

114-19 APPENDIX A
TECHNICAL SPECIFICATIONS
FOR
SUPPLY, DELIVER, RENTAL, INSTALL AND REMOVE MATTING PRODUCTS TO SUPPORT JEA PROJECTS
REVISION 0, DATED 6.10.2019

1. GENERAL

- 1.1 These Technical Specifications define the technical requirements applicable to supply, transporting, deliver, ferrying, installation, rental and removal of matting systems at various locations within JEA.
- 1.2 The work shall be performed at locations along JEA distribution and transmission lines with wet and/or poor soil conditions which require mat installations to allow JEA equipment access to perform work.
- 1.3 The specified work includes, labor, supervision, equipment, tools, consumable supplies and materials necessary to deliver, unload, install, reload and remove matting systems from each assigned work location.
- 1.4 The Contractor shall be allowed to use high density polyethylene (HDPE), composite, hardwood, wood or hybrid type mats or pads, such as those manufactured by "Durabase" and/or "EmTek" or other similar approved matting products during the contract life of this specification.
- 1.5 The Contractor shall reference the Bid Workbook supplied in this specification. The Bid Workbook lists the various bid items required in this specification. JEA will use an evaluated bid method analysis to determine the low bidder for this specification.
- 1.6 The specified work requires the use of specialized equipment and/or manpower experienced in mat or pad installation around energized power lines with voltages up to 230,000 volts.
- 1.7 The mats supplied and installed under this specification are typically used for short duration projects lasting one to two weeks. The mats, as installed, shall be capable of withstanding the weights of a 125' bucket truck and a 200 ton crane.
- 1.8 JEA reserves the right to negotiate discounts for longer term rental periods with the Contractor and/or seek bids from other companies not presently under contract to JEA for these services.
- 1.9 In conjunction with the applicable sections of the Occupational Safety and Health Act (OSHA), the Contractor shall take precautions, at its expense and included in the bid, as necessary to:
 - 1.15.1 Not stack mats underneath a distribution or transmission circuit. The Contractor is cautioned that OSHA minimum approach distances, mandated working distances to/around energized power lines, must be maintained at all times.
 - 1.15.2 Protect all workmen engaged in the performance of the work specified.
 - 1.15.3 Protect the Public from hazardous conditions.
 - 1.15.4 Place and maintain necessary guards and barriers, lights, signs, etc. as necessary.
- 1.10 The JEA Project Engineer for this work is:

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2. PROJECT DESCRIPTION

JEA is seeking the services of a "Turn Key" matting contractor capable of supplying, transporting, delivering, ferrying, renting, unloading, installing, reloading and removing matting and installations for JEA projects.

The work locations shall generally be wet and/or soft soil conditions found throughout JEA's system. It includes wetlands, swamps, creek and ditch crossings and similar situations requiring matting.

Pricing shall be based upon items listed in the JEA workbook and as described in the technical specifications.

The Contractor shall note that access to each work location will vary. The work will require the Contractor to use trailers of various lengths to access each work location.

The Contractor shall use equipment, trailers, and installation methods and take precautions which minimize damage to city/state roads and rights of ways, private roads, culverts, sodded areas, concrete, ditches, JEA patrol roads, JEA rights of way and JEA property.

Areas which are damaged, due to the Contractors negligence or use of improper equipment for the situation, shall be returned/restored to the previous "As Found" condition by the Contractor at his/her expense.

JEA shall restore work areas, at JEA expense, to "As Found" condition when the proper equipment and work methods are used.

Many of JEA's work locations will require use of short length trailers to deliver/remove mats for the assigned project work site.

3. PROJECT EXECUTION

3.1 JEA will identify projects requiring matting and request a field meeting with the Contractor to review site conditions.

3.2 The following items shall be discussed at each site meeting:

- Project access.
- Project requirements.
- The maximum trailer length to be used for site delivery.
- Determine number/type of mats required.
- Determine length/width of matted entry access road.
- Size and locations of equipment pads required for JEA equipment use.
- Proposed project start and end dates.
- Document/Discuss "As Found" Condition.
- Determine installation time.

3.3 Weather permitting; the contractor shall work continuously 10 hours a day until all required mats are installed.

3.4 The Contractor shall supply a "Competent Person" who is the Contractor's Company Supervisor for each project.

The Competent Person shall have a minimum of three years demonstrated experience with matting supply, installation and removal around energized power lines. The Competent Person shall have an assigned mobile cell phone and be available (and answer the phone directly) to JEA 24 hours a day during each project.

4. CODES AND STANDARDS

Perform the project work in accordance with applicable requirements of the latest versions of the codes and standards referenced herein and in the Solicitation.

4.1 Latest Version. Unless a particular version is designated, all references to codes and standards shall, in each instance, be understood to be the current version of the code or standard in effect (including all amendments).

4.2 Conflicts. For materials or workmanship specified by association, trade, Federal, State, local codes and standards, comply with the requirements of the referenced code or standard. Where the requirements of referenced codes and standards conflict with each other, generally, the most stringent requirements apply. Where the requirements of referenced codes and

standards conflict with the technical requirements stipulated herein, request clarification from JEA's Project Engineer before proceeding.

4.3 Codes. The project work performed shall comply with relevant portions of the following codes:

- National Electrical Safety Code (ANSI C2).
- Federal and State Occupational Safety and Health Act (OSHA)
- Code of Federal Regulations
- EPA

4.4 Standards. The project work performed shall comply with relevant portions of industry accepted standards published by the following institutes, associations, and societies:

- American Institute of Steel Construction (AISC)
- American Iron and Steel Institute (AISI)
- American National Standard Institute (ANSI)
- American Society of Civil Engineers (ASCE)
- American Society of Mechanical Engineers (ASME)
- American Society for Testing and Materials (ASTM)
- Institute of Electrical and Electronics Engineers, Inc. (IEEE)
- National Electrical Manufacturer's Association (NEMA)
- Underwriters' Laboratories, Inc. (UL)
- Edison Electric Institute

5. MATERIAL AND EQUIPMENT

5.1 General.

5.1.1 All material shall be supplied by the Contractor.

5.2 Owner-Furnished Materials **(Not Applicable)**

5.3 Contractor Furnished Materials

5.3.1 All material to be installed under this project is contractor supplied.

5.3.2 If requested, the Contractor shall perform engineering load calculations and verify the matting situation meets industry standards and site conditions. The cost of performing the engineering load calculation(s) is included in the pricing submitted in the bid workbook.

5.4 Contractor Supplied Equipment.

5.4.1 The Contractor shall supply all equipment required for a "turnkey" mat installation. It includes but is not limited to; load, transport, deliver, ferry, unload, install, remove, load and remove the matting from each work site.

6. PROTECTION OF THE ENVIRONMENT

Maintain work areas free from environmental pollution that would be in violation of any federal, state, or local ordinances or regulations.

6.1 Environmental Compliance

The Contractor shall be familiar, and otherwise comply with Environmental Regulations as they apply to the erection work under this Contract unless relieved from compliance with specified Environmental Regulations

identified in this Contract. Contractor shall furthermore notify the Owner of the need to obtain additional regulatory authorizations, including permits, prior to applying for such authorizations.

6.2 Waterways.

Observe the rules and regulations of the state, local, and federal agencies prohibiting the pollution of stream or river waters by dumping any refuse, rubbish, or debris therein.

8. SHORTS AND GROUNDING ELECTRICAL CIRCUITS

- 8.1 The Matting system shall be installed within electric distribution circuit and/or Transmission circuit right of ways.
- 8.2 The electrical circuit(s) shall remain "Energized", with voltages up to 230 KV, at any time the Contractor is working at each work site.
- 8.3 The voltage of each circuit and minimum approach distance shall be provided by the JEA Project Engineer at each project meeting.
- 8.4 No circuit outages and no shorting/grounding connections or conductors shall be installed during each mat installation.

9 Contractor Equipment and Safety

- 9.1 **The Contractor and any subcontractors attention is directed to section 1.2.6 of the Solicitation titled "Safety Qualification Requirements" for important JEA safety qualification requirements.**
- 9.2 The Contractor and his employees shall demonstrate adequate knowledge of safety and environmental regulations. The Contractor is again reminded that many of these towers were previously painted with a lead based paint. See the bid form for the specific locations.
- 9.3 Contractor's equipment shall be in good condition and capable of performing this work. Contractor will be required to demonstrate to JEA's satisfaction that equipment being used has been completely refurbished and in good working order.
- 9.4 Contractor shall employ adequate safety measures to ensure the safety of the job site and his employees.
- 9.5 The Contractor shall immediately notify the Project Engineer of any on the job injury or safety incident.

10 CONDITIONS FOR PERFORMING THE WORK

- 10.1 All materials provided by Contractor shall be good quality and meet all standards and codes governing the material for the type of use of the material
- 10.2 Contractor shall repair any excessive damage to all roads, R/W's and adjacent property as directed by and to the satisfaction of JEA.
- 10.3 Contractor shall be responsible at all times for providing security to the work site, equipment and materials. In addition, Contractor shall provide site security for contractor worker safety.
- 10.4 Contractor shall be responsible for obtaining and coordinating worker access to JEA transmission facilities, located on Blount Island, with the proper authorities working for the Jacksonville Port Authority.
- 10.5 Contractor's key employee(s) shall attend the classes listed below prior to the start of the work. Contractor shall be responsible for expenses related to his employees attending the class. JEA does not charge a fee for attending the Radio/Hold Tag class.

JEA's Substation Entry Class --- One half day, 4 hour class
Radio/Hold Tag Class --- One half day, 4 hour class
OSHA 10 Hour Class ---- One and half day class from the Florida Safety Council and other National Training Companies.
Safety Leadership Development class -- One ten (10) hour day class from the Florida Safety Council
JEA Specific Training --- 2 hour class

11 TYPICAL MATTING SITUATIONS

- 11.1 Entry/access roads shall be 14' wide minimum. If the access road changes direction, the Contractor shall fill in the inside curve, with mats, such that our equipment continuously drives on matted surfaces. The access road shall be located at least 15' off the face of each pole/structure unless otherwise noted at the site meeting.
- 11.2 Small equipment pads located parallel to the entrance road shall be 14' wide minimum and 50' long centered at the pole/structure.
- 11.3 Large equipment pads shall be 28' wide by 50' long located adjacent to or angled away from the access road and centered at the pole/structure.
- 11.4 Poles completely enclosed (surrounded) by mats shall be 50' long x 28' wide in the front and back sections with 28' width of each side.
- 11.5 Transportation cost shall be based upon full trailer load quantities.
- 11.6 Specific site situations may require the equipment pad dimensions to change from the dimensions listed above and in the Bid Workbook. JEA will pay for additional mats as the situation dictates based upon the prices listed in the Bid Workbook.
- 11.7 JEA will pay for additional mats as required to fill in the inside sections of the mat installation to allow a complete matted surface for our equipment to drive on. Payment will be based upon the prices listed in the Bid Workbook.
- 11.8 Composite based mats shall have a minimum size of 7.5' x 14'. JEA shall use an effective size of 6.5' x 13' dimension for composite mat calculations and installations.
- 11.9 All matting installations shall be bolted, locked, and/or installed in a workmanship manner which prevents the mats from moving during JEA use.

12 SOIL CONDITIONS

- 12.1 The following description shall generally be used as a field guide to determine how much weight the ground will support and used to determine the matting methods required for each work location. Situations may arise requiring a more detailed soil bearing pressure mat analysis. If or when we have one of those situations, JEA may request a detailed quote for the work from the Contractor and/or seek bids from other matting contractors not presently under contract to JEA.
 - 12.1.1 Type 1 ---- A 200 pound person, standing on one leg, would sink from mid-calf to their knees or more if walking on the surface.
 - 12.1.2 Type 2 --- A 200 pound person, standing on one leg, would sink up to or slightly past their ankles to mid-calf if walking on the surface.
 - 12.1.3 Type 3 --- A 200 pound person, standing on one leg, would sink to the top of their shoe if walking on the surface.

13 INFORMATION TO BE PROVIDED BY THE CONTRACTOR WITH EACH PROJECT QUOTE

The Contractor shall also provide the following information to the Project Manager prior to starting each project:

Detailed itemized cost estimate based upon the pricing as bid and matting requirements determined during the site visit.
Length of time required to install the mats.
Length of time required to remove the mats after JEA use is complete.

JEA's use of the mats will end immediately after our use is completed. The rental period shall end as soon as JEA completes using the mats for JEA's purpose. The Contractor shall pick up the mats at their convenience thereafter.

14 JEA REQUESTED MATERIAL PURCHASES

JEA may request the Contractor to purchase material required for use on a matting project. JEA shall reimburse the Contractor on a cost plus 10% basis for purchasing, coordinating delivery and handling the purchase.

15 MAINTENANCE OF TRAFFIC

JEA shall supply employees to perform maintenance of traffic activities or instruct the Contractor to obtain the services of a Maintenance of Traffic Service company and reimburse the Contractor on a cost plus 10% basis.

16 JEA EQUIPMENT WEIGHTS

JEA will use the following types of equipment performing required work on the matting installations.

- 16.1.1 125 Foot Bucket truck ----- 77,000 pounds
- 16.1.2 Center Mount ----- 56,000 pounds
- 16.1.3 38 Ton Crane ----- 76,000 pounds each
- 16.1.4 200 ton Crane ----- up to 112K pounds

17 SPECIALTY EQUIPMENT RENTAL

During the life of this agreement, JEA may need Specialty Bridge and matting equipment for use during an assigned project which is not presently listed in the Bid Workbook. If the specialty equipment is owned by the Contractor, JEA and the Contractor will negotiate pricing for the required specialty item and agree upon pricing for use. If the equipment must be rented/supplied from a third party JEA shall pay the rental cost plus 10% for handling/coordinating/obtaining the specialty equipment.

18 ADDITIONAL QUALIFICATIONS

- 18.1.1 In order to work quickly and minimize matting equipment rental periods, the Contractor's employee(s) shall have at least three (3) years' experience unloading, installing, removing and loading mats in industrial and/or commercial locations. JEA may request and the Bidder shall provide resumes of key employee's, Foreman, Coordinator and Lead Machine Operator to demonstrate the previously stated requirements.

19 BID INSTRUCTIONS FOR BID WORKBOOKS AND BID FORM

The Contractor's attention is directed to the Bid Workbooks for Matting Services included in JEA Bid Specification 091-15 and section 1.4 of the technical specifications.

JEA is seeking Contractor pricing for access roads, equipment pads and ditch crossings based upon the soil type definitions listed in section 12 of this Technical Specifications document.

JEA's experience with past matting projects indicates that JEA's typical matting needs can be met by Contractors supplying either of two (2) types of matting products: wood based including wood laminate products, and HDPE polymer or other composite based products. The wood or wood laminate based matting systems are built using stringers and decking mats. The number of mats required and spacing between the stringer mats used is soil condition dependent. The HDPE and composite based matting systems are built by stacking mats in layers as needed based upon the soil conditions.

For the purpose of this specification:

Decking mats are the top surface which the equipment drives on and/or operates from.

Stringer mats are installed underneath the top (deck) surface and provides additional structural support based upon the soil conditions.

Horizontal stringer mats are installed in line (horizontally) with the individual mat bolted sections making up the decking surface.

Stringer mats are installed perpendicular (vertically) to the individual mat bolted sections.

Either "Composite" OR "Wood and Wood Laminate" mats bid workbook shall be bid.

Bids which contain pricing for both types of mats shall be deemed non-responsive and not considered for evaluation and award.

JEA has supplied two separate Bid Workbooks. Each Bid Workbook has two excel spreadsheets.

Bidders supplying "Composite" type mats must enter bid data in the Bid Workbook for Composite Matting. Prices entered into the "Bidder Input Sheet" spreadsheet (Tab 1 – Bidder Input) shall populate fields in the "Bid Workbook for Composite Matting" spreadsheet (Tab 2 – scenarios) to determine bid evaluation pricing based upon seven (7) typical matting scenarios.

Bidders supplying "Wood or Wood Laminate" type mats must enter bid data in the Bid Workbook for Wood Laminate Matting. Prices entered into the "Bidder Input Sheet" spreadsheet (Tab 1 – Bidder Rates) shall populate fields in the "Wood or Wood Laminate Mat Pricing Scenarios" spreadsheet (Tab 2 – Scenarios) to determine bid evaluation pricing based upon seven (7) typical matting scenarios.

The Three Year Bid Total from the Tab 2 - Scenarios spreadsheets will be used by JEA to determine the lowest responsive bidder and the three (3) year contract award amount.

The Contractor shall provide all information listed in each applicable Bid Workbook sheet on Tab 1- Bidder Input. Tab 2- Scenario will auto populate to calculate The Three Year Bid Total.

JEA's typical matting project includes building access roads and equipment pads. The Contractors attention is directed to section 11 of the technical specifications for the access road and equipment pad requirements. The access road provides JEA equipment access to each work location(s). The equipment pads are built and located to allow JEA equipment set up and operation to perform work.

Bid Workbooks will require a significant level of attention when entering data. Contractors are encouraged to review the Bid Forms and Bid Workbook evaluation spreadsheets in detail before the Mandatory Pre-Bid meeting. The Bid Form and Bid Workbook evaluation spreadsheets will be discussed in detail at the Mandatory Pre-bid meeting. Contractor pricing and bid data entry points are located in the yellow colored cell sections of the Bid Workbooks.

JEA will review and validate the Contractor supplied information and bid items listed in the Bid Workbook. This will include but not be limited to; number of mats required, mat length and width dimensions, strut spacing, number of required layers and the spreadsheet calculations performed to determine the low bidder.

Please reference the Bid Workbook spreadsheet (Tab 1) columns C, D and E. The lengths, quantities and soil conditions listed are based upon typical matting projects expected to be performed during the life of this contract. This information represents projects expected to be performed in the JEA transmission system.

For Wood or Wood Laminate Contractors **Only**: Please reference Bid Workbook (Tab 1) lines numbered 1 thru 15. Decking mats are defined as the top layer of mat(s) on which JEA equipment will drive on and/or work from. For pricing and data entry purposes all HDPE or composite mats (including the number required to build layers due to soil conditions) shall be considered as "Decking Mats". Therefore, the stringer section of the Bid Workbook does not apply to HDPE or composite mats with bid information listed in the "Decking Mat" section of the Bid Workbook only. For pricing and data entry purposes wood or wood laminate Contractors shall enter pricing, dimensions of individual decking mats required and pricing, dimensions of and spacing of stringer mats required for each specified soil conditions in both sections of the Bid Form.

- 19.1.1 Bid Items #1, #2 and #3 ----- Access Road mat rental pricing, shall be a minimum width of 14' and based upon the soil types specified in section 12. The Contractor shall enter the type of mat product to be used, the dimensions of each mat or individual bolted mat section, mats required to build the specified access road width and specified length, and the layers of mats or stringer mat size and spacing required for the soil condition.
- 19.1.2 Bid items #4, #5 and #6 ---- Tangent equipment pad mat rental pricing, as listed in the bid form, shall be a minimum of 28' wide by 50' long and attached parallel to the access road pads. The tangent equipment pads shall be based upon the soil types specified in section 12. The Contractor shall enter the dimensions of each mat or individual bolted mat section, mat quantity required to build the specified equipment pad. Width and length, and the layers of mats or stringer mat size and spacing required for the soil condition shall be entered.
- 19.1.3 Bid items #7, #8 and #9 ---- Large equipment working pad rental pricing, as listed in the bid form, shall be a minimum of 50' wide by 50' long and attached to the end of the access road pads. The large equipment pads shall be based upon the soil types specified in section 12. The Contractor shall enter the dimensions of each mat or individual bolted mat section, mat quantity required to build the specified equipment pad. Width and length, and the layers of mats or stringer mat size and spacing required for the soil condition shall be entered.
- 19.1.4 Bid items #10, 11 and 12 ---- Tangent equipment working pad rental pricing, as listed in the bid form, shall be a minimum of 14' wide and 50' long and attached parallel to the access road. The tangent equipment pads shall be based upon the soil types specified in section 12. The Contractor shall enter the dimensions of each mat or individual bolted mat section, mat quantity required to build the specified equipment pad. Width and length, and the layers of mats or stringer mat size and spacing required for the soil condition shall be entered.
- 19.1.5 Bid Item #13 ---- The ditch crossing pads shall be constructed in a manner to bridge a 15' wide creek or ditch, five (5) feet deep, with a minimum road width of 14'. The Contractor shall enter the total quantity of Composite mats required which allows equipment to cross the ditch. Wood or Wood Laminate Contractors shall enter the quantity of mats required to fill the ditch and number of decking mats required to allow equipment to cross the ditch. Bidder shall provide Dimensions of each mat or individual bolted mat section, mats required to build the specified access road width and specified length, and the layers of mats or stringer mat size and spacing required for the soil condition.
- 19.1.6 Bid item #14 --- This line item includes the cost to transport to/from, deliver and ferry Composite or wood and wood laminate mats, based upon full truck load quantities. Wood or Wood Laminate Contractors must enter data in decking and stringer mat section of the Bid Form. Composite mat Contractors would supply trucking pricing for decking mats only.
- 19.1.7 Bid item #15 --- This line item includes labor and equipment required to unload, install, remove and reload Composite or Wood and Wood Laminate mats at the job site per mat. Wood or Wood Laminate Contractors must enter data in decking and stringer mat section of the Bid Workbook. Composite mat Contractors would supply decking pricing only.

20 Rental Period Definition

- 20.1 The rental period shall be defined as:
 - 20.1.1 The initial rental period shall be a minimum one week consisting of seven (7) continuous days.
 - 20.1.2 The rental period shall begin when the mats, required for each project, are delivered to the job site and the Contractor starts installation and continues to include the number of days JEA actively uses the completed matting installation.
- 20.2 If the project requires JEA use after the initial seven day rental period, as defined in 20.1 above, rent shall be paid according to:
 - 20.2.1 If JEA's use is three days or less, the weekly rental rate shall be prorated to a daily rate and paid based upon the number of additional days JEA actively used the mat installation.
 - 20.2.2 If JEA's use is four days or more, than the weekly rental rate shall be paid.
- 20.3 The rental period ends when JEA notifies the Contractor that we have completed our use of the mat installation. JEA will contact the Contractor and inform them that our project is complete and the mats are ready for removal. JEA's failure to promptly contact the Contractor shall not extend the rental period.

The Contractor shall remove the mat installation, at their convenience, but no more than two (2) weeks after JEA completion notification.