

Working Together for a Better Tomorrow. Today.

BID SPECIFICATION PACKAGE

for

5kV SWITCHGEAR INTEGRATED COOLING SYSTEM

C 133817

Bid Opening Date/Time

Tuesday, July 23, 2024 at 2:00 p.m. City of Grand Island, City Hall 100 East 1st Street, P.O. Box 1968 Grand Island, NE 68802-1968

Contact Information

<u>Tylor Robinson</u> City of Grand Island – Utilities Department Platte Generating Station Email: trobinson@giud.com Phone: 308/385-5496

Date issued: July 8, 2024

ADVERTISEMENT TO BIDDERS FOR PGS 5kV SWITCHGEAR INTEGRATED COOLING SYSTEM FOR CITY OF GRAND ISLAND, NEBRASKA

Sealed bids for PGS 5kV Switchgear Integrated Cooling System will be received at the office of the City Clerk, 100 E. First Street, P.O. Box 1968, Grand Island, Nebraska 68802, until **Tuesday, July 23, 2024 at 2:00 p.m. local time**, FOB the City of Grand Island, freight prepaid. Bids will be publicly opened at this time in the Grand Island City Hall City Clerk's Office located on 1st floor of City Hall. **Submit** <u>an original and two copies</u> if submitting by mail. Bid package and any Addendas are also available on-line at www.grand-island.com under Business-Bids and Request for Proposals-Bid Calendar under the bid opening date. Bidding documents, plans and specifications for use in preparing bids may be downloaded from the QuestCDN website www.QuestCDN.com for a \$42.00 fee. Submitting through QuestCDN requires one original document of the bid to be uploaded. Bids received after the specified time will not be considered.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Successful bidder shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

Each bidder shall submit with the bid a certified check, a cashiers check, or bid bond payable to the City of Grand Island Treasurer in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. <u>Your certified check, cashiers check or bid bond must be</u> <u>submitted in a separate envelope attached to the outside of the envelope containing the bid</u>. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered. Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The Purchaser reserves the right to reject any or all bids, to waive irregularities therein, and to accept whichever bid that may be in the best interest of the City, at its sole discretion.

No bidder may withdraw his/her bid for a period of thirty (30) days after date of bid opening.

Jill Granere, City Clerk

Advertised

5Kv SWITCHGEAR INTEGRATED COOLING SYSTEM BID DATA FORM

CITY OF GRAND ISLAND GRAND ISLAND, NE

THE undersigned Bidder, having examined the plans, specifications, general and special conditions, and other proposed contract documents, and all addenda thereto, and being acquainted with and fully understanding all conditions relative to the location, arrangement and specified materials and equipment for the proposed work, HEREBY proposes to provide all material, freight, labor, and supervision to replace the existing 5kV switchgear room HVAC equipment with a new geothermal water-cooled heat pump FOB the City of Grand Island-Platte Generating Station, freight prepaid, at the following price:

ITEM DESCRIPTION Base Bid:	EXTENDED COST
Material	\$
Labor	\$
Shipping	\$
Applicable Sales tax*	\$
Total Base Bid	\$

* If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.5% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due.

Exceptions Noted - Bidder acknowledges there are *Exceptions* and/or *Clarifications* noted to the above bid, and those exceptions are fully explained on a separate sheet, clearly marked, and included with the Bid.

Bidder Company Name		Da	te
Company Address	City	State	Zip
Print Name of Person Comple	ting Bid	Si	gnature
Email:	Tele	phone No	
According to Nebraska Sales and selected to file with the Nebraska		1-017, Contractors, ch	neck which option you have
construction, repair, c transmission, or distribu	ales and use tax exemption or annexation of any s ation of electricity. Sep are taxable according to	tructure used f arately stated co	for the generation, ontractor labor would
Option 1 (Section 1-017.05)	Option 2 (Section 1-017.06)	Option 3 (Section	1-017.07)
If the Nebraska sales and use ta Option 1 for sales and use tax pu	x election is not filed or noted abov rposes.	ve, the contractor will b	e treated as a retailer under

By checking this box, Bidder acknowledges the specified completion date of the project is December 1, 2024.

By checking this box, Bidder acknowledges that Addenda Number(s) _____ were received and considered in Bid preparation.

Note: If Bidder supplies individual unit pricing information as supplemental pricing to the base material and labor cost above, said individual pricing is proprietary information and should not be released under a public records request. The total base bid is not considered proprietary information and will be released pursuant to City Procurement Code.

The City reserves the right to reject any bid section(s) submitted by the successful bidder. In submitting the bid, it is understood that the right is reserved by the City to reject any and all bids; to waive irregularities therein and to accept whichever bid that may be in the best interest of the City. It is understood that this bid may not be withdrawn by the bidder until after thirty (30) days from bid opening.

In submitting the bid, the bidder acknowledges the bid guarantee will be forfeited to and become the property of the City of Grand Island, Nebraska, as liquidated damages should this bid be accepted and a contract be awarded to them and they fail to enter into a contract in the form prescribed and to furnish the required bonds within fifteen (15) days, but otherwise the aforesaid bid guarantee will be returned upon signing the Contract and delivering the approved bonds.

Insurance: Bidder acknowledges that their bid includes compliance with the attached insurance requirements.

The Bidder agrees to furnish the required performance and payment bond and to enter into a contract within fifteen (15) days after acceptance of this Bid, and further agrees to complete all work covered by the foregoing bid in accordance with specified requirements. No work shall commence until the Certificate of Insurance and bonds (when required) are approved by the City and the Contract is executed. The proposed work can commence after the Contract is signed and the required bond is approved.

End of Bid Data Form

INSTRUCTIONS TO BIDDERS

1. GENERAL INFORMATION.

The following instructions outline the procedure for preparing and submitting Bids. Bidders must fulfill all requirements as specified in these Documents.

2. TYPE OF BID.

Bidders shall be required to submit prices for all items listed in the Bid Data Form.

3. PREPARATION OF BIDS.

Bidders shall use only the Bid Data Form provided in these Documents. All blank spaces in the Bid Data Form must be filled in, preferably in BLACK ink, in both words and figures where required. No changes to the wording or content of the forms is permitted. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures.

Prices stated shall be f.o.b. with freight and full insurance paid by Bidder, to the job site located in Grand Island, Nebraska.

The Bidder shall acknowledge receipt of all Addenda in the Bid Data Form. Bids received without acknowledgement or without the Addendum enclosed will be considered informal.

Individual unit pricing as listed on the Bid Data Form or supplied as supplemental information may be deemed proprietary information and not be released under a public records request. The total amount of the bid is not considered proprietary information and will be released pursuant to City Procurement Code.

4. SUBMISSION OF BIDS.

All Bids must be submitted intact with the correct number of copies no later than the time prescribed, at the place, and in the manner set forth in the ADVERTISEMENT FOR BIDS. Bids must be made on the Bid Data Form provided herein. Each Bid mailed must be submitted intact in a sealed envelope, so marked as to indicate its contents without being opened, and delivered in person or addressed and mailed in conformance with the instructions in the ADVERTISEMENT FOR BIDS.

5. BID SECURITY.

Bids must be accompanied by cash, a certified check, or cashier's check drawn on a bank which is insured by the Federal Deposit Insurance Corporation, or a bid bond issued by a Surety authorized to issue such bonds in the state where the Work is located, in the amount of 5 percent of the bid amount payable to OWNER. This bid security shall be given as a guarantee that the Bidder will not withdraw their Bid for a period of thirty (30) days after bid opening, and that if awarded the Contract, the successful Bidder will execute the attached Contract within the time specified.

The Attorney-in-Fact that executes this bond on behalf of the Surety must attach a notarized copy of his/her power of attorney as evidence of his/her authority to bind the Surety on the date of execution of the bond. Where State Statue requires, certification by a resident agent shall also be provided.

6. RETURN OF BID SECURITY.

Within fifteen (15) days after the award of the Contract, the OWNER will return the bid securities to all Bidders whose Bids are not to be further considered in awarding the Contract. All other retained bid securities will be held until the Contract has been finally executed, after which all bid securities, other than Bidders' bonds and guarantees which have been fortified, will be returned to the respective Bidders whose Bids they accompanied.

7. BASIS OF AWARD.

The award will be made by the OWNER on the basis of the Bid from the lowest responsive, responsible Bidder which, in the OWNER's sole and absolute judgment will best serve the interest of the OWNER. All Bids will be considered on the following basis:

Delivery time Bid price Cost of installation Suitability to project requirements Conformance with the terms of the Bid Documents

Responsibility and qualification of Bidder

The OWNER reserves the right to reject all Bids, or any Bid not in conformance with the intent of the Bid Documents, and to waive any informalities and irregularities in said Bids.

8. EXECUTION OF CONTRACT.

The successful Bidder shall, within fifteen (15) days after receiving notice of award, sign and deliver to the OWNER the Contract hereto attached together as required in these Bid Documents. Within fifteen (15) days after receiving the signed Contract from the successful Bidder, the OWNER's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract.

9. TIME OF COMPLETION.

The time of completion of the Work to be performed under this Contract is the essence of the Contract. The time allowed for the completion of the Work is stated in the Bid Data Form.

10. GRATUITIES AND KICKBACKS.

City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

11. FISCAL YEAR.

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

CONTRACT AGREEMENT

THIS AGREEMENT made and entered into by and between **[SUCCESSFUL BIDDER]**, hereinafter called the Contractor, and the **CITY OF GRAND ISLAND**, **NEBRASKA**, hereinafter called the City.

WITNESSETH:

THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for bids to be published for 5KV SWITCHGEAR INTEGRATED COOLING SYSTEM; and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the bids submitted, and has determined the aforesaid Contractor to be the lowest responsive and responsible bidder, and has duly awarded to said Contractor a contract therefore, for the sum or sums named in the Contractor's bid, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself, himself/herself, or themselves, and its, his/her, or their successors, as follows:

<u>ARTICLE I</u>. That the following documents shall comprise the Contract, and shall together be referred to as the "Agreement" or the "Contract Documents";

- 1. This Contract Agreement.
- 2. City of Grand Island's Specification for this project.
- 3. [NAME OF SUCCESSFUL BIDDER] bid signed and dated [DATE OF BID].

In the event of any conflict between the terms of the Contract Documents, the provisions of the document first listed shall prevail.

<u>ARTICLE II</u>. That the Contractor shall (a) furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) furnish, as agent for the City, all materials, supplies and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the Contract documents as listed in the attached General Specifications, said documents forming the Contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this Contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid;

<u>ARTICLE III</u>. That the City shall pay to the Contractor for the performance of the work embraced in this Contract and the Contractor will accept as full compensation therefore the sum (subject to adjustment as provided by the Contract) of **[DOLLAR AMOUNT]** (\$00.00) for all services, materials, and work covered by and included in the Contract award and designated in the foregoing Article II; payments thereof to be made in cash or its equivalent in the manner provided in the General Specifications.

The total cost of the Contract includes:

Base Bid:	\$.00
Sales Tax on Materials/Equipment:	\$.00
Sales Tax on Labor:	\$.00
Total	\$.00

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

<u>ARTICLE IV</u>. The Contractor hereby agrees to act as agent for the City in purchasing materials and supplies for the City for this project. The City shall be obligated to the vendor of the materials and supplies for the purchase price, but the Contractor shall handle all payments hereunder on behalf of the City. The vendor shall make demand or claim for payment of the purchase price from the City by submitting an invoice to the Contractor. Title to all materials and supplies purchased hereunder shall vest in the City directly from the vendor. Regardless of the method of payment, title shall vest immediately in the City. The Contractor shall not acquire title to any materials and supplies incorporated into the project. All invoices shall bear the Contractor's name as agent for the City. This paragraph will apply only to these materials and supplies actually incorporated into and becoming a part of the finished product of the 5KV SWITCHGEAR INTEGRATED COOLING SYSTEM.

<u>ARTICLE V</u>. That the Contractor shall start work as soon as possible after the Contract is signed and the required bonds and insurance are approved, and that the Contractor shall deliver the equipment, tools, supplies, and materials F.O.B. Platte Generating Station, and complete the work on or before **December 1, 2024.**

<u>ARTICLE VI</u>. The Contractor agrees to comply with all applicable State fair labor standards in the execution of this Contract as required by Section 73-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 48-657, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. During the performance of this Contract, the Contractor and all subcontractors agree not to discriminate in hiring or any other employment practice on the basis, of race, color, religion, sex, national origin, age or disability. The Contractor agrees to comply with all applicable Local, State and Federal rules and regulations. The Contractor agrees to maintain a drug-free workplace policy and will provide a copy of the policy to the City upon request. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

<u>ARTICLE VII.</u> Gratuities and kickbacks: City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of

a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

[SUCCESSFUL BIDDER]	
Ву	Date
Title	
CITY OF GRAND ISLAND, NEBRASKA	
Bv	Date
By Mayor	
Attest:City Clerk	

The Contract is in due form according to law and hereby approved.

	Date	
Attorney for the City	RAF1	Γ



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REQUEST FOR BIDS - GENERAL SPECIFICATIONS

The Bid shall be in accordance with the following and with all attached BID DATA and DETAILED SPECIFICATIONS.

All prices are to be furnished and installed FOB, Grand Island, Nebraska. All prices shall be firm, and shall include all sales and use taxes as lawfully assessed under laws and regulations of the State of Nebraska. * If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.5% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due.

Mailed bids shall include the following on the **outside** of the mailing envelope: **"5kV Switchgear Integrated Cooling System".** All bids submitted by mail must include <u>an original and two copies</u> of the bid. The bid specification and on-line bidding forms are also available at <u>http://www.grand-island.com/business/bids-andrequest-for-proposals/bid-calendar</u> under the bid opening date and "Click here for bid document link" through QuestCDN for a \$42.00 fee. If submitting through QuestCDN, <u>one</u> original document of the bid is required to be uploaded. No verbal bids will be considered. All sealed bids are due no later than **Tuesday, July 23, 2024 at 2:00 p.m. local time** and submitted to:

Mailing Address:	City Clerk	Street Address:	City Clerk
	City Hall		City Hall
	P. O. Box 1968		100 E. First Street
	Grand Island, NE 68802-1968		Grand Island, NE 68801

Bids will be opened at this time in the City Hall City Clerk's Office located on 1st floor of City Hall. Any bid received after the specified date will not be considered.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Contractor shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

Platte Generating Station / 1035 W. Wildwood Drive / Box 1968 / Grand Island, Nebraska 68802-1968 Phone (308) 385-5496 / FAX (308) 385-5353 The equipment and materials must be new, the latest make or model, unless otherwise specified. Prior to approving the invoice for payment, the City reserves the right to thoroughly inspect and test the equipment to confirm compliance with specifications. Any equipment or material which does not meet the City's requirements will be returned at vendor's expense for correction. The invoice will be paid after supervisor approval at the next regularly scheduled City Council meeting and occurring after departmental approval of invoice; the City Council typically meets the second and fourth Tuesday of each month. Invoices must be received well in advance of Council date to allow evaluation and processing time.

Each bidder shall submit with the bid a certified check, a cashier's check, or bid bond payable to the City of Grand Island in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the Bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. Your certified check, cashier's check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the original bid. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered. Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Successful bidder shall comply with the City's insurance requirements; All bids shall be valid for at least thirty (30) working days after the bid deadline for evaluation purposes.

All bids must be on the bid form and must be signed and dated to be accepted. If exceptions and/or clarifications are noted to the bid, those exceptions must be fully explained on a separate sheet, clearly marked, and included with the Bid. Any changes that are found made to the original bid specification, other than Owner generated Addendums, would result in your bid not being considered. Please contact Tylor Robinson at 308-385-5495 or email trobinson@giud.com for questions concerning this specification.

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5kV SWITCHGEAR INTEGRATED COOLING SYSTEM

Platte Generating Station

Grand Island Utilities Department-Detailed Specification

1.0 PROJECT DECRIPTION

The Grand Island Utilities Department at Platte Generating Station is requesting bids to replace the existing 5kV switchgear room HVAC equipment with a new geothermal water-cooled heat pump.

1.1 BACKGROUND

The Platte Generating Station is a 100 MW Coal plant. The plant has an electrical equipment room located in the northeast corner of the main superstructure that houses the plants 5000 volt and a section of the 480-volt load centers. The room is approximately 60,000 cubic feet. The heat load from the electrical equipment requires the air to be conditioned continuously.

The existing chiller is a 22-ton Carrier model, which is located on the 2nd floor of the plant. It facilitates cooling, via a Carrier air handler, to the 5KV room located directly below the air handler. Existing system equipment information is as follows:

Air Handler Model No. 39E-48; AFC2-DBF-SCS1-BFS-BFE1-MXB •

20 tons

- Condenser Model No. 07EA-022-621
- Nominal Cooling Capacity •
- Refrigerant Type
- R-22 **Electrical Characteristics** • 406/60/3, MCA 60 amps

The plant has three (3) wells with high pressure pumps onsite that supply water to the auxiliary cooling water storage reservoir. Water from the auxiliary water reservoir is distributed throughout the plant to provide equipment cooling water. This is a 'once-through' system which is discharged to our onsite detention pond. The existing water-cooled condenser requires 40 gpm cooling water at 60°F to achieve 22 tons of cooling capacity.

1.2 LOCATION

Platte Generating Station is located at 1035 W. Wildwood Drive, two (2) miles south of Grand Island, Nebraska. The plant entrance is located two (2) miles south of U.S. Highway 34 and 1 ½ miles east of U.S. Highway 281.

1.3 CONTACT

Question regarding this specification may be directed to:

Tylor Robinson **Platte Generating Station** 1035 W. Wildwood Dr. Grand Island, NE 68801 Ph. (308) 385-5495 trobinson@giud.com

2.0 SCOPE

The Contractor shall furnish services and materials described herein to replace the existing air handling and refrigeration equipment associated with the 5kV HVAC system. The Contractor shall provide all material, freight, equipment, lifting equipment, scaffold, labor, personnel protective equipment, tools, consumables, waste disposal, and supervision to fully perform the specified work without the assistance of City personnel.

The Contractor shall remove and properly dispose of all the existing equipment. The Contractor shall abide by all EPA regulations when handling refrigerants. The Contractor shall replace the existing equipment with a new high efficiency water to air heat pump system. The Contractor shall connect the new system to the existing system ductwork. The Contractor shall supply a new LCD display touchscreen thermostat. The replacement equipment shall be new and free from damage. The replacement unit shall meet or exceed the following general requirements:

Minimum Nominal Cooling Capacity:	20 tons
Refrigeration Type:	R-410A
Electrical Characteristics:	460/60/3, MOCP 60
Required Condenser Water Flow:	32 gpm at 50°F
Unit WxDxH in Inches:	60.25x106.5x36

The unit provided shall be a Bosch Model EC242, horizontal configuration or approved equal.

2.1 APPLICABLE CODES AND STANDARDS

All work under the requirements of these specifications shall be in conformance with the National Occupational Safety and Health Administration requirements; the requirements of the current City of Grand Island Municipal Code; and shall also be in compliance with all applicable state and or local laws and ordinances.

The design, construction, installation, and testing of the HVAC system shall be in accordance with the applicable requirements set forth in the latest edition of the following codes and standards:

- Uniform Mechanical Code, 2021 Edition
- National Fire Protection Association, NFPA 70
- Uniform Plumbing Code, 2021 Edition
- International Building Code, 2021 Edition
- American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE)
- Duct Manual and Sheet Metal Construction for Ventilation and Air Conditioning Systems
- Requirements of the Authority Having Jurisdiction (AHJ), State and Local codes in force at the time of Contract
- Applicable Unit Installation, Operation, and Maintenance Manuals

The standards listed, as well as all other applicable codes, standards, and good engineering practices, shall be used as "minimum" design standards.

2.2 COORDINATION OF WORK

The Contractor shall coordinate their work with all other Contractors and trades involved in order to prevent conflicts causing unnecessary expenses or delays in the installation of work under other contracts.

2.3 SYSTEM DESCRIPTION AND OPERATION

The system shall be a nominal 20-ton water to air heat pump designed to operate with entering fluid temperatures between 30°F to 120°F in cooling mode. Acceptable unit models shall be Bosch EC 242-4HZN or approved equal.

•	Minimum Nominal Cooling Capacity:	20 tons
•	Refrigeration Type:	R-410A
•	Electrical Characteristics:	460/60/3, MOCP 60
•	Required Condenser Water Flow:	32 gpm at 50°F
•	Unit WxDxH in Inches:	60.25x106.5x36

Substitutions of approved equal shall be approved with shop drawings and submittals for evaluation in accordance with Bid Section 3.1.

Units shall have the air flow arrangement as specified in this document and attached installation drawings. If units with these arrangements are not used, the Contractor supplying the equipment is responsible for any extra costs incurred by the proposed changes. Additional costs shall be included in the base bid amount.

Rubber or cork isolators shall be installed at unit attachment and load points to prevent transmission of unit vibration to building structure.

The unit shall be constructed with a coaxial type, refrigerant to water heat exchanger. The refrigerant to water heat exchanger shall be of cupro-nickel inner water tube construction and steel outer refrigerant tube design rated to withstand 600 PSIG working refrigerant pressure and 400 PSIG working water pressure.

The supplied unit shall be equipped with the following OEM installed options; Phase protection monitor, Fire alarm/dual power.

2.3.1 SHEETMETAL AND DUCT CONNECTIONS

The Contractor shall furnish and install all ductwork required to transition from existing ductwork to supplied equipment. All ductwork shall be neat, accurate, mechanically tight, and rigidly constructed. Ductwork shall be constructed according to the latest edition of Duct Manual and Sheet Metal Construction for Ventilating and Air Conditioning Systems. Duct shall be a minimum 22-gauge galvanized sheet metal. A flexible connector shall be installed in the return and supply air duct connections. All metal ducting shall be lined on the interior surface with a minimum of one inch duct insulation. All ductwork joints and seams shall be sealed airtight.

2.3.2 WATER SUPPLY AND DISCHARGE PIPING

Supply and return piping must be as large or larger than the OEM unit connections. Units shall be connected with an OEM available hose kit. The hose kit shall include stainless steel hoses, ball valves, automatic flow control valve, Y-strainer with drain valve, and a 24 volt 2-position shutoff valve. All manual flow valves used in the system must be ball valves. Ball valves shall be installed in the supply and return lines for unit isolation and unit water flow balancing. Flexible hoses shall be used between the unit and the rigid system piping to avoid vibration. A Dwyer instruments HFB 5-50 in-line flow monitor, RCM Model 7000 Bronze, or approved equal shall be installed in the discharge water connection.

2.3.3 ELECTRICAL CONNECTIONS AND RACEWAYS

Supply and Installation of all high and low voltage raceways will be the responsibility of Grand Island Utilities personnel. Grand Island Utilities will install and terminate all 460V-3 phase power cabling. It will be the Contractor's responsibility to supply the wire and terminate all low voltage control circuits required for the mechanical equipment (e.g. thermostats and interconnections).

Long length thermostat and control wiring leads may create voltage drop. Increased wire gauge or up-size transformers may be required and shall be installed in accordance with the unit manufacturers recommendations to insure minimum secondary voltage supply. The minimum following guidelines for wiring between a thermostat and the unit shall be met: 18 GA up to 60 foot, 16 GA up to 100 ft, and 14 GA up to 140 ft.

2.3.4 RETURN AIR FILTER INSTALLATION

The Contractor shall modify the exiting ductwork to accommodate 2" MEV-8 pleated filters. The filter access shall be within 5 ft of the floor and shall be easily accessible without the use of a ladder.

2.3.5 STARTUP AND TESTING

Contractor to provide qualified heating and ventilating personnel to perform the balancing and testing. After completing the installation, and before operating the unit, the following checks should be made:

- Make sure that all electrical connections are tight and secured.
- Verify the supply voltage to the heat pump is in accordance with nameplate ratings.
- Verify correct phase rotation of three-phase power supply.
- Verify that the low voltage wiring between the unit and thermostat is correct.
- Verify that the water piping is complete and correct.
- Check that the water flow is correct, and adjust if necessary.
- Check the blower for free rotation, and that it is secured to the shaft.
- Verify that vibration isolation has been provided.
- Complete the unit checkout sheet from the Manufacturer supplied Installation, operation, and Maintenance Manual

The Contractor shall be responsible for scheduling all required inspections. The Contractor shall have a designated representative on site for all scheduled inspections.

Upon completion, the Contractor shall make up a set of operating instructions covering all mechanical equipment with moving or moveable parts including general operating of systems and shall give the owner two (2) copies of the instructions. Instructions shall be type written for particular job and bound. Manufacturer's printed operation and maintenance instructions shall also be provided for each piece of equipment. Starting, stopping, lubricating, and adjustment shall be clearly indicated for each piece of equipment.

2.4 MATERIALS AND WORKMANSHIP

All materials shall be new materials of high quality.

The Contractor shall at all times keep the premises free from unnecessary debris, dirt, condemned materials, blocking, scaffold, etc. as soon as possible after accumulation and after it has served its useful purpose. The Contractor shall always keep the premises broom clean from foreign materials

created under this Contract. The Contractor shall provide tarpaulins to protect all finished surfaces and equipment. All Contractor Generated construction waste shall be hauled offsite. Extreme caution shall be exercised to prevent damage to existing equipment, furniture, etc. during construction. After the job is complete all floors, equipment, etc. shall be given a thorough cleaning prior to leaving the jobsite.

2.5 ACCEPTANCE OF WORK

The Contractor shall correct any Work that fails to conform to the requirements of the specification herein where such failure to conform appears during the progress of the Work, and shall remedy any defects due to faulty materials, equipment or workmanship which appear within a period of one (1) year from the Date of Final Settlement of the Contract or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents. The provisions of this Article apply to Work done by Subcontractors as well as to Work done by direct employees of the Contractor and are in addition to any other remedies or warranties provided by law.

No act of the Owner or the Owner's Representative, either in superintending or directing the Work, or any extension of time for the completion of the Work, shall be regarded as an acceptance of such Work or any part thereof, or of materials used therein, either wholly or in part. Acceptance shall be evidenced only by the final certificate of the Owner. Before any final certificate shall issue, Contractor shall execute an affidavit on the certificate that it accepts the same in full payment and settlement of all claims on account of Work done and materials furnished under this Contract, and that all claims for materials provided or labor performed have been paid or set aside in full.

2.6 WARRANTY

The Contractor warrants that the Services will be performed with the degree of skill and care that is required by current, good, and sound professional procedures and practices, and in conformance with generally accepted professional standards prevailing at the time the Services are performed to ensure that all Services performed are correct and appropriate.

The Contractor warrants all work under the Contract to be of good quality and free from any defective or faulty material and workmanship. Contractor agrees to guarantee all work under this Contract for a period of one (1) year from the date of Final Settlement by the Owner. If any unsatisfactory condition or damage develops within the time of this guarantee due to materials or workmanship that are defective, inferior, or not in accordance with the Contract, as reasonably determined by the Owner, then the Contractor shall, when notified by the Owner, immediately place such guaranteed Work in a condition satisfactory to the Owner. For any Work so corrected, Contractor's obligation hereunder to correct defective Work shall be reinstated for an additional one-year period, commencing with the date of acceptance of such corrected Work.

3.0 BIDDING

The Contractor shall submit a lump sum price for all repairs described within this specification. Bids shall include, but not be limited to all expenses, equipment, labor, mobilization and demobilization, freight, and subcontractors.

3.1 SUBMITTALS

A responsive bid shall submit the following design information and drawings for review:

- Technical specifications as specified in Section 2.3, equipment drawings, weights, dimensions, including necessary electric and water connections and sizing, detail any deviation from proposed installation.
- Supplied construction drawings with required red lines or approved equal.
- Provide internal control panel wiring diagram which shall include power supply requirements and field wiring termination points.

3.2 SITE VISIT

A site visit prior to proposal submittal is **REQUIRED**. All contractors will be required to visit the plant site to ensure familiarity with the project requirements. Site visits may be arranged via the contact information listed herein. A site visit form shall accompany the bid documents.

3.3 SCHEDULE

The Contractor shall provide with the proposal a detailed schedule reflecting all key activities with sufficient information to demonstrate the means of completing the work in the allotted period.

3.3.1 COORDINATION

The Contractor shall be responsible for coordination of this work with all crafts, subcontractors, manufacturer's representatives, and Owner's representative.

3.3.2 TIME OF COMPLETION

The Contractors shall provide detail on time of completion. The contractor shall provide estimated dates of project milestone including demolition, electrical requirements, equipment delivery, and equipment installation.

3.4 CHANGE ORDERS

If any extra and/or additional work is to be done or any change in the plans and specifications is deemed necessary, the Purchaser may issue the Contractor a written change order directing that such extra work be done or that such change be made, and the Contract shall be modified accordingly. No claim for extra costs shall be allowed in the absence of a written change order. The Contractor shall give prompt written notice of any matter which they believe to involve extra cost. In the absence of such notice by the Contractor on account thereof his right to such claim shall be deemed to have been waived. Compensation to the Contractor will be calculated as an addition to or deduction from the Contract Price, based upon such written terms as may be established between the parties, either (a) by an acceptable lump sum proposal of the Contractor, or (b) on a cost-plus limited basis not to exceed a specified limit, or (c) on a basis of the unit prices as stated in these specifications where such unit prices apply. In the event that none of the foregoing methods are agreed upon with the Contractor, the Purchaser may perform the work. The Purchaser shall be the sole judge of such action and procedure. Determination of cost-plus work shall be based upon actual cost of labor and material plus a maximum of 20% of actual Contractor cost for overhead, profit,

The Contractor shall submit a formal process for addressing work that may arise but is not described herein. All change orders shall be addressed with a detailed scope of work and approved before proceeding with scope of extra work.

Contractor shall be required to maintain accurate job logs describing work performed by each crew throughout each day and daily time sheets detailing all work performed and expenses incurred **in the same format as the bid detail submittal**. Daily time sheets shall identify all individuals by name, craft and all hours worked on each portion of the work. Such job logs and time sheets shall

accurately account for all man-hours with clear separation and identification of Time, equipment and Material as required accounting for the actual service hours and expenses. A sample timesheet shall be included in the bid to be approved by the owner's designated representative.

3.5 TERMS AND CONDITIONS

Provide any standard terms and conditions which will be in effect during this completion of this scope of work.

3.6 EXCEPTIONS

The purpose of this specification is to give detail on conditions under which the new equipment will operate, scope of Contract, quality of equipment required, standards used in determining its acceptability and similar data. Each bidder shall carefully read all requirements herein set forth and shall offer equipment and services which fully comply with these requirements or shall plainly set forth all points, features, conditions, specifications, etc., wherein the equipment offered does not meet these specifications. Such exceptions as are made shall be listed by section and subsection number and shall be marked in ink in the sections of these specifications. Exceptions shall be explained in detail in a letter accompanying the bid. Failure to outline such exceptions will require the successful bidder to comply with these specifications.

The City of Grand Island Utilities Department is NOT tax exempt and is subject to 7.5% sales tax. See the Nebraska Department of Revenue web site at <u>www.revenue.state.ne.us</u> for contractor's tax information.

4.0 QUALIFICATIONS

Bids will be received only from qualified bidders. A bidder will be considered qualified if they are a licensed Mechanical Contractor per Grand Island Municipal Building Code. The bidder shall have facilities with a maximum response time of 24 hrs.

The Bidder shall be a firm with qualifications and manpower to complete the scope of work described herein without the help of plant personnel. Any insufficiencies in Contractor manpower, workmanship, or qualifications, without clear written exception, that require the Contractor to employ plant personnel to complete services described in this specification shall be billed to the Contractor at \$95 per man hour.

If the Contractor defaults or neglects to carry out the work in accordance with the contract documents or fails to perform any provisions of the work described herein the owner may, after 7 days written notice to the Contractor and without prejudice to any other remedy, make good the deficiencies by whatever method the Owner may deem necessary. The Purchaser may deduct the cost thereof from the payment, then or thereafter due to the Contractor or, at Owner's option, may terminate Contractor's work under the Contract and take possession of the site and all materials associated with the work scope. The Owner may then by whatever method the Owner may deem expedient remedy the deficiencies. If the unpaid balance of the Contract Sum exceeds the expense of finishing the work, such exceeds such unpaid balance the Contractor shall pay the difference to the Owner. These rights and remedies are in addition to any right to damages or other rights and remedies allowed by law.

The Contractor will be expected to perform the work without the assistance of Platte Generating Station personnel or tools and comply with plant safety regulations and equipment lockout/tag out procedures.

5.0 SAFETY

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in conjunction with the work. The Contractor shall comply with all safety practices as required by the regulatory agencies governing the Contractor's operations as well as any and all safety requirements of the Contractor's organization and shall submit historical evidence of such compliance. All personnel working on site will be required to participate in the plant's safety orientation prior to performing any work on site at PGS.

The plant has an equipment lockout/tag out procedure to prevent the unauthorized starting of motors and the unauthorized movement of valves and dampers. The Contractor is required to use the procedure and add its own locks/tags on top of the plant lock/tags if required. *Removal of plant locks/tags is not allowed and is cause for removal from the plant site.*

6.0 INSURANCE

The contractor shall comply with the attached City's insurance requirements.

7.0 PERFORMANCE AND PAYMENT BOND

The successful Bidder shall file with the OWNER Performance and Payment Bonds in the full amount (100 percent) of the Contract price, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the Work under this Contract, and to cover all guarantees against defective workmanship or materials, or both, for a period of one (1) year after the date of final acceptance of the Work by the OWNER. The Surety furnishing these bonds shall have a record of service satisfactory to the OWNER, be authorized to do business in the State where the OWNER's project is located and shall be named on the current list of approved Surety Companies, acceptable on Federal bonds as published by the Audit Staff, Bureau of Accounts, U.S. Treasury Department.

The Attorney-in-Fact (Resident Agent) who executes these bonds on behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond.

8.0 DRAWINGS AND SITE INFORMATION

A selection of drawings has been provided with the bid package for reference only. Additional drawings are available for review at Platte Generating Station office. The Contractor is responsible for making such prebid site visits as required to obtain additional details for bidding and execution of the work and for clarification of any questions or concerns the bidder may have related to the work scope and site conditions.



Working Together for a Better Tomorrow, Today.

REQUEST FOR BIDS - SITE CONDITIONS

5kV SWITCHGEAR INTEGRATED COOLING SYSTEM Platte Generating Station

Site Visit: Bidders shall visit the site in order to inform themselves of the conditions under which the work is to be performed, concerning the site of the work, the nature of the existing facilities, the obstacles which may be encountered, the sequence of the work, and all other relevant matters concerning the work to be performed. No extra compensation shall be allowed by reason of the failure of such bidder to fully inform themselves of said site conditions prior to the bidding. The Contractor shall employ, so far as possible, such methods and means in the carrying out of their work as will not cause any interruption or interference with the City's operations and any other contractors.

A site visit may be arranged by contacting Tylor Robinson at (308) 385-5495.

Signature of person visiting site:

Signature of Utilities personnel witnessing visit:

Date of Visit:

MINIMUM INSURANCE REQUIREMENTS CITY OF GRAND ISLAND, NEBRASKA

The successful bidder shall obtain insurance from companies authorized to do business in Nebraska of such types and in such amounts as may be necessary to protect the Bidder and the interests of the City against hazards or risks of loss as hereinafter specified. This insurance shall cover all aspects of the Bidder's operations and completed operations. Failure to maintain adequate coverage shall not relieve Bidder of any contractual responsibility or obligation. Minimum insurance coverage shall be the amounts stated herein or the amounts required by applicable law, whichever are greater.

1. WORKERS COMPENSATION AND EMPLOYER'S LIABILITY

This insurance shall protect the Bidder against all claims under applicable State workers compensation laws. This insurance shall provide coverage in every state in which work for this project might be conducted. The liability limits shall not be less than the following:

Workers Compensation Employers Liability Statutory Limits \$100,000 each accident \$100,000 each employee \$500,000 policy limit

2. BUSINESS AUTOMOBILE LIABILITY

This insurance shall be written in comprehensive form and shall protect the Bidder, Bidder's employees, or subcontractors from claims due to the ownership, maintenance, or use of a motor vehicle. The liability limits shall not be less than the following:

Bodily Injury & Property Damage

\$ 500,000 Combined Single Limit

3. COMPREHENSIVE GENERAL LIABILITY

The comprehensive general liability coverage shall contain no exclusion relative to explosion, collapse, or underground property. The liability limits shall not be less than the following:

Bodily Injury & Property Damage

\$ 500,000 each occurrence \$1,000,000 aggregate

4. UMBRELLA LIABILITY INSURANCE

This insurance shall protect the Bidder against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage

\$1,000,000 each occurrence \$1,000,000 general aggregate

5. ADDITIONAL REQUIREMENTS

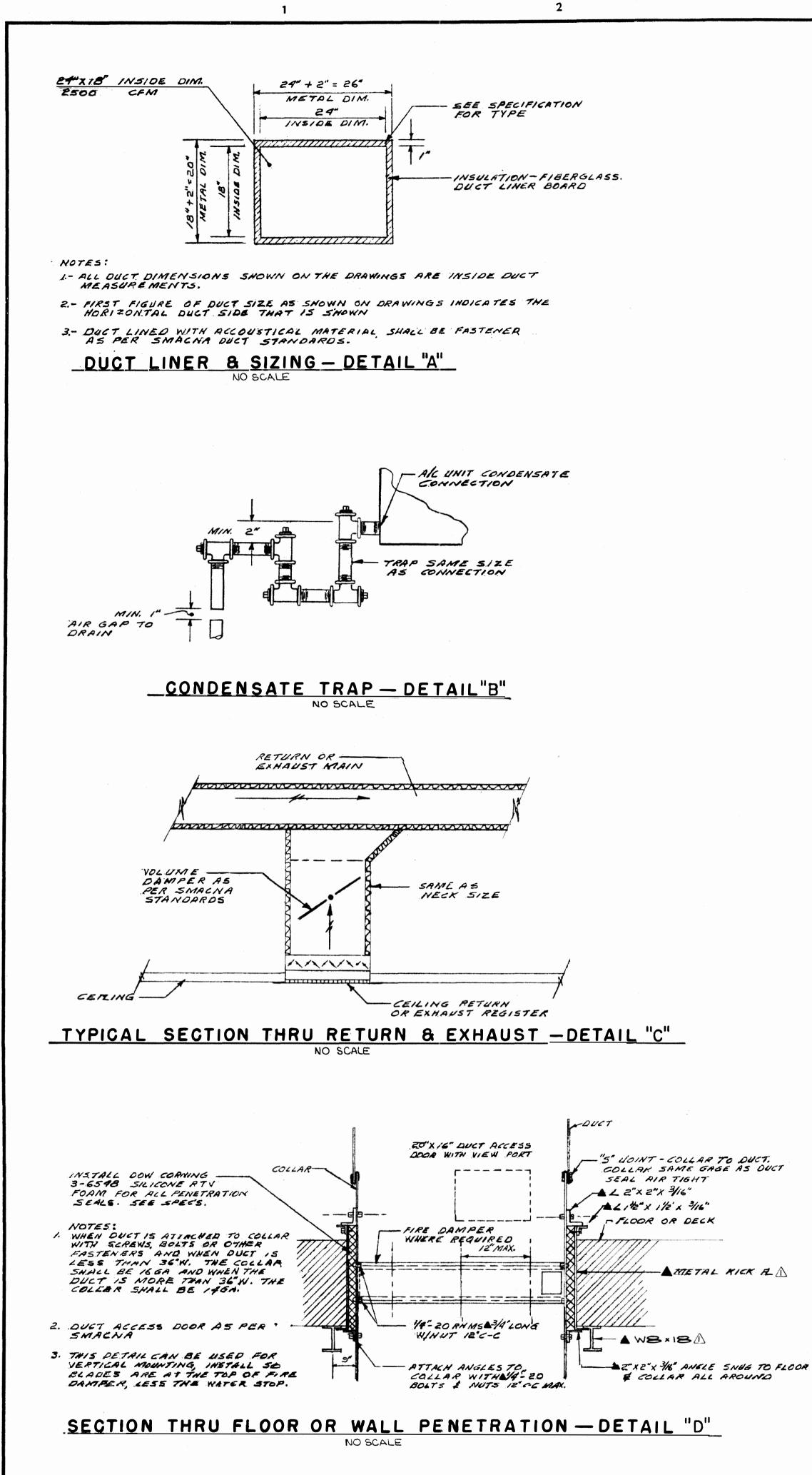
The City may require insurance covering a Bidder or subcontractor more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Bidder or subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Bidder of all obligations under the Contract.

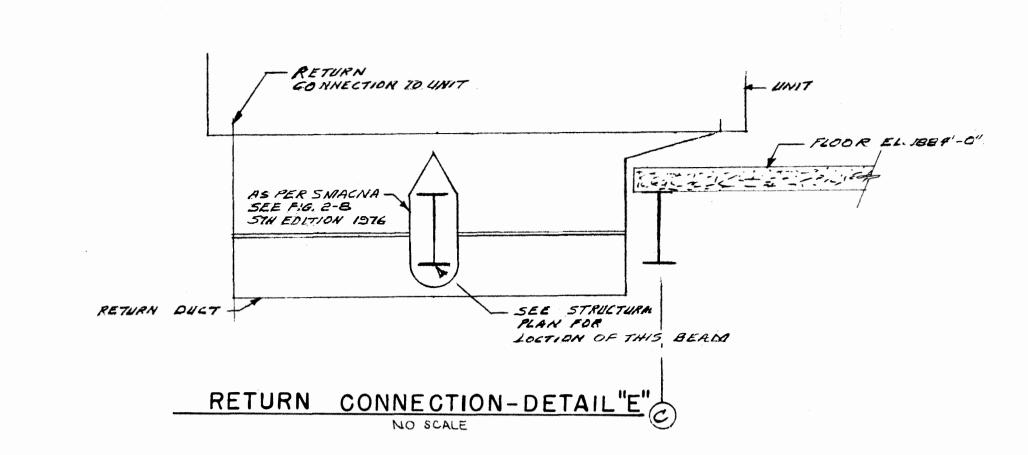
The Bidder shall provide and carry any additional insurance as may be required by special provisions of these specifications.

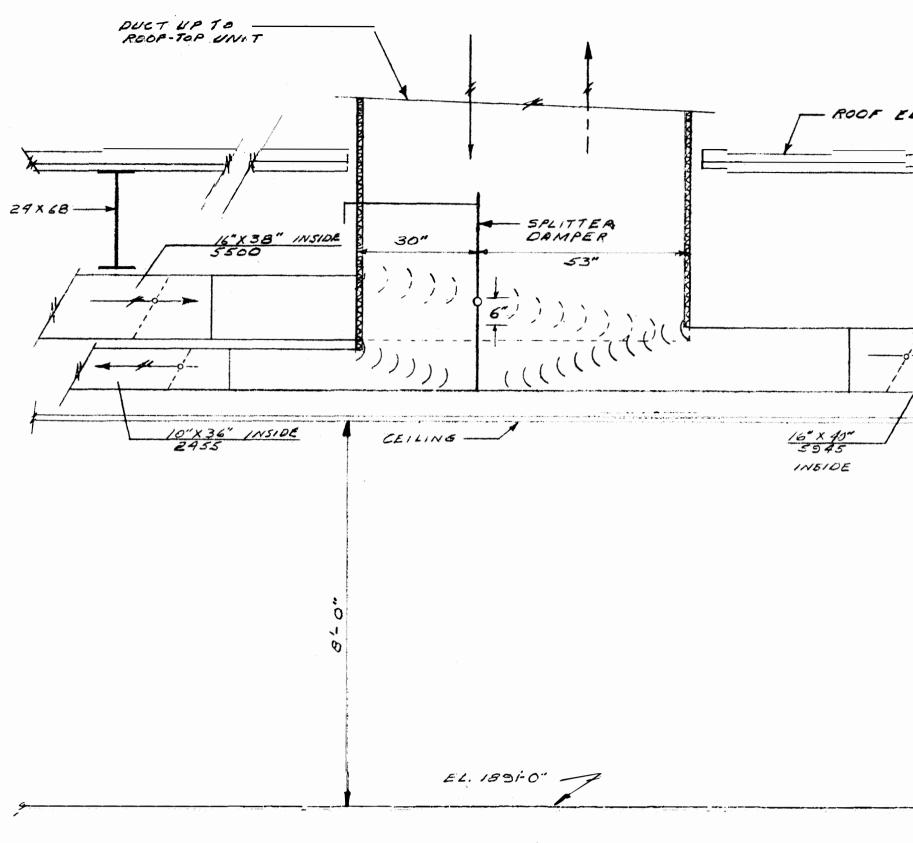
6. CERTIFICATE OF INSURANCE

Satisfactory certificates of insurance shall be filed with the City prior to starting any work on this Contract. The certificates shall show the City as an additional insured on all coverage except Workers Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy is cancelled (strike the "endeavor to" wording often shown on certificate forms). If the Bidder cannot have the "endeavor to" language stricken, the Bidder may elect to provide a new certificate of insurance every thirty (30) days during the contract. Bidder shall immediately notify the City if there is any reduction of coverage because of revised limits or claims paid which affect the aggregate of any policy.



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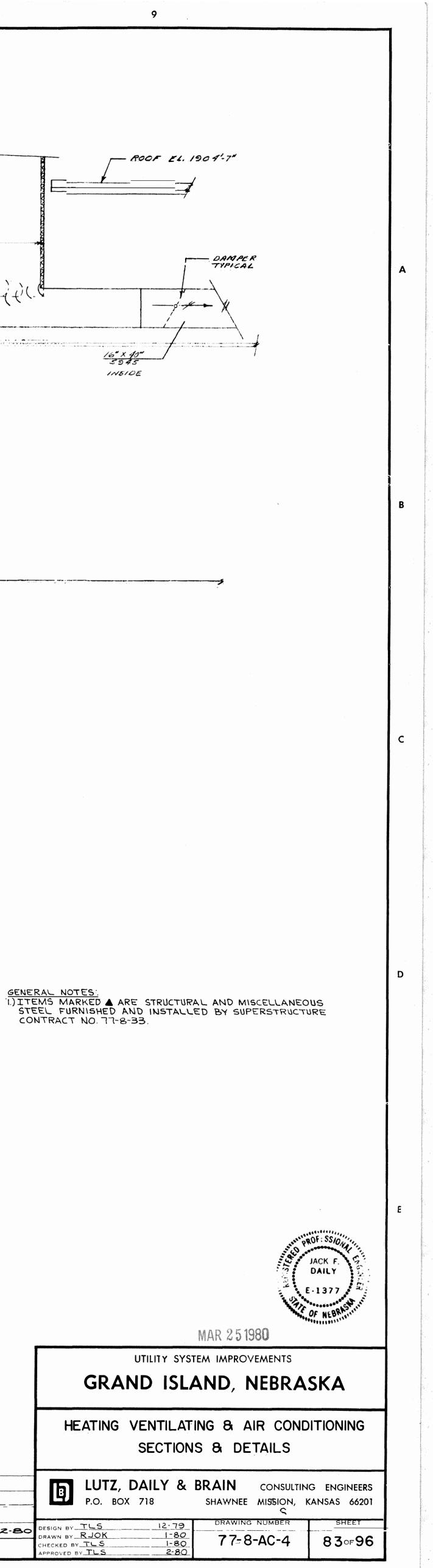


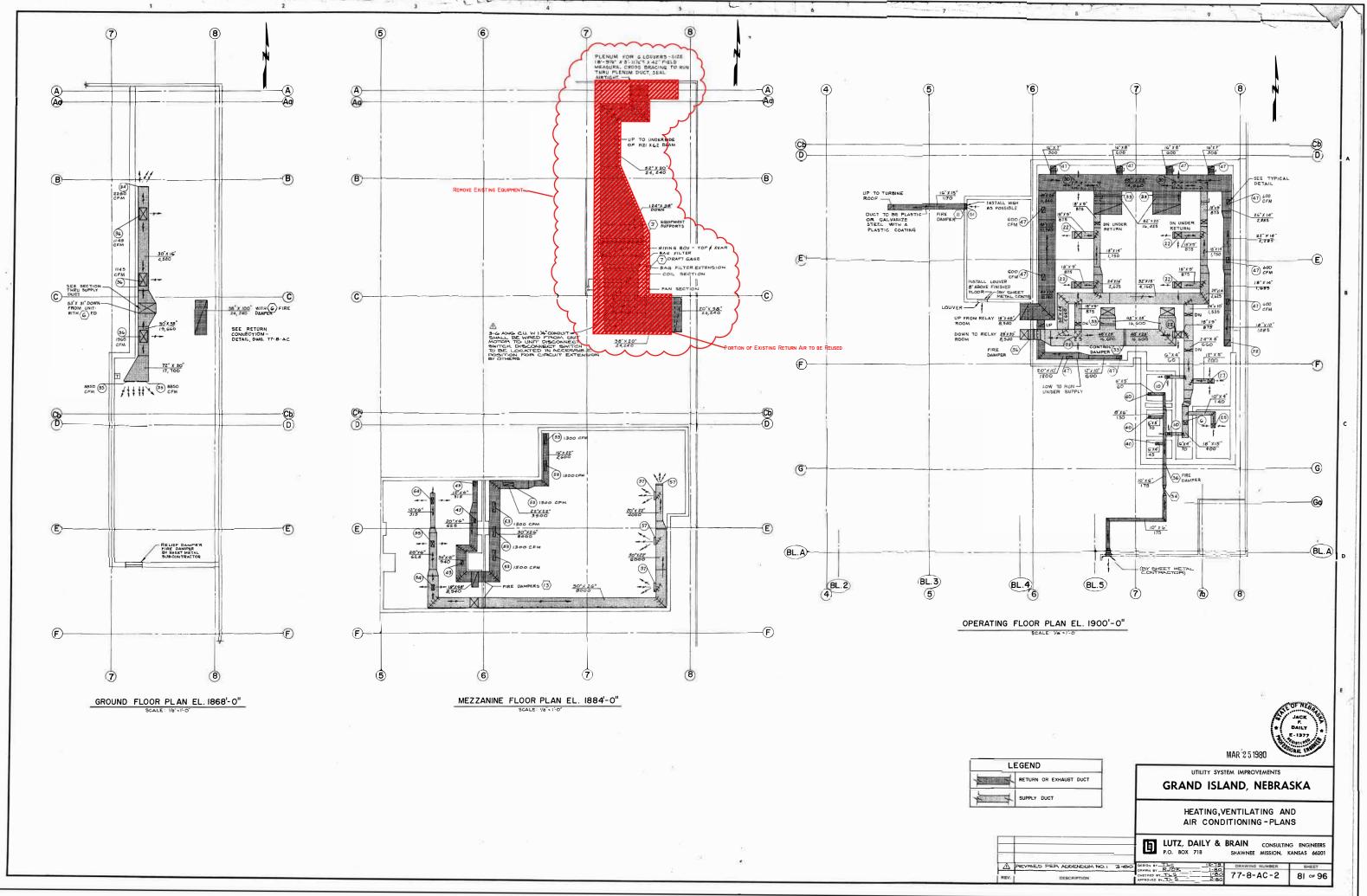


___SECTION_I-AC-4__ SCALE: 12"=1-0"

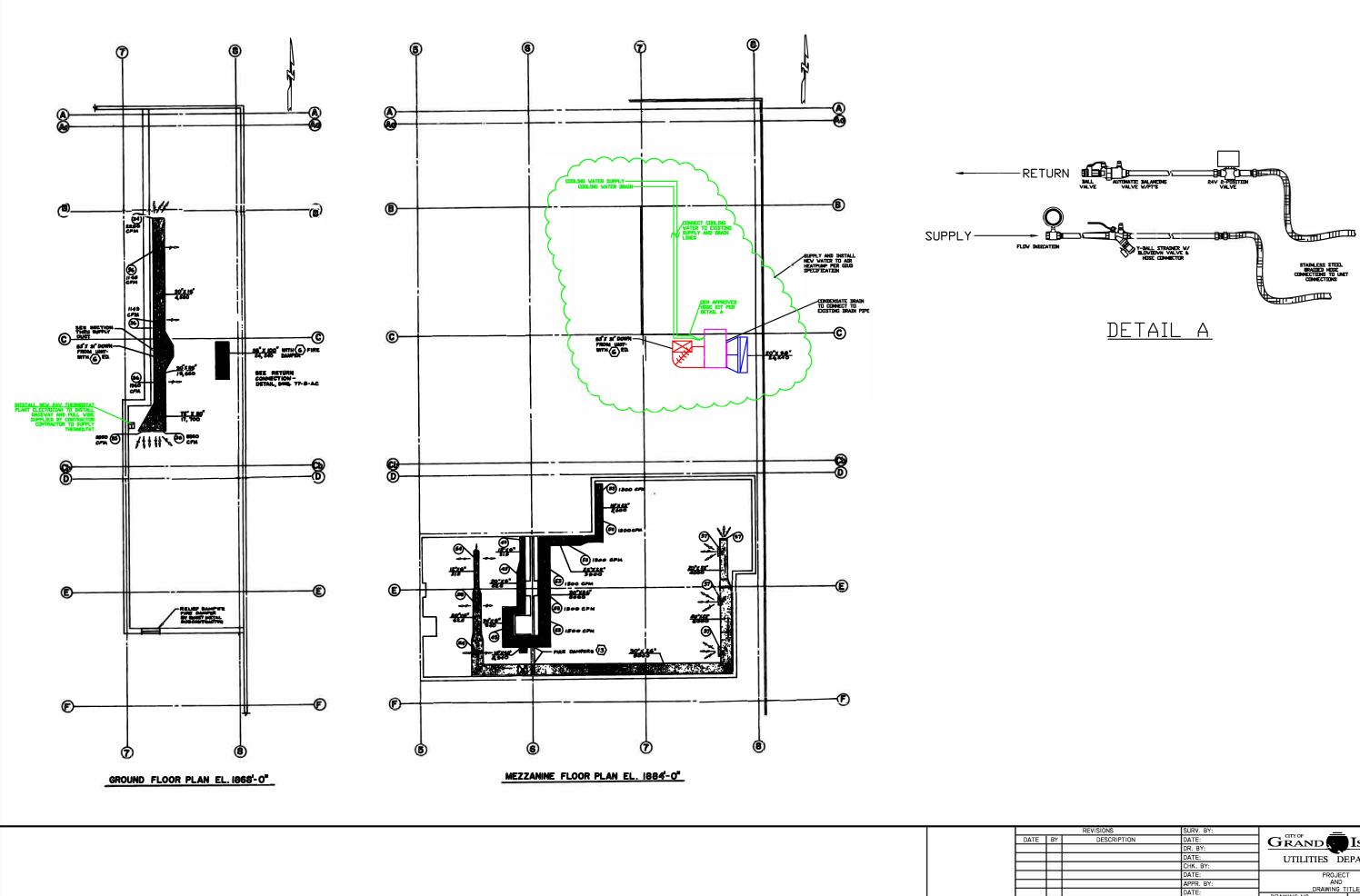
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