



City of Grand Island

Tuesday, January 12, 2010

Council Session

Item G6

**#2010-4 - Approving Change Order for Cooling Tower Overhaul
at Platte Generating Station**

Staff Contact: Gary R. Mader

Council Agenda Memo

From: Gary R. Mader, Utilities Director
Wesley Nespor, Asst. City Attorney/Purchasing

Meeting: January 12, 2010

Subject: PGS Cooling Tower Rebuild Fall 2009
Change Order #1

Item #'s: G-6

Presenter(s): Gary R. Mader, Utilities Director

Background

The Platte Generating Station utilizes a cooling tower as part of the plant's cooling water system. The cooling tower is constructed of wood and fiberglass specially treated for constant exposure to water and the outdoor elements. It has been in nearly continuous service since 1982.

The tower is periodically inspected by third party consultants, who provide evaluation of structural condition, and if problems are found, make recommendations for corrective actions. Cooling tower repair is performed by contractors specializing in furnishing and installing cooling tower components. This project is the third and final phase of repairs as determined by the 2007 inspection. The work for this year included replacement of the tower internal structural components, fill and drift eliminators. Previous phases have included replacement of the tower's decking, external structural components, and louvers. The contract for the work was awarded to International Cooling Tower, Inc. of Edmonton, Canada, at the April 28, 2009 City Council meeting in the amount of \$1,140,000.00.

Discussion

During the rebuild of the cooling tower, a more thorough inspection of the structure was possible when the fill material was removed. The inspection showed that structural components, not included for replacement in the original specifications, needed to be replaced. Pictures of the deteriorated structural members are attached.

350 vertical columns supporting the water deck were specified to be replaced, from 12” below the water deck to the bottom of the tower, but deterioration was found to extend such that the entire length of the columns needed to be replaced.

Diagonal braces at the water deck provide horizontal structural stability and are also attached to the distribution header thrust blocks. The thrust blocks restrain the movement of the 36” diameter water distribution headers that are flowing approximately 56,000 gallons per minute. The diagonals and thrust blocks were also found deteriorated beyond safe structural integrity. The structural members are of 4x4 or 8x8 size, depending upon location within the cooling tower. In all, approximately 2,200 linear feet of additional materials were required to be installed to complete the cooling tower rebuild.

The additions to the contract total \$111,129.00 for a final contract cost of \$1,251,129.00.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends approval of Change Order #1 to the PGS Cooling Tower Rebuild Fall 2009 contract at the Platte Generating Station in the amount of \$111,129.00 for a final contract cost of \$1,251,129.00.

Sample Motion

Move to approve contract Change Order #1 to the PGS Cooling Tower Rebuild Fall 2009 contract with International Cooling Tower, in the amount of \$111,129.00 for a final contract amount of \$1,251,129.00.



Figure 1 Pipe Saddle



Figure 2 Thrust Block



Figure 3 Distribution Pipe support column

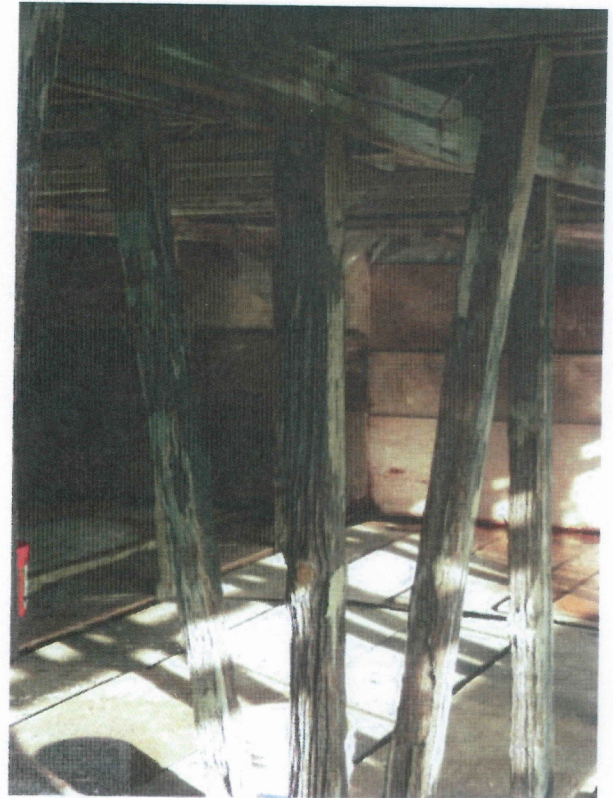


Figure 4



TO: International Cooling Tower USA Inc.
7320 N La Cholla #154 Box 316
P.O. Box 534434
Atlanta, GA 30353-4434

PROJECT: Contract for "PGS Cooling Tower Rebuild Fall 2009"

You are hereby directed to make the following change in your contract:

- 1 Additional payment per the attached spreadsheet.

ADDITION \$111,129.00

The original Contract Sum	<u>\$ 1,140,000.00</u>
Previous Change Order Amounts	<u>\$ -</u>
The Contract Sum is increased by this Change Order	<u>\$ 111,129.00</u>
The Contract Sum is decreased by this Change Order	<u>\$</u>
The total modified Contract Sum to date	<u>\$ 1,251,129.00</u>

Approval and acceptance of this Change Order acknowledges understanding and agreement that the cost and time adjustments included represent the complete values arising out of and/or incidental to the work described therein.

APPROVED: CITY OF GRAND ISLAND

By: _____

Date _____

Attest: _____

Approved as to Form, City Attorney

ACCEPTED: INTERNATIONAL COOLING TOWER USA INC.

By: _____

Date _____

RESOLUTION 2010-4

WHEREAS, International Cooling Tower, Inc., of Edmonton, Canada was awarded a contract for PGS Cooling Tower Rebuild – Fall, 2009, such bid being in the amount of \$1,140,000.00; and

WHEREAS, during the rebuild of the cooling tower, a more thorough inspection of the structure showed structural components, not included for replacement in the original specifications, needed to be replaced; and

WHEREAS, further inspection revealed that approximately 2,200 linear feet of additional materials were required to be installed to complete the cooling tower rebuild; and

WHEREAS, the additional materials and labor were not included in the original contract award and the contractor provided a price quote for the additional work of \$111,129.00; and

WHEREAS, the net cost of the changes to the original contract is an additional \$111,129.00 for a final contract amount of \$1,251,129.00

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that Change Order #1 with International Cooling Tower, Inc., of Edmonton, Canada, resulting in an addition of \$111,129.00 to the original contract amount of \$1,140,000.00 for a final contract amount of \$1,251,129.00 for PGS Cooling Tower Rebuild – Fall, 2009, is hereby approved.

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Adopted by the City Council of the City of Grand Island, Nebraska, January 12, 2010.

Peg Gilbert, Council President

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
January 8, 2010	☐ City Attorney