CITY OF CHICAGO
DEPARTMENT OF PROCUREMENT SERVICES
ROOM 403, CITY HALL, 121 N. LA SALLE ST.

JUSTIFICATION FOR NON-COMPETITIVE PROCUREMENT

COMPLETE THIS SECTION IF NEW CONTRACT
For contract(s) in this request, answer applicable questions in each of the 4 major subject areas below in accordance with the sections for Preparation of Non-Competitive Procurement Form on the reverse side.

Request that negotiations be conducted only with Thermal Chicago Corporation for the product and/or services described herein. (Name of Person or Firm)

This is a request for (One-Time Contractor Requisition # , copy attached) or Sole Source Term Agreement or Delegate Agency (Check one). If Delegate Agency, this request is for “blanket approval” of all contracts within the (Attach List) Pre-Assigned Specification No.

(Program Name) Chilled Water Services for Gallery 37 and City Hall Pre-Assigned Contract No.

COMPLETE THIS SECTION IF AMENDMENT OR MODIFICATION TO CONTRACT
Describe in detail the change in terms of dollars, time period, scope of services, etc., its relationship to the original contract and the specific reasons for the change. Indicate both the original and the adjusted contract amount and/or expiration date with this change, as applicable. Attach copy of all supporting documents. Request approval for a contract amendment or modification to the following:

Contract #: __________________________
Specification #: __________________________
Mod. #: __________________________

Contract or Program Description: Chilled Water Services for Gallery 37 and City Hall

Sandy Duffn __________________________ Telephone __________________________
Originator Name Telephone __________________________
Signature __________________________
Department __________________________
Date 8-05-09 __________________________

(See ATTACHED in each box below if additional space needed:

(1) PROCUREMENT HISTORY – See Attached

(1) ESTIMATED COST – See Attached

(1) SCHEDULE REQUIREMENTS – See Attached

(1) EXCLUSIVE OR UNIQUE CAPABILITY – See Attached

(1) OTHER

Sandy Duffn __________________________
DEPARTMENT HEAD DATE 9/11/09 __________________________

Sandy Duffn __________________________
BOARD CHAIRPERSON DATE 6/09/09 __________________________

Sandy Duffn __________________________
CHIEF PROCUREMENT OFFICER DATE OF APPROVAL 11/19/09 __________________________
MEMORANDUM

To: Jamie L. Rhee  
Chief Procurement Officer  
Department of Procurement Services  

From: Judy D. Martinez  
Commissioner  
Department of General Services  

Re: Request for:  
Non-Competitive Procurement Contract for Chilled Water Services for Gallery 37 and City Hall  
Vendor: Thermal Chicago Corporation  

Date: September 16, 2009

The Department of General Services (DGS) is requesting a Non-Competitive Procurement contract for the Chilled Water Services for Gallery 37 and City Hall. It is our intent for Thermal Chicago Corporation to continue servicing chilled water to these two buildings. We are asking for a five (5) year contract with two (2) – one (1) year extension options. DGS is requesting the vendor, Thermal Chicago Corporation, meet full minority compliance requirements. The Non-Competitive justification package was previously submitted to your department.

If you need additional information regarding this request, please contact Mary Capecci at 312-744-6743.

cc: Capecci  
Walter  
File
Non – Competitive Procurement Justification
(Sole Source)
For Chilled Water Services for Gallery 37 and City Hall

Procurement History:

The Thermal Chicago System began operation in the mid-1990’s as an alternative to self-cooling of commercial buildings. Amongst its many benefits to its customers are: reliability, easy operation, low maintenance and significant reduction in electrical demand. Thermal Chicago installed the current chilled water systems in Gallery 37 and City Hall and has been providing cooling services since May, 1999.

Estimated Cost:

The Department of General Services estimates that we will not exceed $121,500 for Gallery 37 and $240,000 for City Hall per year. The Department of Law (Law) and The Department of General Services (DGS) are currently reviewing the scope of work and pricing schedule.

Schedule Requirements:

There can be no lack of services in the Chilled Water System for Gallery 37 and City Hall. Thermal Chicago Corporation is the sole provider of district cooling services for the downtown area.

Exclusive or Unique Capability:

Based on our research, Thermal Chicago Corporation owns and operates the only district chilled water system in the City. Thermal Chicago Corporation has five (5) district chilled water systems and is the only company located geographically within Illinois and the Nation that can access our chilled water piping system. There are no other chilled water systems to access for the services described under this Agreement.

Several years ago, the City decided to purchase chilled water in lieu of installing and operating new chillers at these buildings. The only alternative to our continued agreement to purchase chilled water would be to install our own equipment. This would require significant additional capital expenditures and approximately eighteen (18) months for implementation.
THERMAL CHICAGO CORPORATION

INSTALLATION, OPERATION AND MAINTENANCE SPECIFICATIONS

66 E. Randolph Street
Chicago, Illinois
1.0 INSTALLATION

1.1 District Cooling Connection

A. Design: Supplier will design and install the Energy Transfer Station (ETS). All applicable codes and standards shall be followed.

B. Primary Service Line: Service line running from the welded T-fittings on the main distribution pipes to the primary side of Customer’s heat exchanger(s).

C. Energy Transfer Station Space: Customer shall provide, at no cost to Supplier, suitable space for the installation of the interconnection equipment. This will include space for the service lines, control panel, heat exchanger(s) and interconnecting pipes. Supplier and Customer shall agree on the routing of pipes through the building and the location of heat exchanger(s) to determine the most cost-effective solution. Customer will make available 110v power for the ETS control system.

D. Equipment: Supplier will provide all equipment on the primary side including isolating valves, primary side tie-ins, strainer, heat exchanger(s), thermometers, thermowells, control valves and energy meter.

E. Installation: Supplier will install heat exchanger(s) and control system. Customer will provide, at no cost to Supplier, personnel required for the drain down (if required) of and tie-in to Customer’s cooling system. Supplier will also install the necessary electrical and control equipment. All piping systems associated with this work shall be pressure tested for leakage in accordance with the ASME/ANSI B31 Code.

F. Commissioning: Supplier, together with Customer’s chief operator, will commission the ETS system. This will include start up of control equipment. During the commissioning, Customer’s operator shall be responsible for the building’s internal chilled water system.

G. Make-up Water: Supplier will provide the make-up water for the primary side of the system. Necessary water treatment will be accomplished at the district cooling plant. Customer side will be filled up, drained as required by the work, and managed by the building owner.

1.2 Building Specifics

The system will include one (1) plate and frame heat exchanger with at least 250 tons capacity.
1.3 Connection Equipment Description

All piping, valves, strainers and equipment necessary to connect Customer’s cooling system to the ETS heat exchanger.

1.4 Energy Transfer Station Description

All equipment associated with the metering and transfer of energy between Supplier’s primary piping and Customer’s connection equipment. This includes the heat exchangers, control valves, metering equipment and control equipment.

2.0 OPERATION

2.1 System Parameters

A. Chilled Water Temperatures:
   - Supplier Supply: 34-39°F
   - Supplier Return: 54°F
   - Customer Supply: 42°F
   - Customer Return: 56°F

1. Installed Heat Exchanger Capacities: One 250-ton heat exchanger

2. Contract Capacity: (as specified in Chilled Water Service Agreement)

3. Supplier will automatically optimize the Customer’s chilled water supply set-point to adjust for variances in the Customer’s operating contract parameters from the specified conditions. During on-peak hours the Supplier chilled water supply temperature and flows will be automatically adjusted as required to provide Customer specified conditions at the Contract Capacity.

B. Chilled Water Pressure

   Design Operating Pressure:
   - Primary: 150 psi
   - Secondary: 150 psi

C. Incoming Service Room

   Indoor Conditions:
   - Winter: 65°F
   - Summer: Ventilated

D. Ventilation Rate: As required by City of Chicago Building Code and load

E. Pipe Sizing Criteria:

   1. Primary
All piping will be sized to generally accommodate maximum velocity of 10 feet/second based on Contract Capacity.

2. Primary (maximum velocity for piping); C = 130:

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Velocity (feet/second)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8&quot; diameter and larger</td>
<td>10.0</td>
</tr>
<tr>
<td>6&quot; diameter</td>
<td>8.0</td>
</tr>
<tr>
<td>4&quot; diameter</td>
<td>6.5</td>
</tr>
<tr>
<td>3&quot; diameter</td>
<td>5.5</td>
</tr>
<tr>
<td>2 ⅜&quot; diameter</td>
<td>5.0</td>
</tr>
<tr>
<td>2&quot; diameter</td>
<td>4.0</td>
</tr>
<tr>
<td>1 ½ and 1 ¼&quot; diameter</td>
<td>3.0</td>
</tr>
</tbody>
</table>

2.2 General Description

A. Supplier Chilled Water

1. Supplier chilled water supply and return to the heat exchanger will be provided from an off-site district chilled water plant.

2. System will include electric control valves, strainer, valving, piping and controls.

3. All necessary gauges, thermometers, gauge cocks, thermowells, shut-off valves, control valves and other instruments will be provided for primary and secondary sides of the heat exchanger for operation and maintenance.

4. Chilled water control valves will be of two-way modulating type and will be selected to close against the differential pressures involved.

5. ETS control will be direct digital control (DDC), complete with ton-hour metering, differential pressure and temperature displays, capacity and consumption displays, and Customer-adjustable chilled water supply reset.

   a. The system will include all computer software and hardware, sensors, transmission equipment for interface with Supplier Central Control Center.

   b. The primary chilled water system flow will be modulated to maintain a secondary chilled water reset temperature.

6. In order to limit chilled water consumption to the Contract Capacity, a demand limiter will be provided on the chilled water service. The demand limiter will limit flow to the lesser of that which attains contract
capacity or 1.2 GPM/ton at rated point for on-peak conditions (adjusted upwards when district supply temperature is greater than 34F).

B. Customer Chilled Water

1. Customer chilled water supply and return piping from the heat exchanger to a point of connection with the building's main chilled water piping system will be provided.

2. Heat exchanger will be arranged in parallel operation through a common header.

3. Manual isolation valves, piping and temperature sensors will be provided at chilled water supply and return piping to heat exchangers.

2.3 Control Scheme

A. Each ETS will be a stand-alone microprocessor-based system provided with a display/interface panel. The ETS will provide local control for the primary chilled water heat transfer and secondary side temperature control/monitoring as well as usage and billing information. Each ETS will transmit data back to a central monitoring facility through the use of a fiber optics network. This network will allow the monitoring of critical points as well as the generation of data from one central location.

B. Calculation of the chilled water consumption and load:

1. Instantaneous load (tons) showing the current usage of chilled water.

2. Consumption usage will display total value of chilled water in ton-hours.

C. The following control and monitoring points shall be provided. Points denoted by an * shall be displayed at the display-interface panel mounted with the ETS.

\[ \begin{align*}
\text{AI} &= \text{Analog Input} \\
\text{DI} &= \text{Digital Input} \\
\text{DO} &= \text{Digital Output} \\
\text{CAL} &= \text{Calculation} \\
\text{ADJ.V} &= \text{Adjustable Variable}
\end{align*} \]

1. Primary Side (TCC)

\[ \begin{align*}
\text{AI}^* &= \text{Primary Chilled Water Supply Temperature} \\
\text{AI}^* &= \text{Primary Chilled Water Return Temperature} \\
\text{AI}^* &= \text{Primary Chilled Water Flow} \\
\text{AI}^* &= \text{Primary Differential Pressure Drop Across Supply and Return Lines} \\
\text{DI}^* &= \text{Primary Differential Across In-line Strainer (Normal or Abnormal)}
\end{align*} \]
2. Secondary Side (Customer)

AI* Secondary Chilled Water Supply Temperature
AI* Secondary Chilled Water Return Temperature

3. Calculated Values

CAL* Instantaneous Load (tons)
CAL* Total Consumption (ton-hours)

4. Adjustable Variables

ADJ.V* Customer Setpoint

D. Control sequence of operation shall be as follows:

1. Loop Control: Once the secondary chilled water system has been enabled through the use of a digital input (source provided by Customer, auxiliary contact from motor pump starter or building environmental controls system), a temperature control valve will modulate open. The adjustable setpoint range is limited as the secondary chilled water temperature departs from design. Forty-eight degrees (48°F) is the pivot point between the lowest available setpoint and the secondary chilled water return temperature. The temperature control valves will modulate to control Customer’s setpoint (Customer adjustable from 38-58°F).

2.4 Service Stop Valves

A. The service stop valves on the connection equipment will be operated only by authorized personnel of Customer. Supplier may close the service stop valves when necessary due to emergency circumstances believed to require immediate cessation of the operation of Customer’s cooling system. Supplier will give the customer immediate notice of any such cessation. In emergency circumstances, if Supplier is unable to close the service stop valves, Customer will use reasonable efforts to close the valves as soon as is practicable.

B. The service stop valves, meter stop valves and other equipment on Supplier’s side of the ETS will be operated only by authorized personnel of Supplier. Customer may close the service stop valves when necessary due to emergency circumstances, which require immediate cessation of chilled water supply. Customer will give Supplier immediate notice of any such cessation.
2.5 Authorized Agents

Customer will not authorize any person except authorized employees of Supplier to operate, maintain, alter or otherwise affect the ETS or any Supplier service equipment installed on the premises.

3.0 MAINTENANCE

3.1 Supplier Responsibility

A. Primary Side Strainer: The strainer in the primary service line will be monitored and cleaned by Supplier.

B. Water Treatment: Supplier will maintain the treatment of primary water from the production plants.

C. Energy Transfer Station Maintenance: Supplier will monitor the pressure drop across the primary side of the heat exchangers and remediate if heat exchanger performance deviates significantly from the manufacturer’s performance map. Supplier will check operation of the primary control valves continuously and remediate if problematic operation occurs.

D. Metering:

1. All metering equipment furnished and maintained by Supplier will be fault intolerant. Supplier will commission, operate and maintain the metering equipment in accordance with the manufacturer’s recommendations.

3.2 Customer Responsibility

A. Changes to the System: Any future changes to Customer’s chilled water system that will impact the district cooling system shall be reported and, when applicable, subject to approval by Supplier.

B. Water Treatment: Customer will maintain a corrosion inhibitor in the building’s chilled water system with a pH level between 9.0 and 10.0, and total bacteria count of less than or equal to 100 cfu/ml. Customer is responsible for expenses associated with correction of fouling caused by poor secondary water quality.

C. Connection Equipment Maintenance: Customer will maintain the secondary isolation valves and strainer.

D. ETS Equipment Room: Customer will maintain adequate ventilation/space conditioning of the ETS equipment room.
4.0 CODES AND STANDARDS

A. Chicago Building Code

B. Latest issue as of this date of American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Handbooks on “Fundamentals” and “Systems”

C. ASHRAE Energy Standard 90-80

D. ASHRAE Climate Condition for Chicago, O’Hare at the 2.5% Design Temperatures

E. National Fire Protection Association (NFPA)

F. Underwriters’ Laboratories (UL)

G. Air Conditioning and Refrigeration Institute (ARI)

H. American National Standards Institute (ANSI)

I. American Society of Mechanical Engineers (ASME)

J. American Society of Testing and Materials (ASTM)

K. National Electrical Manufacturer’s Association (NEMA)


M. Standards of Tubular Heat Exchanger Manufacturer’s Association (TEMA)

N. American Standards Association (ASA)
THERMAL CHICAGO CORPORATION

INSTALLATION, OPERATION AND MAINTENANCE SPECIFICATIONS

121 N. LaSalle Street
Chicago, Illinois
1.0 INSTALLATION

1.1 District Cooling Connection

A. Design: Supplier will design and install the Energy Transfer Station (ETS). All applicable codes and standards shall be followed.

B. Primary Service Line: Service line running from the welded T-fittings on the main distribution pipes to the primary side of Customer's heat exchanger(s).

C. Energy Transfer Station Space: Customer shall provide, at no cost to Supplier, suitable space for the installation of the interconnection equipment. This will include space for the service lines, control panel, heat exchanger(s) and interconnecting pipes. Supplier and Customer shall agree on the routing of pipes through the building and the location of heat exchanger(s) to determine the most cost-effective solution. Customer will make available 110v power for the ETS control system.

D. Equipment: Supplier will provide all equipment on the primary side including isolating valves, strainer, heat exchanger(s), thermometers, thermowells, control valves and energy meter.

E. Installation: Supplier will install heat exchanger(s) and control system. Customer will provide, at no cost to Supplier, personnel required for the drain down (if required) of and tie-in to Customer's cooling system. Supplier will also install the necessary electrical and control equipment. All piping systems associated with this work shall be pressure tested for leakage in accordance with the ASME/ANSI B31 Code.

F. Commissioning: Supplier, together with Customer's chief operator, will commission the ETS system. This will include start up of control equipment. During the commissioning, Customer's operator shall be responsible for the building's internal chilled water system.

G. Make-up Water: Supplier will provide the make-up water for the primary side of the system. Necessary water treatment will be accomplished at the district cooling plant. Customer side will be filled up, drained as required by the work, and managed by the building owner.

1.2 Building Specifics

The system will include two (2) plate and frame heat exchangers with at least 250 tons capacity each.
1.3 Connection Equipment Description

All piping, valves, strainers and equipment necessary to connect Customer’s cooling system to the ETS heat exchangers.

1.4 Energy Transfer Station Description

All equipment associated with the metering and transfer of energy between Supplier’s primary piping and Customer’s connection equipment. This includes the heat exchangers, control valves, metering equipment and control equipment.

2.0 OPERATION

2.1 System Parameters

A. Chilled Water Temperatures:  
   Supplier Supply: 34-39°F  
   Supplier Return: 54°F  
   Customer Supply: 42°F  
   Customer Return: 56°F

1. Installed Heat Exchanger Capacities: Two 250-ton heat exchangers

2. Contract Capacity: (as specified in Chilled Water Service Agreement)

3. Supplier will automatically optimize the Customer’s chilled water supply set-point to adjust for variances in the Customer’s operating contract parameters from the design conditions. During on-peak hours the Supplier chilled water supply temperature and flows will be automatically adjusted as required to provide Customer design conditions at the Contract Capacity.

B. Chilled Water Pressure

Design Operating Pressure:  
   Primary: 150 psi  
   Secondary: 150 psi

C. Incoming Service Room

Indoor Conditions:  
   Winter: 65°F  
   Summer: Ventilated

D. Ventilation Rate: As required by City of Chicago Building Code and load

E. Pipe Sizing Criteria:

1. Primary
All piping will be sized to generally accommodate maximum velocity of 10 feet/second based on Contract Capacity.

2. Primary (maximum velocity for piping); C = 130:

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Maximum Velocity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8&quot; diameter</td>
<td>10.0 feet/second</td>
</tr>
<tr>
<td>6&quot; diameter</td>
<td>8.0 feet/second</td>
</tr>
<tr>
<td>4&quot; diameter</td>
<td>6.5 feet/second</td>
</tr>
<tr>
<td>3&quot; diameter</td>
<td>5.5 feet/second</td>
</tr>
<tr>
<td>2 1/2&quot; diameter</td>
<td>5.0 feet/second</td>
</tr>
<tr>
<td>2&quot; diameter</td>
<td>4.0 feet/second</td>
</tr>
<tr>
<td>1 1/2 and 1 1/4&quot; diameter</td>
<td>3.0 feet/second</td>
</tr>
</tbody>
</table>

2.2 General Description

A. Supplier Chilled Water

1. Supplier chilled water supply and return to the heat exchangers will be provided from an off-site district chilled water plant.

2. System will include electric control valves, strainer, valving, piping and controls.

3. All necessary gauges, thermometers, gauge cocks, thermowells, shut-off valves, control valves and other instruments will be provided for primary and secondary sides of the heat exchangers for operation and maintenance.

4. Chilled water control valves will be of two-way modulating type and will be selected to close against the differential pressures involved.

5. ETS control will be direct digital control (DDC), complete with ton-hour metering, differential pressure and temperature displays, capacity and consumption displays, and Customer-adjustable chilled water supply reset.

   a. The system will include all computer software and hardware, sensors, transmission equipment for interface with Supplier Central Control Center.

   b. The primary chilled water system flow will be modulated to maintain a secondary chilled water reset temperature.

6. In order to limit chilled water consumption to the Contract Capacity, a demand limiter will be provided on the chilled water service. The demand limiter will limit flow to the lesser of that which attains contract
capacity or 1.2 GPM/ton at rated point for on-peak conditions (adjusted upwards when district supply temperature is greater than 34F).

B. Customer Chilled Water

1. Customer chilled water supply and return piping from the heat exchanger to a point of connection with the building's main chilled water piping system will be provided.

2. Heat exchangers will be arranged in parallel operation through a common header.

3. Manual isolation valves, piping and temperature sensors will be provided at chilled water supply and return piping to heat exchangers.

2.3 Control Scheme

A. Each ETS will be a stand-alone microprocessor-based system provided with a display/interface panel. The ETS will provide local control for the primary chilled water heat transfer and secondary side temperature control/monitoring as well as usage and billing information. Each ETS will transmit data back to a central monitoring facility through the use of a fiber optics network. This network will allow the monitoring of critical points as well as the generation of data from one central location.

B. Calculation of the chilled water consumption and load:

1. Instantaneous load (tons) showing the current usage of chilled water.

2. Consumption usage will display total value of chilled water in ton-hours.

C. The following control and monitoring points shall be provided. Points denoted by an * shall be displayed at the display-interface panel mounted with the ETS.

AI = Analog Input
DI = Digital Input
DO = Digital Output
CAL = Calculation
ADJ.V = Adjustable Variable

1. Primary Side (TCC)

AI* Primary Chilled Water Supply Temperature
AI* Primary Chilled Water Return Temperature
AI* Primary Chilled Water Flow
AI* Primary Differential Pressure Drop Across Supply and Return Lines
DI* Primary Differential Across In-line Strainer (Normal or Abnormal)
2. Secondary Side (Customer)

AI* Secondary Chilled Water Supply Temperature
AI* Secondary Chilled Water Return Temperature

3. Calculated Values

CAL* Instantaneous Load (tons)
CAL* Total Consumption (ton-hours)

4. Adjustable Variables

ADJ.V* Customer Setpoint

D. Control sequence of operation shall be as follows:

1. Loop Control: Once the secondary chilled water system has been enabled through the use of a digital input (source provided by Customer, auxiliary contact from motor pump starter or building environmental controls system), a temperature control valve will modulate open. The adjustable setpoint range is limited as the secondary chilled water temperature departs from design. Forty-eight degrees (48°F) is the pivot point between the lowest available setpoint and the secondary chilled water return temperature. The temperature control valves will modulate to control Customer’s setpoint (Customer adjustable from 38-58°F).

2.4 Service Stop Valves

A. The service stop valves on the connection equipment will be operated only by authorized personnel of Customer. Supplier may close the service stop valves when necessary due to emergency circumstances believed to require immediate cessation of the operation of Customer’s cooling system. Supplier will give the customer immediate notice of any such cessation. In emergency circumstances, if Supplier is unable to close the service stop valves, Customer will use reasonable efforts to close the valves as soon as is practicable.

B. The service stop valves, meter stop valves and other equipment on Supplier’s side of the ETS will be operated only by authorized personnel of Supplier. Customer may close the service stop valves when necessary due to emergency circumstances, which require immediate cessation of chilled water supply. Customer will give Supplier immediate notice of any such cessation.
2.5 Authorized Agents

Customer will not authorize any person except authorized employees of Supplier to operate, maintain, alter or otherwise affect the ETS or any Supplier service equipment installed on the premises.

3.0 MAINTENANCE

3.1 Supplier Responsibility

A. Primary Side Strainer: The strainer in the primary service line will be monitored and cleaned by Supplier.

B. Water Treatment: Supplier will maintain the treatment of primary water from the production plants.

C. Energy Transfer Station Maintenance: Supplier will monitor the pressure drop across the primary side of the heat exchangers and remediate if heat exchanger performance deviates significantly from the manufacturer’s performance map. Supplier will check operation of the primary control valves continuously and remediate if problematic operation occurs.

D. Metering:

1. All metering equipment furnished and maintained by Supplier will be fault intolerant. Supplier will commission, operate and maintain the metering equipment in accordance with the manufacturer’s recommendations.

3.2 Customer Responsibility

A. Changes to the System: Any future changes to Customer’s chilled water system that will impact the district cooling system shall be reported and, when applicable, subject to approval by Supplier.

B. Water Treatment: Customer will maintain a corrosion inhibitor in the building’s chilled water system with a pH level between 9.0 and 10.0, and total bacteria count of less than or equal to 100 cfu/ml. Customer is responsible for expenses associated with correction of fouling caused by poor secondary water quality.

C. Connection Equipment Maintenance: Customer will maintain the secondary isolation valves and strainer.

D. ETS Equipment Room: Customer will maintain adequate ventilation/space conditioning of the ETS equipment room.
4.0 CODES AND STANDARDS

A. Chicago Building Code

B. Latest issue as of this date of American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Handbooks on “Fundamentals” and “Systems”

C. ASHRAE Energy Standard 90-80

D. ASHRAE Climate Condition for Chicago, O‘Hare at the 2.5% Design Temperatures

E. National Fire Protection Association (NFPA)

F. Underwriters’ Laboratories (UL)

G. Air Conditioning and Refrigeration Institute (ARI)

H. American National Standards Institute (ANSI)

I. American Society of Mechanical Engineers (ASME)

J. American Society of Testing and Materials (ASTM)

K. National Electrical Manufacturer’s Association (NEMA)


M. Standards of Tubular Heat Exchanger Manufacturer’s Association (TEMA)

N. American Standards Association (ASA)
Non – Competitive Procurement Justification
(Sole Source)
For Chilled Water Services for Gallery 37 and City Hall

*IN DRAFT FORM ONLY – DGS STILL NEEDS TO NEGOTIATE PRICING*

Estimated Cost:

The Department of General Services estimates that we will not exceed $121,500 for Gallery 37 and $240,000 for City Hall per year. The Department of Law (Law) and The Department of General Services (DGS) are currently reviewing the scope of work and pricing schedule.

**Initial Contract Capacity Charge:** $210.00 per ton per year

**Initial Consumption Charge:** $0.18 per ton-hour

**Contract Capacity:** 500 Tons
MDE THERMAL TECHNOLOGIES INC.
CHILLED WATER SERVICE AGREEMENT COVER PAGE

This Cover Page is attached to and made a part of that certain Chilled Water Service Agreement dated ____________, 2009 by and between the customer identified below and MDE Thermal Technologies Inc., an Illinois corporation.

CUSTOMER: \hspace{2.5cm} City of Chicago (acting through its Department of General Services)

CUSTOMER'S INTEREST IN PREMISES:

ADDRESS OF PREMISES: \hspace{1cm} 121 North LaSalle Street, Chicago, Illinois

PROJECTED COMMENCEMENT DATE: \hspace{1cm} September 1, 2009

DURATION OF INITIAL TERM: \hspace{1cm} 60 months

CONTRACT CAPACITY: \hspace{1cm} 500 tons

INTERCONNECTION CHARGE: \hspace{1cm} Not applicable

INITIAL CONTRACT CAPACITY CHARGE: \hspace{1cm} $210 per ton per year

INITIAL CONSUMPTION CHARGE: \hspace{1cm} $0.18 per ton-hour

NOTICES: All notices and other communications shall be addressed as follows:

If to Supplier to:
MDE Thermal Technologies Inc.
c/o Thermal Chicago Corporation
200 West Jackson Blvd., Suite 1310
Chicago, Illinois 60606
Attn: President

With a copy to:
Bryan Cave LLP
161 North Clark #4300
Chicago, Illinois 60601
Attn: Karl L. Marschel

If to Customer to:

Attn:

With a copy to:

Attn:

This Cover Page is an integral part of the Chilled Water Service Agreement and its terms are incorporated into such Agreement by reference.
# Certificate of Liability Insurance

**Producer:** Marsh USA Inc  
500 West Monroe Street  
Chicago, IL 60661  

**Date:** 07/01/2009

**Insurers Affording Coverage**  
- **Insurer A:** American Zurich Insurance Company  
  - NAIC #: 40142
- **Insurer B:** N/A
- **Insurer C:** N/A
- **Insurer D:**
- **Insurer E:**

## Coverage

The policies of insurance listed below have been issued to the insured named above for the policy period indicated. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies. Aggregate limits shown may have been reduced by paid claims.

<table>
<thead>
<tr>
<th>Insr/Add'l Ltr</th>
<th>Insr</th>
<th>Type of Insurance</th>
<th>Policy Number</th>
<th>Policy Effective Date (MM/DD/YYYY)</th>
<th>Policy Expiration Date (MM/DD/YYYY)</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>General Liability</td>
<td>GL 9260621-02</td>
<td>06/30/2009</td>
<td>06/30/2010</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commercial General Liability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EACH OCCURRENCE: $1,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DAMAGE TO RENTED PROPERTY/PERSONAL &amp; ADV INJURY</td>
<td>$1,000,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MED EXP (Any one person): $10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GENERAL AGGREGATE LIABILITY: $2,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PRODUCTS - COMMERICAL: $2,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AUTO ONLY - EA ACCIDENT: $1,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OTHER THAN AUTO ONLY - EA ACCIDENT: $1,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EXCESS / UMBRELLA LIABILITY: EACH OCCURRENCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EXCESS / UMBRELLA LIABILITY: AGGREGATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>WORKERS COMPENSATION AND EMPLOYERS’ LIABILITY: EACH OCCURRENCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>WORKERS COMPENSATION AND EMPLOYERS’ LIABILITY: AGGREGATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SPECIAL PROVISIONS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description of Operations/Location/Entities/Exclusions Added by Endorsement/Special Provisions**

**Certificate Holder:** CHI-002489803-07

**Cancellation:**

Should any of the above described policies be cancelled before the expiration date thereof, the issuing insurer will endeavor to mail 30 days written notice to the certificate holder named to the left, but failure to do so shall impose no obligation or liability of any kind upon the insurer, its agents or representatives.

**Authorized Representative:** Mary Radaszewski

© 1998-2009 ACORD CORPORATION. All Rights Reserved.
May 27, 2009

City of Chicago
Department of Procurement Services
Attn: Mr. Montel Gayles, Chief Procurement Officer
121 N. LaSalle Street
Room 403
Chicago, IL 60602

Re: Chilled Water Service Agreements for 121 N. LaSalle & 66 E. Randolph

Dear Mr. Gayles,

I am writing you to inquire about the Compliance Plan requirements in our Non-Competitive Procurement submittal for chilled water service (air conditioning) at 121 N. LaSalle and 66 E. Randolph.

Thermal Chicago Corporation (formerly known as ETT and Northwind Inc) operates as the Grantee under a District Cooling Use Agreement (the "Agreement") with the City of Chicago. The original Agreement was dated October 1, 1994 and has been amended twenty-five times through October 1, 2008. The Agreement gives us the non-exclusive right to use certain public ways of the City to construct, operate and maintain the district cooling system. As part of the Agreement, we participate in the City's MBE/WBE initiative with regards to the on-going capital investment in our district cooling system. We also provide compliance data to the Department of Environment as part of our annual reporting required pursuant to the terms of the Agreement.

Our current contracts for chilled water service at 121 N. LaSalle and 66 E. Randolph expire August 31, 2008. We are working on new contracts with the Department of General Services to allow us to continue providing chilled water service to these properties. However, Thermal Chicago Corporation is not an MBE or WBE supplier. I do not believe it is appropriate or necessary for these service agreement contracts to have MBE/WBE compliance goals since our company participates in the program as noted above.

If you have any questions, please feel free to contact me at (312) 447-1600 x12.

Sincerely,

Jim Pagnusat
Vice-President of Finance