City of Kodiak
Oscar's Dock Crane PN 18-05/8531
Addendum No. 1
November 20, 2017

The following change(s) and/or clarification(s) are made to the Plan and Specification Documents of Invitation to Bid for the **Oscar's Dock Crane PN 18-05/8531:**

1. Replace pages 3, 4 and 5 of the Bid Documents with the following pages.
2. Questions are clarified below:
   a. The specifications ask for a capacity of 6,400 pounds at 10 feet, but it states the winch is 4,000 pounds at bare drum, and line pull of 3,400 pounds mid drum and 3,100 pounds full drum. Can you please confirm if we are to match the crane's lifting capacity to the winch requirements?
   Answer: The crane is intentionally oversized for public use. The winch is downsized per specifications.
   b. For this crane design, we do not use a worm gear drive but a roller bearing slew drive, please confirm that this is okay.
   Answer: Please provide 360 continuous rotation. See addendum to Section I – Bid Specifications.
   c. We do not provide a mechanical hard stop, but we can a swing stop that stops the slewing via hydraulics, please confirm that this is okay.
   Answer: No stop required. Please see answer #2
   d. Can you confirm that a 316 stainless steel Sheave Head is required? We typically do not produce the sheave head with stainless.
   Answer: Sheave head may be 316 stainless steel or HDG. See addendum to specifications.
   e. Most importantly, please see the maximum overturning moment and axial force specified in our load chart, page 2 of the attached sales drawing package. Our max overturning moment is 227,000 lbf-ft, and axial load is 25,000 pounds. We may be able to get the number down a little on our end, but not by that much. Can you ask the customer if there's any flexibility in what they've provided for max overturning moment and axial force?
   Answer: See addendum to Section I – Bid Specifications.
   f. What is the need for the 1.33 dynamic factor? Typically dock cranes do not fall under this category requirement. Just want to make sure you aren't asking for a crane larger than you need.
   Answer: Yes we want the crane to be overbuilt considering public use.
   g. We utilize a 360 degree slew bearing as opposed to the worm gear drive you call out. Will this be an issue?
   Answer: Please provide 360 continuous rotation. See addendum to Section I – Bid Specifications.

h. Similarly, we design for 360 degree continuous rotation. We can provide non-continuous, but it generally ends up being more expensive than providing the hydraulic rotary manifold. And you don't have to worry about extra long hoses inside the pedestal getting tangled. Is there any particular reason for this? Your top-down view drawing sure makes it look like you need access to everything in that area.
Answer: Please provide 360 continuous rotation . See addendum to Section I – Bid Specifications.

i. Can we quote for a built-in pedestal powerpack (HPU)? Or do you prefer the skid-mounted unit you have shown in the drawings?
Answer: Yes, as long as it does not conflict with the base layout and operation of the crane. We do need the I-beam base.

j. There doesn't seem to be a lot of allowed crane/boom weight in your maximum loading (axial/moment) values. The load capacities already take up most of the limits, unless I'm misunderstanding the numbers you have provided.
Answer: See addendum to Section I – Bid Specifications.

There are no changes to the Bid opening Time and Location.

CITY OF KODIAK
2410 Mill Bay Road, Kodiak, AK 99615
Engineering Dept.
(907) 486-8065 Fax: (907) 486-8066

SECTION I – BID SPECIFICATIONS:

Fixed Boom Hydraulic Marine Dock Crane as follows:

Capacity	3.2 ton
Maximum Reach	25 feet
Capacity Maximum Reach	3,000 lbs
Capacity at 20 feet	3,700 lbs
Capacity at 15 feet	5,200 lbs
Capacity at 10 feet	6,400 lbs
Winch Capacity	4,000 lbs bare drum line pull (3,400 lbs mid and 3,100 lbs full)
Boom Material	ASTM A500 grade B or approved equal
Coating Process	Hot-dip galvanized booms, turret, and pedestal or (approved equal)
Components	As required
Rigging	.375 anti-rotation wire rope with fall ball/swivel safety hook (or approved equal)
Hydraulic Cylinder	17-4PH Stainless steel rod, ductile iron piston/head gland, and built in safety valve (or approved equal)
Hinge Pins	17-4PH Stainless steel with integral retainer/anti-rotation plate (or approved equal)
Sheave Head	316 stainless steel or HDG
Sheave Pins	316 stainless steel
Sheaves	Nylatron, with sealed stainless steel bearings (or approved equal)
Slew Drive	Heavy-duty sealed worm gear drive, self-locking design (or approved equal)
Slewing Angle	360° continuous rotation (or approved equal)
Mechanical Stop	Bolt-on, with adjustable pedestal tab (or approved equal)
Wind speed	30 kts (operational limit)
Dynamic Design Factor	1.33 (or approved equal)
Design Pressure	2,300 psi pressure drop across crane. (or approved equal)
Design Flow	11 gpm maximum (or approved equal)
Pedestal	bolt-down or weld to crane platform per customer drawing
Directional Valve	Walvoil SD11/3, pedestal-mounted (or approved equal)
Hoses	Directional valve to functions (or approved equal)
Boom Material	ASTM A500 grade B (or approved equal)

Electro-Hydraulic Power Unit:

Electric Motor	15hp, 208-240/480vac, 3ph, 1750 rpm, TEFC (or approved equal)
Hydraulic Pump	Vane-type, positive displacement (or approved equal)
Reservoir	40 gallon (or approved equal)
Filtration	10 micron nominal, with filter change gage (or approved equal)
Relief Valve	Adjustable, with 0-3000 psi gage (or approved equal)

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Additional Items	Sight glass with thermometer Spare return filter elements (3) Filler/breather

Note: If hydraulic power unit and/or reservoir is separated from the crane and exposed to weather, the crane company must provide a weatherproof enclosure with sight panel for gauges and removable access panel as required for servicing. Enclosure may be HDG stainless steel or aluminum and mounted to crane platform with a minimum of 4 feet clearance from crane pedestal.

Crane Platform:
Crane platform shall be fabricated to include crane base and all associated crane equipment required to install and provide a functioning unit (see attached drawings). It is the intent of the City to have an integral crane and platform including all required hydraulic plumbing and electric that can be bolted down to the existing dock and electrically connected by local contractors. The crane manufacturer shall determine how to integrate the crane and platform.

City of Kodiak has provided structural engineering for design of the crane platform to withstand maximum moment of 130,000 ft-lbs and maximum axial force of 11,000 lbs including a 1.33 dynamic factor. The crane manufacturer shall provide all additional support as required to attach crane to platform. If crane manufacturer requires overturn moment and/or axial force higher than specified it is the crane manufacturer's responsibility to engineer and certify the crane platform assembly to accommodate the added load capacity. The engineer must be a Professional Engineer with current registration.

Crane proposer/manufacturer shall submit "Shop Drawings" of crane platform for owner review and approval prior to fabrication. Allow 2 weeks for owner review and approval.

Pedestal Mounted Crane Controls and Electronic Access:
Crane shall be controlled and monitored by existing access control system currently in use at the harbor office. Crane manufacturer shall provide the following:

1. PDK Wireless Controller by Marina Dock Parts
2. Wireless connection to harbor office master controller
3. Must integrate with FSM Marina Management Software
4. Must include relay switch operated by 12 volts to supply power to crane
5. Locking manual off/on switch
6. Flashing beacon to show the crane is active
7. Weather proof 120 volt ac outlet for transformer to PDK Controller
8. Card Reader must be P-300-HA Cascade Proximity Reader

Electric Service for crane shall be provided by City of Kodiak

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SECTION II – GENERAL REQUIREMENTS:

1. Bids shall be submitted on the "Bid Form" provided and must be manually signed by a responsible member of the firm.
2. In order to ensure consideration, bids must be submitted in a sealed envelope. The envelope must be plainly marked with:

Mr. Mike Tvenge, City Manager
City of Kodiak
PO Box 1397
Kodiak AK 99615

Express Mail or Special Delivery Address:
710 Mill Bay Road, Room 114
Kodiak, AK 99615

Bid Documents:
Oscar's Dock Crane PN 18-05/8531

To be Opened:
3:00 p.m. on Friday, December 1, 2017

No responsibility will attach to any officer for the premature opening of, or the failure to open, a bid properly addressed and identified.

3. Inquiries or requests for information pertaining to these specifications should be directed to Lon White, Harbormaster at (907) 486-8086 / Glenn Melvin, City Engineer at (907) 486-8065.
4. Crane supplier shall submit with bid - product brochure, crane specifications, terms, delivery information, and crane drawing and if submitting an "approved equal" it must be clearly shown in the bid submittal package.