Memorandum

DATE: July 28, 2011

TO: Menasha Board of Public Works

FROM: Mark Radtke, Director of Public Works MR

RE: Change Order No. 2 for Public Protection Facility HVAC Equipment Replacement; Contract 2011-01; ACC Planned Service; ADD $3,913.00

Attached to this memo are the proposed change order, consultant engineer's recommendation and cost summary report for Change Order No. 2 involving the HVAC equipment upgrade at the Public Protection Facility. The changes are a result of specifying equipment using the new refrigerant R-410a in lieu of continuing with the use of R-22 which is being phased out of production. To continue the use of units using R-22 could jeopardize the City in the future if we were to need additional R-22 refrigerant with very limited or no source for such.

Prior to pursuing the change order, we asked our consultant why this wasn't foreseen in the project design. His reply explanation is attached, which indicates we couldn't exclusively specify one manufacturer's unit, and the piping requirements vary depending on the manufacturer. We further asked him to review the proposed pricing for the additional work. He has completed his review and has justified the costs for this work.

This project is being funded through a grant from the Energy Efficiency and Conservation Block Grant (EECBG) Program. Building Services Superintendent, Adam Alix, completed the attached cost summary report for this contract, including the additional costs with this proposed change order. Even with the additional cost for this change order, EECBG grant funds are sufficient to cover the project costs (including engineering) with a projected balance of grant funds in the amount of $2,028.00. There are no other anticipated change orders for this project, as it is approaching completion.

I recommend approval of the change order as submitted.

Enclosure

M:\word\BPW memo re ACC Change Order #2 Unit 2011-01 7-28-11.docx

CHANGE ORDER

DATE: July 20, 2011 CHANGE ORDER NO: 2 (two)

Contractor: ACC Planned Service, Inc.
Contract No. 2011-01
Project: Public Protection Facility HVAC Equipment Upgrade

You are directed to make the changes noted below in the subject contract unit number.

To utilize existing piping from mechanical room to roof, the following changes need to be made:

1. Install EMM modules in units to set minimum capacity to maintain oil return
2. Add wire and transducer for 4-20 mA signal
3. Add liquid line Long Line Check Valve
4. Move both liquid line dryers to smaller H.G. line
5. Modify double viser at coil to use smaller line for minimum loads

This change is the outcome of a meeting that took place on site on July 19, 2011 with Engineer Tom Riederer; Carrier Rep Jamie Johnson; ACC - Paul Kreiling; and Adam Alix.

The changes result in the following adjustments:

	CONTRACT-TOTAL		LEAD TIME	
Original Contract				
Prior to this Change Order	$115,487.00		_____	Days
Adjustments per this Change Order	$3,913.00	(Add)	10	Days
Current Contract Status	_____		_____	Days

Directed/Authorized
City of Menasha Department of Public Works
By: _____

Date: _____

Accepted

By: _____

Date: _____

-----Original Message-----
From: Riederer Engineering LLC [mailto:riedeng@new.rr.com]
Sent: Thursday, July 21, 2011 3:41 PM
To: Adam Alix
Subject: Menasha PPF Change order 2

We have reviewed ACC Planned Service's Change Order #2. This change order is for changes to the refrigeration piping and addition of capacity control circuit boards to the air conditioning condensing units. Both items result from the refrigerant manufacturer's (Carrier) review of the existing piping for suitability of use with the refrigerant change from R-22 to R-410a that is part of this project due to the recent phaseout of R-22. The equipment manufacturers use proprietary methods of doing these calculations, and it is left to them to make any specific recommendations on the refrigerant piping system. This may in fact vary with the manufacturer and is difficult if not impossible to determine at the time of design. It is also necessary to have the manufacturer sign off on the piping system to avoid warranty issues.

We find the extra costs to be not unreasonable for the value received; in particular the addition of the EMM boards replaces more extensive (and expensive) modifications to the piping and will provide a near-stepless capacity control that will complement the variable air flow of the air handling units under control of the building automation system.

PPF EECBG HVAC Upgrade Project Cost Summary

Grant Award Amount			$ 116,895.00
Project Costs			
Original Contract Amount		$ 115,487.00	
Plus: Change Orders			
#1-Boiler Venting	$ 3,596.00		
#2-Condenser Piping	$ 3,913.00	$ 7,509.00	
Total Contract Amount		$ 122,996.00	
Engineering Costs			
2010 Expenditure	**$ 2,079.00**		
2011 Expenditure	$ 4,521.00	$ 6,600.00	
Total Project Cost		$ 129,596.00	
Less: Financial Incentives			
Focus On Energy	$ 6,467.00		
WPPI	$ 3,312.00	$ 9,779.00	
Net Project Cost			$ 119,817.00
Funding Shortage/Excess			$ (2,922.00)

PPF HVAC Upgrade Project Net Cost			$ 119,817.00
Less: Costs already expensed in 2010		$ 2,079.00	
Costs already expensed in 2011		$ 2,871.00	$ 4,950.00
Total Funds needed to finish project			$ 114,867.00
EECBG Funds			$ 116,895.00
Grant Funds available to offset expensed costs			$ 2,028.00