedule H is “New,” then MARAD completed a Title VI Assessment of the Recipient, as described in chapter II, section 2 of DOT Order 1000.12C, before entering into this agreement, as documented in section 2 of schedule H.
- (d) In this section 9.1, “**Title VI**” means Title VI of the Civil Rights Act of 1964, Pub. L. No. 88-352 (codified at 42 U.S.C. 2000d to 2000d-4a).

9.2 Legacy Infrastructure and Facilities. In furtherance of the Americans with Disabilities Act of 1990 (ADA), Pub. L. No. 101-336 (codified at 42 U.S.C. 12101–12213), and Section 504 of the Rehabilitation Act of 1973, Pub. L. No. 93-112 (codified at 29 U.S.C. 794), not later than one year after the date of this agreement, the Recipient shall develop a plan to address any legacy infrastructure or facilities that are not compliant with ADA standards and are involved in, or closely associated with, the Project. Consistent with 49 C.F.R. part 27, even in the absence of prior discriminatory practice or usage, a Recipient administering a program or activity receiving Federal financial assistance is expected to take action to ensure that no person is excluded from participation in or denied the benefits of the program or activity on the basis of disability.

ARTICLE 10

CRITICAL INFRASTRUCTURE SECURITY AND RESILIENCE

10.1 Critical Infrastructure Security and Resilience.

- (a) Consistent with Presidential Policy Directive 21, “Critical Infrastructure Security and Resilience” (Feb. 12, 2013), and the National Security Presidential Memorandum on Improving Cybersecurity for Critical Infrastructure Control Systems (July 28, 2021), the Recipient shall consider physical and cybersecurity and resilience in planning, design, and oversight of the Project.
- (b) If the Security Risk Designation in section 6 of schedule F is “Elevated,” then the Recipient shall:

- (1) in the first Quarterly Project Progress Report and Recertification that the Recipient submits under section 7.1, identify a cybersecurity Point of Contact for the transportation infrastructure being improved in the Project; and
 - (2) in the second Quarterly Project Progress Report and Recertification that the Recipient submits under section 7.1, provide a plan for completing the requirements in section 10.1(c).
- (c) If the Security Risk Designation in section 6 of schedule F is “Elevated,” then not later than the eighth Quarterly Project Progress Report and Recertification that the Recipient submits under section 7.1, the Recipient shall include each of the following in a Quarterly Project Progress Report and Recertification that the Recipient submits under section 7.1:
- (1) a cybersecurity incident reporting plan for the transportation infrastructure being improved in the Project or a summary of that plan;
 - (2) a cybersecurity incident response plan for the transportation infrastructure being improved in the Project or a summary of that plan;
 - (3) the results of a self-assessment of the Recipient’s cybersecurity posture and capabilities or a summary of those results; and
 - (4) a description of any additional actions that the Recipient has taken to consider or address cybersecurity risk of the transportation infrastructure being improved in the Project.

ARTICLE 11 PIDP DESIGNATIONS

- 11.1 Effect of Urban or Rural Designation.** Based on information that the Recipient provided to MARAD, including the Technical Application, if applicable, section 1 of schedule F designates this award as an urban award or a rural award, as defined in the NOFO. The Recipient shall comply with the requirements that accompany that designation on geographic location and cost sharing.
- 11.2 Effect of Historically Disadvantaged Community.** If section 3 of schedule F lists “Yes” for the “HDC Designation,” then based on information that the Recipient provided to MARAD, including the Technical Application, MARAD determined that the Project will be carried out in a historically disadvantaged community, as defined in the NOFO. The Recipient shall incur a majority of the costs under this award in historically disadvantaged communities.
- 11.3 Effect of Discretionary or CPF Designation.**

- (a) If section 5 of schedule F lists “Discretionary,” for the “Discretionary-CPF Designation,” then the Recipient submitted an application for funding under the NOFO and MARAD selected the Project for funding under that NOFO.
- (b) If section 5 of schedule F lists “CPF,” for the “Discretionary-CPF Designation,” then Congress selected the Recipient to receive FY 2024 PIDP CPF through the Consolidated Appropriations Act, 2024, as identified in the table entitled “Community Project Funding/Congressionally Directed Spending” included in the Act’s accompanying explanatory statement, and that award is subject to the available provisos of the Consolidated Appropriations Act, 2024. MARAD is required to award CPF grants in accordance with the specific “recipient,” “project,” and “amount information” provided in the “Community Project Funding/Congressionally Directed Spending” table.

ARTICLE 12 CONTRACTING AND SUBAWARDS

12.1 Minimum Wage Rates. The Recipient shall include, in all contracts in excess of \$2,000 for work on the Project that involves labor, provisions establishing minimum rates of wages, to be predetermined by the United States Secretary of Labor, in accordance with the Davis-Bacon Act, 40 U.S.C. 3141–3148, that contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.

12.2 Buy America.

- (a) For the purpose of the award term at exhibit B, term B.5, the Project is “an infrastructure project.” The Recipient acknowledges that iron, steel, manufactured products, and construction materials used in the Project are subject to the Buy America preference in that award term and this agreement is not a waiver of that preference. All non-infrastructure spending is subject to the Buy American Act, 41 U.S.C. chapter 83.
- (b) If the Recipient uses iron, steel, manufactured products, or construction materials that are not produced in the United States in violation of the award term at exhibit B, term B.5, MARAD may disallow and deny reimbursement of costs incurred by the Recipient and take other remedial actions under article 13 and 2 C.F.R. 200.339–200.340.
- (c) Under 2 C.F.R. 200.322, as appropriate and to the extent consistent with law, the Recipient should, to the greatest extent practicable under this award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The Recipient shall include the requirements of 2 C.F.R. 200.322 in all subawards including all contracts and purchase orders for work or products under this award.
- (d) For all iron, steel, manufactured products, or construction materials incorporated into the Project and to which a Buy America preference applies, the manufacturer or supplier of

the item(s) should provide to the Recipient a signed certification statement attesting that each item procured under this award meets the applicable Buy America preference requirements. The Recipient must maintain on file any certifications received under this section 12.2(d) and provide to MARAD copies of any such certifications or other documentation supporting compliance upon request of MARAD pursuant to article 19 and 2 C.F.R. 200.334-200.338.

12.3 Small and Disadvantaged Business Requirements.

- (a) If any funds under this award are administered by or through a State Department of Transportation, the Recipient shall expend those funds in compliance with the requirements at 49 C.F.R. part 26 (“Participation by disadvantaged business enterprises in Department of Transportation financial assistance programs”).
- (b) If any funds under this award are not administered by or through a State Department of Transportation, the Recipient shall expend those funds in compliance with the requirements at 2 C.F.R. 200.321 (“Contracting with small businesses, minority businesses, women’s business enterprises, veteran-owned businesses, and labor surplus area firms”).

12.4 Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment. The Recipient acknowledges that Section 889 of Pub. L. No. 115-232 and 2 C.F.R. 200.216 prohibit the Recipient and all subrecipients from procuring or obtaining certain telecommunications and video surveillance services or equipment under this award.

12.5 Pass-through Entity Responsibilities.

- (a) If the Recipient makes a subaward under this award, the Recipient shall comply with the requirements on pass-through entities under 2 C.F.R. parts 200 and 1201, including 2 C.F.R. 200.331–200.333.
- (b) By accepting this award, the Recipient certifies that it either has systems in place to comply with the requirements set forth at 2 C.F.R. 200.331-333 and described in this section 12.5(b)(1)-(9) or will refrain from making subawards until the systems are designed and implemented:
 - (1) The Recipient is responsible for selecting subrecipients using a system for properly differentiating between subrecipients and procurement contractors under the standards at 2 C.F.R. 200.331.
 - (2) The Recipient must establish and follow a system that ensures all subaward agreements are in writing and contain all the elements required by 2 C.F.R. 200.332(b).
 - (3) Prior to making subawards under this award, the Recipient must ensure that each subrecipient has a Unique Entity Identifier.

- (4) The Recipient must ensure that subrecipients are aware that they are subject to the same requirements as those that apply to the pass-through entity's PIDP award, as required by 2 C.F.R. 200.332(b)(2), including but not limited to, applicable Buy America requirements, procurement standards, reporting subawards and executive compensation under the Federal Funding Accountability and Transparency Act, certifications regarding lobbying, and Title VI of the Civil Rights Act of 1964 requirements.
- (5) The Recipient must establish and follow a system for evaluating subrecipient risks of noncompliance with Federal statutes, regulations, and the terms and conditions of the subaward as required by 2 C.F.R. 200.332(c) and document that evaluation.
- (6) The Recipient must establish and follow a system for deciding whether to impose additional requirements on subrecipients based on risk factors as required by 2 C.F.R. 200.332(d).
- (7) The Recipient must establish and follow a system for monitoring subrecipient performance that includes the elements required by 2 C.F.R. 200.332(e) and report the results of the monitoring in the quarterly progress reports referenced in article 7 of this agreement.
- (8) The Recipient must verify that every subrecipient is audited as required by subpart F of 2 C.F.R. 200 when it is expected that the subrecipient's Federal awards expended during the respective fiscal year equaled or exceeded the threshold set forth in 2 C.F.R. 200.501.
- (9) The Recipient may not make a fixed amount subaward without prior approval from MARAD.

12.6 Disclosing Conflict of Interest.

- (a) In accordance with 2 C.F.R. 200.318(c)(1), the Recipient must establish and maintain written Standards of Conduct to address, resolve, and disclose to MARAD conflicts of interest affecting any contract or subaward and governing the performance of its employees that are engaged in or otherwise involved in the award or administration of third-party contracts. Additionally, the Recipient must be aware of conflict of interest issues a prospective contractor might have, including lack of impartiality, impaired objectivity, or unfair competitive advantage.
- (b) In accordance with 2 C.F.R. 200.318(c)(2), if the Recipient has a parent, affiliate, or subsidiary organization that is not a State, local government, or Indian tribe, the Recipient must also maintain written standards of conduct covering organizational conflicts of interest.
- (c) The Recipient must disclose in a timely manner, in writing, any potential or real conflicts of interest described in section 12.6(a)-(b) to MARAD pursuant to 2 C.F.R.

200.112, including the Recipient's approach for resolving or mitigating the conflict of interest.

ARTICLE 13 NONCOMPLIANCE AND REMEDIES

13.1 Noncompliance Determinations.

- (a) If MARAD determines that the Recipient may have failed to comply with the United States Constitution, Federal law, or the terms and conditions of this agreement, MARAD may notify the Recipient of a proposed determination of noncompliance. For the notice to be effective, it must be written and MARAD must include an explanation of the nature of the noncompliance, describe a remedy, state whether that remedy is proposed or effective at an already determined date, and describe the process through and form in which the Recipient may respond to the notice.
- (b) If MARAD notifies the Recipient of a proposed determination of noncompliance under section 13.1(a), the Recipient may, not later than 7 calendar days after the notice, respond to that notice in the form and through the process described in that notice. In its response, the Recipient may:
 - (1) accept the remedy;
 - (2) acknowledge the noncompliance, but propose an alternative remedy; or
 - (3) dispute the noncompliance.

To dispute the noncompliance, the Recipient must include in its response documentation or other information supporting the Recipient's compliance.

- (c) MARAD may make a final determination of noncompliance only:
 - (1) after considering the Recipient's response under section 13.1(b); or
 - (2) if the Recipient fails to respond under section 13.1(b), after the time for that response has passed.
- (d) To make a final determination of noncompliance, MARAD must provide a notice to the Recipient that states the bases for that determination.

13.2 Remedies.

- (a) If MARAD makes a final determination of noncompliance under section 13.1, MARAD may impose a remedy, including:
 - (1) additional conditions on the award;

- (2) any remedy permitted under 2 C.F.R. 200.339–200.340, including withholding of payments; disallowance of previously reimbursed costs, requiring refunds from the Recipient to MARAD; suspension or termination of the award; or suspension and disbarment under 2 C.F.R. part 180; or
 - (3) any other remedy legally available.
- (b) To impose a remedy, MARAD must provide a written notice to the Recipient that describes the remedy, but MARAD may make the remedy effective before the Recipient receives that notice.
 - (c) If MARAD determines that it is in the public interest, MARAD may impose a remedy, including all remedies described in section 13.2(a), before making a final determination of noncompliance under section 13.1. If it does so, then the notice provided under section 13.1(d) must also state whether the remedy imposed will continue, be rescinded, or modified.
 - (d) In imposing a remedy under this section 13.2 or making a public interest determination under section 13.2(c), MARAD may elect to consider the interests of only MARAD.
 - (e) The Recipient acknowledges that amounts that MARAD requires the Recipient to refund to MARAD due to a remedy under this section 13.2 constitute a debt to the Federal Government that MARAD may collect under 2 C.F.R. 200.346 and the Federal Claims Collection Standards (31 C.F.R. parts 900–999).
- 13.3 Other Oversight Entities.** Nothing in this article 13 limits any party’s authority to report activity under this agreement to the United States Department of Transportation Inspector General or other appropriate oversight entities.

ARTICLE 14 AGREEMENT TERMINATION

14.1 MARAD Termination.

- (a) MARAD may terminate this agreement and all of its obligations under this agreement if any of the following occurs:
 - (1) the Recipient fails to obtain or provide any non-PIDP Grant contribution or alternatives approved by MARAD as provided in this agreement and consistent with schedule D;
 - (2) a completion date for the Project or a component of the Project is listed in section 2 of schedule C and the Recipient fails to meet that milestone by six months after the date listed in section 2 of schedule C;

- (3) the Recipient fails to meet a milestone listed in section 3 of schedule C by the deadline date listed in that section for that milestone;
 - (4) the Recipient fails to comply with the terms and conditions of this agreement, including a material failure to comply with the project schedule in schedule C even if it is beyond the reasonable control of the Recipient;
 - (5) circumstances cause changes to the Project that MARAD determines are inconsistent with MARAD's basis for selecting the Project to receive a PIDP Grant; or
 - (6) MARAD determines that termination of this agreement is in the public interest.
- (b) In terminating this agreement under this section, MARAD may elect to consider only the interests of MARAD.
 - (c) This section 14.1 does not limit MARAD's ability to terminate this agreement as a remedy under section 13.2.
 - (d) The Recipient may request that MARAD terminate the agreement under this section 14.1.

14.2 Closeout Termination.

- (a) This agreement terminates on Project Closeout.
- (b) In this agreement, "**Project Closeout**" means the date that MARAD notifies the Recipient that the award is closed out. Under 2 C.F.R. 200.344, Project Closeout should occur no later than one year after the end of the period of performance.

14.3 Post-Termination Adjustments. The Recipient acknowledges that under 2 C.F.R. 200.345–200.346, termination of the agreement does not extinguish MARAD's authority to disallow costs, including costs that MARAD reimbursed before termination, and recover funds from the Recipient.

14.4 Non-Terminating Events.

- (a) The end of the budget period described under section 25.4 does not terminate this agreement or the Recipient's obligations under this agreement.
- (b) The end of the period of performance described under section 25.5 does not terminate this agreement or the Recipient's obligations under this agreement.
- (c) The cancellation of funds under section 16.2 does not terminate this agreement or the Recipient's obligations under this agreement.

14.5 Other Remedies. The termination authority under this article 14 supplements and does not limit MARAD's remedial authority under article 13 or 2 C.F.R. part 200, including 2 C.F.R. 200.339–200.340.

ARTICLE 15 COSTS, PAYMENTS, AND UNEXPENDED FUNDS

15.1 Limitation of Federal Award Amount. Under this award, MARAD shall not provide funding greater than the amount obligated under section 4.3. The Recipient acknowledges that MARAD is not liable for payments exceeding that amount, and the Recipient shall not request reimbursement of costs exceeding that amount.

15.2 Projects Costs. This award is subject to the cost principles at 2 C.F.R. 200 subpart E, including provisions on determining allocable costs and determining allowable costs.

15.3 Timing of Project Costs.

- (a) The Recipient shall not charge to this award costs that are incurred after the budget period.
- (b) Except as permitted under section 15.3(d)–(e), the Recipient shall not charge to this award costs that were incurred before the date of this agreement.
- (c) This agreement hereby terminates and supersedes any previous MARAD approval for the Recipient to incur costs under this award for the Project. Section 5 of schedule D is the exclusive MARAD approval of costs incurred before the date of this agreement.
- (d) If section 5 of schedule D identifies a pre-award approval under 2 C.F.R. 200.458 that will be reimbursed with Federal funds, then the Recipient may charge to this award, for payment from the PIDP Grant or other Federal amounts, costs that were incurred before the date of this agreement, were consistent with that approval, and would have been allowable if incurred during the budget period.
- (e) If MARAD approves a request from the Recipient under 46 U.S.C. 54301(a)(10)(B) and section 5 of schedule D describes that approval, then the Recipient may charge to this award, for payment from non-Federal amounts, costs that were incurred before the date of this agreement, were consistent with that approval, and would have been allowable if incurred during the budget period.

15.4 Recipient Recovery of Federal Funds. The Recipient shall make all reasonable efforts, including initiating litigation, if necessary, to recover Federal funds if MARAD determines, after consultation with the Recipient, that those funds have been spent fraudulently, wastefully, or in violation of Federal laws, or misused in any manner under this award. The Recipient shall not enter a settlement or other final position, in court or otherwise, involving the recovery of funds under the award unless approved in advance in writing by MARAD.

15.5 Unexpended Federal Funds. Any Federal funds that are awarded at section 4.1 but not expended on allocable, allowable costs remain the property of the United States.

15.6 Timing of Payments to the Recipient.

- (a) Reimbursement is the payment method for the PIDP grant program.
- (b) The Recipient shall not request reimbursement of a cost before the Recipient has entered into an obligation for that cost.

15.7 Payment Method.

(a) If the MARAD Payment System identified in section 6 of schedule A is “Delphi eInvoicing System,” then the Recipient shall complete all applicable forms and attach supporting documents, including the SF 270, in Delphi eInvoicing System, which is on-line and paperless, to request reimbursement. To obtain the latest version of these standard forms, visit <https://www.grants.gov/forms/>. The Recipient shall review the training on using Delphi eInvoicing System before submitting a request for reimbursement. To guide the Recipient when reviewing this training, MARAD provides the following additional information, which may change after execution of this agreement:

- (1) The Recipient may access the training from the MARAD “Delphi eInvoicing System” webpage at <https://einvoice.esc.gov>. The training is linked under the heading “Grantee Training.” The Recipient should click on “Grantee Training” to access the training.
- (2) A username and password are not required to access the on-line training. It is currently available, will be accessible 24/7, and will take approximately 10 minutes to review.
- (3) Once the above referenced training has been reviewed, Recipients must request and complete the External User Access Request form. Recipients can request the External User Access Request form by sending an email to a Grants/Contracting Officer who is identified in section 5 of schedule A or section 2.2. A request to establish access will be sent once the External User Access Request form is received.

(b) MARAD may deny a payment request that is not submitted using the method identified in this section 15.7.

15.8 Information Supporting Expenditures.

(a) If the MARAD Payment System identified in section 6 of schedule A is “Delphi eInvoicing System,” then when requesting reimbursement of costs incurred or credit for cost share incurred, the Recipient shall electronically submit and attach the SF 270 (Request for Advance or Reimbursement), shall identify the Federal share and the Recipient’s share of costs, and shall submit supporting cost detail to clearly document all

costs incurred. As supporting cost detail, the Recipient shall include a detailed breakout of all costs incurred, including direct labor, indirect costs, other direct costs, and travel.

- (b) If the Recipient submits a request for reimbursement that MARAD determines does not include or is not supported by sufficient detail, MARAD may deny the request or withhold processing the request until the Recipient provides sufficient detail.

15.9 Reimbursement Request Timing Frequency.

- (a) If the MARAD Payment System identified in section 6 of schedule A is “Delphi eInvoicing System,” the Recipient shall request reimbursement of a cost incurred as soon as practicable after incurring that cost. If the Recipient requests reimbursement for a cost more than 180 days after that cost was incurred, MARAD may deny the request for being untimely.
- (b) If the MARAD Payment System identified in section 6 of schedule A is “Delphi eInvoicing System,” then the Recipient should not request reimbursement more frequently than once every 30 days.

ARTICLE 16 LIQUIDATION, ADJUSTMENTS, AND FUNDS AVAILABILITY

16.1 Liquidation of Recipient Obligations.

- (a) The Recipient shall liquidate all obligations of award funds under this agreement not later than the earlier of (1) 120 days after the end of the period of performance or (2) the statutory funds cancellation date identified in section 16.2.
- (b) Liquidation of obligations and adjustment of costs under this agreement follow the requirements of 2 C.F.R. 200.344–200.346.

16.2 Funds Cancellation.

- (a) PIDP grant funding that was appropriated in division J of the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58 (Nov. 15, 2021) for fiscal year 2024, is canceled by statute after September 30, 2039, and then unavailable for any purpose, including adjustments.
- (b) PIDP grant funding that was appropriated in the Consolidated Appropriations Act, 2024, Pub. L. No. 118-42 (Mar. 9, 2024), or a previous annual appropriations act, remains available until expended.
- (c) Section 4.2 identifies the specific source or sources of funding for this award.

ARTICLE 17 AGREEMENT MODIFICATIONS

17.1 Bilateral Modifications. The parties may amend, modify, or supplement this agreement by mutual agreement in writing signed by MARAD and the Recipient. Either party may request to amend, modify, or supplement this agreement by written notice to the other party.

17.2 Unilateral Contact Modifications.

- (a) The Recipient may update the contacts who are listed in section 3 of schedule A by written notice to all of the MARAD contacts who are listed in section 5 of schedule A and section 2.2.
- (b) MARAD may update the contacts who are listed in section 5 of schedule A and section 2.2 by written notice to all of the Recipient contacts who are listed in section 3 of schedule A.

17.3 MARAD Unilateral Modifications.

- (a) MARAD may unilaterally modify this agreement to comply with Federal law, including the Program Statute.
- (b) To unilaterally modify this agreement under this section 17.3, MARAD must provide a notice to the Recipient that includes a description of the modification and state the date that the modification is effective.

17.4 Other Modifications. The parties shall not amend, modify, or supplement this agreement except as permitted under sections 17.1, 17.2, or 17.3. If an amendment, modification, or supplement is not permitted under section 17.1, not permitted under section 17.2, or not permitted under section 17.3, it is void.

ARTICLE 18 FEDERAL FINANCIAL ASSISTANCE, ADMINISTRATIVE, AND NATIONAL POLICY REQUIREMENTS

18.1 Uniform Administrative Requirements for Federal Awards. The Recipient shall comply with the obligations on non-Federal entities under 2 C.F.R. parts 200 and 1201.

18.2 Federal Law and Public Policy Requirements.

- (a) The Recipient shall ensure that Federal funding is expended in full accordance with the United States Constitution, Federal law, and statutory and public policy requirements:

including but not limited to, those protecting free speech, religious liberty, public welfare, the environment, and prohibiting discrimination.

- (b) The failure of this agreement to expressly identify Federal law applicable to the Recipient or activities under this agreement does not make that law inapplicable.

18.3 Federal Freedom of Information Act.

- (a) MARAD is subject to the Freedom of Information Act, 5 U.S.C. 552.
- (b) The Recipient acknowledges that the Technical Application and materials submitted to MARAD by the Recipient related to this agreement may become MARAD records subject to public release under 5 U.S.C. 552.

18.4 History of Performance. Under 2 C.F.R. 200.206, any Federal awarding agency may consider the Recipient's performance under this agreement, when evaluating the risks of making a future Federal financial assistance award to the Recipient.

18.5 Whistleblower Protection.

- (a) The Recipient acknowledges that it is a "grantee" within the scope of 41 U.S.C. 4712, which prohibits the Recipient from taking certain actions against an employee for certain disclosures of information that the employee reasonably believes are evidence of gross mismanagement of this award, gross waste of Federal funds, or a violation of Federal law related to this award.
- (b) The Recipient shall inform its employees in writing of the rights and remedies provided under 41 U.S.C. 4712, in the predominant native language of the workforce.

18.6 External Award Terms and Obligations.

- (a) In addition to this document and the contents described in article 26, this agreement includes the following additional terms as integral parts:
 - (1) Appendix A to 2 C.F.R. part 25: System for Award Management and Universal Identifier Requirements;
 - (2) Appendix A to 2 C.F.R. part 170: Reporting Subawards and Executive Compensation;
 - (3) 2 C.F.R. 175.15(b): Trafficking in Persons; and
 - (4) Appendix XII to 2 C.F.R. part 200: Award Term and Condition for Recipient Integrity and Performance Matters.
- (b) The Recipient shall comply with:
 - (1) 49 C.F.R. part 20: New Restrictions on Lobbying;

- (2) 49 C.F.R. part 21: Nondiscrimination in Federally-Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964;
- (3) 49 C.F.R. part 27: Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance; and
- (4) Subpart B of 49 C.F.R. part 32: Governmentwide Requirements for Drug-free Workplace (Financial Assistance).

18.7 Incorporated Certifications. The Recipient makes the statements in the following certifications, which are incorporated by reference:

- (1) Appendix A to 49 C.F.R. part 20 (Certification Regarding Lobbying).

ARTICLE 19

MONITORING, FINANCIAL MANAGEMENT, CONTROLS, AND RECORDS

19.1 Recipient Monitoring and Record Retention.

- (a) The Recipient shall monitor activities under this award, including activities under subawards and contracts, to ensure:
 - (1) that those activities comply with this agreement; and
 - (2) that funds provided under this award are not expended on costs that are not allowable under this award or not allocable to this award.
- (b) If the Recipient makes a subaward under this award, the Recipient shall monitor the activities of the subrecipient in compliance with 2 C.F.R. 200.332(e) and section 12.5 of this agreement.
- (c) The Recipient shall retain records relevant to the award as required under 2 C.F.R. 200.334.

19.2 Financial Records and Audits.

- (a) The Recipient shall keep all project accounts and records that fully disclose the amount and disposition by the Recipient of the award funds, the total cost of the Project, and the amount or nature of that portion of the cost of the Project supplied by other sources, and any other financial records related to the Project.
- (b) The Recipient shall keep accounts and records described under section 19.2(a) in accordance with a financial management system that meets the requirements of 2 C.F.R. 200.301–200.303 and 2 C.F.R. 200 subpart F and will facilitate an effective audit in accordance with 31 U.S.C. 7501–7506.

- (c) The Recipient shall separately identify expenditures under the FY 2024 PIDP Grants in financial records required for audits under 31 U.S.C. 7501–7506. Specifically, the Recipient shall:
- (1) list expenditures under that program separately on the schedule of expenditures of Federal awards required under 2 C.F.R. 200 subpart F, including “FY 2024” in the program name; and
 - (2) list expenditures under that program on a separate row under Part II, Item 1 (“Federal Awards Expended During Fiscal Period”) of Form SF-SAC, including “FY 2024” in column c (“Additional Award Identification”).

19.3 Internal Controls. The Recipient shall establish and maintain internal controls as required under 2 C.F.R. 200.303.

19.4 MARAD Record Access. MARAD may access Recipient records related to this award under 2 C.F.R. 200.337 in order to make audits, examinations, excerpts, and transcripts. This right also includes timely and reasonable access to the Recipient’s personnel for the purpose of interview and discussion related to such documents.

ARTICLE 20 NOTICES

20.1 Form of Notice.

- (a) For a notice under this agreement to be valid, it must be in writing.
- (b) For a notice to MARAD under this agreement to be valid, it must be signed and dated by an individual with authority to act on behalf of the Recipient.

20.2 Method of Notice to MARAD.

- (a) For a notice to MARAD under this agreement to be valid, it must be sent by one or more of the following: (1) email; (2) a national transportation company with all fees prepaid and receipt of delivery; or (3) by registered or certified mail with return receipt requested and postage prepaid.
- (b) For a notice to MARAD under this agreement to be valid, it must be addressed to all of the MARAD contacts who are listed in section 5 of schedule A and section 2.2.
- (c) Except as specified in section 20.2(d), a valid notice to MARAD under this agreement will be deemed to have been received on the earliest of (1) when the email is received by MARAD, as recorded by MARAD’s email systems, and (2) when indicated on the receipt of delivery by national transportation company or mail.

- (d) If a valid notice or other communication to MARAD under this agreement is received after 5:00 p.m. on a business day, or on a day that is not a business day, then the notice will be deemed received at 9:00 a.m. on the next business day.

20.3 Method of Notice to Recipient.

- (a) Except as specified in section 20.3(d), for a notice to the Recipient under this agreement to be valid, it must be sent by one or more of the following: (1) email; (2) a national transportation company with all fees prepaid and receipt of delivery; or (3) registered or certified mail with return receipt requested and postage prepaid.
- (b) For a notice to the Recipient under this agreement to be valid, it must be addressed to all of the Recipient contacts who are listed in section 3 of schedule A.
- (c) A valid notice to the Recipient under this agreement is effective when received by the Recipient. It will be deemed to have been received:
 - (1) for email, on receipt; and, for other delivery, when indicated on the receipt of delivery by national transportation company or mail; or
 - (2) if the Recipient rejects or otherwise refuses to accept it, or if it cannot be delivered because of a change in address or representatives for which no notice was given, then on that rejection, refusal, or inability to deliver.
- (d) For a notice to the Recipient under article 13 to be valid, it must be sent by one or more of the following: (1) a national transportation company with all fees prepaid and receipt of delivery or (2) registered or certified mail with return receipt requested and postage prepaid.

20.4 Recipient Contacts for Notice. If a Recipient contact who is listed in section 3 of schedule A is unable to receive notices under this agreement on behalf of the Recipient, then the Recipient shall promptly identify one or more replacement contacts under section 17.2(a).

20.5 Additional Mandatory Notices to MARAD. The Recipient shall notify MARAD if any one of the following conditions is satisfied, not later than 5 business days after that condition is satisfied:

- (1) the Recipient receives a communication related to this award or this agreement from the United States Comptroller General, a Federal Inspector General, or any other oversight entity; or
- (2) the Recipient becomes aware of waste, fraud, abuse, or potentially criminal activity related to this agreement.

20.6 Scope of Notice Requirements. The form and method requirements of this article 20, including sections 20.1, 20.2, and 20.3, apply only to communications for which this agreement expressly uses one or more of the following words: “notice”; “notification”;

“notify”; or “notifying.” This article 20 does not control or limit other communication between the parties about the Project or this agreement.

ARTICLE 21 INFORMATION REQUESTS

21.1 MARAD Information Requests.

- (a) By notice, MARAD may request from the Recipient any information that MARAD determines is necessary to fulfill its oversight responsibilities under the Program Statute or other Federal law.
- (b) If MARAD requests information from the Recipient under section 21.1(a), the Recipient shall respond in the form and at the time detailed in the notice requesting information.
- (c) This section 21.1 does not limit the Recipient’s obligations under section 19.4 or 2 C.F.R. 200.337 to provide access to Recipient records.

ARTICLE 22 ASSIGNMENT

- 22.1 Assignment Prohibited.** The Recipient shall not transfer to any other entity any discretion granted under this agreement, any right to satisfy a condition under this agreement, any remedy under this agreement, or any obligation imposed under this agreement.

ARTICLE 23 WAIVER

23.1 Waivers.

- (a) A waiver of a term of this agreement granted by MARAD will not be effective unless it is in writing and signed by an authorized representative of MARAD.
- (b) A waiver of a term of this agreement granted by MARAD on one occasion will not operate as a waiver on other occasions.
- (c) If MARAD fails to require strict performance of a term of this agreement, fails to exercise a remedy for a breach of this agreement, or fails to reject a payment during a breach of this agreement, that failure does not constitute a waiver of that term or breach.

ARTICLE 24 ADDITIONAL TERMS AND CONDITIONS

24.1 Disclaimer of Federal Liability. MARAD shall not be responsible or liable for any damage to property or any injury to persons that may arise from, or be incident to, performance or compliance with this agreement.

24.2 Relocation and Real Property Acquisition.

- (a) To the greatest extent practicable under State law, the Recipient shall comply with the land acquisition policies in 49 C.F.R. 24 subpart B and shall pay or reimburse property owners for necessary expenses as specified in that subpart.
- (b) The Recipient shall provide a relocation assistance program offering the services described in 49 C.F.R. 24 subpart C and shall provide reasonable relocation payments and assistance to displaced persons as required in 49 C.F.R. 24 subparts D–E.
- (c) The Recipient shall make available to displaced persons, within a reasonable period of time prior to displacement, comparable replacement dwellings in accordance with 49 C.F.R. 24 subpart E.

24.3 Real Property and Equipment Disposition.

- (a) In accordance with 2 C.F.R. 200.311, when real property is no longer needed for the originally authorized purpose, the Recipient or subrecipient must obtain disposition instructions from the Federal awarding agency or pass-through entity.
- (b) In accordance with 2 C.F.R. 200.313 and 1201.313, equipment acquired under this award must be used by the Recipient or subrecipient in the Project as long as needed, whether or not the Project continues to be supported by the Federal award. When no longer needed for the originally awarded Project or another Federal award:
 - (1) if the entity that acquired the equipment is a State, that entity shall dispose of that equipment in accordance with State laws and procedures;
 - (2) if the entity that acquired the equipment is an Indian Tribe, the Indian Tribe shall dispose of that equipment in accordance with tribal laws and procedures. If such laws and procedures do not exist, Indian Tribes must follow the guidance in 2 C.F.R. 200.313; and
 - (3) if the entity that acquired the equipment is neither a State nor an Indian Tribe, that entity shall request disposition instructions from MARAD within 120 days after that entity determines that the equipment is no longer needed.
- (c) In accordance with 2 C.F.R. 200.443(d), the distribution of the proceeds from the disposition of equipment must be made in accordance with 2 C.F.R. 200.313–200.316 and 2 C.F.R. 1201.313.

- (d) The Recipient shall ensure compliance with this section 24.3 for all tiers of subawards under this award.

24.4 Environmental Review.

- (a) The Recipient shall not begin final design, begin construction, or take other actions that represent an irretrievable commitment of resources for the Project unless and until:
 - (1) MARAD complies with the National Environmental Policy Act, 42 U.S.C. 4321 to 4370m-12, Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, Section 7 of the Endangered Species Act, 16 U.S.C. 1531, and any other applicable environmental laws and regulations; and
 - (2) MARAD provides the Recipient with written communication stating that the environmental review process is complete.
- (b) The Recipient acknowledges that:
 - (1) MARAD's actions under section 24.4(a) depend on the Recipient conducting necessary environmental analyses and submitting necessary environmental documents to MARAD; and
 - (2) applicable environmental statutes and regulations may require the Recipient to prepare and submit documents to other Federal, State, and local agencies.
- (c) To the extent practicable and consistent with Federal law, the Recipient shall coordinate all environmental investigations, reviews, and consultations as a single process.
- (d) The activities described in schedule B and other information described in this agreement may inform environmental decision-making processes, but the parties do not intend this agreement to document the alternatives under consideration under those processes. If a build alternative is selected that does not align with schedule B or other information in this agreement, then:
 - (1) the parties may amend this agreement under section 17.1 for consistency with the selected build alternative; or
 - (2) if MARAD determines that the condition at section 14.1(a)(5) is satisfied, MARAD may terminate this agreement under section 14.1(a)(5).
- (e) The Recipient shall complete any mitigation activities described in the environmental documents and correspondence for the Project, including the terms and conditions contained in the required permits and authorizations for the Project. Section 3 of schedule B identifies environmental documents and correspondence describing mitigation activities and permits, but the absence of a document or correspondence from that section does not relieve the Recipient of any compliance obligations. The Recipient acknowledges that should a Mitigation Monitoring and Compliance Plan be required under 40 C.F.R. 1505.3, the Recipient may be required to provide regular and/or ad-hoc

reports to MARAD regarding the status of the agreed upon mitigation measures as part of a Mitigation Monitoring and Compliance Plan. MARAD may determine that any failure to complete the mitigation activities and permits within the Project environmental documents or complete requirements under a Mitigation Monitoring and Compliance Plan is non-compliance of the grant agreement subject to the remedies identified in article 13.

- (f) The Recipient acknowledges that, unless MARAD indicates otherwise in writing, upon termination of an agreement for the Project entered into under 36 C.F.R. 800.6(c) or 36 C.F.R. 800.14(b), the Recipient shall immediately cease all Project activities related to the “undertaking” as defined in that agreement, pending MARAD’s determinations under 36 C.F.R. 800 and applicable law.

ARTICLE 25 MANDATORY AWARD INFORMATION

25.1 Information Contained in a Federal Award. For 2 C.F.R. 200.211:

- (1) the “Federal Award Date” is the date of this agreement, as defined under section 27.2;
- (2) the “Assistance Listings Number” is 20.823 and the “Assistance Listings Title” is “Port Infrastructure Development Program”; and
- (3) this award is not for research and development.

25.2 Federal Award Identification Number. The Federal Award Identification Number is listed in section 7 of schedule A.

25.3 Recipient’s Unique Entity Identifier. The Recipient’s Unique Entity Identifier, as defined at 2 C.F.R. 25.415, is listed in section 2 of schedule A.

25.4 Budget Period. The budget period for this award begins on the date of this agreement and ends on the budget period end date that is listed in section 1 of schedule C. In this agreement, “budget period” is used as defined at 2 C.F.R. 200.1.

25.5 Period of Performance. The period of performance for this award begins on the date of this agreement and ends on the period of performance end date that is listed in section 1 of schedule C. In this agreement, “period of performance” is used as defined at 2 C.F.R. 200.1.

ARTICLE 26 CONSTRUCTION AND DEFINITIONS

26.1 Schedules. This agreement includes the following schedules as integral parts:

Schedule A	Administrative Information
Schedule B	Project Activities
Schedule C	Award Dates and Project Schedule
Schedule D	Award and Project Financial Information
Schedule E	Changes from Application
Schedule F	PIDP Designations
Schedule G	PIDP Performance Measurement Information
Schedule H	Civil Rights and Title VI

26.2 Exhibits. The following exhibits, which are located in the document titled “Exhibits to MARAD Grant Agreements Under the Fiscal Year 2024 Port Infrastructure Development Program Grants,” dated August 2, 2024, and available at <https://www.maritime.dot.gov/grants/federal-grant-assistance/federal-grant-assistance>, are part of this agreement.

Exhibit A	Applicable Federal Laws and Regulations
Exhibit B	Additional Standard Terms
Exhibit C	Quarterly Project Progress Reports and Recertifications: Format and Content

26.3 Construction.

(a) In these General Terms and Conditions:

- (1) unless expressly specified, a reference to a section or article refers to that section or article in these General Terms and Conditions;
- (2) a reference to a section or other subdivision of a schedule listed in section 26.1 will expressly identify the relevant schedule; and
- (3) there are no references to articles or sections in project-specific portions of the agreement that are not contained in schedules listed in section 26.1.

(b) If a provision in these General Terms and Conditions or the exhibits conflicts with a provision in the project-specific portion of the agreement, then the project-specific portion of the agreement prevails. If a provision in the exhibits conflicts with a provision in these General Terms and Conditions, then the provision in these General Terms and Conditions prevails.

26.4 Integration. This agreement constitutes the entire agreement of the parties relating to the PIDP grant program and awards under that program and supersedes any previous

agreements, oral or written, relating to the PIDP grant program and awards under that program.

26.5 Definitions. In this agreement, the following definitions apply:

“General Terms and Conditions” means this document, including articles 1–27.

“Program Statute” means the collective statutory text:

- (1) at 46 U.S.C. 54301;
- (2) under the heading “Port Infrastructure Development Program” in title VIII of division J of the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58 (Nov. 15, 2021), and all other provisions of that act that apply to amounts appropriated under that heading; and
- (3) under the heading “Port Infrastructure Development Program” in title I of division F of the Consolidated Appropriations Act, 2024 Pub. L. No. 118-42 (Mar. 9, 2024), and all other provisions of that act that apply to amounts appropriated under that heading.
- (4) If a Funding Act not described in (1)-(3) above is identified in section 4 of schedule F, then all provisions of that act that apply to amounts appropriated under that heading for the PIDP shall also apply.

“Project” means the project proposed in the Technical Application, as modified by the negotiated provisions of this agreement, including schedules A–H.

“PIDP Grant” means an award of funds that were made available under the NOFO or as specified for CPF in the table entitled “Community Project Funding/Congressionally Directed Spending” included in the explanatory statement to the Consolidated Appropriations Act, 2024.

“Technical Application” means the application identified in section 1 of schedule A, including Standard Form 424 and all information and attachments submitted with that form through Grants.gov, as applicable.

26.6 References to Times of Day. All references to times of day in this agreement are deemed references to that time at the prevailing local time in Washington, DC.

ARTICLE 27 AGREEMENT EXECUTION AND EFFECTIVE DATE

27.1 Counterparts. This agreement may be executed in counterparts, which constitute one document. The parties intend each countersigned original to have identical legal effect.

27.2 Effective Date. The agreement will become effective when all parties have signed it. The date of this agreement will be the date this agreement is signed by the last party to sign it. This instrument constitutes a PIDP Grant when MARAD's authorized representative signs it.

U.S. DEPARTMENT OF TRANSPORTATION
MARITIME ADMINISTRATION

EXHIBITS TO MARAD GRANT AGREEMENTS UNDER THE
FISCAL YEAR 2024 PORT INFRASTRUCTURE DEVELOPMENT PROGRAM
GRANTS

AUGUST 2, 2024

EXHIBIT A

APPLICABLE FEDERAL LAWS AND REGULATIONS

By entering into this agreement for a FY 2024 PIDP Grant, the Recipient assures and certifies, with respect to this Grant, that it will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of Federal funds for this Project. Performance under this agreement shall be governed by and in compliance with the following requirements, as applicable, to the type of organization of the Recipient and any applicable sub-recipients. The applicable provisions to this agreement include, but are not limited to, the following:

General Federal Legislation

- a. Davis-Bacon Act - 40 U.S.C. §§ 3141, et seq.
- b. Federal Fair Labor Standards Act - 29 U.S.C. §§ 201, et seq.
- c. Hatch Act - 5 U.S.C. §§ 1501, et seq.
- d. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 - 42 U.S.C. §§ 4601, et seq.
- e. National Historic Preservation Act of 1966 - 54 U.S.C. § 306108
- f. Archeological and Historic Preservation Act of 1974 - 54 U.S.C. §§ 312501, et seq.
- g. Native American Graves Protection and Repatriation Act - 25 U.S.C. §§ 3001, et seq.
- h. Clean Air Act – 42 U.S.C. §§ 7401, et seq.
- i. Clean Water Act - 33 U.S.C. §§ 1251, et seq.
- j. Endangered Species Act – 16 U.S.C. §§ 1531 et seq.
- k. Coastal Zone Management Act – 16 U.S.C. §§ 1451 et seq.
- l. Flood Disaster Protection Act of 1973 – 42 U.S.C. §§ 4001 et seq.
- m. Age Discrimination Act of 1975, as amended - 42 U.S.C. §§ 6101, et seq.
- n. American Indian Religious Freedom Act, 42 U.S.C. 1996
- o. Drug Abuse Office and Treatment Act of 1972, as amended, 21 U.S.C. §§ 1101, et seq.
- p. The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, P.L. 91-616, as amended - 42 U.S.C. §§ 4541, et seq.
- q. Sections 523 and 527 of the Public Health Service Act of 1912, as amended, 42 U.S.C. §§ 290dd through 290dd-2
- r. Architectural Barriers Act of 1968 - 42 U.S.C. §§ 4151, et seq.
- s. Contract Work Hours and Safety Standards Act - 40 U.S.C. §§ 3701, et seq.
- t. Copeland Anti-kickback Act, as amended - 18 U.S.C. § 874 and 40 U.S.C. § 3145
- u. National Environmental Policy Act of 1969 - 42 U.S.C. §§ 4321, et seq.
- v. Wild and Scenic Rivers Act – 16 U.S.C. §§ 1271, et seq.
- w. Single Audit Act of 1984 - 31 U.S.C. §§ 7501, et seq.
- x. Americans with Disabilities Act of 1990 - 42 U.S.C. §§ 12101, et seq.
- y. Title IX of the Education Amendments of 1972, as amended - 20 U.S.C. §§ 1681–1683 and §§ 1685–1687
- z. Section 504 of the Rehabilitation Act of 1973, as amended - 29 U.S.C. § 794
- aa. Title VI of the Civil Rights Act of 1964 - 42 U.S.C. §§ 2000d, et seq.
- bb. Limitation on Use of Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions – 31 U.S.C. § 1352
- cc. Freedom of Information Act - 5 U.S.C. § 552, as amended

- dd. Magnuson-Stevens Fishery Conservation and Management Act – 16 U.S.C. §§ 1801, et seq.
- ee. Farmland Protection Policy Act of 1981 – 7 U.S.C. §§ 4201, et seq.
- ff. Fish and Wildlife Coordination Act of 1956 – 16 U.S.C. §§ 661, et seq.
- gg. Section 9 of the Rivers and Harbors Act and the General Bridge Act of 1946 - 33 U.S.C. §§ 401 and 525
- hh. Section 4(f) of the Department of Transportation Act of 1966, 49 U.S.C. § 303 and 23 U.S.C. § 138
- ii. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) – 42 U.S.C. §§ 9601, et seq.
- jj. Safe Drinking Water Act – 42 U.S.C. §§ 300f, et seq.
- kk. The Wilderness Act – 16 U.S.C. §§ 1131, et seq.
- ll. Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 – 42 U.S.C. § 6901 et seq.
- mm. Migratory Bird Treaty Act 16 U.S.C. §§ 703, et seq.
- nn. The Federal Funding Accountability and Transparency Act of 2006, as amended (Pub. L. No. 109–282, as amended by section 6202 of Pub. L. No. 110–252)
- oo. Cargo Preference Act of 1954 – 46 U.S.C. § 55305
- pp. Section 889 of the John D. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232
- qq. Build America, Buy America Act – Pub. L. No. 117-58, div. G §§ 70901–70927
- rr. The Buy American Act, 41 U.S.C. chapter 83

Executive Orders

- a. Executive Order 11246 – Equal Employment Opportunity
- b. Executive Order 11990 – Protection of Wetlands
- c. Executive Order 11988 – Floodplain Management
- d. Executive Order 12372 – Intergovernmental Review of Federal Programs
- e. Executive Order 12549 – Debarment and Suspension
- f. Executive Order 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- g. Executive Order 13166 – Improving Access to Services for Persons With Limited English Proficiency
- h. Executive Order 13985 – Advancing Racial Equity and Support for Underserved Communities Through the Federal Government
- i. Executive Order 14005 – Ensuring the Future is Made in All of America by All of America’s Workers
- j. Executive Order 14008 – Tackling the Climate Crisis at Home and Abroad
- k. Executive Order 14096 – Revitalizing Our Nation’s Commitment to Environmental Justice for All
- l. Executive Order 14025 – Worker Organizing and Empowerment
- m. Executive Order 14052 – Implementation of the Infrastructure Investment and Jobs Act
- n. Executive Order 14112 - Reforming Federal Funding and Support for Tribal Nations to Better Embrace Our Trust Responsibilities and Promote the Next Era of Tribal Self-Determination
- o. Executive Order 14091, Further Advancing Racial Equity and Support for Underserved

Revised 2024-06-26 A-3 Communities Through the Federal Government

General Federal Regulations

- a. Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards – 2 C.F.R. Parts 200, 1201
- b. Non-procurement Suspension and Debarment – 2 C.F.R. Parts 180, 1200
- c. Procedures for predetermination of wage rates – 29 C.F.R. Part 1
- d. Contractors and subcontractors on public building or public work financed in whole or part by loans or grants from the United States – 29 C.F.R. Part 3
- e. Labor standards provisions applicable to contracts governing federally financed and assisted construction (also labor standards provisions applicable to non-construction contracts subject to the Contract Work Hours and Safety Standards Act) – 29 C.F.R. Part 5
- f. Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and federally assisted contracting requirements) – 41 C.F.R. Parts 60, et seq.
- g. New Restrictions on Lobbying – 49 C.F.R. Part 20
- h. Nondiscrimination in Federally Assisted Programs of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 – 49 C.F.R. Part 21
- i. Uniform relocation assistance and real property acquisition for Federal and Federally assisted programs – 49 C.F.R. Part 24
- j. Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance – 49 C.F.R. Part 25
- k. Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance – 49 C.F.R. Part 27
- l. DOT's implementation of DOJ's ADA Title II regulations compliance procedures for all programs, services, and regulatory activities relating to transportation under 28 C.F.R. Part 35
- m. Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Transportation – 49 C.F.R. Part 28
- n. Denial of public works contracts to suppliers of goods and services of countries that deny procurement market access to U.S. contractors – 49 C.F.R. Part 30
- o. Governmentwide Requirements for Drug-Free Workplace (Financial Assistance) – 49 C.F.R. Part 32
- p. DOT's implementing ADA regulations for transit services and transit vehicles, including the DOT's standards for accessible transportation facilities in Part 37, Appendix A – 49 C.F.R. Parts 37 and 38
- q. Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs – 49 C.F.R. Part 26 (as applicable under section 12.3 of this agreement)
- r. Preference for Privately Owned Commercial U.S. Flag Vessels – 46 C.F.R. Part 381
- s. Buy America Preferences for Infrastructure Projects – 2 C.F.R. 184
- t. National Environmental Policy Act implementing regulations– 40 C.F.R. 1500 - 1508

Specific assurances required to be included in the FY 2024 PIDP Grant agreement by any of the above laws, regulations, or circulars are hereby incorporated by reference into this agreement.

EXHIBIT B
ADDITIONAL STANDARD TERMS

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TERM B.1
TITLE VI ASSURANCE
(Implementing Title VI of the Civil Rights Act of 1964, as amended)

**ASSURANCE CONCERNING NONDISCRIMINATION IN FEDERALLY-ASSISTED
PROGRAMS AND ACTIVITIES RECEIVING OR BENEFITING FROM FEDERAL
FINANCIAL ASSISTANCE**

(Implementing the Rehabilitation Act of 1973, as amended, and the Americans With Disabilities
Act, as amended)

49 C.F.R. Parts 21, 25, 27, 37 and 38

The United States Department of Transportation (USDOT)

Standard Title VI/Non-Discrimination Assurances

DOT Order No. 1050.2A

By signing and submitting the Technical Application and by entering into this agreement under the FY 2024 PIDP, the Recipient **HEREBY AGREES THAT**, as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation (DOT), through the Maritime Administration (MARAD), it is subject to and will comply with the following:

Statutory/Regulatory Authorities

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 C.F.R. Part 21 (entitled *Non-discrimination In Federally-Assisted Programs Of The Department Of Transportation—Effectuation Of Title VI Of The Civil Rights Act Of 1964*);
- 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);

The preceding statutory and regulatory cites hereinafter are referred to as the “Acts” and “Regulations,” respectively.

General Assurances

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

“No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise

subjected to discrimination under any program or activity,” for which the Recipient receives Federal financial assistance from DOT, including MARAD.

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Non-discrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these non-discrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

Specific Assurances

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its Federally assisted FY 2024 PIDP Grant:

1. The Recipient agrees that each “activity,” “facility,” or “program,” as defined in §§ 21.23 (b) and 21.23 (e) of 49 C.F.R. § 21 will be (with regard to an “activity”) facilitated, or will be (with regard to a “facility”) operated, or will be (with regard to a “program”) conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.
2. The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection with the FY 2024 PIDP Grant and, in adapted form, in all proposals for negotiated agreements regardless of funding source:

“The Recipient, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.”

3. The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations.
4. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.
5. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.

6. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.
7. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:
 - a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
 - b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:
 - a. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
 - b. the period during which the Recipient retains ownership or possession of the property.
9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.
10. Maintain records of Title VI, Title IX, and ADA investigations, complaints, and lawsuits alleging discrimination on the basis of race, color, national origin, sex, age, or disability that are attributed to the Recipient. To the extent permitted by law, the records shall include the date that the investigation, lawsuit, or complaint was filed; a summary of the allegation(s); the status of the investigation, lawsuit, or complaint; and actions taken by the Recipient in response, or final findings related to, the investigation, lawsuit, or complaint. The Recipient must submit a summary of these records that includes de-identified aggregate data, upon request by MARAD, sufficient to determine whether the Recipient is in compliance with Federal non-discrimination requirements. If MARAD determines that the provided information is insufficient to determine whether the Recipient is in compliance with Federal non-discrimination requirements, then the parties will come to a mutually-agreed-to resolution about the information the Recipient should submit.

11. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

By signing this ASSURANCE, the Recipient also agrees to comply (and require any sub-recipients, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing MARAD's access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by MARAD. You must keep records, reports, and submit the material for review upon request to MARAD, or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

The Recipient gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the FY 2024 PIDP. This ASSURANCE is binding on the Recipient, other recipients, sub-recipients, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the FY 2024 PIDP.

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Maritime Administration (MARAD), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 C.F.R. Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or MARAD to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or MARAD, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or MARAD may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant

thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or MARAD may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX B

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Specific Assurance 4:

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the Recipient will accept title to the lands and maintain the project constructed thereon in accordance with the Consolidated Appropriations Act, 2024, Pub. L. No. 118-42 (Mar. 9, 2024), the regulations for the administration of the FY 2024 PIDP, and the policies and procedures prescribed by the Maritime Administration (MARAD) of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the Recipient all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto Recipient and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the Recipient, its successors and assigns.

The Recipient, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the Recipient will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX C

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the Recipient pursuant to the provisions of Specific Assurance 7(a):

- A. The (Recipient, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add “as a covenant running with the land”] that:
 1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (Recipient, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
- B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Non-discrimination covenants, Recipient will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*
- C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the Recipient will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the Recipient and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX D

CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by Recipient pursuant to the provisions of Specific Assurance 7(b):

- A. The (Recipient, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, “as a covenant running with the land”) that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (Recipient, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
- B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, Recipient will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*
- C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, Recipient will there upon revert to and vest in and become the absolute property of Recipient and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 C.F.R. Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 C.F.R. Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 U.S.C. § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 C.F.R. Parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. § 1681 et seq).

TERM B.2
CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS -- PRIMARY COVERED TRANSACTIONS

2 C.F.R. Parts 180 and 1200

These assurances and certifications are applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring MARAD approval or that is estimated to cost \$25,000 or more – as defined in 2 C.F.R. Parts 180 and 1200.

By signing and submitting the Technical Application and by entering into this agreement under the FY 2024 PIDP, the Recipient is providing the assurances and certifications for First Tier Participants and Lower Tier Participants in the FY 2024 PIDP Grant, as set out below.

1. Instructions for Certification – First Tier Participants:

a. The prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms “covered transaction,” “civil judgment,” “debarred,” “suspended,” “ineligible,” “participant,” “person,” “principal,” and “voluntarily excluded,” as used in this clause, are defined in 2 C.F.R. Parts 180 and 1200. “First Tier Covered Transactions” refers to any covered transaction between a Recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a Recipient or subrecipient of

Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers to any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions,” provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment, including a civil settlement, rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior MARAD approval or estimated to cost \$25,000 or more - 2 C.F.R. Parts 180 and 1200)

a. The prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms “covered transaction,” “civil settlement,” “debarred,” “suspended,” “ineligible,” “participant,” “person,” “principal,” and “voluntarily excluded,” as used in this clause, are defined in 2 C.F.R. Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a Recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a Recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered

transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction,” without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

TERM B.3
REQUIREMENTS REGARDING DELINQUENT TAX LIABILITY OR A FELONY
CONVICTION UNDER ANY FEDERAL LAW

As required by sections 744 and 745 of Title VII, Division E of the Consolidated Appropriations Act, 2023, Pub. L. No. 117-328 (Dec. 29, 2022) and similar provisions in subsequent appropriations acts, and implemented through USDOT Order 4200.6, the funds provided under this award shall not be used to enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to, any corporation that:

- (1) Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless a Federal agency has considered suspension or debarment of the corporation and made a determination that suspension or debarment is not necessary to protect the interests of the Government; or
- (2) Was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless a Federal agency has considered suspension or debarment of the corporation and made a determination that suspension or debarment is not necessary to protect the interests of the Government.

The Recipient therefore agrees:

1. **Definitions.** For the purposes of this exhibit, the following definitions apply:

“**Covered Transaction**” means a transaction that uses any funds under this award and that is a contract, memorandum of understanding, cooperative agreement, grant, loan, or loan guarantee.

“**Felony Conviction**” means a conviction within the preceding 24 months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the United States Code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. 3559.

“**Participant**” means the Recipient, an entity who submits a proposal for a Covered Transaction, or an entity who enters into a Covered Transaction.

“**Tax Delinquency**” means an unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

2. **Mandatory Check in the System for Award Management.** Before entering a Covered Transaction with another entity, a Participant shall check the System for Award Management (the “SAM”) at <http://www.sam.gov/> for an entry describing that entity.

3. **Mandatory Certifications.** Before entering a Covered Transaction with another entity, a Participant shall require that entity to:

- (1) Certify whether the entity has a Tax Delinquency; and
- (2) Certify whether the entity has a Felony Conviction.

4. **Prohibition.** If

- (1) the SAM entry for an entity indicates that the entity has a Tax Delinquency or a Federal Conviction;
- (2) an entity provides an affirmative response to either certification in section 3; or
- (3) an entity’s certification under section 3 was inaccurate when made or became inaccurate after being made

then a Participant shall not enter or continue a Covered Transaction with that entity unless MARAD has determined in writing that suspension or debarment of that entity are not necessary to protect the interests of the Government.

5. **Mandatory Notice to MARAD.**

- (a) If the SAM entry for a Participant indicates that the Participant has a Tax Delinquency or a Felony Conviction, the Recipient shall notify MARAD in writing of that entry.
- (b) If a Participant provides an affirmative response to either certification in section 1, the Recipient shall notify MARAD in writing of that affirmative response.
- (c) If the Recipient knows that a Participant’s certification under section 1 was inaccurate when made or became inaccurate after being made, the Recipient shall notify MARAD in writing of that inaccuracy.

6. **Flow Down.** For all Covered Transactions, including all tiers of subcontracts and subawards, the Recipient shall:

- (1) require the SAM check in section 2;
- (2) require the certifications in section 3;
- (3) include the prohibition in section 4; and

- (4) require all Participants to notify the Recipient in writing of any information that would require the Recipient to notify MARAD under section 5.

TERM B.4

RECIPIENT POLICY TO BAN TEXT MESSAGING WHILE DRIVING

(a) *Definitions.* The following definitions are intended to be consistent with the definitions in DOT Order 3902.10, Text Messaging While Driving (Dec. 30, 2009) and Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving (Oct. 1, 2009). For clarification purposes, they may expand upon the definitions in the executive order.

For the purpose of this Term B.4, “**Motor Vehicles**” means any vehicle, self-propelled or drawn by mechanical power, designed and operated principally for use on a local, State or Federal roadway, but does not include a military design motor vehicle or any other vehicle excluded under Federal Management Regulation 102-34-15.

For the purpose of this Term B.4, “**Driving**” means operating a motor vehicle on a roadway, including while temporarily stationary because of traffic congestion, a traffic signal, a stop sign, another traffic control device, or otherwise. It does not include being in your vehicle (with or without the motor running) in a location off the roadway where it is safe and legal to remain stationary.

For the purpose of this Term B.4, “**Text messaging**” means reading from or entering data into any handheld or other electronic device (including, but not limited to, cell phones, navigational tools, laptop computers, or other electronic devices), including for the purpose of Short Message Service (SMS) texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include the use of a cell phone or other electronic device for the limited purpose of entering a telephone number to make an outgoing call or answer an incoming call, unless this practice is prohibited by State or local law. The term also does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to remain stationary.

For the purpose of this Term B.4, the “**Government**” includes the United States Government and State, local, and tribal governments at all levels.

(b) *Workplace Safety.* In accordance with Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving (Oct. 1, 2009) and DOT Order 3902.10, Text Messaging While Driving (Dec. 30, 2009), the Recipient, subrecipients, contractors, and subcontractors are encouraged to:

(1) adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers including policies to ban text messaging while driving—

(i) Company-owned or -rented vehicles or Government-owned, leased or rented vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct workplace safety initiatives in a manner commensurate with the size of the business, such as—

(i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(c) *Subawards and Contracts*. To the extent permitted by law, the Recipient shall insert the substance of this exhibit, including this paragraph (c), in all subawards, contracts, and subcontracts under this award that exceed the micro-purchase threshold, other than contracts and subcontracts for the acquisition of commercially available off-the-shelf items.

TERM B.5
**REQUIRED USE OF AMERICAN IRON, STEEL, MANUFACTURED PRODUCTS,
AND CONSTRUCTION MATERIALS**

This award term implements § 70914(a) of the Build America, Buy America Act, Pub. L. No. 117-58, div. G, tit. IX, subtit. A, 135 Stat. 429, 1298 (2021), Office of Management and Budget (OMB) Memorandum M-24-02, “Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure”, and 2 C.F.R. part 184.

Requirement to Use Iron, Steel, Manufactured Products, and Construction Materials Produced in the United States.

The Recipient shall not use funds provided under this award for an infrastructure project unless:

- (1) all iron and steel used in the project are produced in the United States—this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
- (2) all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product; and
- (3) all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

Incorporation into an infrastructure project.

The Buy America preference in this award term only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project, but are not an integral part of the structure or permanently affixed to the infrastructure project.

Categorization of articles, materials, and supplies.

An article, material, or supply should only be classified into one of the following categories: (i) Iron or steel products; (ii) Manufactured products; (iii) Construction materials; or (iv) Section 70917(c) materials. An article, material, or supply should not be considered to fall into multiple categories. In some cases, an article, material, or supply may not fall under any of the categories listed in this paragraph. The classification of an article, material, or supply as falling into one of the categories listed in this paragraph must be made based on its status at the time it is brought to the work site for incorporation into an infrastructure project. In general, the work site is the

location of the infrastructure project at which the iron, steel, manufactured products, and construction materials will be incorporated.

Application of the Buy America Preference by category.

An article, material, or supply incorporated into an infrastructure project must meet the Buy America Preference for only the single category in which it is classified.

Determining the cost of components for manufactured products.

In determining whether the cost of components for manufactured products is greater than 55 percent of the total cost of all components, use the following instructions:

- (a) For components purchased by the manufacturer, the acquisition cost, including transportation costs to the place of incorporation into the manufactured product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (b) For components manufactured by the manufacturer, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (a), plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the manufactured product.

Waivers.

When necessary, the Recipient may apply for, and the USDOT may grant, a waiver from the Buy America preference in this award term.

A request to waive the application of the Buy America preference must be in writing. The USDOT will provide instructions on the waiver process and on the format, contents, and supporting materials required for any waiver request. Waiver requests are subject to public comment periods of no less than 15 days and must be reviewed by the Office of Management and Budget (OMB) Made in America Office.

When the USDOT has made a determination that one of the following exceptions applies, the awarding official may waive the application of the Buy America preference in any case in which the USDOT determines that:

- (1) applying the Buy America preference would be inconsistent with the public interest;
- (2) the types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality; or
- (3) the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent.

There may be instances where an award qualifies, in whole or in part, for an existing waiver described at <https://www.transportation.gov/office-policy/transportation-policy/made-in-america>.

Definitions

“Buy America preference” means the “domestic content procurement preference” set forth in section 70914 of the Build America, Buy America Act, which requires the head of each Federal agency to ensure that none of the funds made available for a Federal award for an infrastructure project may be obligated unless all of the iron, steel, manufactured products, and construction materials incorporated into the project are produced in the United States.

“Component” means an article, material, or supply, whether manufactured or unmanufactured, incorporated directly into: a manufactured product; or, where applicable, an iron or steel product.

“Construction materials” means articles, materials, or supplies that consist of only one of the items listed in paragraph (1) of this definition, except as provided in paragraph (2) of this definition. To the extent one of the items listed in paragraph (1) contains as inputs other items listed in paragraph (1), it is nonetheless a construction material.

(1) The listed items are:

- (i) Non-ferrous metals;
- (ii) Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- (iii) Glass (including optic glass);
- (iv) Fiber optic cable (including drop cable);
- (v) Optical fiber;
- (vi) Lumber;
- (vii) Engineered wood; and
- (viii) Drywall.

(2) Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material.

“Infrastructure” means public infrastructure projects in the United States, which includes, at a minimum, the structures, facilities, and equipment for roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property; and structures, facilities, and equipment that generate, transport, and distribute energy including electric vehicle (EV) charging.

“Infrastructure project” means any activity related to the construction, alteration, maintenance, or repair of infrastructure in the United States regardless of whether infrastructure is the primary purpose of the project. See also paragraphs (c) and (d) of 2 C.F.R. 184.4.

“Iron or steel products” means articles, materials, or supplies that consist wholly or predominantly of iron or steel or a combination of both.

“Manufactured products” means:

- (1) Articles, materials, or supplies that have been:
 - (i) Processed into a specific form and shape; or
 - (ii) Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.
- (2) If an item is classified as an iron or steel product, a construction material, or a section 70917(c) material under 2 C.F.R. 184.4(e) and the definitions set forth in this section, then it is not a manufactured product. However, an article, material, or supply classified as a manufactured product under 2 C.F.R. 184.4(e) and paragraph (1) of this definition may include components that are construction materials, iron or steel products, or section 70917(c) materials.

“Manufacturer” means the entity that performs the final manufacturing process that produces a manufactured product.

“Predominantly of iron or steel or a combination of both” means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components.

“Produced in the United States” means:

- (1) In the case of iron or steel products, all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) In the case of manufactured products:
 - (i) The product was manufactured in the United States; and
 - (ii) The cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard that meets or exceeds this standard has been established under applicable law or regulation for determining the minimum amount of domestic content of the manufactured product. The costs of components of a manufactured product are determined according to 2 C.F.R. 184.5, as outlined above in this award term.

- (3) In the case of construction materials, all manufacturing processes for the construction material occurred in the United States. *See* section 2 C.F.R. 184.6 for more information on the meaning of “all manufacturing processes” for specific construction materials.

“Section 70917(c) materials” means cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives. See section 70917(c) of the Build America, Buy America Act.

EXHIBIT C
QUARTERLY PROJECT PROGRESS REPORTS AND RECERTIFICATIONS:
FORMAT AND CONTENT

- 1. Purpose.** The purpose of the Quarterly Project Progress Reports and Recertifications under this agreement for the FY 2024 PIDP are to ensure that the project scope, schedule, and budget will be maintained to the maximum extent possible.
- 2. Format and Content.** The Recipient shall produce a quarterly cost, schedule, and status report that contains the sections enumerated in the following list. At the discretion of MARAD, modifications or additions can be made to produce a quarterly reporting format that will most effectively serve both the Recipient and MARAD. Some projects will have a more extensive quarterly status than others. For smaller projects, MARAD may determine that the content of the quarterly reports will be streamlined and project status meetings will be held on a less-frequent basis. The first quarterly progress report should include a detailed description and, where appropriate, drawings of the items funded.

 - (a) Project Overall Status.** This section provides an overall status of the project’s scope, schedule and budget. The Recipient shall note and explain any deviations from the scope of work, the schedule, or the budget that are described in this agreement.
 - (b) Project Significant Activities and Issues.** This section provides highlights of key activities, accomplishments, and issues occurring on the project during the previous quarter. Activities and deliverables to be reported on should include meetings, audits and other reviews, design packages submitted, advertisements, awards, construction submittals, construction completion milestones, submittals related to any applicable Recovery Act requirements, media or Congressional inquiries, value engineering/constructability reviews, environmental permit approvals, compliance with environmental mitigation measures, subrecipient monitoring, and other items of significance.
 - (c) Action Items/Outstanding Issues.** This section should draw attention to, and track the progress of, highly significant or sensitive issues requiring action and direction in order to resolve. The Recipient should include administrative items and outstanding issues that could have a significant or adverse effect on the project’s scope, schedule, or budget. Status, responsible person(s), and due dates should be included for each action item/outstanding issue. Action items requiring action or direction should be included in the quarterly status meeting agenda. The action items/outstanding issues may be dropped from this section upon full implementation of the remedial action, and upon no further monitoring anticipated.
 - (d) Project Scope Overview.** The purpose of this section is to provide a further update regarding the project scope. If the original scope contained in the grant agreement is still accurate, this section can simply state that the scope is unchanged.

(e) **Project Schedule.** An updated master program schedule reflecting the current status of the program activities should be included in this section. A Gantt (bar) type chart is probably the most appropriate for quarterly reporting purposes, with the ultimate format to be agreed upon between the Recipient and MARAD. It is imperative that the master program schedule be integrated, i.e., the individual contract milestones tied to each other, such that any delays occurring in one activity will be reflected throughout the entire program schedule, with a realistic completion date being reported. Narratives, tables, and/or graphs should accompany the updated master program schedule, basically detailing the current schedule status, delays and potential exposures, and recovery efforts. The following information should also be included:

- Current overall project completion percentage vs. latest plan percentage.
- Completion percentages vs. latest plan percentages for major activities such as right-of-way, major or critical design contracts, major or critical construction contracts, and significant force accounts or task orders. A schedule status description should also be included for each of these major or critical elements.
- Any delays or potential exposures to milestone and final completion dates. The delays and exposures should be quantified, and overall schedule impacts assessed. The reasons for the delays and exposures should be explained, and initiatives being analyzed or implemented in order to recover the schedule should be detailed.

(f) **Project Cost.** An updated cost spreadsheet reflecting the current forecasted cost vs. the latest approved budget vs. the baseline budget should be included in this section. One way to track project cost is to show: (1) Baseline Budget, (2) Latest Approved Budget, (3) Current Forecasted Cost Estimate, (4) Expenditures or Commitments to Date, and (5) Variance between Current Forecasted Cost and Latest Approved Budget. Line items should include all significant cost centers, such as prior costs, right-of-way, preliminary engineering, environmental mitigation, general engineering consultant, section design contracts, construction administration, utilities, construction packages, force accounts/task orders, wrap-up insurance, construction contingencies, management contingencies, and other contingencies. The line items can be broken-up in enough detail such that specific areas of cost change can be sufficiently tracked and future improvements made to the overall cost estimating methodology. A Program Total line should be included at the bottom of the spreadsheet. Narratives, tables, and/or graphs should accompany the updated cost spreadsheet, basically detailing the current cost status, reasons for cost deviations, impacts of cost overruns, and efforts to mitigate cost overruns. The following information should be provided:

- Reasons for each line item deviation from the approved budget, impacts resulting from the deviations, and initiatives being analyzed or implemented in order to recover any cost overruns.

- Transfer of costs to and from contingency line items, and reasons supporting the transfers.
- Speculative cost changes that potentially may develop in the future, a quantified dollar range for each potential cost change, and the current status of the speculative change. Also, a comparison analysis to the available contingency amounts should be included, showing that reasonable and sufficient amounts of contingency remain to keep the project within the latest approved budget.
- Detailed cost breakdown of the general engineering consultant (GEC) services (if applicable), including such line items as contract amounts, task orders issued (amounts), balance remaining for tasks, and accrued (billable) costs.
- Federal obligations and/or disbursements for the project, compared to planned obligations and disbursements.

(g) Federal Financial Report (SF-425). The Federal Financial Report (SF-425) is a financial reporting form used throughout the Federal Government Grant system. Recipients shall complete this form and attach it to each quarterly Project Progress and Monitoring Report. The form is available at <https://www.grants.gov/forms/forms-repository/post-award-reporting-forms>.

(h) Certifications.

- i. A certification that the Recipient is in compliance with 2 C.F.R. 200.303 (Internal Controls) and 2 C.F.R. part 200, subpart F (Audit Requirements), as applicable.
- ii. The certification required under 2 C.F.R. 200.415(a).
- iii. If the Recipient has made subawards under the grant, a certification affirming that the Recipient has established comprehensive monitoring plans and procedures for subrecipients benefiting from pass-through funds.