# **PROJECT MANUAL**

**FOR** 

# SUNSET POOL HEATER REPLACEMENT

Project Address Glen Ellyn, Illinois

Date:February 8, 2021

Owner: Glen Ellyn Park District 185 Spring Avenue Glen Ellyn, Illinois 60137

Engineer: WT Group 2675 Pratum Avenue Hoffman Estates, IL 60192

# Proposals shall be received until Wednesday, February 23rd, 2022, at 10:00am

at the Administration Office of the Glen Ellyn Park District 185 Spring Avenue, Glen Ellyn, Illinois 60137

\*\*Please email ntroia@gepark.org
To be added to the Plan Holders List\*\*



Owner: Glen Ellyn Park District

185 Spring Avenue Glen Ellyn, IL 60137

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#### **DUPAGE COUNTY, ILLINOIS**

# **LEGAL NOTICE TO BIDDERS**

Notice is hereby given that sealed bid proposals will be received by the Glen Ellyn Park District, (GEPD) Glen Ellyn, Illinois for **Sunset Pool Heater Replacement** in accordance with the Bid Documents.

The project consists of: Remove and dispose of existing outdoor swimming pool hears with associated pipes and valves. Replace with new heater units as specified on plans. Contractor must be pre-qualified with the State of Illinois.

Proposals will be received until <u>WEDNESDAY, FEBRUARY 23rd, 10:00 AM at the Spring Avenue Recreation Center, 185 Spring Avenue, Glen Ellyn, Illinois</u>, at which time and place all proposals will be publicly opened and read aloud. Bids must be received in a sealed envelope addressed with the name of the Bidder, Owner, Project name, and date and time of the Bid. Results will be posted on GEPD website.

Bid Documents will be available digitally beginning February 9<sup>th</sup> through the Glen Ellyn Park District the website: **www.gepark.org/about/bids-rfps/**.

There will be a non-mandatory pre-bid meeting on Monday, February 14th, 10:00 am at the job site.

All questions shall be submitted in writing. Questions may be directed via email to Nathan Troia <a href="mailto:ntroia@gepark.org">ntroia@gepark.org</a>. Questions must be received two days prior to bid opening.

All contracts for work herein are subject to all District rules and regulations. This contract calls for the construction of a public work, within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 et seq.

All bids will remain firm for ninety (90) days after the bid opening. The Board of Park Commissioners of the Glen Ellyn Park District reserves the right to reject any or all bids, to waive bid formalities, and to accept the lowest responsible bid that serves the best interests of the District.

Minority and women-owned businesses are encouraged to submit bids for this project. The successful contract bidder(s) are encouraged to utilize minority and women-owned businesses as sub-contractors for supplies, equipment, services, and construction.

#### PUBLISHED BY THE AUTHORITY OF:

Board of Park Commissioners of the Glen Ellyn Park District, DuPage County, Illinois. Dated this 8<sup>th</sup> day of February, 2022

END OF SECTION - 00 11 13

# SECTION 00 21 13 - INSTRUCTIONS TO BIDDERS

#### PART 1 – PREPARATION OF PROPOSALS

- A. Bids are requested for the replacement of pool heaters at Sunset Pool for the Glen Ellyn Park District, (hereinafter referred to as GEPD or Owner), to be performed in accordance with the attached Bid Documents, Project Plans and Manual. The proposal must be received by the date and hour set aside for their opening.
- B. Each Bid shall consist of a completed:
  - 1. Bidders Qualifications
  - 2. Bid Form
  - 3. Certification of Compliance
  - 4. Bid Surety (Bid Bond)
- C. Bid Documents consist of the following:
  - Plans.
  - Project Manual and Specifications
  - Any Addenda issued prior to receipt of Bids.
- D. Bid Documents may be obtained as described in Legal Notice to Bidders.
- E. Bids must be received in a sealed envelope addressed with the name of the Bidder, Owner, Project name, and date and time of the Bid. On the outside of the bid envelope, each sealed bid shall also contain the notation "SEALED BID".
  - If delivered by FedEx or similar courier, be sure the outside of that envelope also indicates the bid contents.
- F. Please send Bids to the attention of Nathan Troia, Parks Project Manager, 185 Spring Avenue, Glen Ellyn, Illinois 60137.

#### PART 2 - ACCEPTANCE OR REJECTION OF BID

- A. The Contract, if awarded, will be awarded to the responsible Bidder who submits the lowest responsive and best qualified Bid proposal complying with these instructions and all other Contract Documents. The GEPD will accept or reject bids within ninety (90) days after analysis of the proposals and reserves the right to accept or reject any or all bids, or to waive any informality or technicality in any proposal in the interest of the owner. No Bidder may withdraw his Proposal for a period of ninety days after the date of opening thereof.
- B. The GEPD may consider such factors as bid price, work guarantee, experience and responsibility of bidder, methods of performing the work and similar factors in determining which bid it deems to be in its best interest and best meeting the requirements of the park district.

# **PART 3 - BID FORM**

- A. A Schedule of Values is included as part of the Bid Form. The prices given in this Schedule are intended solely for the purpose of evaluating the lump sum bid. Although the Schedule of Values in some instances includes unit quantities, this project is to be bid as a lump sum. The bidders are responsible for verifying their own quantities for bidding purposes. The lump sum price shall be for an installed and complete project as drawn and specified.
- B. If the Schedule of Values includes any allowances, each bidder should include this amount in the lump sum bid.

#### PART 4 - EXAMINATION OF DOCUMENTS AND INSPECTION OF SITE

- A. Before submitting a Proposal, Bidders shall carefully examine the Bid Documents, Project Manual, Drawings and Specifications, visit the site of work, fully inform themselves of all existing conditions and limitations, and include in the Proposal a sum to cover the cost of all items to be constructed/work to be performed.
- B. The failure or omission of any bidder to receive or examine any form or document, or to visit the site and become acquainted with existing conditions shall in no way relieve the bidder from any obligation with respect to his bid. No pleas of ignorance, oversight or miscalculation of the conditions prevailing shall suffice to secure withdrawal of a Proposal submitted or to invalidate the Contract or bond after its execution.
- C. Any quantities are given as a courtesy only. Bidders are responsible for verifying all quantities and not to rely solely on the quantities shown in this schedule.

#### **PART 5 - QUALIFICATIONS AND REFERENCES**

- A. The Contractor bidding the project shall be actively engaged in work of the nature described in the plans and specifications and must be able to demonstrate that adequate persons and materials are available to perform the work. The Contractor shall submit with the Bid Proposal no less than three (3) references for which the Contractor has completed work similar to that described in the plans and specifications.
- B. Contractor must be pre-qualified with the State of Illinois for public pool work.

#### **PART 6 - PROPOSAL GUARANTY**

- A. A Bid Bond shall accompany each sealed bid. The Bid Bond of all bidders, except the successful Contractor(s), shall be returned within ten (10) days after the GEPD's decision to accept and/or reject bids. The successful Contractor's Bid Bond shall be returned upon receipt of an acceptable Performance Bond, Payment Bond, and Certificate of Insurance.
- B. Should the Bidder fail to refuse to enter into the agreement within 10 calendar days after notification of acceptance of the Bidder's proposal by the Glen Ellyn Park District, the Bid Bond shall be forfeited and become the property of the Glen Ellyn Park

District.

C. All Bid Bonds will be returned to unsuccessful Bidders by mail.

#### PART 7 - ADDENDA

Any Addenda issued during the bidding period shall be included in the bid proposal lump sum price and shall be considered part of the Contract Documents. Receipt of all Addenda shall be acknowledged on the bid form. FAILURE TO ACKNOWLEDGE RECEIPT OF ADDENDUM ON THE BID FORM MAY DISQUALIFY BID.

All Addendum and associated Bid Document shall be issued through Accurate Repro / Glen Ellyn Park District website gepark.org or online plan room referenced on website. The Glen Ellyn Park District shall not be responsible for information received or not received through this source any other source. It is the responsibility of the bidder to check the website for addendums.

#### **PART 8 - SUBSTITUTIONS AND MODIFICATIONS**

Substitutions (Alternates) for materials, proprietary products, process or equipment may be made only with prior written approval of the GEPD using the Substitution Request Form found at the end of this section, Instruction to Bidders - 00 21 13.

Requests for substitutions shall be submitted to the GEPD five (5) working days, excluding Saturday and Sunday, prior to the bid opening date exclusive of bid opening date. All requests shall include a complete description of the proposed substitute, the name of the material, process, or equipment for which it is to be substituted, and drawings, specifications and data sheets to sufficiently evaluate how the substitution favorably compares to the specified item. Any substitution accepted by the GEPD shall be done so in a written addendum to the bid documents prior to the bid opening.

Use of an alternative product must be approved prior to bidding. Failure to pre-approve an alternative product assumes (mandates) that the bidder has reflected an intended use of the materials and/or manufacturers of the products specified in the Drawings and Specifications.

Whenever in the Project Manual or on the Drawings any material, equipment, device or process is specified or indicated by patent or proprietary name, or by name of its manufacturer, such reference to a material, equipment, device or process has been used to establish a type and quality.

References to the term "equal" or "approved equal" shall mean that an item substituted for a proprietary item shall be of equal or greater quality and shall be approved in the manner described in this section.

#### **PART 9 - INTERPRETATION OF DOCUMENTS**

A. If any person requires clarification or discovers discrepancies or omissions in the Bid Documents, they shall bring these to the attention of the Owner Representative. Any interpretation or correction of the documents will be made only by Addendum issued by the Glen Ellyn Park District.

Bidders may contact *Nathan Troia* <u>ntroia@gepd.org</u> with any questions during the bidding process.

All questions shall be submitted in writing via email.

B. If an error is found in a bid, it must be corrected before the date and time for the bid opening. A written request for withdrawal of the original bid or any part thereof may be granted only if the request is received prior to the specified time of closing.

No bid may be withdrawn or cancelled after the closing time for receipt of bids and for a period of thirty (30) days thereafter

#### **PART 10 - SALES TAX EXEMPTION**

The Glen Ellyn Park District is exempt from payment of the Retailer's Occupation Tax, the Service Occupation Tax (both state and local), the Use Tax and the Service Use Tax, as required by Illinois law. No tax shall be charged for purchases made on behalf of the Glen Ellyn Park District.

#### **PART 11 - INSURANCE**

Bidder's attention is directed to the insurance requirements in the Supplemental Specifications. It is highly recommended that bidders confer with their respective insurance carriers or brokers to determine in advance of bid submission the availability of insurance certificates and endorsements as prescribed and provided herein. If an apparent low bidder fails to comply strictly with the insurance requirements, that bidder may be disqualified from award of the contract.

# **PART 12 – SUBSTANCE ABUSE PREVENTION**

The Contractor shall comply with and cause all subcontractors to comply with the requirements and provisions of the Illinois Substance Abuse Prevention on Public Works Projects Act (820 ILCS 265/1 et seq.) (the "Act").

Failure by the Contractor to comply with the requirements of the Illinois Substance Abuse Prevention on Public Works Projects Act shall constitute a material default of the Contract and shall give the Owner the right to pursue any remedy available to it at law or in equity, including termination of the Agreement for cause in the Owner's sole discretion and any other remedy as provided in the Contract. In the event of a default hereunder, Contractor shall also pay to the Owner all damages Owner is entitled to under the Contract that arise from the default, together with interest, costs and the Owner's reasonable attorney fees.

#### **PART 13 – IDENTITY PROTECTION**

Pursuant to the Illinois Identity Protection Act, 5 ILCS 179/1 *et seq*, the Glen Ellyn Park District has adopted this policy to ensure the confidentiality and integrity of Social Security numbers (SSNs) that the District collects, maintains, and uses. Any information sent or forwarded to the District by various contractors or vendors, especially certified payroll, shall have all references to employee SSNs removed prior to sending.

#### PART 14 - PREVAILING WAGE AND LABOR LAWS.

This contract calls for the construction of a public work, within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 et seq. (the Act). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current prevailing rate of wages (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at http://labor.illinois.gov/. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Departments web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labors website. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, including but not limited to, all wage requirements and notice and record keeping duties.

A signed Affidavit of Compliance shall be included in the bid proposal.

# PART 15 - PERFORMANCE AND PAYMENT BOND

Within (10) days after the award of contract, the successful contractor shall furnish a Performance Bond and a Labor and Materials Payment Bond, each equal to 100% of the contract and all obligations arising from it. Bonds shall be provided on the AIA-312 Form or similar form and shall become part of the Contract. The failure of the successful bidder to enter into contract and supply the required bonds within the (10) days of award of contract, or within such extended period as the GEPD may grant, shall constitute default, and the GEPD may either award the contract to the next responsible bidder, or readvertise for bids. A charge against the defaulting bidder may be made for the difference between the amount of the bid and the amount for which a subsequent contract is executed, irrespective of whether the amount thus due exceeds the amount of the bid guarantee.

#### PART 16 - PERMITS

WT Group is coordinating the permit application with IDPH. The application has been submitted at the time of bidding.

All permit fees will be paid by the Glen Ellyn Park District directly to the permitting agency or municipality.

END OF SECTION 00 21 13



# **SUBSTITUTION** REQUEST (During the Bidding Phase)

Project:	
To: Project Number:	
Project Number:	
Re: Contract For:	
Specification Title: Description:	
Specification Title: Description:	
Proposed Substitution:  Manufacturer:  Trade Name:  Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for of the request; applicable portions of the data are clearly identified.  Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for	
Manufacturer: Phone: Model No.: Model No.: Model No.: Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for of the request; applicable portions of the data are clearly identified.  Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for	
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Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for	r evaluation
Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for	
<ul> <li>Same maintenance service and source of replacement parts, as applicable, is available.</li> <li>Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.</li> <li>Proposed substitution does not affect dimensions and functional clearances.</li> <li>Payment will be made for changes to building design, including A/E design, detailing, and construction costs causubstitution.</li> </ul>	used by the
Submitted by:	
Signed by: Firm: Address:	
Telephone:	
REVIEW AND ACTION	
<ul> <li>☐ Substitution approved - Make submittals in accordance with Specification Section 01330.</li> <li>☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.</li> <li>☐ Substitution rejected - Use specified materials.</li> <li>☐ Substitution Request received too late - Use specified materials.</li> </ul>	
Signed by: Date:	
Supporting Data Attached: Drawings X Product Data Samples Tests Reports	

#### SECTION 00 31 00 - PRELIMINARY SCHEDULE

#### 1.01 GENERAL

A. The following represents the preliminary construction schedule for the Work. This schedule is the current estimate of the Owner to be used for the purposes of bidding. All bidders shall include the costs of all overtime, double-shift, or so-called "premium" time that may be necessary to meet this milestone.

#### 1.02 PRELIMINARY SCHEDULE

- A. **Bid Documents Available:** Wednesday, February 9<sup>th</sup>, 2022. Through www.gepark.org/about/bids-rfps/
- B. Pre-Bid Meeting: Monday February 14th, 10:00am, at job site.
- C. Questions Due: Two days before bids due.
- D. Bids Due: February 23<sup>rd</sup>, 10:00am at Spring Avenue Recreation Center, 185 Spring Avenue, Glen Ellyn, IL 60137
- E. Award of Contract: Anticipated March 1st, 2022 at Park District monthly board meeting
- F. Pre-Construction meeting with the Owner and Contractor: TBD
- G. Commencement of Construction: Anticipated start, April 4<sup>th</sup>, 2022.
- H. **Substantial Completion:** May 13<sup>th</sup>, 2022 prior to pool opening Memorial Day. However, if due to extenuating circumstances, pool heaters could be installed mid-summer during hotter temperatures. The existing heaters are in a debilitated state but likely could be used for brief time.

END OF SECTION - 00 31 00

SECTION 00 41 13 - BID FORM

Sunset Pool He	ater Replacement
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GLEN ELLYN, ILLINOIS

COMPANY NAME:	
THIS PROJECT IS SUBMITTED TO: Glen Ellyn Board of Commissioners	

To whom it may concern:

The undersigned Bidder has received the Bid Documents, Drawings and Project Manual, titled Sunset Pool Heater Replacement

The undersigned has received the following Addenda and have included their provisions in my bid:

Addendum No,	dated	•
Addendum No,	dated	
Addendum No,	dated	

The undersigned Bidder, hereby agrees:

- 1. To hold the bid open for ninety (90) days
- 2. To accept the provisions of the Contract Documents
- 3. To furnish bonds, bid security, certificate of insurance and schedule of values as specified
- 4. To accomplish the work in accordance with the Contract Documents
- 5. That the Bid price is a lump sum cost for materials, installation and labor for the installation
- 6. That this Bid is genuine, and not sham or collusive, or made in the interest or behalf of any person not herein named
- 7. If awarded the contract, the undersigned further agrees to begin work with an adequate force and equipment within 7 days as established in the agreement.

**THE UNDERSIGNED BIDDER**, having familiarized himself with the work required by the Contract Documents, the site(s) where the Work is to be performed, local labor conditions and all laws, regulations and other factors affecting performance of the Work, and having satisfied himself of the expense and difficulties attending performance of the Work,

**HEREBY PROPOSES** and agrees, if this Bid is accepted to enter into Agreement to perform all work, including the assumption of all obligations, duties and responsibilities necessary to the successful completion of the Agreement and the furnishing of materials and equipment required to be incorporated in and form a permanent part of the Work, tools, equipment, supplies, transportation, facilities, labor, superintendence and services required to perform the Work as

indicated or specified in the Contract Documents to be performed or furnished by Contractor in accordance with the following Bid Prices. Contractor must submit on all scheduled values to be considered.

# **BASE BID PRICE:**

The undersigned Bidder will perform all the work for the Sunset Pool Heate the base bid lump sum cost of:	er Replacement, for
	Dollars,
(\$).	
(Amount shall be shown in both words and figures. In case of discrepancy in words will govern).	v, the amount showr
PREPARED BY:	
Signed:	
Name Printed:	-
Title:	_
Company:	_

#### SCHEDULE OF VALUES - BASE BID

Bidder to complete the Schedule of Values. The Schedule of Values is for bid evaluation, aiding the bidder in estimating quantities and preparing the lump sum bid. Bidders are responsible for verifying all quantities and not relying solely on the quantities shown in this schedule. The successful bidder will be required to enter into a lump sum contract agreement. No additional payments will be made due to the discrepancies between bidder's estimated quantities, owner's estimated quantities, and the actual installed quantities to construct the work as drawn and specified. The Unit Prices will be used to establish change orders for additions or deductions to the project as approved by the Owner. The Unit Price shall include all equipment, materials, and labor necessary to complete the work.

COMPANY NAME:
COMPANT NAME.

Item	Description	Quantity	Unit	Unit Price	Item Total
1.0	Demolition				
1.1	Remove and dispose of existing outdoor swimming pool heaters with associated pipes and valves.	1.00	LSUM	\$ -	\$ -
				Subtotal	\$ -
2.0	New Construction				
2.1	New Pool Heater as Specfiied	1.00	LSUM	\$ -	\$ -
2.2	New Back-Up Pool Heater as Specified	1.00	LSUM	\$ -	\$ -
2.3	Associated plumbing, valves, flue work, and incidentals as specified	1.00	LSUM	\$ -	\$
2.4	New Concrete Pad for New Heaters	1.00	LSUM	\$ -	\$
				Subtotal	\$ -
			Constru	ction Subtotal	<b>\$</b> -

3.0	General Requirements				
3.1	Contracting and General Requirements	1.00	LSUM	\$ -	\$ -
3.2	Bonds & Insurance	1.00	LSUM	\$ -	\$ -
3.3	Allowance for unforeseent conditions. Include in Base Bid price. Including replacing non-functioning existing valves.				\$ 3,000.00
				Subtotal	\$
Bid Project Total			\$ -		

END OF SECTION - 00 41 13

SECTION 00 45 13 - BIDDER'S QUALIFICATIONS

# ALL BIDDERS ARE REQUIRED TO FILL OUT THE FOLLOWING INFORMATION AND SUBMIT IT ALONG WITH ALL OTHER BID REQUIREMENTS.

BIDDE	R GENERAL INFORMATION:	
Bidder	Name:	
Submi	tted By:	
	Name and Title	
Addres	SS:	
Busine	ess Phone:	
Busine	ess Fax:	
Email	address of Bidder:	
Busine	ess Type: Sole Proprietor Partnership Corporation formed in the State of Joint Venture Other:	r
If a Sc	le Proprietor, please answer the following:	
	Name in Full:	
	Home Address:	
	Business Address	
	Date of Birth	

	Place of Birth
	Driver's License #/State
lf a C	Corporation, please answer the following:
	Date & Place Incorporated
	State of Incorporation
	President:
	Vice President:
	Secretary:
	Treasurer:
	Is the corporation held publicly or privately?
lf a P	Partnership, please answer the following:
	Date of Organization:
	Type of Partnership:
	Name & Partnership Share of:
	General Partner #1:
	General Partner #2:
	General Partner #3:
lf a J	oint Venture, please answer the following:
	Date of Organization:
	Name & Type of Entity of each Joint Venture (partnership/corp./sole prop.):
	General Venture #1:
	General Venture #2:
	General Venture #3:
	General Venture #4:

If other than a Corporation or Partnership, describe organization and name principals:
DIDDED DACKODOLIND INFORMATION.
BIDDER BACKGROUND INFORMATION:
Have you ever failed to complete any work awarded to you? If yes, indicate when, where and why:
□ Yes No
Has your contractor's license been revoked at any time in the last five years?
□ Yes No
At any time during the last five years, has your firm or any of its owners or officers been convicted of a crime involving the awarding of a contract of a government construction project, or the bidding or performance of a government contract?
□ Yes No
Contractor has the appropriate level of insurance according to the Bid Documents:
□ Yes No
Contractor has current Workers' Compensation Insurance as required by the Labor Code:
□ Yes No
Contractor is licensed to do business as a Contractor in the jurisdiction where this Project is to be completed:
□ Yes No
How many years has your organization been in business as a contractor?
Is the firm a subsidiary, parent, holding company or affiliate of another construction firm?
□ Yes No

If Yes, please have that company submit this document with your Bid.			
Has your firm changed names or license number in the last five years?			
□ Yes No			
If Yes, please provide all names and contractors' license numbers used within the last five years:			
Has there been a change in ownership of the firm at any time in the last three years?			
□ Yes No			
If Yes, please list the name and contact information for the previous Owner(s):			
Was your firm in bankruptcy at any time during the last five years?  □ Yes No			
If Yes, please attach a copy of the bankruptcy petition, showing the case number and the date on which the petition was filed as well as a copy of the Bankruptcy Court's discharge order.			
At any time in the last five years has your firm been assessed liquidated damages?  ☐ Yes No			
If Yes, please provide the information pertaining to the project(s):			
In the last five years have you, a subsidiary of your firm or past owner of your firm been associated, been debarred, disqualified, removed or otherwise prevented from bidding on or completing a project:			
□ Yes No			

If Yes, please provide the information pertaining to the project(s):
In the last five years has your surety company made any payments on your firm's behalf as a resul of a default, to satisfy any claims made against a performance or payment bond issued on your firm's behalf, in connection with a construction project?
□ Yes No
If Yes, please provide the information pertaining to the project(s):
In the last five years has your insurance carrier, for any form of insurance, refused to renew the insurance policy for your firm:
□ Yes No
If Yes, please provide the insurance carrier's information and the year this occurred:
Has OSHA cited and assessed penalties against your firm for any violations of its safety or health regulation in the last five years?
□ Yes No
If Yes, please provide the information pertaining to the project(s):

Glen Ellyn Park District Sunset Pool Heater Replacement	02/2022
Bonding Capacity:	
Name of Bonding Company/Surety	
Address:	
Phone:	
List all other sureties (name and full address) that five years, include the dates which each wrote the	
PROJECT EXPERIENCE:	
List three (3) Pool Equipment installation projects (5) years which are similar in scope to the Work we Park District. Do not include projects completed by organizations under a different name.	hich you would be performing for the Glen Ellyn
1. Project Name:	
Owner, Contact Person and Phone Number	er
Architect, Contact Person and Phone Num	ber
Contract Amount	
Date of Completion	

Percentage of work completed by your organization	
Percentage of work completed by subcontractors	
2. Project Name:	
Owner, Contact Person and Phone Number	
Architect, Contact Person and Phone Number	
Contract Amount	
Date of Completion	
Percentage of work completed by your organization	
Percentage of work completed by subcontractors	
referriage of work completed by subcontractors	
3. Project Name:	
Owner, Contact Person and Phone Number	
Architect, Contact Person and Phone Number	
Contract Amount	
Date of Completion	
Percentage of work completed by your organization	
Percentage of work completed by subcontractors	
referriage of work completed by subconflactors	
PRE-QUALIFICATION WITH THE STATE OF ILLINOIS:	
Is the contractor pre-qualified with the State of Illinois to perform public pool work? Circle of	ne.
YesNo	

# **DESIGNATION OF SUBCONTRACTORS:**

The undersigned certifies that they have used the sub-bids of the following listed subcontractors in compiling this Bid. The subcontractors listed will be used only for the work for which they are listed in their bid. All subcontractors are subject to the approval of the Owner, and are required to read and follow the Project Specifications that pertain to the work they are performing. If a bidder does not submit any sub-contractors, they will be required to complete all work within their own

workforce. If subcontractors are listed, all bonds and insurance shall be written to include them. (List additional subcontractors on separate sheet of paper).

1.	Subcontractor Name:	
	Type of Work:	
	Address:	
	Address.	
	Phone Number:	
2.	Subcontractor Name:	
	Type of Work:	
	Address:	
	Phone Number:	
3.	Subcontractor Name:	
	Type of Work:	
	Address:	
	Phone Number:	
	i ilolio i tullibol.	

I, the undersigned, certify and declare that I have read all the foregoing answers to this Request for Qualifications Statement and know its content.

# **SIGNATURES:**

	Submitter's Signature	Date	-
	Title		-
	Name of Organization Represented		e information provided herein is
true an	d sufficiently complete so as not to be mis	sleading.	
	Notary Public Signature	Date	-
	Commission Expiration		

**BIDDERS QUALIFICATIONS** 

**END OF SECTION - 00 45 13** 

#### SECTION 00 45 20 - AFFIDAVIT OF COMPLIANCE

The undersigned, being first duly sworn on oath, deposes and states that he has the authority to make this certification on behalf of the undersigned,

# (Name of Company)

- (A) That in connection with this procurement,
  - (1) the prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other undersigned or with any competitor; and
  - (2) the prices which have been quoted in this bid have not been knowingly disclosed by the undersigned and will not be knowingly disclosed by the undersigned prior to opening directly or indirectly to any other undersigned or to any competitor; and
  - (3) no attempt has been made or will be made by the undersigned to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
- (B) The undersigned further states,
  - (1) he is the person in the undersigned's organization responsible within that organization for the decision as to the prices being bid herein and that he has not participated, and will not participate, in any action contrary to (A)(1) through (A)(3) above; or
  - (2)(a) he is not the person in the undersigned's organization responsible within that organization for the decision as to the prices being bid herein but that he has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (A)(1) through (A)(3) above, and as their agent does hereby so certify; and
    - (b) that he has not participated, and will not participate, in any action contrary to (A)(1) through (A)(3) above.
- (C) The undersigned certifies that, pursuant to Illinois Compiled Statutes, 720 ILCS 5/33E-1 et seq., the undersigned is not barred from bidding on this contract as a result of a conviction for violation of State of Illinois laws prohibiting bid-rigging or bid-rotating.
- (D) The undersigned certifies that, pursuant to Illinois Compiled Statutes, 65 ILCS 5/11-42.1-1, the undersigned is not delinquent in the payment of any tax administered by the Illinois Department of Revenue.
- (E) The undersigned agrees to provide a drug free workplace in accordance with the Drug Free Workplace Act, 30 ILCS 580/1 et seq.
- (F) The Contractor shall comply with and cause all subcontractors to comply with the requirements and provisions of the Illinois Substance Abuse Prevention on Public Works Projects Act (820 ILCS 265/1 et seg.) (the "Act").

- (G) Is not barred from bidding on this public contract as a result of a violation of either Section 33E-3 or 33E-4 of Illinois Revised Statues Chapter 38, Article 33E (Public Contracts)
- (H) Is in compliance with Illinois Human Rights Act, including the sexual harassment policy amendment which took effect July 1, 1993 (codified as 775 ILCS 52-105-1993), requiring a written anti-harassment policy that meets the directives of the Act;
- (I) Agrees to comply with all the provisions of the Americans with Disabilities Act with respect to employment, program participation, public service and any other provisions related to your operations in service to the Glen Ellyn Park District.
- (J) The undersigned, does hereby certify pursuant to section 2-105 of the Illinois Human Rights Act (775 ILCS 5/2-105) that it has a written sexual harassment policy that includes, at a minimum, the following information: (i) the illegality of sexual harassment; (ii) the definition of sexual harassment under State law; (iii) a description of sexual harassment, utilizing examples; (iv) an internal complaint process including penalties; (v) the legal recourse, investigative and complaint process available through the Department of Human Rights and Human Rights Commission; (vi) direction on how to contact the Department of Human Rights and Human Rights Commission; and (vii) protection against retaliation as provided by Section 6-101 of the Human Rights Act.
- (K) The contractor understands and agrees to abide by the provisions of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 et seq. (the Act). This contract calls for the construction of a public work, within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 et seq. (the Act). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current prevailing rate of wages (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at http://labor.illinois.gov/. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Departments web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labors website. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, including but not limited to, all wage requirements and notice and record keeping duties.

Glen	Ellyn	Park	District
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- (L) The contractor understands and agrees to provide competent supervision and personnel capable of completing all required work in a safe manner as governed by current OSHA standards and all other authorities having jurisdiction
- (M) It is expressly understood that the foregoing statements, representations, and promises are made as a condition to the right of the undersigned to receive payment under any award made hereunder.

Authorized Signatu	re:
Title	:
SUBSCRIBED AND SWORN TO before me	e this
day of, 20	22
Notary Public	<u> </u>

**END OF SECTION - 00 45 20** 

# SECTION 00 52 13 - AGREEMENT FORM

#### PART 1 – GENERAL

# 1.01 FORM OF AGREEMENT

- A. AIA Document A101, Owner-Contractor Agreement Form Stipulated Sum (2017 Edition), forms the basis of Contract between the Owner and Contractor.
- B. The above document may be examined at the Owner's office or purchased at the American Institute of Architects, <a href="http://www.aia.org/docs-purchase&defPr=1">http://www.aia.org/docs-purchase&defPr=1</a>.

#### 1.02 RELATED REQUIREMENTS

A. Document 00 72 13 – General Conditions.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

**END OF SECTION - 00 52 13** 

AGREEMENT FORM 00 52 13-1

#### SECTION 00 61 00 - INSURANCE, BONDS, CERTIFICATES AND FORMS

#### PART 1 – GENERAL

#### A. List of Subcontractors:

Contractor shall provide a List of Subcontractors within seven (7) days .of Contract date. The List shall include the Contractors Name, Trade Performed, Address, Phone Number, Fax Number, and Names and Cell Phone Numbers of Project Manager and Superintendent.

# B. Performance / Payment Bonds:

The forms of Bonds shall be "Performance Bond" and "Payment Bond", The American Institute of Architects Document A312, December, Most Recent Edition. The Bidder shall furnish performance and payment bonds covering the faithful performance of the Contract and payment of all obligations arising hereunder. The cost of such Bonds shall be included in the Bid. The Performance and Payment Bond shall be in the amount of 100% of the contract price.

# C. Bid Bond (Equal to not less than 10% of the amount of the Base Bid):

The form of "Bid Bond" shall be AIA Form A-310 or cashier's check made payable to GLEN ELLYN PARK DISTRICT.

# D. Substantial Completion

The form of "Certificate of Substantial Completion" shall be provided by the Owner.

#### G. Request for Information (RFI) Form

This form shall be used by the Contractor when requesting information from the Owner during the bidding process.

# H. Substitution Request Form

This form shall be used by the Contractor when requesting consideration of a proposed product or material substitution.

#### PART 2 - INSURANCE

- A. Contractor shall procure and maintain, for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the lump sum cost of the Work.
- B. Minimum Scope of Insurance: Coverage should be at least as broad as the following:
  - Insurance Services Office Commercial General Liability Occurrence per Owner; and
  - 2. Owners and Contractors Protective Liability (OCP) policy with the Glen Ellyn Park District as named insured; and
  - 3. Insurance Service Office Business Auto Liability coverage and shall include "Any Auto" per Owner and
  - 4. Workers Compensation as required by the Labor Code of the State of Illinois and Employer' Liability Insurance.
- C. Minimum Limits of Insurance: Contractor shall maintain limits no less than the following:
  - 1. Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage.
  - 2. Business Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
  - 3. Umbrella Liability: \$1,000,000 each occurrence
  - 4. Workers' Compensation and Employers' Liability: Workers' Compensation coverage with statutory limits and Employers' Liability limits or \$1,000,000 per accident.
  - 5. Owners and Contractors Protective Liability Policy: \$1,000,000 each occurrence.
- D. Any deductibles or self-insured retentions must be declared to and approved by the Glen Ellyn Park District. At the option of the Glen Ellyn Park District, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Glen Ellyn Park District its officials, agents, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of the losses and related investigations, claim administration and defense expenses.
- E. Other Insurance Provisions: the policies are to contain, or be endorsed to contain, the following provisions:
  - 1. General Liability and Automobile Liability Coverage
  - 2. The Glen Ellyn Park District, its officials, agents, employees and volunteers are to be covered as insured's as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed

operations of the contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the member, its officials, agents, employees and volunteers.

- 3. The Contractor's insurance coverage shall be primary as respects the Glen Ellyn Park District, its officials, agents, employees and volunteers. Any insurance or self-insurance maintained by the Glen Ellyn Park District, its officials, agents, employees and volunteers shall be excess of Contractor's insurance and shall not contribute with it.
  - Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Glen Ellyn Park District, its officials, agents, employees and volunteers.
- 4. The Contractor's insurance shall contain a Severability of Interest/Cross Liability clause or language stating that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respects to the limits of the insurer's liability.
  - a. Workers' Compensation and Employer's Liability Coverage: The insurer shall agree to waive all rights of subrogation against the Glen Ellyn Park District, its officials, agents, employees and volunteers for losses arising from work performed by Contractor for the Glen Ellyn Park District.
  - b. All Coverages: Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, cancelled, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Glen Ellyn Park District.
  - c. Acceptability of Insurers: Insurance is to be placed with insurers with a Best's rating of no less than A-, VIII and licensed to do business in the State of Illinois.
  - d. Verification of Coverage: Contractor shall furnish the Glen Ellyn Park District with certificates of insurance naming the Glen Ellyn Park District, its officials, agents, employees and volunteers as additional insured, and with original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements may be on forms provided by the member and are to be received and approved by the Glen Ellyn Park District before any work commences. The attached Additional Insured Endorsement shall be provided to the insurer for their use in providing coverage to the additional insured. Other additional insured endorsements may be utilized, if they provide a scope of coverage at least as broad as the coverage stated on the attached endorsement. The

- Glen Ellyn Park District reserves the right to request full certified copies of the insurance policies and endorsements.
- e. Subcontractors: Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.
- f. Assumption of Liability: The contractor assumes liability for all injury to or death of any person or persons including employees of the contractor, any subcontractor, any supplier or any other person and assumes liability for all damage to property sustained by any person or persons occasioned by or in any way arising out of any work performed pursuant to this agreement.

#### F. Indemnity/Hold Harmless Provision:

- 1. To the fullest extent permitted by law, the Contractor hereby agrees to defend, indemnify and hold harmless the Glen Ellyn Park District, its officials, agents and employees, against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, which may in anywise accrue against the Glen Ellyn Park District, its officials, agents and employees, arising in whole or in part or in consequence of the performance of this work by the Contractor, its employees, or subcontractors, or which may in anywise result therefore, except that arising out of the sole legal cause of the Glen Ellyn Park District, its agents or employees, the Contractor shall at it own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefore or incurred in connections therewith, and if any judgment shall be rendered against the member, its officials, agents and employees, in any such action, the Contractor shall, at its own expense, satisfy and discharge the same.
- Contractor expressly understands and agrees that any performance bond or insurance policies required by this contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the Glen Ellyn Park District, its officials, agents and employees as herein provided.

#### COMMERCIAL GENERAL AND UMBRELLA LIABILITY INSURANCE

- A. Contractor shall maintain commercial general liability (CGL).
- B. CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 10 93, or a substitute form providing equivalent coverage, and shall cover liability arising from premises, operations, independent contractors, productscompleted operations, personal injury and advertising injury, and liability assumed

- under an insured contract (including the tort liability of another assumed in a business contract).
- C. GEPD shall be included as an insured under the CGL, using ISO additional insured endorsement CG 20 10 or a substitute providing equivalent coverage, and under the commercial umbrella, if any. This insurance shall apply as primary insurance with respect to any other insurance or self-insurance afforded to GEPD.
- D. There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from pollution, explosion, collapse, or underground property damage.

## CONTINUING COMPLETED OPERATIONS LIABILITY INSURANCE

- A. Contractor shall maintain commercial general liability (CGL).
- B. Continuing the CGL insurance shall be written on ISO occurrence form CG000110 93, or substitute form providing equivalent coverage, and shall, at minimum, cover liability arising from products completed operations and liability assumed under an insured contract.
- C. Continuing CGL insurance shall have a products-completed operations aggregate of at least two times its each occurrence limit.
- D. Continuing commercial umbrella coverage, if any, shall include liability coverage for damage to the insured's completed work equivalent to that provided under ISO form CG 00 01.

#### BUSINESS AUTO AND UMBRELLA LIABILITY INSURANCE

- A. Contractor shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit of not less than \$2,000,000.00 each accident. Such insurance shall cover liability arising out of any auto, including owned, hired and non-owned autos.
- B. Business auto insurance shall be written on Insurance Services Office (ISO) form CA 00 01, CA 00 05, CA 00 12, CA 00 20, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in the 1990 and later editions of CA 00 01.

#### WORKERS' COMPENSATION INSURANCE AND EMPLOYER'S LIABILITY

A. Contractor shall maintain workers' compensation insurance as required by statute and employer's liability insurance.

B. If GEPD has not been included as an insured under the CGL using ISO additional insured endorsement CG 20 10 under the Commercial General and Umbrella Liability Insurance required in this Contract, the contractor waives all rights against GEPD and its officers, officials, employees, volunteers and agents for recovery of damages arising out of or incident to the Contractor's work.

### GENERAL INSURANCE PROVISIONS

- A. Prior to beginning work, Contractor shall furnish GEPD with a certificate(s) of insurance and applicable policy endorsement(s), executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth above. AR certificates shall provide for 30 days' written notice to GEPD prior to the cancellation or material change of any insurance referred to therein. Written notice to GEPD shall be by certified mail, return receipt requested.
- B. Failure of GEPD to demand such certificate, endorsement or other evidence of full compliance with these insurance requirements or failure of GEPD to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- C. GEPD shall have the right, but not the obligation, of prohibiting Contractor or any subcontractor from entering the project site until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by GEPD. Failure to maintain the required insurance may result in termination of this Contract at GEPD's option.
  - 1. With respect to insurance maintained after final payment in compliance with a requirement above, an additional certificate(s) evidencing such coverage shall be promptly provided to GEPD whenever requested.
  - 2. Contractor shall provide certified copies of all insurance policies required above within 10 days of GEPD's written request for said copies.

#### D. Acceptability of Insurers

1. For insurance companies which obtain a rating from A.M. Best, that rating should be no less than A -VIII using the most recent edition of the A.M. Best's Key Rating Guide. If the Best's rating is less than A -VIII or a Best's rating is not obtained, the GEPD has the right to reject insurance written by an insurer it deems unacceptable.

#### E. Cross-Liability Coverage

- 1. If Contractor's liability policies do not contain the standard ISO separation of insured provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.
- F. Deductible and Self-Insured Retentions

1. Any deductibles or self-insured retentions must be declared to the GEPD. At the option of the GEPD, the Contractor may be asked to eliminate such deductibles or self-insured retentions as respects the owner, its officers, officials, employees, volunteers and agents or required to procure a bond guaranteeing payment of losses and other related costs, including, but not limited to, investigations, claim administration and defense expenses.

#### G. Subcontractors

 Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.

END OF SECTION - 00 61 00

# SECTION 00 72 13 - GENERAL CONDITIONS

PART 1 – GENERAL

# 1.01 GENERAL CONDITIONS:

A. The General Conditions for this Project are "General Conditions of the Contract for Construction", American Institute of Architects Document A201, 1997 Edition, including all supplements.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION - 00 72 13

#### SECTION 00 73 00 - SUPPLEMENTARY CONDITIONS

#### PART 1 - TERMS

#### 1.1 TERMS

- A. For the purpose of these specifications, the terms "Owner" and "GEPD" shall refer to the Glen Ellyn Park District.
- B. The term "Contractor" shall refer to the party entering into the contract for the performance of the Work.
- C. The term "Owner's Representative", "Landscape Architect", "Architect" or "Engineer" shall mean a designated employee or employees of the Glen Ellyn Park District

#### 1.2 GOVERNING SPECIFICATIONS

- A. The term "IDOT Standard Specifications" shall mean the most current adopted edition of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction.
- B. The IDOT Standard Specifications shall govern the work except as specifically modified on the Plans and in these Specifications.

#### PART 2 - WORK COMPLETION TIME

#### 2.1 CONTRACT TIME

Work shall commence no earlier than the date fixed in a Notice to Proceed that will be prepared by the Owner. Contractor is encouraged to minimize the length of time involved in on-site construction. Scheduling shall take into account time for ordering and delivery of equipment. Subject to delay resulting from a strike or other force majure defined herein, substantial completion of all items, including completion of punch list items shall be no later than the date listed in the A101 Contract. In case of failure to complete the work within the time named herein or within such extra time as may have been allowed by extensions, the GEPD may withhold such sums as may be necessary from final payment to complete the work.

# 2.2 DAILY RESTRICTIONS

The daily work schedule shall conform to the stricter of the following two schedules: either 1.) the regulatory limitations imposed by the municipality where the site is located or 2.) work at the project site shall not commence before 7:00 am and shall not be conducted after 6:00 pm on weekdays and not before 8:00 am or after 5:00 pm on weekends.

#### PART 3 - RETAINAGE

GEPD will retain ten percent (10%) of the amount of each progress payment until final completion and acceptance by the GEPD of all Work included in this Contract.

#### PART 4 - EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

- A. The Contractor is required to comply with the following equal employment opportunity clause by the Illinois Fair Employment Practices Commission as a material term of all public contracts.
- B. In the event of Contractor's non-compliance with any provision of the Equal Employment Opportunity Clause, the Illinois Fair Employment Practices Act or the Fair Employment Practices Commission's Rules and Regulations for Public Contracts, the Contractor may be declared non responsible and, therefore, ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During performance of this Contract, Contractor agrees as follows:
  - That he/she will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or ancestry and further that he/she will examine all job classifications to determine if minority persons or women are under-utilized and will take appropriate affirmative action to rectify any such underutilization.
  - 2. That if he/she hire additional employees in order to perform this contract or any portion hereof he/she will determine the availability (in accordance with the Commission's Rules and Regulations for Public Contracts) of minorities and women in the area(s) from which they may reasonably recruit and he/she will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized
  - That in all solicitations or advertisements for employees placed by him/her or on his/her behalf, he/she will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, national origin or ancestry.
  - 4. That he/she will send to each labor organization or representative of works with which they have or are bound by a collective bargaining or other agreement or understanding, a notice advising each labor organization or representative of the contractor's under Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts. If any such labor organization or representative fails or refuses to cooperate with the contractor in his efforts to comply with such act and rules and regulations, the contractor will promptly so notify the Illinois Fair Employment Practices Commission and

the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations there under.

5. That he/she will submit reports as required by the Illinois Fair Employment Practices Commission's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the commission or the contracting agency, and in all respects comply with Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts.

END OF SECTION - 00 73 00

#### SECTION 01 10 00 - SUMMARY OF WORK

#### PART 1 GENERAL

#### 1.01. DESCRIPTION

A. The Park is located at the 483 Fairview Avenue, Glen Ellyn, 60137

#### 1.02. STAGING

A. Contractor field office space and material storage will be limited to areas adjacent to the parking lot as directed by the Owner.

#### 1.03. SCOPE OF WORK

A. Prior to construction, the Contractor shall be responsible for providing the Owner with a detailed construction sequencing schedule outlining the days times, and areas of the parking lot that will be affected and shut off to patrons.

#### 1.04. CONTRACTOR DUTIES:

- A. Except as specifically noted, provide and pay for:
  - 1. Labor, materials and equipment.
  - 2. Tools, construction equipment and machinery.
  - 3. Other facilities, utilities and services necessary for proper execution and completion of work.
- B. Pay legally required sales, consumer and use taxes.
- Secure and pay for, as necessary for proper execution and completion of work.
  - 1. Licenses.
- D. Give required notices.
- E. Comply with codes, ordinances, rules, regulations orders and other legal requirements of public authorities which bear on performance of work.
- F. Promptly submit written notices to Owner, of observed variance of Contract Documents from legal requirements.

#### 1.05. JOB CONDITIONS

- A. Maintain regular traffic flow around site unless otherwise directed.
- B. Repair any damage to property which is to remain in use, or that belongs to any person, or persons, on or off the site, caused by construction.

- C. Perform all work in such a manner as to prevent fires. Remove debris promptly; do not burn materials on the site.
- D. Protect and maintain existing utility lines in such a manner as to prevent interruptions of service.
- E. Cap all utility lines terminated by work on this project in a manner approved by governmental and utility authorities having jurisdiction.
- F. Remove all materials from construction operations in such a manner as to avoid creating a nuisance. Legally dispose of all materials on a daily basis.

#### 1.06. CONTRACTS:

A. Construct work under single contract, employing acceptable low subcontractors.

#### 1.07. OWNER-FURNISHED PRODUCTS:

A. The Owner will provide all items not specified in the contract documents. However, the work does include providing support systems to receive Owner furnished equipment, and mechanical and electrical connections.

#### B. Owner Duties:

- 1. Schedule delivery date with supplier in accordance with construction schedule.
- 2. Obtain installation drawings and instructions.
- 3. Submit claims for transportation damages.
- 4. Pay for all building and permit fees.
- 5. Arrange for guarantees, warranties.
- 6. Unload delivered products.
- 7. Promptly inspect delivered products; report damaged or defective items.
- 8. Handle at site, including uncrating and storage.
- 9. Protect from exposure to elements, and from damage.
- 10. Install, connect, and finish products

#### C. Contractor Duties:

- 1. Designate required delivery date for each product in construction schedule.
- 2. Repair or replace items damaged as result of Contractor operations.

#### 1.08. CONTRACTOR USE OF PREMISES:

A. Confine operations at site to areas permitted by:

- 1. Permits.
- 2. Contract Documents.
- B. Do not unreasonably encumber site with materials or equipment.
- C. Assume full responsibility for protection and safekeeping of materials, tools, equipment and products stored on premises.
- D. Move any store products which interfere with operations of other Contractor.
- E. Obtain and pay for use of additional storage or work areas needed for operations.
- F. Provide all pumping necessary to keep site utility lines and excavations free from water. Do not discharge on adjoining property.

#### 1.09. PERFORMANCE OF WORK:

- A. All contractors shall inspect surfaces, structure and other work precedent to their work and upon which their work depends, and verify that no defects or errors are present that could result in poor application in their work or cause latent defects in workmanship.
- B. Any defects or errors found in work precedent to another contractor's operations, shall be reported to the general contractor, who shall see that such are corrected prior to commencement of work by the contractor affected.
- C. Commencement of any operation shall constitute acceptance of substrates or preceding work by the contractor performing same.
- D. Each sub-contractor shall adequately prepare substrates or preceding work prior to commencing his installation operations.
- E. All manufactured articles, materials, appliances and equipment shall be applied, installed, connected, erected, used, clean conditions, and placed in operation as directed by the respective manufacturer, insofar as these directions are applicable to this particular project and are not in conflict with superior requirements in the specifications or requirements of applicable Building Codes.

#### 1.10. PARTIAL OWNER OCCUPANCY:

- A. Schedule early completion of designated areas for Owner usage prior to substantial completion of entire project.
- B. Contractor Provide:
  - 1. Access for Owner personnel.
  - 2. Operation of mechanical and electrical systems.
- C. Prior to occupancy, execute certificate of substantial completion.

- D. Upon occupancy, Owner provides:
  - 1. Maintenance.
  - 2. Insurance.

END OF SECTION 01 10 00

#### SECTION 01 23 00 - ALTERNATES

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

A. This Section includes administrative and procedural requirements for alternates.

#### 1.3 DEFINITIONS

- A. Alternate: Alternates are synonymous with Substitutions as defined in Section 00 21 13. An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

#### 1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

#### B. Notification:

Substitutions (Alternates) for materials, proprietary products, process or equipment may be made only with prior written approval of the GEPD using the Substitution Request Form found in Section, Instruction to Bidders - 00 21 13.

Requests for substitutions shall be submitted to the GEPD five (5) working days, excluding Saturday and Sunday, prior to the bid opening date exclusive of bid opening date. All requests shall include a complete description of the proposed substitute, the

ALTERNATES 01 23 00 - 1

name of the material, process, or equipment for which it is to be substituted, and drawings, specifications and data sheets to sufficiently evaluate how the substitution favorably compares to the specified item. Any substitution accepted by the GEPD shall be done so in a written addendum to the bid documents prior to the bid opening.

Use of an alternative product must be approved prior to bidding. Failure to preapprove an alternative product assumes (mandates) that the bidder has reflected an intended use of the materials and/or manufacturers of the products specified in the Drawings and Specifications.

Whenever in the Project Manual or on the Drawings any material, equipment, device or process is specified or indicated by patent or proprietary name, or by name of its manufacturer, such reference to a material, equipment, device or process has been used to establish a type and quality.

References to the term "equal" or "approved equal" shall mean that an item substituted for a proprietary item shall be of equal or greater quality and shall be approved in the manner described in this section.

C. Execute accepted alternates under the same conditions as other work of the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 23 00

ALTERNATES 01 23 00 - 2

#### SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. In general, it is the Contractor's responsibility to notify the Landscape Architect if there will be changes to the Contract Sum or Contract Time. Regardless, if it was owner initiated or due to unforeseen circumstances. This is to be done as soon as possible.
- C. Related Sections include the following:
  - 1. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

#### 1.3 MINOR CHANGES IN THE WORK

A. Landscape Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.

#### 1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests:
  - Landscape Architect will issue a Proposal Request with proposed changes in Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental drawings or attachments. Proposal Request form shall be AIA Document G709, or similar document. A Proposal Request may also come verbally from the Landscape Architect. Do not consider the Proposal Request as a reason to stop work in progress or to execute the proposed change.
  - 2. Contractor shall then submit to Landscape Architect a Proposal estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.

- a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made.
- b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
- c. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship.
- d. Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.

#### B. Contractor-Initiated Proposals:

- 1. If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a Proposal to the Landscape Architect.
- 2. Contractor shall submit to Landscape Architect a Proposal estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
  - Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change.
  - b. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made.
  - c. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship.
  - e. Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.

#### 1.5 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Proposal, Contractor will issue a Change Order for signatures of Owner and Contractor. Using AIA Document G701 or similar.

B. Any Change Order must be signed, prior to commencement of work. Proposals and Change Orders presented after Work has been complete will not be authorized for payment.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

#### SECTION 01 29 76 - PROGRESS PAYMENT PROCEDURES

#### PART 1 - GENERAL

#### 1.01 SUBMITTAL OF APPLICATIONS:

A. Submit applications for payment to the Owner in accordance with the schedule established by Conditions of the Contract and Agreement between Owner and Contractor.

#### 1.02 FORMAT AND DATA REQUIRED

- A. Submit itemized applications type on AIA Document G702, Application and Certificate for Payment, and Continuation Sheets G703.
- B. Provide Itemized Data on Continuation Sheets:
  - 1. Format, schedules, line items and values: Those of the Schedule of Values accepted by Owner.
  - 2. Major trades in Schedule of Values shall be broken down into sub-categories.

#### 1.03 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

- A. Fill in required information, including that for change orders executed prior to the date of submittal of application.
- B. Fill in summary of dollar values to agree with the respective totals indicated on the continuation sheets.
- C. Execute certification with the signature of a responsible officer of the contract firm.

#### 1.04 CONTINUATION SHEETS

- A. Fill in total list of all scheduled component items of work with item number and the scheduled dollar and cents value for each item.
- B. Fill in the value in each column for each schedule line item when work has been performed or products stored.
- C. List each change order executed prior to the date of submission, at the end of the continuation sheets.
- List by change order number, and description, as for an original component item of work.

#### 1.05 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

- A. When the Owner requires substantiating data, Contractor shall submit suitable information, with a cover letter identifying:
  - 1. Project.
  - 2. Application number and date.
  - Detailed list of enclosures.
  - 4. Item number and identification as shown on application, and description for stored products.

#### 1.06 SUBMITTAL PROCEDURE

- A. Before each certificate for payment is issued, Contractor shall furnish to the Owner a complete statement of the amount due to Subcontractors, parties supplying material, and for his own materials and labor on a Contractor's sworn affidavit form (Construction Industry Affairs Committee of Chicago, Form No. 1, "Application for Payment and Sworn Statement for Contractor and Subcontractor to Owner", Form No. 591).
- B. The first payment request shall be accompanied by the Contractor's partial waiver of lien as well as all Certified Payroll for that pay period.
- C. Each subsequent monthly payment request shall be accompanied by the Contractor's partial waiver and the partial waivers of Subcontractors and suppliers who were included in the immediate preceding payment request, to the extent of that payment as well as all Certified Payroll for the Contractor and Subcontractors. (The Contractor must submit partial waivers on a current basis, but the Subcontractors and suppliers may not be more than one payment late with their partial waivers.)
- D. If there is a project allowance included as part of the Contract Sum, designated in Article 4, Section 4.4 of the AIA Document A101-2007, the Contractor shall submit, with his monthly pay applications, an allowance adjustment summary to the Owner showing what portions, if any, of the allowance have been used.
- E. The Contractor may use his own Allowance Adjustment form or one provided by the Owner.
- F. Applications for payment shall be submitted to the Owner in accordance with the schedule established by Conditions of the Contract and Agreement between Owner and Contractor.
- G. Material necessary to construction of project, delivered upon premises, shall not be removed from premises without written consent of the Owner.

G. Payments will be made on account of materials (fabricated) or equipment not installed but delivered and suitably stored and protected at the site or stored off site in a bonded warehouse. Payments for materials or equipment stored on or off the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest, including applicable insurance and transportation for those materials and equipment stored off the site.

#### 1.07 APPLICATION FOR FINAL PAYMENT

- A. Fill in application forms as specified for progress payments.
- B. Use continuation sheets for presenting the final statement of accounting as specified in Section 01 70 00, Closeout Procedures.
- C. The acceptance of the final payment by the Contractor shall be held to be a waiver of any and all claims against the Owner arising out of or in connection with the Contract. At the time of substantial completion, all waivers shall be current up to 100 percent of the value of the work as of that date.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 29 76

#### SECTION 01 70 00 - EXECUTION

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
  - 1. Construction layout.
  - 2. Field engineering and surveying.
  - 3. General installation of products.
  - 4. Coordination of Owner-installed products.
  - 5. Progress cleaning.
  - 6. Starting and adjusting.
  - 7. Protection of installed construction.
  - Correction of the Work.
- B. Related Sections include the following:
  - 1. Division 01 Section "Submittal Procedures" for submitting surveys.
  - 2. Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.
- C. It will be left to the Contractor's discretion if a professional land surveyor is retained for field layout. Otherwise, it will be the responsibility of the Contractor or Subcontractor to implement the field layout.

#### 1.3 SUBMITTALS

A. Equipment Orders: Submit orders for heaters and other equipment.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
  - 1. Before construction, verify the location and points of connection of utility services.
- B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
  - Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.
  - 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
  - 1. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
    - a. Description of the Work.
    - b. List of detrimental conditions, including substrates.
    - c. List of unacceptable installation tolerances.
    - d. Recommended corrections.
  - 2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
  - 3. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

#### 3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

- 1. Notify Landscape Architect and Owner not less than two (2) days in advance of proposed utility interruptions.
- 2. Do not proceed with utility interruptions without Owner's written permission.
- C. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- D. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- E. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Landscape Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents. Submit requests on CSI Form 13.2A "Request for Interpretation."

#### 3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Landscape Architect promptly.
- B. General: If practical, engage a land surveyor to lay out the Work using accepted surveying practices.
  - 1. Establish benchmarks (minimum of 3) and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
  - 2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
  - 3. Inform installers of lines and levels to which they must comply.
  - 4. Check the location, level and plumb, of every major element as the Work progresses.
  - 5. Notify Landscape Architect when deviations from required lines and levels exceed allowable tolerances.
  - 6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- D. Building Lines and Levels: Locate and lay out control lines and levels for structures, foundations, and column grids, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piles from two or more locations.

E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Landscape Architect.

#### 3.4 FIELD ENGINEERING

- A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
  - 1. Do not change or relocate existing benchmarks or control points without prior written approval of Landscape Architect. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Landscape Architect before proceeding.
  - 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- B. Benchmarks: Establish and maintain a minimum of two (2) permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
  - 1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
  - 2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
  - 3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.
- C. Certified Survey: On completion of foundations, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.
- D. Final Property Survey: Prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by professional engineer, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.
  - 1. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.

#### 3.5 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
  - 1. Make vertical work plumb and make horizontal work level.

- 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- 3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
  - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Landscape Architect.
  - 2. Allow for structural movement, including thermal expansion and contraction.
  - 3. Use only anchors and fasteners specified in contract documents or "Approved Equal".
- G. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- H. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

#### 3.6 OWNER-INSTALLED PRODUCTS

- A. Site Access: Provide access to Project site for Owner's construction forces.
- B. Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction forces.
  - 1. Construction Schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.
  - 2. Preinstallation Conferences: Include Owner's construction forces at preinstallation conferences covering portions of the Work that are to receive

Owner's work. Attend preinstallation conferences conducted by Owner's construction forces if portions of the Work depend on Owner's construction.

#### 3.7 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F.
  - Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
  - 1. Remove liquid spills promptly.
- D. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- E. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- F. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- G. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

#### 3.8 STARTING AND ADJUSTING

- A. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- B. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 1 Section "Quality Requirements."

#### 3.9 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

#### 3.10 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 1 Section "Cutting and Patching."
  - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

END OF SECTION 01 70 00

#### SECTION 01 77 00 - CLOSEOUT PROCEDURES

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Inspection procedures.
  - 2. Project Record Documents.
  - 3. Operation and maintenance manuals.
  - 4. Warranties.
  - 5. Instruction of Owner's personnel.
  - 6. Final cleaning.

#### B. Related Sections include the following:

- 1. Division 01 Section "Progress Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
- 2. Division 01 Section "Execution" for progress cleaning of Project site.
- 3. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
- 4. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- 5. Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for products of those Sections.

#### 1.3 INSPECTIONS & PUNCH LISTS

- A. Preliminary Procedures: Before requesting a owner inspection for Substantial Completion, complete the following:
  - 1. Complete startup testing of systems.
  - 2. Submit test/adjust/balance records.
  - 3. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 4. Complete final cleaning requirements, including touchup painting.
  - 5. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- B. Owner inspection: Submit a request for Owner inspection for Substantial Completion.
  - 1. On receipt of request, Owner will either proceed with inspection alone or request contractor to be present.
  - Owner will prepare the Punch List or additional items identified by the Owner that must be completed or corrected before Certificate of Substantial Completion will be issued.
  - 3. Re-inspection: Request re-inspection when the Work identified in Punch List is completed or corrected.
  - 4. Owner re-inspects and initials items on the Punch List that have been completed or corrected. Then notifying contractor of any outstanding items. This cycle continues until all items are verified by Owner to be complete or corrected.

#### 1.4 SUBSTANTIAL COMPLETION

#### A. Procedures:

- 1. When all work is found to be substantially complete and in accordance with the Contract Documents, a Certificate of Substantial Completion will be issued.
- 2. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- 3. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
- 4. Submit a final Application for Payment according to Division 1 Section "Progress Payment Procedures."

#### 1.5 WARRANTIES

- A. Warranties begin at date designated on the Certificate of Substantial Completion.
- B. Contractor to guarantee all labor performed and materials installed for a period of (1) one year from the date of substantial completion.
- C. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
  - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
  - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.

- 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

#### PART 2 - PRODUCTS

#### 2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

#### PART 3 - EXECUTION

#### 3.1 DEMONSTRATION AND TRAINING

- A. Instruction: Instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
  - 1. Provide instructors experienced in operation and maintenance procedures.
  - 2. Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at the start of each season.
  - 3. Schedule training with Owner with at least seven (7) days' advance notice.
  - 4. Coordinate instructors, including providing notification of dates, times, length of instruction, and course content.
- B. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections. For each training module, develop a learning objective and teaching outline. Include instruction for the following:
  - 1. System design and operational philosophy.
  - Review of documentation.
  - 3. Operations.
  - 4. Adjustments.
  - 5. Troubleshooting.
  - 6. Maintenance.
  - 7. Repair.

#### 3.2 FINAL CLEANING

A. General: Provide final cleaning prior to re-inspection of completed punch list items. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    - c. Rake grounds that are neither planted nor paved to a smooth, eventextured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - e. Remove snow and ice if present.
    - f. Clean exposed exterior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
    - g. Remove debris and surface dust from limited access spaces, including equipment vaults, manholes and similar spaces.
    - h. Remove labels that are not permanent.
    - i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
      - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
    - j. Wipe surfaces of mechanical and electrical equipment, and similar equipment. Remove excess lubrication, paint and other foreign substances.
    - k. Replace parts subject to unusual operating conditions.
    - I. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
    - m. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 01 77 00

#### SECTION 01 78 23- OPERATION AND MAINTENANCE DATA

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
  - 1. Operation and maintenance documentation directory.
  - 2. Emergency manuals.
  - 3. Operation manuals for systems, subsystems, and equipment.
  - 4. Maintenance manuals for the care and maintenance of products, materials, and finishes.

#### B. Related Sections include the following:

- 1. Division 01 Section "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
- 2. Division 01 Section "Closeout Procedures" for submitting operation and maintenance manuals.
- 3. Division 01 Section "Project Record Documents" for preparing Record Drawings for operation and maintenance manuals.
- 4. Divisions 02 through 33 Sections for specific operation and maintenance manual requirements for products in those Sections.

#### 1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

#### 1.4 SUBMITTALS

A. Initial Submittal: Submit two (2) draft copies of each manual at least fifteen (15) days before requesting inspection for Substantial Completion. Include a complete operation and maintenance directory. Landscape Architect will return one (1) copy of draft and mark whether general scope and content of manual are acceptable.

- B. Final Submittal: Submit two (2) copies of each manual in final form at least fifteen (15) days before final inspection. Landscape Architect will return one (1) copy with comments within fifteen (15) days after final inspection.
  - 1. Correct or modify each manual to comply with Landscape Architect's comments. Submit three (3) copies of each corrected manual within fifteen (15) days of receipt of Landscape Architect's comments.

#### 1.5 COORDINATION

A. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

#### PART 2 - PRODUCTS

#### 2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Organization: Include a section in the directory for each of the following:
  - 1. List of documents.
  - 2. List of systems.
  - 3. List of equipment.
  - 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with the same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

#### 2.2 MANUALS, GENERAL

A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:

- 1. Title page.
- 2. Table of contents.
- 3. Manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
  - 1. Subject matter included in manual.
  - 2. Name and address of Project.
  - 3. Name and address of Owner.
  - 4. Date of submittal.
  - 5. Name, address, and telephone number of Contractor.
  - 6. Name and address of Landscape Architect.
  - 7. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
  - 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
  - 1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
    - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
    - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
  - 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
  - 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
  - 4. Supplementary Text: Prepared on 8-1/2-by-11-inch, 20-lb/sq. ft. white bond paper.

- Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
  - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
  - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

#### 2.3 EMERGENCY MANUALS

- A. Content: Organize manual into a separate section for each of the following:
  - 1. Type of emergency.
  - 2. Emergency instructions.
  - 3. Emergency procedures.
- B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
  - 1. Fire.
  - 2. Flood.
  - Gas leak.
  - 4. Water leak.
  - 5. Power failure.
  - 6. Water outage.
  - 7. System, subsystem, or equipment failure.
  - 8. Chemical release or spill.
- C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- D. Emergency Procedures: Include the following, as applicable:
  - 1. Instructions on stopping.
  - 2. Shutdown instructions for each type of emergency.
  - 3. Operating instructions for conditions outside normal operating limits.
  - 4. Required sequences for electric or electronic systems.
  - 5. Special operating instructions and procedures.

#### 2.4 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
  - 1. System, subsystem, and equipment descriptions.

- 2. Performance and design criteria if Contractor is delegated design responsibility.
- 3. Operating standards.
- 4. Operating procedures.
- 5. Operating logs.
- 6. Wiring diagrams.
- 7. Control diagrams.
- 8. Piped system diagrams.
- 9. Precautions against improper use.
- 10. License requirements including inspection and renewal dates.

#### B. Descriptions: Include the following:

- 1. Product name and model number.
- 2. Manufacturer's name.
- 3. Equipment identification with serial number of each component.
- 4. Equipment function.
- 5. Operating characteristics.
- 6. Limiting conditions.
- 7. Performance curves.
- 8. Engineering data and tests.
- 9. Complete nomenclature and number of replacement parts.

#### C. Operating Procedures: Include the following, as applicable:

- 1. Startup procedures.
- 2. Equipment or system break-in procedures.
- 3. Routine and normal operating instructions.
- 4. Regulation and control procedures.
- 5. Instructions on stopping.
- 6. Normal shutdown instructions.
- 7. Seasonal and weekend operating instructions.
- 8. Required sequences for electric or electronic systems.
- 9. Special operating instructions and procedures.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

#### 2.5 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.

- C. Product Information: Include the following, as applicable:
  - 1. Product name and model number.
  - 2. Manufacturer's name.
  - 3. Color, pattern, and texture.
  - 4. Material and chemical composition.
  - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
  - 1. Inspection procedures.
  - 2. Types of cleaning agents to be used and methods of cleaning.
  - 3. List of cleaning agents and methods of cleaning detrimental to product.
  - 4. Schedule for routine cleaning and maintenance.
  - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
  - 1. Include procedures to follow and required notifications for warranty claims.

#### 2.6 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in the manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
  - 1. Standard printed maintenance instructions and bulletins.
  - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
  - 3. Identification and nomenclature of parts and components.
  - 4. List of items recommended to be stocked as spare parts.

- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
  - 1. Test and inspection instructions.
  - 2. Troubleshooting guide.
  - 3. Precautions against improper maintenance.
  - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
  - 5. Aligning, adjusting, and checking instructions.
  - 6. Demonstration and training videotape, if available.
- E. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- F. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- G. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
  - 1. Include procedures to follow and required notifications for warranty claims.

#### PART 3 - EXECUTION

#### 3.1 MANUAL PREPARATION

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.
- B. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
- E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

- 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
  - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
  - 2. Comply with requirements of newly prepared Record Drawings in Division 1 Section "Project Record Documents."
- G. Comply with Division 1 Section "Closeout Procedures" for the schedule for submitting operation and maintenance documentation.

END OF SECTION 01 78 23

#### SECTION 01 78 39 - PROJECT RECORD DOCUMENTS

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
  - 1. Record Drawings.
  - 2. Record Specifications.
  - Record Product Data.
- B. Related Sections include the following:
  - 1. Division 01 Section "Closeout Procedures" for general closeout procedures.
  - 2. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
  - 3. Divisions 02 through 33 Sections for specific requirements for Project Record Documents of products in those Sections.

#### C. Payment:

 Unless noted otherwise, it shall be the responsibility of the Contractor to pay for the preparation and execution of all electronic and hard copy Project Record Document copies.

#### 1.3 SUBMITTALS

- A. Record Drawings: Submit two (2) sets of Project Record Document plan sets in electronic format on compact discs or digital video discs (CD's or DVD's) as well as two (2) hard copy Project Record Document plan sets to the Owner upon project completion.
- B. Record Specifications: Submit two (2) sets of Project Record Document specifications in electronic format on compact discs or digital video discs (CD's or DVD's) as well as two (2) hard copy Project Record Document specifications to the Owner upon project completion.

- C. Record Product Data: Submit two (2) hard copy record Project Data copies of each Product Data submittal to the Owner upon project completion.
  - 1. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in the manual instead of submittal as Record Product Data.

#### PART 2 - PRODUCTS

### 2.1 RECORD DRAWINGS (Required)

#### A. Record Prints:

- 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
  - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
  - b. Accurately record information in an understandable drawing technique.
  - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
- 2. Content: Types of items requiring marking include, but are not limited to, the following:
  - a. Dimensional changes to Drawings.
  - b. Revisions to details shown on Drawings.
  - c. Site grading and topography.
  - d. Spot grades of storm water overflow routes.
  - e. Rims and inverts for storm sewer pipe and structures.
  - f. Locations and depths of underground utilities.
  - g. Revisions to routing of piping and conduits.
  - h. Revisions to electrical circuitry.
  - i. Actual equipment locations.
  - j. Changes made by Change Order or Construction Change Directive.
  - k. Changes made following Architect's written orders.
  - I. Details not on the original Contract Drawings.
  - m. Field records for variable and concealed conditions.
  - n. Record information on the Work that is shown only schematically.
- 3. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.

- 4. Mark important additional information that was either shown schematically or omitted from original Drawings.
- 5. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing Record Drawings where Landscape Architect determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.
  - 1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.
  - Consult with Landscape Architect for proper scale and scope of detailing and notations required to record the actual physical installation and its relation to other construction. Integrate newly prepared Record Drawings into Record Drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.
- C. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
  - 1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
  - 2. Identification: As follows:
    - a. Project name.
    - b. Date.
    - c. Designation "PROJECT RECORD DRAWINGS."
    - d. Name of Architect and Construction Manager.
    - e. Name of Contractor.
- D. Village of Glen Ellyn Record Drawings. Projects submitted to the VGE will require record drawings (as-builts) signed and sealed by a registered Illinois professional engineer. Verify this requirement with the Landscape Architect. Below are the City of Aurora's requirements.
- 1. Use the approved engineering plans for as-built documents. (Don't redraw the plans)
- 2. Cross out proposed rim & inverts and write in the as-built elevations. (Rim grades must be within .2'of proposed.)
- 3. If a utility line was moved, show by crossing out and drawing in its new location.
- 4. Give as-built lengths and slopes on all sewer lines.
- 5. Give as-built lengths on water main, usually between valves.
- 6. Give locations of all valves & B-boxes based on distance from nearest fire hydrant. (i.e. x ft. North, v ft. East)
- 7. Benchmarks should be established on all fire hydrants. (Use the northerly-most upper flange bolt)
- 8. Give locations of all corporation stops and B-boxes on water services for each lot with respect to nearest Fire Hydrant.

- 9. Give locations of all sanitary service lines for each lot with respect to the downstream manhole.
- 10. Basically, anything shown on the approved plans should be documented.
- 11. Stormwater Management Facility
- a) The only item that can be redrawn to show accurately how it was constructed and to accurately be able to calculate as-built volumes.
- b) Submit certified calculations of as-built pond volume and verify that it equals or exceeds the required volume. Show proposed and as-built volume on plans.
- c) Give as-built side slopes (Bottom slopes also if blue/green)
- d) Verify high water elevation, overflow construction details, and normal water levels.
- e) Certify installation & size of restrictors or outlet system.
- f) Verify one foot of freeboard around pond.
- 12. Grading
- a) Verify overland flood routing.
- b) Show as-built grading of all outlots, parks, stormwater management facilities & major drainage ways.
- c) If a subdivision, grading for individual lots will be submitted when built on.
- d) If a commercial, industrial or non residential site, show as-built grading of site. Basically, was it graded as proposed.
- 13. Give all as-built centerline grades and top of curb grades every 50'. In addition, give top of curb grades at every lot line intersection.
- 14. Show as-built wiring for street lights.
- 15. Show any offsite work that may have been adjusted or replaced.
- 16. Be sure to include details in set of as-builts.
- 17. Submit two (2) sets of prints initially for review and field inspection.
- 18. When requested, submit the following:
- Two (2) electronic copies of the as-builts on one CD, 1 as a read only Auto Cad Ver. 2004 format, and 1 as a PDF format.
- 19. All record drawings (as-builts) must be signed and sealed by a registered Illinois professional engineer.
- 20. All verification calculations must be signed and sealed by a registered Illinois professional engineer.

#### 2.2 RECORD SPECIFICATIONS (Determined by Landscape Architect if required)

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
  - 3. Record the name of the manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
  - 4. For each principal product, indicate whether Record Product Data has been submitted in operation and maintenance manuals instead of submitted as Record Product Data.

- 5. Note related Change Orders, Record Drawings, and Product Data where applicable.
- 2.3 RECORD PRODUCT DATA (Determined by Landscape Architect if required)
  - A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
    - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
    - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
    - 3. Note related Change Orders, Record Drawings, and Product Data where applicable.
- 2.4 MISCELLANEOUS RECORD SUBMITTALS (Determined by Landscape Architect if required)
  - A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

#### PART 3 - EXECUTION

#### 3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Landscape Architect's and Construction Manager's reference during normal working hours.

END OF SECTION 01 78 39

## NOTES

## **DEMOLITION NOTES:**

- 1.) EXISTING SLIP-RESISTANT CONCRETE FLOOR SLOPES TO EXISTING FLOOR DRAIN.
- 2.) EXISTING HEATER AREA IS NOT ACCESSIBLE TO POOL PATRONS AND IS COMPLETELY ENCLOSED BY FENCE.
- 3.) REMOVE AND DISPOSE OF EXISTING SWIMMING POOL HEATERS (LOCHINVAR CPN1261 & CPN 1441).
- 4.) DISCONNECT EXISTING OUTDOOR SWIMMING POOL HEATERS FROM EXISTING 2" GAS SERVICE, EXISTING EXHAUST VENT PIPE, AND ELECTRICAL WIRING AND CONDUIT. PROTECT THESE EXISTING ITEMS AS REQUIRED SO THEY MAY BE CONNECTED TO THE NEW HEATER.

## **INSTALLATION NOTES**

- 1.) NEW HEATERS IS BEING INSTALLED FOR THE EXISTING OUTDOOR SWIMMING POOL.
- 2.) ALL POOL WATER HEATER INFLUENT AND EFFLUENT LINES FROM THE BYPASS TO THE HEATER TO BE C.P.V.C. REPLACE PIPES AND VALVES AS REQUIRED.
- 3.) INSTALLATION OF THE NEW POOL HEATERS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- 4.) CONTRACTOR TO CONNECT THE NEW POOL HEATER TO THE EXISTING 2" GAS SERVICE. EXHAUST VENT PIPES AND ELECTRICAL WIRING AND CONDUIT.
- 5.) INSTALLATION OF THE NEW POOL HEATERS AND WIRING SHALL ADHERE TO THE 2008 NATIONAL ELECTRICAL CODE. ALL CIRCUITS TO BE GROUNDED WITH AN INSULATED COPPER WIRE FROM THE MAIN DISTRIBUTION PANEL IN ACCORDANCE WITH THE 2008 NATIONAL ELECTRICAL CODE. THE HEATER SHALL BE BONDED TO THE EXISTING BONDING WIRE LOCATED IN THE EQUIPMENT ROOM IN ACCORDANCE WITH ARTICLE 680.26 OF THE 2008 NATIONAL ELECTRICAL CODE.
- 6.) A PRESSURE RELIEF VALVE WITH A MAXIMUM PRESSURE RATING OF 75 POUNDS PER SQUARE INCH AND HAVING A THERMAL CAPACITY AT LEAST EQUAL TO THE HEAT INPUT RATING OF THE HEATER SHALL BE INSTALLED ON EACH HEATER EFFLUENT PIPE, WITH THE DISCHARGE PIPED TO WITHIN SIX (6) INCHES OF THE FLOOR.
- 7.) CONTRACTOR TO INCLUDE 2 NEW THERMOMETERS IF NOT PRESENT ON SITE (ONE BEFORE AND ONE AFTER HEATER BYPASS) AND AQUASTAT MANUFACTURED BY HONEYWELL, MODEL #L4006A1959 (LOCATED DOWNSTREAM FROM HEATER PIPING). AQUASTAT SET TO 115°.

## **BONDING NOTES:**

SCALE: 1/2" = 1'-0" 1.) CONTRACTOR SHALL BOND NEW HEATER TO THE EXISTING BONDING GRID IN ACCORDANCE WITH ARTICLE 680.26 OF THE 2008 NATIONAL ELECTRICAL CODE. PROVIDE AN APPROVED BONDING LUG / CLAMP ON ALL EXISTING ITEMS AND CONNECT WITH A #8 SOLID BARE COPPER BONDING WIRE.

BALL VALVE AS REQUIRED

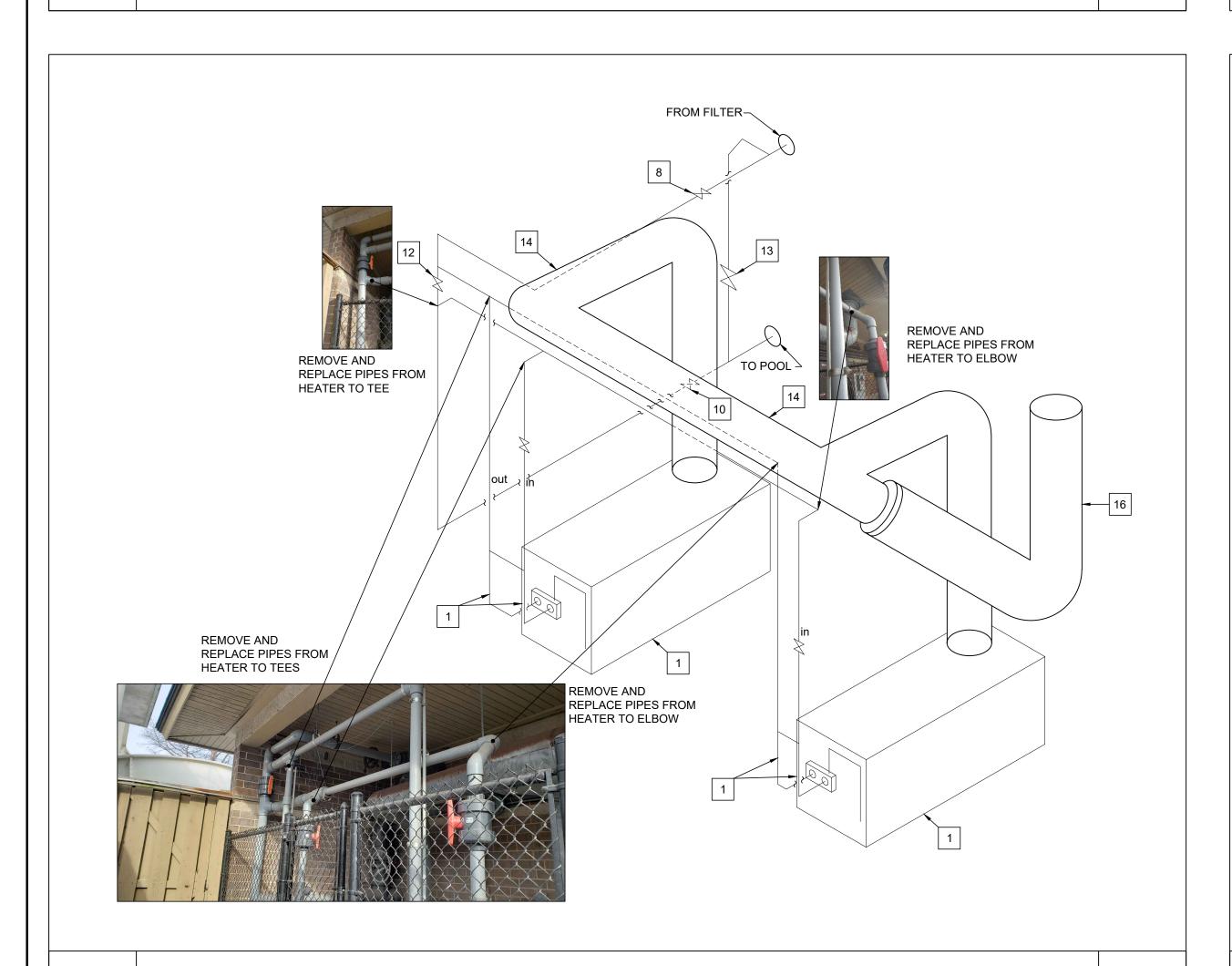
**KEY NOTES** 

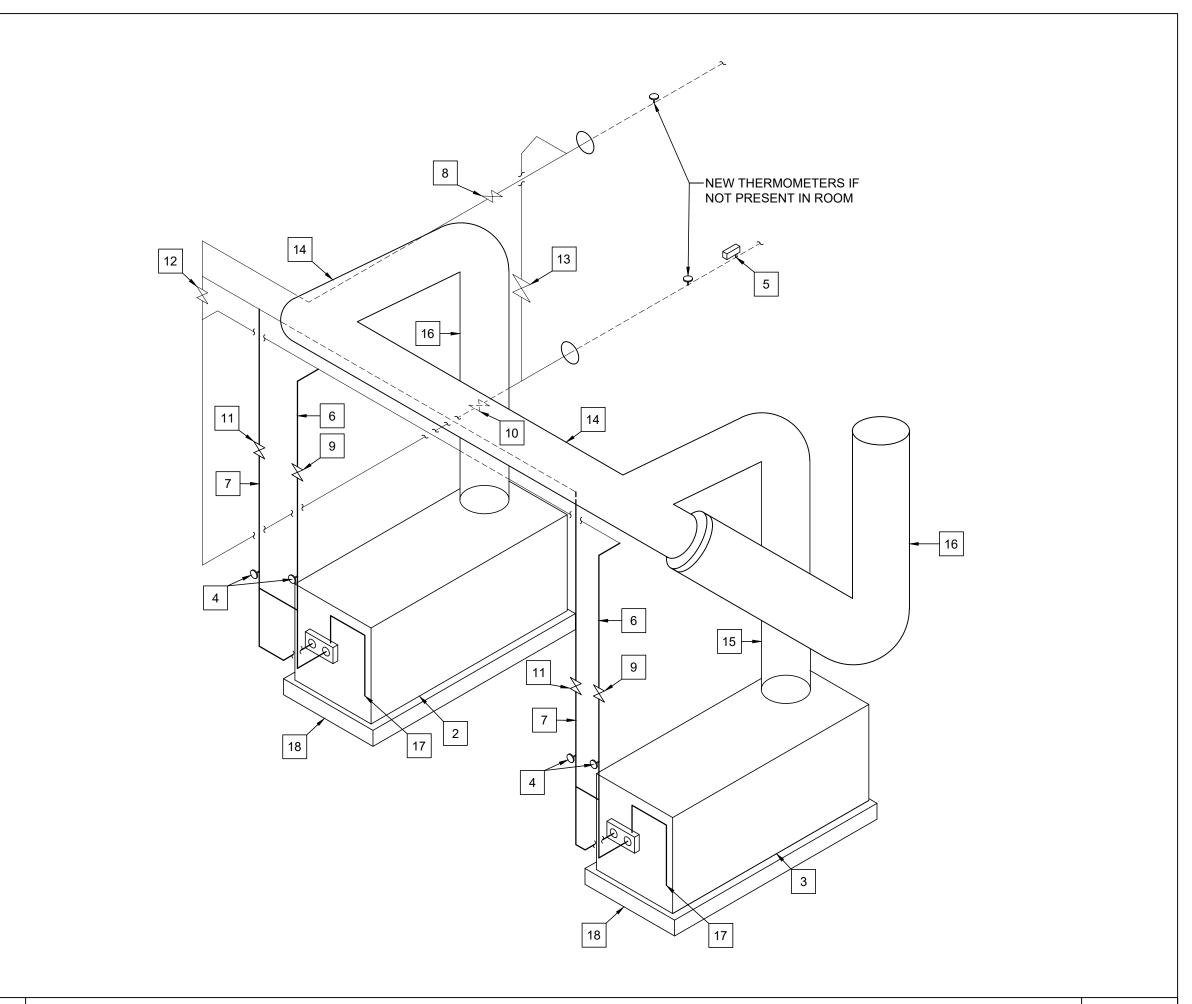
# -

- REMOVE AND DISPOSE OF EXISTING OUTDOOR SWIMMING POOL HEATERS WITH ASSOCIATED PIPES AND VALVES.
- NEW 1,440,000 B.T.U. SWIMMING POOL HEATER
- NEW 1,260,000 B.T.U. BACK-UP SWIMMING POOL HEATER MANUFACTURED BY LOCHINVAR, MODEL # CPN1262.

MANUFACTURED BY LOCHINVAR, MODEL # CPN1442.

- 4. NEW THERMOMETERS
- NEW AQUASTAT, IF NOT PRESENT ALREADY PRESENT, INSTALLED DOWNSTREAM FROM HEATER PIPING, SET AT 115° F, BY HONEYWELL #L4006A1959.
- 6. NEW 2 1/2" CPVC INFLUENT PIPES, CONNECT TO EXISTING
- NEW 2 1/2" CPVC EFFLUENT PIPES, CONNECT TO EXISTING
- EXISTING 2 1/2" HEATER INFLUENT TRUE UNION BALL VALVE TO REMAIN
- 9. NEW 2 1/2" HEATER ISOLATION INFLUENT TRUE UNION
- BALL VALVE 10. EXISTING 2 1/2" HEATER EFFLUENT TRUE UNION BALL
- VALVE TO REMAIN 11. NEW 2 1/2" HEATER ISOLATION EFFLUENT TRUE UNION
- 12. EXISTING 2 1/2" HEATER BYPASS VALVE TO REMAIN
- 13. EXISTING 4" HEATER BYPASS VALVE TO REMAIN
- 14. EXISTING 12" FLUE TO REMAIN
- 15. NEW 12" FLUE, CONNECT TO EXISTING
- 16. EXISTING 15" FLUE THRU ROOF OF ENCLOSURE. REPLACE
- 17. CONTRACTOR TO INSTALL A PRESSURE RELIEF VALVE ON EXISTING HEATER EFFLUENT PIPE. MAXIMUM PRESSURE RATING OF 75 POUNDS PER SQUARE INCH AND HAVING A THERMAL CAPACITY AT LEAST EQUAL TO THE HEAT INPUT RATING OF THE HEATER. SHALL BE INSTALLED WITH THE DISCHARGE PIPED TO WITHIN 6" OF THE FLOOR
- 18. NEW CONCRETE PAD FOR NEW HEATERS





DRAWN: EAM JOB: A2200005

**AQ1.0** 

HEATER LAYOUT, HEATER DEMOLITION DIAGRAM, NEW HEATER DIAGRAM AND NOTES

NOT TO SCALE

**NEW HEATER LAYOUT** 

# TYPICAL SPECIFICATIONS FOR LOCHINVAR COPPER-FIN2 COMMERCIAL HEATER MODELS CPN1262 & CPN1442

- 1. THE CPN1262 HAS AN INPUT RATING OF 1,260,000 B.T.U./HR AND SHALL BE OPERATED ON NATURAL GAS
- 2. THE CPN1442 HAS AN INPUT RATING OF 1,440,000 B.T.U./HR AND SHALL BE OPERATED ON NATURAL GAS
- THE WATER CONTAINING SECTION SHALL BE OF A "FIN TUBE" DESIGN, WITH STRAIGHT COPPER TUBES HAVING EXTRUDED INTEGRAL FINS SPACED SEVEN (7) FINS PER INCH. THE TUBES SHALL TERMINATE INTO A ONE PIECE. LINED, CAST IRON HEADER. THERE SHALL BE NO BOLTS. GASKETS OR "O" RINGS IN THE HEAD CONFIGURATION. THERE SHALL BE ACCESS TO THE FRONT HEADER OF THE HEATERS EXCHANGER FOR THE PURPOSES OF INSPECTION, CLEANING OR REPAIR. THE HEAT EXCHANGER SHALL BE MOUNTED IN A STRESS-FREE JACKET ASSEMBLY IN ORDER TO PROVIDE A "FREE FLOATING DESIGN" ABLE TO WITHSTAND THE EFFECTS OF THERMAL SHOCK. THE HEATERS SHALL BEAR THE ASME "H" STAMP FOR 160 PSI WORKING PRESSURE AND SHALL BE NATIONAL BOARD LISTED. THE COMPLETE HEAT EXCHANGER ASSEMBLY SHALL CARRY A FIVE (5) YEAR WARRANTY.
- 4. THE COMBUSTION CHAMBER SHALL BE SEALED AND COMPLETELY ENCLOSED WITH LOCH-HEAT CERAMIC FIBERBOARD INSULATION. A BURNER/FLAME OBSERVATION PORT SHALL BE PROVIDED ON EACH END OF THE UNIT. THE BURNERS SHALL BE CONSTRUCTED OF A HIGH TEMPERATURE STAINLESS STEEL AND FIRE ON A HORIZONTAL PLAN. THE HEATERSS SHALL BE MULTI-SPEED COMBUSTION AIR BLOWER TO PRECISELY CONTROL THE FUEL//AIR MIXTURE OF MAXIMUM EFFICIENCY.
- THE HEATERS SHALL BE CONSTRUCTED WITH A HEAVY GAUGE GALVANIZED STEEL JACKET ASSEMBLY, PRIMED AND PRE-PAINTED ON BOTH SIDES WITH A MINIMUM DRY FILM THICKNESS OF 0.70 MILS. THE JACKET DESIGN SHALL ALLOW SINGLE UNIT VENTING CONNECTION WITHOUT THE USE OF EXTERNAL DRAFT HOOD DEVICES.
- 6. THE HEATERS SHALL BE CERTIFIED AND LISTED BY CSA INTERNATIONAL UNDER THE LATEST EDITION OF ANSI Z21.56/CSA4.7 STANDARD. THE HEATERS SHALL COMPLY WITH THE ENERGY EFFICIENCY REQUIREMENTS OF THE LATEST EDITION OF THE ASHRAE 90.1 STANDARD. THE HEATERS SHALL OPERATE AT THERMAL EFFICIENCY 85%.
- 7. THE HEATERS SHALL BE FURNISHED WITH A FACTORY SUPPLIED PUMPED BY PASS ASSEMBLY TO ENSURE PROPER OPERATION WITHOUT CONDENSATION. THE BY PASS ASSEMBLY SHALL INCLUDE A SEALED ALL BRONZE PUMP SUITABLE FOR OUTDOOR INSTALLATION. THE BY PASS ASSEMBLY SHALL BE CONSTRUCTED OF SCHEDULE 80 CPVC PIPING WITH BRASS INSERTS AND AN AUTOMATIC THREE-WAY VALVE TO PROTECT THE UNIT AGAINST INLET WATER TEMPERATURES THAT WOULD CAUSE THE HEAT EXCHANGER TO CONDENSE. INSTRUCTIONS FOR PROPER SETUP AND OPERATION OF THE BY PASS WILL BE SUPPLIED WITH THE HEATERS.
- B. THE HEATERS SHALL BE EQUIPPED WITH AN ELECTRONIC INTEGRATED CONTROL MODULE WITH A MICROPROCESSOR-BASED PLATFORM INCORPORATING SOFTWARE CUSTOMIZED FOR OPERATION OF THE LOCHINVAR COPPER-FIN II. ALL INTERNAL SAFETY, OPERATING AND IGNITION CONTROLS SHALL BE INCLUDED IN THE ELECTRONIC INTEGRATED CONTROL MODULE. THE ELECTRONIC INTEGRATED CONTROL MODULE SHALL PROVIDE ON/OFF CONTROL OF THE GAS SUPPLY TO THE BURNER, OPERATION OF THE COMBUSTION AIR BLOWER, IGNITION OF THE GAS-AIR MIXTURE, FLAME PROVING, CONTROL OF WATER TEMPERATURE SET POINTS, AND MONITORING OF ALL SAFETY FUNCTIONS. MODBUS PROTOCOL (OPTIONAL).
- 9. THE HEATERS SHALL FEATURE THE "SMART SYSTEM" CONTROL WITH A 2-LINE, 16 CHARACTER LCD DISPLAY, PASSWORD SECURITY, PUMP DELAY WITH FREEZE PROTECTION, PUMP EXERCISE AND PC PORT CONNECTION. THE HEATERS SHALL ALLOW 0-10 VDC INPUT CONNECTION FOR BMS CONTROL AND HAVE BUILT-IN "CASCADE" TO SEQUENCE AND ROTATE WHILE MAINTAINING STAGE FIRING OF UP TO EIGHT HEATERSS WITHOUT UTILIZATION OF AN EXTERNAL CONTROLLER. SUPPLY VOLTAGE SHALL BE 120 VOLT / 60 HERTZ / SINGLE PHASE.
- 10. LOCAL COMMUNICATION, PROGRAMMING AND A DISPLAY OF OPERATING AND ALARM STATUS CONDITIONS SHALL BE ACCESSIBLE THROUGH THE SMART SYSTEM CONTROL PANEL. THE SMART SYSTEM CONTROL PANEL SHALL CONTAIN AN ON/OFF MAIN POWER SWITCH, A DIGITAL DISPLAY OF A TEMPERATURE FUNCTIONS, THE OPERATIONAL STATUS OF THE HEATERS, OR AN ACTIVE ALARM FAULT. DATA POINTS VISIBLE IN THE DIGITAL DISPLAY INCLUDE INLET WATER TEMPERATURE, OUTLET WATER TEMPERATURE, WATER TEMPERATURE DIFFERENTIAL, PERCENT FIRING RATE, SETPOINT TEMPERATURES, SETPOINT DIFFERENTIAL, MINIMUM TEMPERATURE, MAXIMUM TEMPERATURE AND MAXIMUM RESET TEMPERATURE. OPERATIONAL STATUS SHALL BE DISPLAYED FOR OFF, STANDBY, PRE-PURGE, IGNITION, POOL AND/OR SPA WATER HEATING, AND POST-PURGE.
- 11. FAULT STATUS SHALL BE PROVIDED FOR HIGH LIMIT, GAS PRESSURE (OPTIONAL), LOW WATER, BLOCKED DRAIN, LOUVER PROVING, AND AIR PRESSURE SWITCH STATUS.
- 12. THE STANDARD OPERATING CONTROL SYSTEM SHALL INCLUDE REDUNDANT PROVEN PILOT HOT SURFACE IGNITION WITH FULL FLAME MONITORING CAPABILITY. MULTIPLE MAIN GAS VALVES WITH REDUNDANT VALVE SEATS AND BUILT IN LOW GAS PRESSURE REGULATORS SHALL BE SUPPLIED AS STANDARD. GAS VALVES WILL BE REFERENCED TO THE COMBUSTION CHAMBER TO ENSURE PROPER AIR/GAS MIXTURE FOR EFFICIENT COMBUSTION.
- 13. ADDITIONAL STANDARD CONTROLS SHALL INCLUDE A WATER PRESSURE SWITCH, BLOCKED FLUE PRESSURE SWITCH, LOW AIR PRESSURE SWITCH FOR EACH FAN, LOW VOLTAGE TRANSFORMER FOR THE CONTROL CIRCUIT, 7 AMP CIRCUIT BREAKER FOR 24 VAC CONTROL CIRCUIT, ASME TEMPERATURE AND PRESSURE RELIEF VALVE AND FLOW SWITCH. THE MANUFACTURER SHALL VERIFY PROPER OPERATION OF THE BURNERS, ALL CONTROLS AND THE HEAT EXCHANGER BY CONNECTION TO WATER AND VENTING FOR A FACTORY FIRE TEST PRIOR TO SHIPPING. A QUALITY TEST REPORT SHALL BE SHIPPED WITH EACH UNIT.

- 14. A 24 VAC CONTROL CIRCUIT AND COMPONENTS SHALL
  BE USED. ALL COMPONENTS SHALL BE EASILY
  ACCESSED AND SERVICEABLE. ALL COMPONENTS
  SHALL HAVE MULTI PIN PLUG IN TYPE CONNECTORS TO
- 15. THE HEATERS SHALL BE APPROVED FOR INDOOR OR OUTDOOR INSTALLATION. THE HEATERS SHALL BE APPROVED FOR SIDEWALL, DIRECTAIRE® VERTICAL, DIRECTAIRE VERTICAL WITH SIDEWALL AIR INLET, DIRECTAIRE HORIZONTAL, AIRE-LOCK™ DIRECT VENT AND CONVENTIONAL VENTING (SEE MECHANICAL DETAIL). VENTING SHALL BE CLASSIFIED CATEGORY I, NEGATIVE DRAFT, NON CONDENSING, TO USE TYPE "B" DOUBLE WALL VENTING MATERIALS. DIRECT VENT INSTALLATIONS REQUIRE THE USE OF AL29-4C VENT MATERIALS.

EASE SERVICE, TROUBLESHOOTING AND LOWER

REMOVAL AND REPLACEMENT COST.

16. THE HEATERSS SHALL HAVE AN INDEPENDENT LABORATORY RATING FOR OXIDES OF NITROGEN (NOX) OF LESS THAN 20 PPM CORRECTED TO 3% O2.

RK DISTRICT - SUNSET POOL ATER REPLACEMENT

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UMBING \ TELECOMMUNICATION \ STR

GLEN ELLYN PARK DISTRIC

OUTDOOR HEATER REPL

483 FAIRVIEW AVE.

GLEN ELLYN, IL 60137

ISSUE

DRAWN: EAM

JOB: A2200005

AQ1.1

NEW HEATER

SPECIFICATION