

MUNICIPALITY OF ANCHORAGE

ASSEMBLY MEMORANDUM

No. AM 254-2016

Meeting Date: April 12, 2016



1 **From: Mayor**

2
3 **Subject: SOLE SOURCE CONTRACT WITH MANTECH MECHANICAL TO INSTALL**
4 **THE REPLACEMENT ICE RINK REFRIGERATION SYSTEM AT THE BEN**
5 **BOEKE ARENA FOR THE MUNICIPALITY OF ANCHORAGE,**
6 **MAINTENANCE & OPERATIONS DEPARTMENT (\$4,991,648)**
7

8 Award of this contract will provide for the replacement of the ice rink and refrigeration
9 equipment, to include stainless steel piping, heat recovery equipment, new concrete
10 floor and new dasher board system. This project provides for demolition of existing
11 concrete floor, removal and salvage of existing ice rink refrigeration equipment,
12 installation of new owner furnished CO₂ refrigeration equipment, placement of new
13 concrete floor, installation of an integrated dasher board system and other related work.
14

15 There are only two (2) direct CO₂ rinks in the USA, The McDonald Center and Sullivan
16 Arena which have already been modified. The Ben Boeke Arena and all future ice rink
17 projects will get modified to a direct CO₂ system.
18

19 Both the McDonald Center and Sullivan Arena were installed by Mantech Mechanical.
20 Mantech is the only certified contractor capable of installing Hillphoenix CO₂ ice rink
21 refrigeration systems within the United States. Additionally, Mantech is the only
22 company that has certified CO₂ rink installation personnel on hand. MOA contacted our
23 ice rink consultant, Scott Ward of Stevens Engineering who concurs that Mantech is the
24 only known company capable and certified to perform the installs of the CO₂ Hillphoenix
25 ice rinks.
26

27 Mantech has proven they have the expertise to install these highly complex systems
28 within a condensed timeline. The MOA only has 150 days to demo both rinks, install the
29 new rinks, install the ice plant, piping, electrical and safety features. All work shall be
30 substantially completed within one hundred twenty (120) calendar days after receipt of
31 the "Notice to Proceed". Final Completion will be within one hundred fifty (150) calendar
32 days after receipt of the "Notice to Proceed".
33

34 Based upon the above information, reduced timeline and attached Department
35 Memorandum, it is recommended the Assembly approve the sole source contract with
36 Mantech Mechanical to install the replacement ice rink refrigeration system from
37 Hillphoenix in the amount of \$4,991,684. Scheduled date of completion is September
38 30, 2016.
39

40 This is the written determination of the Purchasing Officer as required by Title 7.
41

42 Recommended by: Ronald S. Hadden, Purchasing Officer
43 Fund Certification: Robert E. Harris, CFO

1 | 401-1707-5202-PWFM12225G14-BP2014 - \$4,991,648
2 | (State Grant)
3 | Concur: Michael K. Abbott, Municipal Manager
4 | Respectfully submitted: Ethan A. Berkowitz, Mayor



Municipality of Anchorage
Maintenance and Operations Department
Capital Projects

MEMORANDUM

DATE: March 30, 2016

TO: Ron Hadden, Purchasing Officer

THRU: Alan Czajkowski, Director *AC*

FROM: Jon M. Clark, Manager *JM*

SUBJECT: Sole Source Contract with Mantech Mechanical - Ben Boeke Arena

Maintenance and Operations is currently in the process of modernizing all of the Municipal Ice Hockey Rink Refrigeration Systems. The Harry J. McDonald ice system was replaced with a Direct Carbon Dioxide (CO₂) system during the summer and fall of 2014. The Sullivan Arena was modernized last summer with a CO₂ system. Ben Boeke Ice Arena is the next facility to be upgraded to the CO₂ system during this summer. The Municipal ice rinks are being modernized to comply with the Montreal Protocol which is being implemented by the EPA. This mandate states: Freon (R-22) that we currently use in our other ice rinks, will no longer be manufactured after 2020. Carbon Dioxide (CO₂) has an Ozone Depletion Potential of 0 and a Global Warming Potential of 1. In comparison our current refrigerant (R-22) has an Ozone Depletion Potential of 0.05 and a Global Warming Potential of 1700. The only other refrigerant that has a Global Warming Potential of 1 or less utilized in ice rinks is Ammonia (NH₃). Although Ammonia is very efficient it is one of the most dangerous refrigerants available.

There are two direct CO₂ ice rinks in the USA. The first one is at the Harry J McDonald Center and the second one is at the Sullivan Arena. Both of these ice rinks were installed by Mantech Mechanical from Anchorage Alaska. Mantech Mechanical is the only company in the nation that has qualified CO₂ ice rink installation personnel on their staff. Ice rinks by their very nature are complex due to their size and the amount of refrigerant required to make the system work efficiently. Mantech Mechanical has proven they have the expertise to install these complex systems and produce a quality end product in a condensed time frame. From start to finish, we only have 150 days to demo both rinks, install new rinks, install the ice plant, piping, electrical generation, and a multitude of safety features to make this one of the safest ice rinks in the nation. This is not the type of project that we want a contractor doing on the job training on. The contractor installing this system, must understand all of the complexities, and tolerances of ice rink construction, along with the high tech controls and interlinks between the rink floors, sensors and all of the safety requirements mandated by building safety. Just understanding the procurement and manufacturing timelines of critical parts of the floor and piping system is instrumental. Numerous materials to include miles of stainless steel tubing, specialty coated rebar and rebar chairs have to be ordered 6-10 weeks in advance of critical timelines of the project. Mantech Mechanical has already done all the research to find and establish relationships with these material suppliers that provide these specialty materials.

Maintenance and Operations has researched all options and determined that Mantech Mechanical is the only known contractor in the United States currently with qualified staff to perform this work. In addition, Mantech Mechanical is currently the only company certified to install, and maintain Hillphoenix ice plant equipment. M&O has reached out to our ice rink consultant, (Scott Ward of Stevens Engineering) to

inquire if there are other qualified contractors to do this work, and he has verified that Mantech is the only known company in the United States with this experience. Mr. Ward reached out to the two known Canadian companies. They are both out of Quebec, and presented a significant communication challenge since their primary language is French and their English was all but impossible to understand. In addition they manufacture and install their own equipment with one exception. I feel it would be very problematic using a foreign company for this work. The owner of Mantech Mechanical worked on several of the initial installations of the MOA owned ice rinks back in the 1980's and has been performing critical repairs when other companies lacked the experience or willingness to do the work. Attached is a memo from Scott Ward.

It in the best interest of the MOA and its tax payers to award this sole source contract to the only know US firm that has done this work in the past. To award this contract to an unskilled contractor is very risky and could easily blow the tight timeline for the project not to mention the budget. Due to the critical nature and the complexity of the installation of this CO2 system, coupled with the restrictive time line to finish the project M&O recommends Mantech Mechanical be awarded this sole source contract in the amount of \$4,991,648.00