



Rizzetta & Company

# **Encore Community Development District**

---

**Board of Supervisors'  
Special Meeting  
September 15, 2022**

**The Trio at Encore  
1101 Ray Charles Blvd  
Tampa, Florida 33602  
813.533.2950**

**[www.encorecdd.org](http://www.encorecdd.org)**

## **ENCORE COMMUNITY DEVELOPMENT DISTRICT AGENDA**

Rizzetta & Company, 9428 Camden Field Parkway, Riverview, FL 33578

<b>Board of Supervisors</b>	Billi Johnson-Griffin Teresa Moring Dr. Hazel Harvey Julia Jackson Mae Walker	Chairman Vice Chairman Assistant Secretary Assistant Secretary Assistant Secretary
<b>District Manager</b>	Christina Newsome	Rizzetta & Company, Inc.
<b>District Attorney</b>	Sarah Sandy	Kutak Rock
<b>District Engineer</b>	Greg Woodcock	Cardno TBE

**All cellular phones must be placed on mute while in the meeting room.**

The Audience Comment portion of the agenda is where individuals may make comments on matters that concern the District. Individuals are limited to a total of three (3) minutes to make comments during this time.

Pursuant to provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting/hearing/workshop is asked to advise the District Office at least forty-eight (48) hours before the meeting / hearing / workshop by contacting the District Manager at (813) 533-2950. If you are hearing or speech impaired, please contact the Florida Relay Service by dialing 7-1-1, or 1-800-955-8771 (TTY) 1-800-955-8770 (Voice), who can aid you in contacting the District Office.

A person who decides to appeal any decision made at the meeting/hearing/workshop with respect to any matter considered at the meeting/hearing/workshop is advised that person will need a record of the proceedings and that accordingly, the person may need to ensure that a verbatim record of the proceedings is made including the testimony and evidence upon which the appeal is to be based.

**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**DISTRICT OFFICE – Riverview FL – 813-533-2950**  
**Mailing Address – 3434 Colwell Avenue, Suite 200, Tampa, FL 33614**  
**www.encorecdd.org**

---

**Board of Supervisors**  
**Encore Community**  
**Development District**

September 7, 2022

**AGENDA**

Dear Board Members:

The Special meeting of the Board of Supervisors of the Encore Community Development District will be held on **Thursday, September 15, 2022, at 3:00 p.m.** at The Trio at Encore, located at 1101 Ray Charles Blvd. Tampa, Florida 33602. The following is the tentative agenda for the meeting:

**BOARD OF SUPERVISORS MEETING:**

- 1. CALL TO ORDER/ROLL CALL**
- 2. AUDIENCE COMMENTS**
- 3. STAFF REPORTS**
- 4. BUSINESS ITEMS**
  - A. Consideration of RFPs for Chiller Plant System for Lot 12 Piping Upgrade Project ..... Tab 1
  - B. Consideration of RFPs for Chiller System Operations and Maintenance Services ..... Tab 2
- 5. BUSINESS ADMINISTRATION**
- 6. SUPERVISOR REQUESTS**
- 7. ADJOURNMENT**

I look forward to seeing you at the meeting. In the meantime, if you have any questions, or to obtain a copy of the full agenda, please do not hesitate to contact me at (813) 533-2950, [cnewsome@rizzetta.com](mailto:cnewsome@rizzetta.com), or Crystal Yem at [cyem@rizzetta.com](mailto:cyem@rizzetta.com).

Sincerely,

*Christina Newsome*

Christina Newsome  
District Manager

## Tab 1



***ENCORE  
COMMUNITY  
DEVELOPMENT  
DISTRICT***

**PROJECT MANUAL**

**FOR**

**CONSTRUCTION SERVICES FOR  
CHILLER PLANT – LOT 12 PIPING  
UPGRADE**

**August 10, 2022**

**ENCORE COMMUNITY DEVELOPMENT DISTRICT  
REQUEST FOR PROPOSALS FOR CONSTRUCTION SERVICES FOR  
CHILLER PLANT – LOT 12 PIPING UPGRADE  
CITY OF TAMPA, FLORIDA**

**TABLE OF CONTENTS**

- I. Project Information Package
  - A. Notice of Request for Proposals
  - B. Instructions to Proposers
  - C. Evaluation Criteria
- II. Proposal Submission Package
  - A. Proposal Signature Form
  - B. Organizational Information of Proposer
  - C. Proposed List of Subcontractors
  - D. Certificate of Corporate Principal/Affidavit of Proposer
  - E. Sworn Statement Regarding Discrimination
  - F. Sworn Statement Regarding Scrutinized Companies
  - G. Sworn Statement Regarding Public Entity Crimes
  - H. Trench Safety Affidavit
  - I. Affidavit of Non-Collusion
  - J. Minimum Qualifications Statement
  - K. Summary of Costs and Schedule
- III. Form of Agreement (EJCDC) (“Contract” or “Agreement”)
  - A. Standard Form of Agreement (EJCDC)
  - B. General Conditions (EJCDC)
  - C. Supplemental Conditions (EJCDC)
  - D. Change Order (EJCDC)
  - E. Performance Bond and Payment Bond (EJCDC)
- IV. Plans and Specifications
- V. Report of Geotechnical Exploration

# **I. PROJECT INFORMATION PACKAGE**

## **PART I.A. – NOTICE OF RFP**

**ENCORE COMMUNITY DEVELOPMENT DISTRICT  
NOTICE OF REQUEST FOR PROPOSALS  
CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT**

Encore Community Development District (“**District**” or “**CDD**”), located in the City of Tampa, Hillsborough County, Florida, hereby announces that it is soliciting proposals to provide labor, materials, equipment, and construction services in connection with upgrading its chilled water system’s (“**Chiller**”) existing piping connection between the Chiller and Lot 12 (“**Project**”).

The “**Project Manual**,” consisting of instructions to Proposers, technical information, contract forms, proposal forms, construction plans, and other materials, will be available upon request from Greg Woodcock, District Engineer, at [greg.woodcock@cardno.com](mailto:greg.woodcock@cardno.com) and are expected to be available beginning **August 10, 2022, at 12:00 p.m. (EST)**. The District reserves the right in its sole discretion to make changes to the Project Manual up until the Proposal Deadline (defined herein), and to provide notice of such changes only to those Proposers who have provided their contact information to the District Engineer via e-mail at [greg.woodcock@cardno.com](mailto:greg.woodcock@cardno.com).

There will be a **mandatory pre-proposal conference on August 16, 2022, at 11:00 a.m. (EST)** at the Chiller site location located at **1299 E. Harrison Street, Tampa, FL 33602** (or at an alternative location to be determined and announced). Attendance at the pre-proposal conference is mandatory, and all proposers must request a copy of the Project Manual no later than the time of the pre-proposal conference.

To be eligible to submit a proposal, and in addition to any other requirements set forth in the Project Manual, an interested firm must hold all required local, state and federal licenses in good standing, and be authorized to do business in the City of Tampa, Hillsborough County and the State of Florida. Each proposal shall be accompanied by a proposal guarantee in the form of a proposal bond or certified cashier’s check in an amount not less than five percent (5%) of the total bid to be retained in the event the successful proposer fails to execute a contract with the District and file the requisite Performance and Payment Bonds and insurance within fourteen (14) calendar days after the receipt of the Notice of Award. **TIME IS OF THE ESSENCE WITH RESPECT TO THE PROJECT.**

Firms desiring to provide services for the Project must submit one (1) original and one (1) electronic copy (PDF format and all documents included on a USB flash drive) of the required Proposal no later than **September 9, 2022, at 2:00 p.m. (EST)** (“**Proposal Deadline**”), at the offices of the District Manager c/o Rizzetta & Company, Inc., 2700 S. Falkenburg Rd, STE 2745, Riverview, FL 33758 (“**District Manager’s Office**”) (or at an alternative location to be determined and announced).

Proposals shall be in the form provided in the Project Manual and submitted in a sealed envelope, marked with a notation “PROPOSAL FOR CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT.” The District reserves the right to return unopened to the Proposer any Proposals received after the time and date stipulated above. Each Proposal shall remain binding for a minimum of one hundred twenty (120) days after the Proposal opening.

Proposals will be evaluated in accordance with the criteria included in the Project Manual. **District reserves the right to reject any and all Proposals, make modifications to the work, award the contracts in whole or in part with or without cause, provide for the delivery of the project in phases, and waive minor or technical irregularities in any Proposal, as it deems appropriate, and if the District determines in its discretion that it is in the District's best interests to do so.** Any protest of the Project Manual, including, but not limited to the terms and specifications, must be filed with the District within seventy-two (72) hours of the pre-proposal meeting, together with a protest bond in a form acceptable to the District and in the amount of Fifty Thousand Dollars (\$50,000) or two percent (2%) of the contract price of the contract to be awarded, whichever is greater. In the event the protest is successful, the protest bond shall be refunded to the protestor. In the event the protest is unsuccessful, the protest bond shall be applied towards the District's costs, expenses and attorney's fees associated with hearing and defending the protest. Failure to timely file a protest, or failure to timely post a protest bond, will result in a waiver of proceedings under Chapter 190, *Florida Statutes*, and other law.

The successful Proposer will be required upon award to furnish payment and performance bonds for one hundred percent (100%) of the value of the contracts (as described in the Project Manual), with a surety acceptable to the District, and in accordance with Section 255.05, *Florida Statutes*.

## NOTICE OF SPECIAL MEETING TO OPEN PROPOSALS

Pursuant to Section 255.0518, *Florida Statutes*, the proposals will be publicly opened at a special meeting of the District to be held at the Proposal Deadline and at the District Manager's Office. The purpose of the special meeting will be to announce the names of the proposers and pricing. No decisions of the District's Board of Supervisors ("Board") will be made at that time. A copy of the agenda for the meeting can be obtained from the District Manager's Office or by emailing [jgoldyn@rizzetta.com](mailto:jgoldyn@rizzetta.com).

The meeting is open to the public and will be conducted in accordance with the provisions of Florida law. There may be occasions when one or more Board Supervisors or staff members will participate by telephone. At the above location will be present a speaker telephone so that any Board Supervisor or staff member can attend the meeting and be fully informed of the discussions taking place either in person or by telephone communication. The meeting may be continued in progress without additional notice to a time, date, and location stated on the record.

Any person requiring special accommodations to participate in this meeting is asked to advise the District Manager's Office at 813-533-2950, at least 48 hours before the meetings. If you are hearing or speech impaired, please contact the Florida Relay Service by dialing 7-1-1, or 1-800-955-8771 (TTY) / 1-800-955-8770 (Voice), for aid in contacting the District Manager's Office.

Any and all questions relative to this procurement shall be directed in writing by e-mail only to Greg Woodcock, District Engineer, at [greg.woodcock@cardno.com](mailto:greg.woodcock@cardno.com), copy Jennifer Goldyn at [jgoldyn@rizzetta.com](mailto:jgoldyn@rizzetta.com) and Sarah Sandy at [sarah.sandy@kutakrock.com](mailto:sarah.sandy@kutakrock.com). No phone inquiries please.

## **PART I.B. – INSTRUCTIONS TO PROPOSERS**

**ENCORE COMMUNITY DEVELOPMENT DISTRICT  
INSTRUCTIONS TO PROPOSERS**

**CONSTRUCTION SERVICES FOR CHILLER PLANT – LOT 12 PIPING UPGRADE  
CITY OF TAMPA FLORIDA**

**SECTION 1. DUE DATE.** Sealed proposals must be received no later than **2:00 p.m., Friday, September 9, 2022**, at the offices of the District Manager c/o Rizzetta & Company, Inc., 2700 S. Falkenburg Rd, STE 2745, Riverview, FL 33758 (“**District Manager’s Office**”), Attention: Jennifer Goldyn. Proposals will be opened at a public meeting to be held at **2:00 p.m., Friday, September 9, 2022**, at the District Manager’s Office. Proposals received after the time and date stipulated above will be returned un-opened to the proposer. Any proposal not completed as specified or missing the required proposal documents as provided in the Project Manual may be disqualified.

**SECTION 2. SUMMARY OF SCHEDULE.** The District anticipates the following RFP schedule, though certain dates may be subject to change:

<b>DATE/TIME</b>	<b>EVENT</b>
<b>August 10, 2022</b>	RFP Notice is issued.
<b>August 10, 2022 at 12:00 p.m.</b>	Project Manual Available for Distribution.
<b>August 16, 2022 at 11:00 a.m.</b>	Mandatory Pre-Proposal Meeting for Proposers.
<b>August 22, 2022 at 5:00 p.m.</b>	Deadline for questions.
<b>September 9, 2022 at 2:00 p.m.</b>	Proposals submittal deadline.
<b>September 9, 2022 at 2:00 p.m.</b>	Public meeting to open bids held.
<b>Week of September 12, 2022</b>	Anticipated Evaluation Committee meeting evaluate proposals received followed by regular Board meeting to consider the committee’s recommendations

**SECTION 3. MANDATORY PRE-PROPOSAL CONFERENCE.** A mandatory pre-proposal conference will be held on **Tuesday, August 16, 2022, at 11:00 a.m. at the site location located at 1299 E. Harrison Street, Tampa, FL 33602 (or at an alternative location to be determined and announced)**. The pre-proposal conference may include, but not be limited to, a discussion of contract requirements, inspections, evaluations, and submittal requirements. The District will not consider a Proposal from any Proposer that does not have an authorized representative present at said conference.

**SECTION 4. CONTRACT AWARD.** Within fourteen (14) days of receipt of the Notice of Intent to Award from the District, the Proposer shall enter into and execute the Contract in substantially the form included herein, unless requested otherwise by the District. The Proposal shall be submitted with the understanding that the Proposer will not withdraw its proposal for a period of one hundred and twenty (120) days after proposals are received.

**SECTION 5. PERFORMANCE/PAYMENT:** The successful Proposer will be required to provide the District with a Performance and Payment Bond in compliance with section 255.05,



*Florida Statutes*, executed in substantially the form included herein, and in an amount of One Hundred Percent (100%) of the total amount of the contract value concurrent with execution of the contract.

**SECTION 6. SIGNATURE ON PROPOSAL.** In addition to executing all forms, affidavits, and acknowledgments for which signature and notary blocks are provided, the Proposer must correctly sign the Proposal Signature Form. If the Proposal is made by an individual, that person's name and business address shall be shown. If made by a partnership, the name and business address of an authorized member of the firm or partnership shall be shown. If made by a corporation, the person signing the proposal shall show the name of the state under the laws of which the corporation was chartered. In addition, the Proposal should bear the seal of the corporation. Anyone signing the Proposal as agent shall file with the Proposal legal evidence of his or her authority to do so.

**SECTION 7. FAMILIARITY WITH THE PROJECT.** The Proposer, by and through the submission of the Proposal, agrees that he shall be held responsible for having heretofore examined the project site, the location of all proposed work and for having satisfied himself from his own personal knowledge and experience or professional advice as to the character, conditions, and location of the site, the nature of the turf, shrubs, trees, palms, vegetation, weeds, sprinklers and irrigation systems, roads, sidewalks and paved paths, ground, surface and subsurface, and any other conditions surrounding and affecting the work, any obstruction, the nature of any existing construction, and all other physical characteristics of the job, in order that the Proposer may include in the prices which the Proposer proposes all costs pertaining to the work and thereby provide for the satisfactory landscape and irrigation maintenance thereof. The Proposer agrees to accept the site in an "as is" condition and hold its prices for the period set forth in this proposal package, regardless of any changes to the site that may occur from the time of Proposal submission and through the time of contract award and the start of any work under the contract. The Proposer, in preparing the Proposal, shall take into consideration that work by other contractors may be in progress at or near the site and that the Proposer shall not interfere with work done by such other contractors.

**SECTION 8. FAMILIARITY WITH THE LAW.** By submitting a Proposal, the Proposer is assumed to be familiar with all federal, state, and local laws, ordinances, rules and regulations that in any manner affect the work. Ignorance on the part of the Proposer will in no way relieve it from responsibility to perform the work covered by the Proposal in compliance with all such laws, ordinances and regulations.

**SECTION 9. COLLUSION.** Proposers may be disqualified, and their proposals rejected if the District has reason to believe that collusion may exist among Proposers, the Proposer has defaulted on any previous contract, or is in arrears on any previous or existing contract, or for failure to demonstrate proper licensure and business organization.

**SECTION 10. INTERPRETATIONS AND ADDENDA.** Any and all questions relative to this project shall be directed to Greg Woodcock, District Engineer, by email only at [greg.woodcock@cardno.com](mailto:greg.woodcock@cardno.com), with a copy to the District Manager, Jennifer Goldyn, at [jgoldyn@rizzetta.com](mailto:jgoldyn@rizzetta.com) and District Counsel, Sarah Sandy, at [sarah.sandy@kutakrock.com](mailto:sarah.sandy@kutakrock.com), no later

than 5:00 p.m., on **Monday, August 22, 2022**. Interpretations or clarifications considered necessary in response to such questions will be issued by Addenda e-mailed, faxed or otherwise delivered to all parties recorded as having obtained copies of the Project Manual. Only questions answered by formal written Addenda will be binding. No interpretations will be given verbally. All questions and answers will be distributed to all Proposers. No inquiries will be accepted from subcontractors – the Proposer shall be responsible for all queries.

**SECTION 11. SUBMISSION OF PROPOSALS.** Submit one (1) original, and one (1) electronic copy (PDF format and all documents included on a USB flash drive) of the completed Project Manual, including any Addenda thereto and requested attachments, at the time and place indicated herein, which shall be enclosed in an opaque, sealed envelope, marked with the project title and name and address of the Proposer and accompanied by the required documents. If the Proposal is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with a notation, “PROPOSAL FOR CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT” on the face of it.

**SECTION 12. PROPOSAL MODIFICATION.** Proposals may be modified by an appropriate document duly executed and delivered to the place where Proposals are to be submitted at any time prior to the time proposals are due.

**SECTION 13. PROJECT MANUAL; PROPOSAL SUBMISSION PACKAGE.** The Project Manual will be available beginning August 10, 2022, at 12:00 p.m. upon request from Greg Woodcock, District Engineer, at [greg.woodcock@cardno.com](mailto:greg.woodcock@cardno.com). All blanks in the Proposal Submission Package must be completed in ink or typewritten. In making its Proposal, each Proposer represents that it has read and understands the Project Manual, including but not limited to the Project Information Package and Proposal Submission Package, and that the Proposal is made in accordance therewith. Each Proposer shall supply a proposal bond or certified cashier's check in the sum equal to five percent (5%) of the total amount of the bid with its proposal.

**SECTION 14. BASIS OF AWARD/RIGHT TO REJECT.** The contract, if awarded, will only be awarded to a responsible Proposer who is qualified by experience to do the work specified herein. The District reserves the right to reject any and all proposals, make modifications to the work, award the contract in whole or in part with or without cause to one proposer or separate proposers, provide for the delivery of the project in phases, and waive minor or technical irregularities in any Proposal, as it deems appropriate, if it determines in its discretion that it is in the District's best interests to do so.

**SECTION 15. INSURANCE.** All Proposers shall include as part of their Proposal a current Certificate of Insurance detailing the company's insurance coverage. In the event the Proposer is notified of award, it shall provide proof of the Insurance Coverage identifying the District, District Engineer, and Housing Authority of the City of Tampa, Florida and their staff, employees, officers, agents and supervisors as additional insureds, as stated in the Contract form provided herein, within seven (7) calendar days after notification, or within such approved extended period as the District may grant. Failure to provide proof of insurance coverage shall constitute a default and the Proposer shall forfeit its proposal guarantee.

**SECTION 16. INDEMNIFICATION.** The successful Proposer shall fully indemnify, defend and hold harmless the District, its officers, agents, staff, consultants and supervisors and THA, its Board of Directors, officers and staff, from and against all claims, damages, costs and losses arising, in whole or in part, from Contractor's negligence or breach of contract, as more fully set forth in the Contract documents provided herein.

**SECTION 17. LIMITATION OF LIABILITY.** Nothing herein shall be construed as or constitute a waiver of District's limitations on liability contained in section 768.28, *Florida Statutes*, or other statute or law.

**SECTION 18. PROJECT SCHEDULE; LIQUIDATED DAMAGES.** The Proposer shall submit a proposed schedule for the work described in this Project Manual, which, if selected, shall become a part of the construction Contract. Should the Contractor or, in case of his default, the Surety fail to complete the work within the time stipulated in the contract, or within such extra time as may have been granted by the District, the Proposer, in case of his default, the Surety shall pay to the District, not as a penalty but as liquidated damages, the amount of \$1,000.00 per calendar day beyond substantial completion.

**SECTION 19. MANDATORY AND PERMISSIVE REQUIREMENTS.** The only mandatory requirements contained within the Project Manual are that: (i) an interested firm must hold all required local, state and federal licenses in good standing, and (ii) be authorized to do business in the City of Tampa, Hillsborough County, and the State of Florida. All of the requirements or provisions set forth in the Project Manual shall be deemed "permissive," in that a Proposer's failure to meet any requirement described in mandatory terms such as "shall," "will," "mandatory," or similar language does not automatically disqualify the Proposer's Proposal, but instead may be taken into account in the evaluation and scoring of the Proposal.

**SECTION 20. PROPOSAL REQUIREMENTS.** All proposals shall include the following information in addition to any other requirements of the Project Manual:

- A. Completed copies of all forms and/or documents contained in the Proposal Submission Package.
- B. List position or title and corporate responsibilities of key management or supervisory personnel. Proposer should include resumes for each person listed.
- C. Detailed construction schedules for all work, as well as descriptions of how the Proposer intends to use its equipment and personnel to meet those schedules.
- D. Describe proposed staffing levels. Include information on current operations, administrative, maintenance and management staffing of both a professional and technical nature. Proposer should include resumes with applicable certifications.
- E. A copy of its insurance certificate indicating the types of coverage and limits for general, property, automobile liability insurance, and worker's compensation insurance.

- F. Evidence Proposer is able to obtain payment and performance bonds for 100% of the amount of the project.
- G. The Proposer shall submit with its Proposal satisfactory evidence of experience in similar work and show that it is fully prepared with the necessary organization, capital, and equipment to complete the work to the satisfaction of the District. In furtherance of such, the Proposer shall submit satisfactory evidence that the Proposer has constructed three (3) projects similar in quality and scope with a minimum of \$2,000,000 in total volume construction cost within the last (5) years. The name and contact information of owners will be required for each project completed within the last three (3) years.
- H. Evidence that Proposer attended the mandatory pre-proposal meeting.
- I. Evidence that Proposer is authorized to do business in the City of Tampa, Hillsborough County, and the State of Florida; and
- J. Copies of all of Proposer's local, state and federal licenses.
- K. All other information, forms, and/or documents required under the Project Manual.

**SECTION 21. PROTESTS.** Any protest regarding the Project Manual, including the evaluation criteria, specifications or other requirements contained in the Request for Proposal, must be filed in writing, at the District Manager's Office within seventy-two (72) hours (excluding Saturdays, Sundays, and state holidays) after the Project Manual, including but not limited to the Project Information Package and Proposal Submission Package, are made available to qualified contractors. The formal protest setting forth with particularity the facts and law upon which the protest is based shall be filed within seven (7) calendar days (including Saturdays, Sundays, and state holidays) after the initial notice of protest was filed. Pursuant to Section 3.11(1)(c), of the District's Rules of Procedure, any notice of protest filed with the District must be accompanied by a Protest Bond in the amount of Fifty Thousand Dollars (\$50,000) or two percent (2%) of the contract price of the contract to be awarded, whichever is greater. Any notice of protest filed without the Protest Bond shall render any such notice of protest invalid. Failure to timely file a notice of protest or failure to timely file a formal written protest shall constitute a waiver of any right to object or protest with respect to any provision in any document included in the Project Manual, including but not limited to, the Project Information Package, Proposal Submission Package, plans, specifications or Contract documents.

**SECTION 22. EVALUATION OF PROPOSALS.** The proposals shall be ranked based on the District's evaluation of the Proposer's ability to perform the services for the project as demonstrated by the documentation provided by the Proposer and reference checks of the Proposer's clients. The criteria to be used in the evaluation are presented in the Evaluation Criteria sheet, contained within the Project Information Package. Price will be one factor used in determining which proposal is in the best interest of the District, but the District explicitly and clearly reserves the right to make such award to other than the lowest priced proposal.

**SECTION 23. BLACK OUT PERIOD/CONE OF SILENCE.** The blackout period is defined as between the time the Request for Proposals is issued by the District and the time the Board awards the contract. During this black out period, and except as otherwise expressly authorized herein, any attempt to communicate either directly or indirectly with District staff or officials related to this solicitation for goods or services, in person, by mail, by facsimile, by telephone, by electronic mail, or by any other means of communication, will result in disqualification of their award and/or contract. This does not apply to pre-solicitation conferences, contract negotiations, or communications with staff not concerning this solicitation.

**SECTION 24. REFERENCE TERMS.** Any headings in this document are for the purposes of reference only and shall not limit or otherwise affect the meaning thereof. Any reference to gender shall be construed to include all genders, firms, partnerships and corporations. References in the singular shall be construed to include the plural and references in the plural shall be construed to include the singular.

**SECTION 25. ADDITIONAL TERMS AND CONDITIONS.** No additional terms and conditions included with the proposal response shall be evaluated or considered and any and all such additional terms and conditions shall have no force and effect and are inapplicable to this proposal. If submitted either purposefully through intent or design or inadvertently appearing separately in transmitting letters, specifications, literature, price lists or warranties, it is understood and agreed the general and special conditions in this solicitation are the only conditions applicable to this proposal and the Proposer's authorized signature affixed to the proposal attests to this.

**SECTION 26. MINORITY BUSINESS ENTERPRISE ("MBE").** Proposers must provide evidence of the firm's efforts to encourage and utilize minorities and minority business enterprise firms in its operations. Proposers must include specific areas or disciplines where minority sub-consultants or vendors are proposed to be utilized. There shall be a goal of not less than 20% for the purpose of awarding contracts to MBE's or prime consultants with MBE participation of at least 20% of the total contract effort. For the purposes of the Project Manual, all references to "minority business enterprise" or "MBE" shall mean a business that is owned or controlled by one or more socially or economically disadvantaged persons. Such persons include African-Americans, Puerto Ricans, Spanish-Speaking Americans, Native Americans, Eskimos, Aleuts, Hasidic Jewish persons, Asian Pacific Americans, and Asian Indians. "Owned or controlled by" means one or more socially and economically disadvantaged person(s), or a for-profit business or nonprofit organization controlled by such person(s), that possess at least 51 percent (51%) of the ownership of the business and its management and daily business operations are controlled by such person(s).

**PART I.C. – EVALUATION CRITERIA**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**EVALUATION CRITERIA**

**CONSTRUCTION SERVICES FOR CHILLER PLANT – LOT 12 PIPING UPGRADE**  
**CITY OF TAMPA, FLORIDA**

**1. ABILITY OF PERSONNEL (15 Points)**

(e.g., geographic locations of the firm’s headquarters or permanent office in relation to the project; capabilities and experience of key personnel; present ability to manage this project; evaluation of existing workload; proposed staffing levels; etc.)

**2. PROPOSER’S EXPERIENCE (25 Points)**

(e.g., past record and experience of the Proposer in similar projects and/or with similar systems; volume of work previously performed by the firm; past performance for other units of local government in other contracts; character, integrity, reputation of respondent; etc.)

**3. UNDERSTANDING SCOPE OF WORK (10 Points)**

Extent to which the proposal demonstrates an understanding of the District’s needs for the services requested.

**4. CLARITY AND ORGANIZATION OF PRESENTATION (5 Points)**

Degree to which proposal is well organized, easy to understand, evidences ability to communicate in a clear and concise manner, and ease of determining completeness.

**5. ABILITY TO PERFORM REQUIRED SERVICES (15 Points)**

Extent to which the proposal demonstrates the adequacy of Proposer’s financial resources, organization, equipment, capital and financial stability as a business entity necessary to complete the services required.

**6. PRICE (20 Points)**

Points will be rewarded to the Proposer submitting the lowest total price proposal (i.e., the summation of the unit price extensions using quantity estimates provided, the allowances shown, plus the proposal contractor’s fee) for completing the work. All other proposals will receive a percentage of the amount based upon the difference between the Proposer’s bid and the low bid.

**7. MINORITY BUSINESS (10 Points)**

Points will be awarded to Proposers that are MBE’s that have a track record of utilizing minority businesses that have a workforce composed of minorities, etc. Considerations also include evidence provided of Proposer’s effort to encourage and utilize minorities, MBE firms, minority sub-consultants, and vendors and an evaluation of the information provided on specific ways in which the goals stated in Instructions to Proposers are to be achieved.

**100 Total Points Possible**

## **II. PROPOSAL SUBMISSION PACKAGE**

## **PART II.A. PROPOSAL SIGNATURE FORM**



**OFFICIAL PROPOSAL SIGNATURE FORM**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT**  
**CITY OF TAMPA, FLORIDA**

TO BE SUBMITTED TO:

ENCORE COMMUNITY DEVELOPMENT DISTRICT  
c/o Rizzetta & Company, Inc.  
Attn: Jennifer Goldyn  
2700 S. Falkenburg Rd, STE 2745  
Riverview, Florida 33758  
**Due by 2:00 p.m., Friday, September 9, 2022**

TO: ENCORE COMMUNITY DEVELOPMENT DISTRICT

FROM: \_\_\_\_\_  
(Name of Proposer)

In accordance with the Request for Proposals inviting proposals for **Encore Community Development District – Construction Services for Chiller Plant – Lot 12 Piping Upgrade** the undersigned proposes to provide all work (“Work”) necessary to install and construct the improvements, including but not limited to:

all labor, materials, equipment, and construction services in connection with upgrading the District’s chilled water system’s (“Chiller”) existing piping connection between the Chiller and Lot 12 (“Project”) as further described in the plans and specifications included in the Project Manual (“Plans”).

All Proposals shall be for complete Work in accordance with the Plans. Qualified or partial Proposals will be considered non-responsive.

**PRICE**

Proposer submits that it can perform the work described in this Project Manual for a Total Lump Sum Price of \_\_\_\_\_ (\$ \_\_\_\_\_) as more specifically described in the Proposal.

The undersigned Proposer, having a thorough understanding of the Work required by the Contract documents, the site and conditions where the Work is to be performed, local labor conditions and all laws, regulations and other factors affecting performance of the Work, and having knowledge of the expense and difficulties attending performance of the Work, and having fully inspected the site in all particulars, hereby proposes and agrees, if this Proposal is accepted, to enter into the Construction Contract with the Owner to fully perform all Work in strict compliance with the Contract documents, including the assumption of all obligations, duties and responsibilities necessary to the successful completion of the Project and the furnishing of all 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; and bonds, insurance, submittals; and all fees including without limitation permits, timber taxes, inspection fees, maintenance bonds, as-builts and plats as needed for dedication, etc., as indicated or specified in the Contract documents to be performed or furnished by Proposer for the LUMP SUM PRICES as indicated in the Proposal.

## TIME

Proposer shall submit along with this Proposal a detailed project schedule. This chart shall include such milestones included at the Proposer's discretion; however, at the very least the chart shall identify dates for the issuance of the Notice to Proceed, the achievement of Substantial Completion and the application for Final Payment, as such events are defined in the Standard General Conditions of the construction Contract.

Proposer submits that it can reach Substantial Completion of the Work described in this Project Manual within \_\_\_\_\_ ( ) days of the issuance of a Notice to Proceed.

The undersigned Proposer agrees to commence work within thirty (30) days after the date of a written Notice to Proceed. The undersigned Proposer agrees that this Proposal shall be valid for a period of one hundred twenty (120) days from the date proposals are due. Proposer hereby acknowledges that any work provided and any cost incurred by Proposer prior to receiving both the Notice of Award and the Notice to Proceed will be at Proposer's risk unless specifically agreed to in writing by the District.

## DOCUMENTS AND ADDENDA

The Proposer submits that he has carefully examined the site of the proposed Work and the existing conditions, as well as the drawings and specifications. Also, Proposer has thoroughly reviewed the Request for Proposal, Instructions to Proposers, Evaluation Criteria, Standard Form of Agreement, Amendments, General Conditions, Supplementary Conditions, the Plans, the Specifications and all other components of the Contract documents and acknowledges that the following addenda covering revisions to thereto, and the cost, if any, of such revisions has been included in the enclosed Pricing Amount(s).

Addendum No. \_\_\_\_\_ Dated: \_\_\_\_/\_\_\_\_/\_\_\_\_

Addendum No. \_\_\_\_\_ Dated: \_\_\_\_/\_\_\_\_/\_\_\_\_

Addendum No. \_\_\_\_\_ Dated: \_\_\_\_/\_\_\_\_/\_\_\_\_

\_\_\_\_\_  
(Signed)

\_\_\_\_\_  
(Print Name of Signatory)

This \_\_\_\_\_ day of \_\_\_\_\_, 2022. (Corporate Seal)

Sworn to before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

(Notary Seal)

\_\_\_\_\_  
Notary Public/ Expiration Date

## **PART II.B. ORGANIZATIONAL INFORMATION OF PROPOSER**

**ORGANIZATION INFORMATION OF PROPOSER**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT**  
**CITY OF TAMPA, FLORIDA**

DATE SUBMITTED: \_\_\_\_\_, 2022

1. Proposer \_\_\_\_\_ / ☐ A Individual  
(Company Name) / ☐ A Partnership  
/ ☐ A Limited Liability Company  
/ ☐ A Corporation  
/ ☐ A Subsidiary Corporation

2. Proposer's Parent Company Name (if applicable) \_\_\_\_\_

3. Proposer's Parent Company Address (if applicable)

Street Address \_\_\_\_\_

P.O. Box (if any) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone \_\_\_\_\_ Fax No. \_\_\_\_\_

1<sup>st</sup> Contact Name \_\_\_\_\_ Title \_\_\_\_\_

2<sup>nd</sup> Contact Name \_\_\_\_\_ Title \_\_\_\_\_

4. Proposer Company Address (if different)

Street Address \_\_\_\_\_

P.O. Box (if any) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone \_\_\_\_\_ Fax No. \_\_\_\_\_

Telephone \_\_\_\_\_ Fax No. \_\_\_\_\_

1<sup>st</sup> Contact Name \_\_\_\_\_ Title \_\_\_\_\_

2<sup>nd</sup> Contact Name \_\_\_\_\_ Title \_\_\_\_\_

5. Is the Proposer incorporated in the State of Florida? Yes ( ☐ ) No ( ☐ )

5.1 If yes, provide the following:

Is the Company in good standing with the Florida Department of State, Division of Corporations?

Yes ( ☐ ) No ( ☐ )

If no, please explain \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date Incorporated \_\_\_\_\_ Charter No. \_\_\_\_\_

5.2 If no, provide the following:

The state in which the Proposer company is incorporated \_\_\_\_\_

Is the company in good standing with the state? Yes ( ) No ( )

If no, please explain \_\_\_\_\_

\_\_\_\_\_

Date incorporated \_\_\_\_\_ Charter No. \_\_\_\_\_

6. Is the Proposer company a registered or licensed contractor with the State of Florida? Yes ( ) No ( )

6.1 If yes, provide the following:

Type of registration (i.e. certified general contractor, certified electrical contractor, etc.) \_\_\_\_\_

\_\_\_\_\_

License No. \_\_\_\_\_ Expiration Date \_\_\_\_\_

Qualifying Individual \_\_\_\_\_ Title \_\_\_\_\_

List company(ies) currently qualified under this license \_\_\_\_\_

\_\_\_\_\_

6.2 Is the Proposer company a registered or licensed Contractor with City of Tampa?  
Yes ( ) No ( )

6.3 Has the Proposer company performed work for a community development district previously?  
Yes ( ) No ( )

7. Name of Proposer's Bonding Company \_\_\_\_\_

Address \_\_\_\_\_

Approved Bonding Capacities:	Aggregate Limit	\$ _____
	Single Project Limit	\$ _____
	Total Current Contracts Bonded	\$ _____

8. Name of Proposer's Bonding Agency \_\_\_\_\_

Address \_\_\_\_\_

Contact Name \_\_\_\_\_ Telephone \_\_\_\_\_

9. List the Proper's total annual dollar value of work completed for each of the last five (5) years starting with the latest year and ending with the most current year (1) \_\_\_\_\_,  
(2) \_\_\_\_\_, (3) \_\_\_\_\_,  
(4) \_\_\_\_\_, (5) \_\_\_\_\_.

10. What are the Proposers' company's current insurance limits?
- |                      |    |       |
|----------------------|----|-------|
| General Liability    | \$ | _____ |
| Automobile Liability | \$ | _____ |
| Workers Compensation | \$ | _____ |
| Expiration Date      |    | _____ |

11. Has the Proposer company been cited by OSHA for any job site or company office/shop safety violations in the past two years? Yes ☐ No ☐

If yes, please describe each violation fine, and resolution \_\_\_\_\_

\_\_\_\_\_

What is the Proposer's current worker compensation rating? \_\_\_\_\_

Has the Proposer experienced any worker injuries resulting in a worker losing more than ten (10) working days as a result of the injury in the past two (2) years? Yes ☐ No ☐

If yes, please describe the incident: \_\_\_\_\_

\_\_\_\_\_

12. Please state whether or not your company or any of its affiliates are presently barred or suspended from bidding or contracting on any state, local, or federal-aid contracts in any state(s)? Yes ☐ No ☐

If so, state the name(s) of the company(ies) \_\_\_\_\_

\_\_\_\_\_

The state, local or federal entity(ies) with whom barred or suspended \_\_\_\_\_

State the period(s) of debarment or suspension \_\_\_\_\_

13. What is the construction experience of the proposed superintendent and project manager?

INDIVIDUAL'S NAME	PRESENT POSITION OR OFFICE	MAGNITUDE AND TYPE OF WORK	YEARS OF CONSTRUCTION EXPERIENCE	YEARS WITH FIRM	IN WHAT CAPACITY?

14. Have you ever failed to complete any work awarded to you? Yes ☐ No ☐

If so, where and why? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

15. Has any officer or partner of your organization ever been an officer, partner, or owner of some other organization that has failed to complete a construction contract?

Yes ☐ No ☐

If so, state name of individual, other organization and reason therefore \_\_\_\_\_

---

---

---

---

16. List any and all litigation to which the organization has been a party in the last five (5) years.

---

---

---

---

17. Has organization or any of its affiliates ever been either disqualified or denied prequalification status by a governmental entity? Yes ☐ No ☐

If so, discuss the circumstances surrounding such denial or disqualification as well as the date thereof.

---

---

---

---

18. Within the past five (5) years, has organization failed to complete a project within the scheduled contract time? Yes ☐ No ☐

If so, discuss the circumstances surrounding such failure to complete a project on time as well as the date thereof.

---

---

---

19. List all projects currently under contract, with a remaining contract amount of over \$100,000.00 (excluding retainage) and with an expected remaining contract duration in excess of 120 days (to substantial completion).

---

---

---

---

20. Is Proposer a Minority Business Enterprise, as defined by the federal Department of Housing and Urban Development? ( ) yes ( ) no

If yes, provide date first certified as an MBE \_\_\_\_\_.

Whether or not Proposer is an MBE, provide number of minorities employed by Proposer by category of job (e.g., administrative, supervisory, technical, etc.) and number of total workforce:

Identify subcontractors Proposer intends to utilize to perform the work, and whether or not subcontractors are MBE: \_\_\_\_\_

Provide evidence in response to Instructions to Proposers related to MBE efforts.

The undersigned hereby authorize(s) and request(s) any person, firm or corporation to furnish any pertinent information requested by the Encore Community Development District or their authorized agents, deemed necessary to verify the statements made in this application or attachments hereto, or necessary to determine whether the Encore Community Development District should qualify the Proposer for providing a Proposal for its construction projects, including such matters as the Proposer's ability, standing integrity, quality of performance, efficiency and general reputation.

\_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
(Type Name and Title of Person Signing)

This \_\_\_\_\_ day of \_\_\_\_\_, 2022.

(Corporate Seal)

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_.

[Notary Seal]

Name: \_\_\_\_\_  
Personally Known \_\_\_\_\_  
OR Produced Identification \_\_\_\_\_  
Type of Identification \_\_\_\_\_



## CORPORATE OFFICERS

Company Name \_\_\_\_\_

Date \_\_\_\_\_

Provide the following information for Officers of the Proposer and parent company, if any.

NAME OF PROPOSER	POSITION OR TITLE	CORPORATE RESPONSIBILITIES	INDIVIDUAL'S RESIDENCE CITY, STATE
FOR PARENT COMPANY (if applicable)			

## SUPERVISORY PERSONNEL

Company Name \_\_\_\_\_

Date \_\_\_\_\_

What is the experience of the key management and supervisory personnel of the Proposer company for both administration as well as operations? (Attach resumes of key personnel here)

INDIVIDUAL'S NAME	PRESENT TITLE	DESCRIPTION OF DIRECT JOB RESPONSIBILITIES	YEARS OF EXPERIENCE IN PRESENT POSITION	TOTAL YEARS OF RELATED EXPERIENCE

**COMPANY OWNED MAJOR EQUIPMENT**  
(Attach additional sheets if necessary)

Company Name \_\_\_\_\_

Date \_\_\_\_\_

[illegible]

**STATUS OF CONTRACTS ON HAND**  
**(Attach additional sheets if necessary)**

Company Name \_\_\_\_\_

Date \_\_\_\_\_

Furnish requested information about all of Proposer's active contracts, whether as prime or subcontracts; whether in progress or awarded but not yet started; and regardless of with whom contracted. All amounts to be shown to nearest \$1,000. Contractor may consolidate and list as a single item all contracts which individually do not exceed 3% of total active contracts and in total do not exceed 20% of the active total contracts.

				PROPOSER'S UNCOMPLETED AMOUNT AS OF THIS DATE		COMPLETION DATE		
OWNER, LOCATION AND DESCRIPTION OF PROJECT	CURRENT CONTRACT AMOUNT AS PRIME	CURRENT CONTRACT AMOUNT AS SUBCONTRACTOR	CURRENT AMOUNT SUBJECT TO OTHERS	AS PRIME CONTRACTOR	AS SUBCONTRACTOR	ORIGINAL CONTRACT DATE	APPROVED REVISED DATE	CURRENT ESTIMATE DATE
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
Subtotal Uncompleted Work				\$	\$			
Total Uncompleted Work on Hand				\$				

## PROJECTS COMPLETED BY PROPOSER IN THE LAST TWO YEARS

Company Name \_\_\_\_\_

Date \_\_\_\_\_

List all projects completed in the last two years for which the contract value individually exceeded 3% of the Proposer's annual total work completed for the year the project was started. Include in the list projects that were started earlier than two years but were completed within the last two years.

PROJECT NAME/ LOCATION	FINAL CONTRACT AMOUNT	PRIME OR SUB <sup>1</sup>	CLASSIFICATION OF WORK PERFORMED	YEAR STARTED/ COMPLETED	OWNER NAME/ LOCATION <sup>2</sup>	NAME & PHONE NUMBER OF OWNER'S REPRESENTATIVE ON THIS PROJECT <sup>3</sup>

<sup>1</sup> 'Prime or Sub' should indicate whether Proposer performed the work as a prime contractor or as a subcontractor.

<sup>2</sup> 'Owner Name/Location' should indicate the Owner of the project if the Proposer performed the work as a prime contractor or the general contractor if the Proposer performed the work as a subcontractor.

<sup>3</sup> 'Name & Phone Number of Owner's Representative on this Project' should list a reference from the business entity listed in the previous column familiar with Proposer's contract performance.

**\*\*\*END OF ORGANIZATIONAL INFORMATION FORM\*\*\***

## **PART II.C. PROPOSED LIST OF SUBCONTRACTORS**

**PROPOSED LIST SUBCONTRACTORS  
AND  
MAJOR MATERIALS SUPPLIERS**

NAME OF SUBCONTRACTOR	ADDRESS	PROPOSED PROJECT RESPONSIBILITIES	PERCENTAGE OF CONTRACT PRICE	SUBCONTRACTOR'S AUTHORIZED REPRESENTATIVE

**PART II.D. CERTIFICATE OF CORPORATE  
PRINCIPAL/AFFIDAVIT OF PROPOSER**



**CERTIFICATE AS TO CORPORATE PRINCIPAL**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT**  
**CITY OF TAMPA FLORIDA**

I, \_\_\_\_\_, certify that I am the Secretary of the Corporation named as Principal in the attached bond; that \_\_\_\_\_ who signed the said bond on behalf of the Principal, was then of said Corporation; that I know his signature, and his signature hereto is genuine; and that said bond was duly signed, sealed, and attested for and on behalf of said Corporation by authority of its governing body.

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Corporate Seal

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) SS

Before me, a Notary Public duly commissioned, qualified and acting, personally appeared to me well known, who being by me first duly sworn upon oath, says that he is the Attorney-In-Fact, for the \_\_\_\_\_ and that he has been authorized by \_\_\_\_\_ to execute the foregoing bond on behalf of the surety named therein in favor of Encore Community Development District.

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Signature of Notary Public taking acknowledgement

My Commission Expires: \_\_\_\_\_(SEAL)

(Attach Power of Attorney to original Proposal Bond and Financial Statement of Surety Company)

**AFFIDAVIT FOR INDIVIDUAL**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT**  
**CITY OF TAMPA, FLORIDA**

STATE OF \_\_\_\_\_ )  
 ) SS  
COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_, being duly sworn, deposes and says that the statements and answers to the questions concerning experience contained herein are correct and true as of this date; and that he/ she understands that intentional inclusion of false, deceptive or fraudulent statements on this application constitute fraud; and, that the District considers such action on the part of the Proposer to constitute good cause for rejecting Proposer's proposal.

\_\_\_\_\_  
(Proposer must also sign here)

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Signature of Notary Public taking acknowledgement

My Commission Expires: \_\_\_\_\_(SEAL)

**AFFIDAVIT FOR PARTNERSHIP**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT**  
**CITY OF TAMPA, FLORIDA**

STATE OF \_\_\_\_\_ )  
 ) SS  
COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_, is a member of the firm of \_\_\_\_\_,  
being duly sworn, deposes and says that the statements and answers to the questions of the foregoing  
experience questionnaire are correct and true as of the date of this affidavit; and, that he/ she understands  
that intentional inclusion of false, deceptive or fraudulent statements on this application constitutes fraud;  
and, that the District considers such action on the part of the Proposer to constitute good cause for rejecting  
Proposer's proposal.

\_\_\_\_\_  
(Signature of a General Partner is Required)

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online  
notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_  
\_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_  
\_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Signature of Notary Public taking acknowledgement

My Commission Expires: \_\_\_\_\_(SEAL)

**AFFIDAVIT FOR CORPORATION**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT**  
**CITY OF TAMPA, FLORIDA**

STATE OF \_\_\_\_\_ )  
 ) SS  
COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_  
(title) \_\_\_\_\_  
of the \_\_\_\_\_,  
(a corporation described herein) being duly sworn, deposes and says that the statements and answers to the questions of the foregoing experience questionnaire are correct and true as of the date of this affidavit; and, that he/ she understands that intentional inclusion of false, deceptive or fraudulent statements on this application constitutes fraud; and, that the District considers such action on the part of the Proposer to constitute good cause for rejecting Proposer's proposal.

\_\_\_\_\_  
(Officer must also sign here)

CORPORATE SEAL

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Signature of Notary Public taking acknowledgement

My Commission Expires: \_\_\_\_\_ (SEAL)

## **PART II.E. SWORN STATEMENT REGARDING DISCRIMINATION**

**SWORN STATEMENT PURSUANT TO SECTION 287.134(2)(a), FLORIDA STATUTES,  
ON DISCRIMINATION**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to Encore Community Development District  
(print name of the public entity)  
  
by \_\_\_\_\_  
(print individual's name and title)  
  
for \_\_\_\_\_  
(print name of entity submitting sworn statement)  
  
whose business address is \_\_\_\_\_  
\_\_\_\_\_  
  
and (if applicable) its Federal Employer Identification Number (FEIN) is \_\_\_\_\_  
  
(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement)  
\_\_\_\_\_  
  
2. I understand that a "discrimination" or "discriminated" as defined in section 287.134(1)(b), *Florida Statutes*, means a determination of liability by a state circuit court or federal district court for a violation of any state or federal law prohibiting discrimination on the basis of race, gender, national origin, disability, or religion by an entity; if an appeal is made, the determination of liability does not occur until the completion of any appeals to a higher tribunal.  
  
3. I understand that "discriminatory vendor list" as defined in section 287.134(1)(c), *Florida Statutes*, means the list required to be kept by the Florida Department of Management Services pursuant to section 287.134(3)(d), *Florida Statutes*.  
  
4. I understand that "entity" as defined in section 287.134(1)(e), *Florida Statutes*, means any natural person or any entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts let by a public entity, or which otherwise transacts or applies to transact business with a public entity.  
  
5. I understand that an "affiliate" as defined in section 287.134(1)(a), *Florida Statutes*, means:
  1. A predecessor or successor of an entity that discriminated; or
  2. An entity under the control of any natural person or entity that is active in the management of the entity that discriminated. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one entity of shares constituting a controlling interest in another entity, or a pooling of equipment or income among entities when not for fair market value under an arm's length agreement, shall be a prima facie case that one entity controls another entity  
6. I understand that, pursuant to section 287.134(2)(a), *Florida Statutes*, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the

construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity.

Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Indicate which statement applies.)

- \_\_\_ Neither the entity submitting this sworn statement, nor any affiliate of the entity, has been placed on the discriminatory vendor list.
- \_\_\_ The entity submitting this sworn statement, or an affiliate of the entity, appears on the discriminatory vendor list.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/VENDOR EXECUTING THIS AFFIDAVIT TO VERIFY THAT NONE OF THE SUBCONTRACTORS/SUPPLIERS UTILIZED FOR THIS BID/QUOTE HAVE BEEN PLACED ON THE DISCRIMINATORY VENDOR LIST. IN THE EVENT IT IS LATER DISCOVERED THAT A SUBCONTRACTOR/SUPPLIER HAS BEEN PLACED ON THE DISCRIMINATORY VENDOR LIST, THE CONTRACTOR/VENDOR SHALL SUBSTITUTE THE SUBCONTRACTOR/ SUPPLIER WITH ANOTHER WHO HAS NOT PLACED ON THE DISCRIMINATORY VENDOR LIST. ANY COST ASSOCIATED WITH THIS SUBSTITUTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR/VENDOR.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY.

\_\_\_\_\_  
Signature by authorized representative of Proposer

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Signature of Notary Public taking acknowledgement

My Commission Expires: \_\_\_\_\_(SEAL)

## **PART II.F. SWORN STATEMENT REGARDING SCRUTINIZED COMPANIES**



**SWORN STATEMENT PURSUANT TO SECTION 287.135(5), FLORIDA STATUTES, REGARDING  
SCRUTINIZED COMPANIES WITH ACTIVITIES IN SUDAN LIST OR SCRUTINIZED COMPANIES  
WITH ACTIVITIES IN THE IRAN PETROLEUM ENERGY SECTOR LIST**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR  
OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to Encore Community Development District  
by \_\_\_\_\_  
(print individual's name and title)  
for \_\_\_\_\_  
(print name of entity submitting sworn statement)  
whose business address is \_\_\_\_\_

2. I understand that, subject to limited exemptions, section 287.135, *Florida Statutes*, declares a company that, at the time of bidding or submitting a proposal for a new contract or renewal of an existing contract, is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to section 215.473, *Florida Statutes*, or that has business operations in Cuba or Syria, or is participating in a boycott of Israel, is ineligible for, and may not bid on, submit a proposal for, or enter into or renew a contract with a local governmental entity for goods or services of \$1 million or more.
3. Based on information and belief, at the time the entity submitting this sworn statement submits its proposal to the Encore Community Development District, neither the entity, nor any of its officers, directors, executives, partners, shareholders, members, or agents, is listed on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, that it does not have business operations in Cuba or Syria, and that it is not participating in a boycott of Israel.
4. If awarded the Contract, the entity will immediately notify the Encore Community Development District in writing if either the entity, or any of its officers, directors, executives, partners, shareholders, members, or agents, is placed on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List.

\_\_\_\_\_  
Signature by authorized representative of Proposer

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization  
this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_  
\_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_  
as identification and who did (did not) take an oath.

My Commission Expires: \_\_\_\_\_ (SEAL) \_\_\_\_\_  
Signature of Notary Public taking acknowledgement

## **PART II.G. SWORN STATEMENT REGARDING PUBLIC ENTITY CRIMES**

**SWORN STATEMENT ON PUBLIC ENTITY CRIMES**  
**PURSUANT TO SECTION 287.133(2)(a), FLORIDA STATUTES**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to Encore Community Development District  
(print name of the public entity)

by \_\_\_\_\_  
(print individual's name and title)

for \_\_\_\_\_  
(print name of entity submitting sworn statement)

whose business address is

\_\_\_\_\_  
\_\_\_\_\_

and (if applicable) its Federal Employer Identification Number (FEIN) is \_\_\_\_\_

(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement.)

\_\_\_\_\_

2. I understand that a "public entity crime" as defined in section 287.133(1)(g), *Florida Statutes*, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid, proposal, reply, or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
3. I understand that "convicted" or "conviction" as defined in section 287.133(1)(b), *Florida Statutes*, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
4. I understand that an "affiliate" as defined in section 287.133(1)(a), *Florida Statutes*, means:
1. A predecessor or successor of a person convicted of a public entity crime; or
  2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
5. I understand that a "person" as defined in section 287.133(1)(e), *Florida Statutes*, means any natural person or any entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts let by a public entity, or which otherwise transacts

or applies to transact business with a public entity. The term “person” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Indicate which statement applies.)

- \_\_\_ Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.
- \_\_\_ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees members or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.
- \_\_\_ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the final order)

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/VENDOR EXECUTING THIS PUBLIC ENTITY CRIME AFFIDAVIT TO VERIFY THAT NONE OF THE SUBCONTRACTORS/SUPPLIERS UTILIZED FOR THIS BID/QUOTE HAVE BEEN CONVICTED OF A PUBLIC ENTITY CRIME SUBSEQUENT TO JULY 1, 1989. IN THE EVENT IT IS LATER DISCOVERED THAT A SUBCONTRACTOR/SUPPLIER HAS BEEN CONVICTED OF A PUBLIC ENTITY CRIME, THE CONTRACTOR/VENDOR SHALL SUBSTITUTE THE SUBCONTRACTOR/ SUPPLIER WITH ANOTHER WHO HAS NOT RECEIVED A CONVICTION. ANY COST ASSOCIATED WITH THIS SUBSTITUTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR/VENDOR.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES, FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

\_\_\_\_\_  
(Signature)

STATE OF FLORIDA

COUNTY OF \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Signature of Notary Public taking acknowledgement

My Commission Expires: \_\_\_\_\_(SEAL)

## **PART II.H. TRENCH SAFETY AFFIDAVIT**

## **TRENCH SAFETY ACT COMPLIANCE STATEMENT**

### **ENCORE COMMUNITY DEVELOPMENT DISTRICT CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT CITY OF TAMPA, FLORIDA**

#### **INSTRUCTIONS**

Because trench excavations on this Project are expected to be in excess of 5 feet, Chapter 90-96 of the Laws of Florida requires that construction on the Project comply with Occupational Safety and Health Administration Standard 29 C.F.R.s. 1926.650 Subpart P. All Proposers are required to execute this Compliance Statement and the Compliance Cost Statement. The costs for complying with the Trench Safety Act must be incorporated into the Project's Proposal.

This form must be certified in the presence of a notary public or other officer authorized to administer oaths.

#### **CERTIFICATION**

1. I understand that Chapter 90.96 of the Laws of Florida (The Trench Safety Act) requires me to comply with OSHA Standard 29 C.F.R.s. 1926.650 Subpart P. I will comply with The Trench Safety Act, and I will design and provide trench safety systems at all trench excavations in excess of five feet in depth for this project.
2. The estimated cost imposed by compliance with The Trench Safety Act will be:  
\_\_\_\_\_ Dollars (Written)  
\$ \_\_\_\_\_ (Figures).
3. The amount listed above has been included within the Proposal.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

Proposer: \_\_\_\_\_

By: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_ of \_\_\_\_\_, who is personally known to me or who has produced \_\_\_\_\_ as identification, and did [ ] or did not [ ] take the oath.

[Notary Seal]

\_\_\_\_\_  
Notary Public, State of Florida  
Print Name: \_\_\_\_\_  
Commission No.: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

**TRENCH SAFETY ACT COMPLIANCE COST STATEMENT**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT**  
**CITY OF TAMPA, FLORIDA**

**INSTRUCTIONS**

Because trench excavations on this Project are expected to be in excess of 5 feet, Chapter 90-96 of the Laws of Florida requires that all Proposers submit a statement of the costs of complying with the Trench Safety Act. Said costs must also be incorporated into the Proposal.

This form must be certified in the presence of a notary public or other officer authorized to administer oaths.

By executing this statement, proposer acknowledges that included in the various items of its Proposal and in the total Proposal price are costs for complying with the Florida Trench Safety Act (90-96, Laws of Florida ) effective October 1, 1990. The Proposer further identifies the costs as follows:

Type of Trench Safety Mechanism	Quantity	Unit Cost <sup>1</sup>	Item Total Cost
Project Total			

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

Proposer: \_\_\_\_\_

By: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_ of \_\_\_\_\_, who is personally known to me or who has produced \_\_\_\_\_ as identification, and did [ ] or did not [ ] take the oath.

\_\_\_\_\_  
Notary Public, State of Florida  
Print Name: \_\_\_\_\_  
Commission No.: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

<sup>1</sup> Use cost per linear square foot of trench excavation used and cost per square foot of shoring used.



## **PART II.I. AFFIDAVIT OF NON-COLLUSION**

**AFFIDAVIT OF NON-COLLUSION**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT**  
**CITY OF TAMPA, FLORIDA**

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, do hereby certify that I have not, either directly or indirectly, participated in collusion or proposal rigging. Affiant is a \_\_\_\_\_ (officer or principal) in the firm of \_\_\_\_\_, and authorized to make this affidavit on behalf of the same. I understand that I am swearing or affirming under oath to the truthfulness of the claims made in this affidavit and that the punishment for knowingly making a false statement includes fines and/or imprisonment.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Signature by authorized representative of Proposer

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Signature of Notary Public taking acknowledgement

My Commission Expires: \_\_\_\_\_(SEAL)

## **PART II.J. MINIMUM QUALIFICATIONS STATEMENT**

**MINIMUM CONTRACTOR QUALIFICATIONS STATEMENT**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER PLANT – LOT 12 PIPING UPGRADE PROJECT**  
**CITY OF TAMPA, FLORIDA**

Contractor: \_\_\_\_\_

Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Typical Work Description: Construction Services will include all labor, materials, equipment, and construction services in connection with upgrading the CDD's chilled water system's ("Chiller") existing piping connection between the Chiller and Lot 12.

Owner: Encore Community Development District ("CDD")

Minimum Qualifications: Proposers for the CDD projects shall have the following minimum qualifications:

- (1) Attended the mandatory pre-proposal meeting.
- (2) Applicant is authorized to do business in the City of Tampa, Hillsborough County, and the State of Florida.
- (3) Applicant holds all required local, state and federal licenses in good standing.
- (4) Applicant has constructed three (3) projects similar in quality and scope with a minimum of \$2,000,000 in total volume construction cost within the last (5) years.

The CDD reserves the right to waive any of the minimum qualifications or to waive any informalities or irregularities in the qualifications as deemed to be in the best interests of the District.

Certification: I hereby certify that the applicant meets or exceeds the minimum qualifications identified above. I further acknowledge that despite meeting the minimum qualifications above, the Encore Community Development District has the right to deny, suspend or revoke a prospective bidder's qualification for bidding on the Encore Community Development District projects based upon the Determination of Qualified Prospective Bidder information contained herein.

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Contractor Title                      Date

**PART II(K)**

**SUMMARY OF COSTS AND SCHEDULE**

## **PART III. FORM OF AGREEMENT (EJCDC)**

## **PART IV. PLANS AND SPECIFICATIONS**





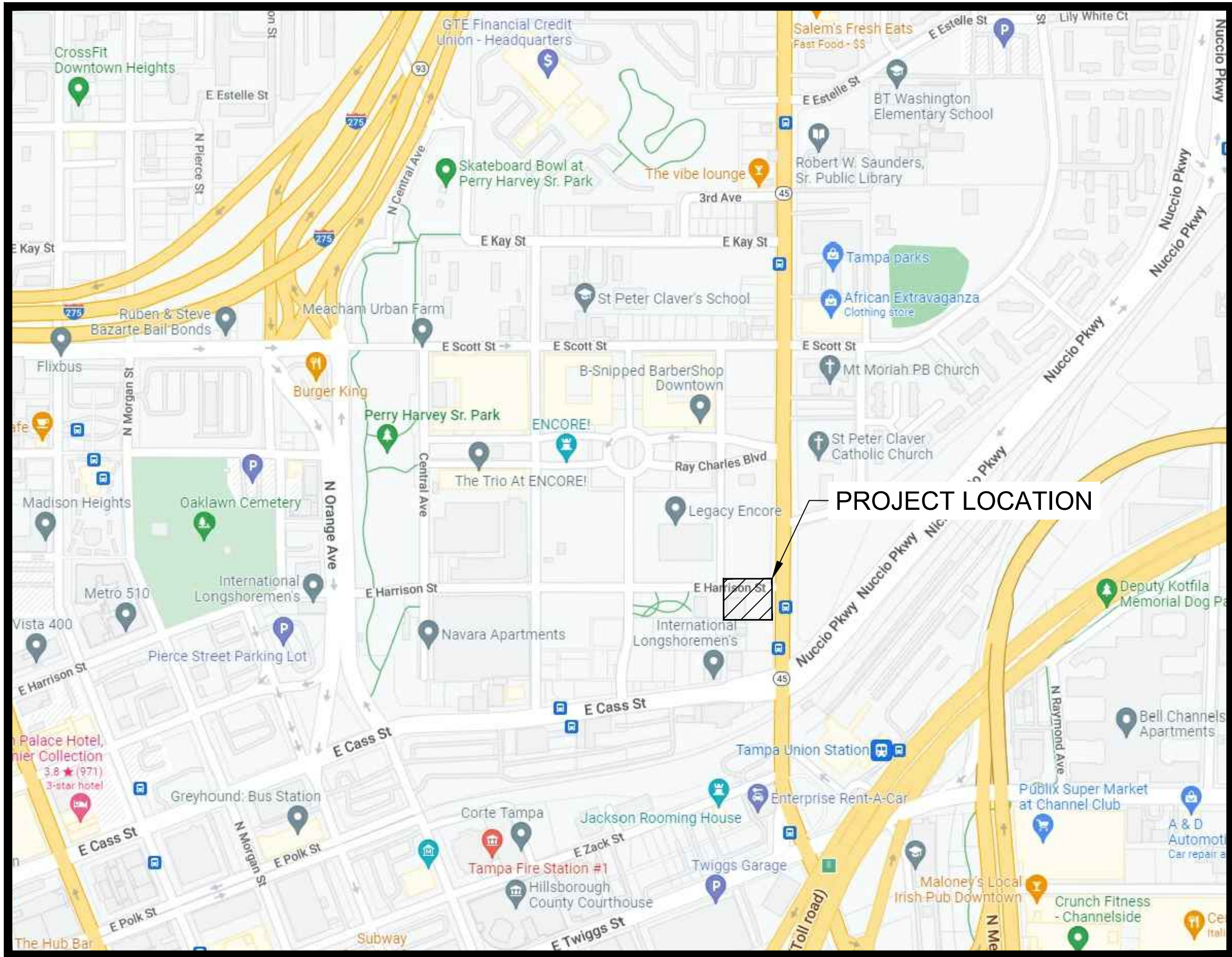
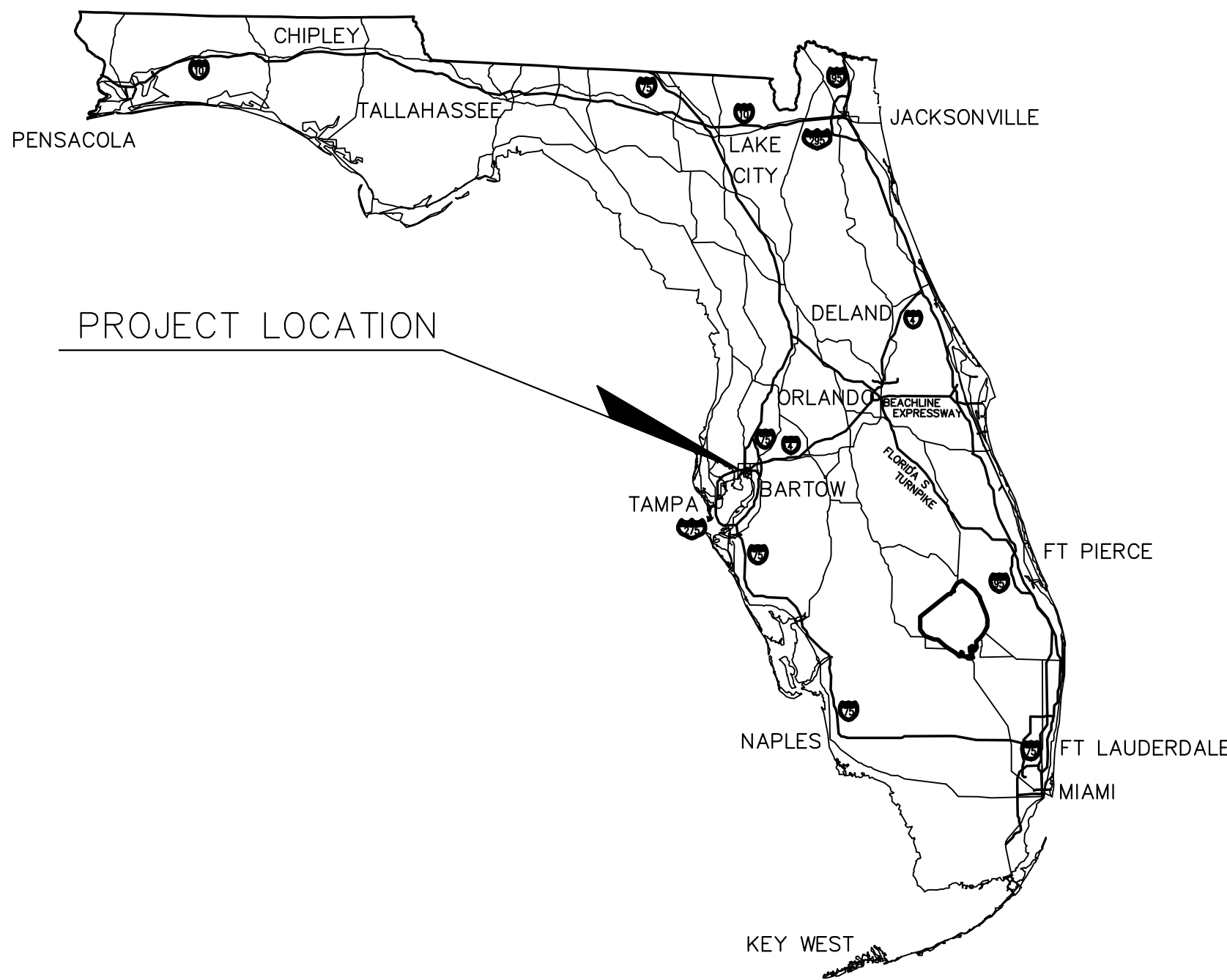
CONSTRUCTION DRAWINGS

# ENCORE!

## CHILLER PLANT PIPE EXTENSION TO LOT 12

### FOR

## ENCORE! COMMUNITY DEVELOPMENT DISTRICT



SECTION 13      TOWNSHIP 29 S      RANGE 18 E

PROJECT TEAM

OWNER / DEVELOPER

TAMPA HOUSING AUTHORITY  
ATTN: LORENZO REED  
5301 W. CYPRESS ST.  
TAMPA, FL 33607  
PHONE: (305) 533-0044

OWNER'S REPRESENTATIVE

RHC AND ASSOCIATES INC.  
CONSULTING ENGINEERS  
ATTN: JOSEPH W. J. ROBINSON, P.E.  
PO BOX 4505  
TAMPA, FL 33677  
PHONE: (813) 254-0907 (OFFICE)

CIVIL ENGINEER

CARDNO, INC.  
ATTN: BRYAN L. ZARLENGA  
ATTN: GREG WOODCOCK  
380 PARK PLACE BLVD., SUITE 300  
CLEARWATER, FL 33759  
PHONE: (727) 531-3505

SURVEYOR

POLARIS SURVEYING  
ATTN: JUSTIN D. FERRANS  
2165 SUNNYDALE BLVD, SUITE D  
CLEARWATER, FL 33765  
PHONE: (727) 461-6113

MECHANICAL ENGINEER

VOLTAIR, INC.  
ATTN: L. ROLAND YOUNG, JR.  
ATTN: KENNY ROBERTS  
220 WEST 7TH AVE., SUITE 210  
TAMPA, FL 33602  
PHONE: (813) 867-4857

MANUFACTURER

TRANE  
ATTN: FREDERICK DELA CRUZ  
ATTN: JIM CRUMB  
902 HIMES AVE.  
TAMPA, FL 33609  
PHONE: (813) 773-8342

SUBSURFACE UTILITY ENGINEER

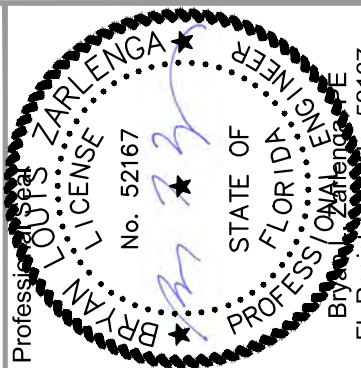
ELEMENT ENGINEERING GROUP, LLC  
ATTN: NED CONNOLLY  
8509 BENJAMIN RD, SUITE E  
TAMPA, FL 33634  
PHONE: (813) 852-1888

STRUCTURAL ENGINEER

MASTER CONSULTING ENGINEERS, INC.  
ATTN: ROB BELL  
5523 WEST CYPRESS ST, SUITE 200  
TAMPA, FL 33607  
PHONE: (813) 287-3600



CLEARWATER  
380 PARK PLACE BLVD, STE 300, CLEARWATER, FL 33759  
TEL: (727) 531-3505    FAX: (727) 431-1777  
www.cardno.com    Certificate of Authorization No. 29915



CONSULTING ENGINEERS  
220 West 7th Avenue, Suite 210  
Tampa, FL 33602  
C.O.A. 27158  
Project No. 10101



ENCORE CEP - LOT 12  
EXPANSION  
CITY OF TAMPA, HILLSBOROUGH COUNTY, FLORIDA

COVER SHEET

CIVIL PLANS SHEET INDEX

SHEET NUMBER	SHEET NAME
SC1.00	COVER SHEET
SC2.00	UTILITY GENERAL NOTES
SC2.01	SITE DEMOLITION PLAN
SC3.00	SITE PLAN AND PROFILE SHEET
SC3.01	SITE PLAN DETAILS (1)
SC3.02	SITE PLAN DETAILS (2)

MECHANICAL PLANS SHEET INDEX

M000	MECH. LEGENDS, SYMBOLS, AND NOTES
M101	CHILLER YARD PLAN - MECHANICAL
M801	MECHANICAL DETAILS

STRUCTURAL PLANS SHEET INDEX

S101	G.N.L. NOTES, FOUND. & FRAMING PLANS
S102	SECTIONS & DETAILS

COMPONENT PLAN SETS AND REPORTS:

REFER TO THE FOLLOWING ADDITIONAL PLAN SETS FOR ADDITIONAL INFORMATION TO SUPPORT THESE PERMIT DRAWINGS:

- MECHANICAL PLANS FROM: VOLTAIR, INC.
- STRUCTURAL PLANS FROM: MASTER CONSULTING ENGINEERS, INC.



DESIGN BY: BLZ/JPH  
CHECKED BY: TFB/BLZ  
SCALE: AS NOTED

ISSUED FOR:	DATE:
<input type="checkbox"/> CD 30%	
<input type="checkbox"/> CD 60%	
<input type="checkbox"/> CD 95% Review	
<input type="checkbox"/> CD 100%	
<input type="checkbox"/> Pricing	
<input type="checkbox"/> Bidding	
<input checked="" type="checkbox"/> Permit	04/18/22
<input type="checkbox"/> Construction	
<input type="checkbox"/> Record Dwg	
Drawing No.	

SC1.00



UTILITY NOTES

EXISTING UTILITIES SHOWN TAKEN FROM A SURVEY PREPARED BY ELEMENT ENGINEERING GROUP, LLC, POLARIS SURVEYING, HISTORICAL ENCORE! INFRASTRUCTURE PLANS AND INFORMATION BY THE CITY OF TAMPA.

RIGHT-OF-WAY UTILITY NOTES  
(PROJECT INCLUDES WORK WITHIN THE PUBLIC  
RIGHT-OF-WAY OR CITY EASEMENT)

1. AT LEAST 3 WEEKS PRIOR TO CONSTRUCTION, THE DEVELOPER'S REPRESENTATIVE SHALL NOTIFY THE RESIDENT ENGINEER, THE CITY OF TAMPA, AND THE DEPARTMENT OF SANITARY SEWERS FIELD ENGINEERING OFFICE (813-259-1622) OF THE CONTRACTOR'S NAME, STARTING DATE PROJECTED SCHEDULE AND OTHER INFORMATION AS REQUIRED. ANY WORK PERFORMED PRIOR TO NOTIFYING FIELD ENGINEERING OR WITHOUT A DEPARTMENT INSPECTOR PRESENT MAY BE SUBJECT FOR REMOVAL AND REPLACEMENT.
2. THE CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL THE FOLLOWING HAS BEEN COMPLETED:

A. FINAL INSPECTION IN CONJUNCTION WITH DEPARTMENT PERSONNEL COMPLETED.

B. AS-BUILTS HAVE BEEN SUBMITTED AND ACCEPTED.

C. ALL NECESSARY TESTING COMPLETED AND CERTIFIED.

D. PAYMENT OF ALL CAPACITY FEES.

E. ISSUANCE OF F.D.E.P. CERTIFICATION OF COMPLETION APPROVAL (IF APPLICABLE).
3. ALL SEWER CROSSINGS WITH LESS THAN 18" OF OUTSIDE VERTICAL CLEARANCE AND/OR 10' OUTSIDE HORIZONTAL CLEARANCE SHALL BE EVALUATED BY THE CITY OF TAMPA WASTEWATER DEPARTMENT ON A CASE-BY-CASE BASIS.
4. ON-SITE (ALL FACILITIES, INCLUDING THE POINT-OF-CONNECTION, ARE ON-SITE AND WILL BE PRIVATELY OWNED AND MAINTAINED).

UTILITY CONSTRUCTION NOTES

1. LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY LOCATION, SEPARATION, AND COVER OF ALL EXISTING UTILITIES, AND ADVISE THE ENGINEER OF RECORD OF ANY CONFLICTS IMMEDIATELY.
2. ANY IRRIGATION LINES TO BE ADJUSTED OR RELOCATED SHALL BE INSTALLED PER CITY OF TAMPA RECLAIMED WATER STANDARDS WITH MINIMUM COVERAGE OF 3 FEET UNLESS OTHERWISE NOTED.
3. CONTRACTOR TO INSTALL BENDS ON POTABLE WATER OR IRRIGATION LINES AS NECESSARY IN ORDER TO AVOID CONFLICT(S) WITH PROPOSED OR EXISTING FACILITIES. BENDS INSTALLED THAT ARE NOT SHOWN IN THE PLANS SHALL BE SHOWN IN THE AS-BUILTS.
4. SEE DEMOLITION PLANS FOR INFORMATION ON EXISTING UTILITY DEMOLITION.
5. CONTRACTOR IS ADVISED TO FAMILIARIZE HIMSELF WITH THE OVERALL SCOPE OF WORK TO BE PERFORMED PRIOR TO SUBMITTING A BID.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING OF ANY RELOCATED POTABLE WATER OR IRRIGATION LINES IN ACCORDANCE WITH CURRENT STANDARDS OF LOCAL JURISDICTION. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION AND THE OWNER OF HIS AUTHORIZED REPRESENTATIVE AT LEAST 3 WORKING DAYS IN ADVANCE OF PERFORMING TESTS. ALL TESTS TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. THE CONTRACTOR SHALL PROVIDE CERTIFIED AS-BUILTS AND RED-LINE DRAWINGS, SIGNED & SEALED BY A PROFESSIONAL LAND SURVEYOR PRIOR TO CERTIFICATION BY THE ENGINEER. THE AS-BUILT AND RED-LINE DRAWINGS SHALL BE IN ACCORDANCE WITH RECORD DRAWING REQUIREMENTS OF THE APPLICABLE PERMIT AGENCY AND THE CITY AND AT A MINIMUM, SHOW FINAL GRADES AND LOCATIONS ON ALL UTILITIES INCLUDING: SANITARY SEWER MAINS, MANHOLES, CLEANOUTS, FORCE MAINS, WATER MAINS, METERS, RPBPS, VALVES, GAS MAINS, LIGHT POLES, RECLAIMED LINES, PRODUCT PIPING, ETC. ALL UTILITY INFORMATION SHALL INCLUDE BOTH HORIZONTAL AND VERTICAL INFORMATION INCLUDING ALL OFFSETS AND STATIONING. THE CONTRACTOR SHALL PROVIDE TEN COPIES OF THE CERTIFIED AS-BUILT AND RED-LINE DRAWINGS TO THE ENGINEER FOR PURPOSES OF CERTIFYING THE UTILITIES. THE ENGINEER SHALL UTILIZE THE CERTIFIED RECORD DRAWINGS PROVIDED BY THE CONTRACTORS LICENSED SURVEYOR FOR USE IN CERTIFYING THE RECORD DRAWINGS TO THE APPLICABLE PERMIT AGENCIES.
8. WORK SHALL NOT COMMENCE UNTIL ALL PERMITS REQUIRED FOR THE SUBJECT PORTION OF THE WORK ARE OBTAINED. IT IS THE CONTRACTORS RESPONSIBILITY TO HAVE ALL REQUIRED PERMITS AND/OR EVIDENCE OF COMPLIANCE WITH APPLICABLE REGULATIONS ON THE SITE AT ALL TIMES DURING THE EXECUTION OF WORK. SPECIFIC PERMITS MAY BE REQUIRED FOR THE INSTALLATION OF POTABLE WATER LINES, SANITARY SE3WER LINES, STORMWATER PIPES, ETC. TREE BARRICADES AND EROSION SILTATION CONTROL MUST BE INSTALLED IMPLEMENTED PRIOR TO COMMENCING CONSTRUCTION.
9. ALL UTILITIES (INCLUDING STORMWATER FACILITIES) SHALL BE KEPT IN OPERATION EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF THE UTILITY OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE EXISTING UTILITIES AND ANY AND ALL DAMAGE TO EXISTING UTILITIES AS A RESULT OF THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
10. ALL DETAILS MUST BE IN COMPLIANCE WITH THE LATEST REVISION OF THE CITY OF TAMPA TECHNICAL MANUALS.
11. ALL NOTE APPLY TO ALL SHEETS WHERE APPLICABLE.
12. ANY EASEMENT NOTES ON THE CONSTRUCTION PLANS TO BE DEDICATED TO THE CITY OF TAMPA, CDD, AND /OR TAMPA HOUSING AUTHORITY AS PAR OF A RE-PLAT.

CHILL WATER/SANITARY SEWER SEPARATION  
NOTES

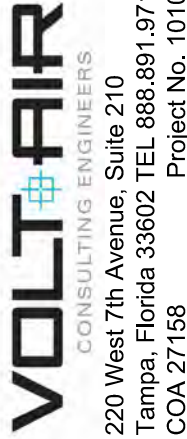
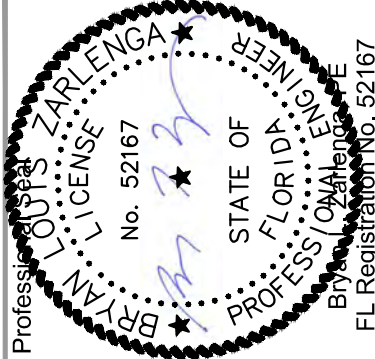
1. ALL PIPE MATERIAL AND INSTALLATIONS ARE TO BE IN ACCORDANCE WITH THE CITY OF TAMPA SPECIFICATIONS.
2. BENDS SHALL BE INSTALLED ON CHILL LINES AS NECESSARY TO MAINTAIN PROPER ALIGNMENT. JOINT DEFLECTION SHALL BE IN ACCORDANCE WITH AWWA C-600, LATEST EDITION, EXCEPT DEFLECTION ALLOWED SHALL BE 80% OR LESS THAN THE DEFLECTION VALUES GIVEN IN THE AWWA DEFLECTION TABLES (e.g., FOR 12" PIPE, 4 DEGREES PER JOINT MAX DEFLECTION).
3. ALL CHILLED WATER LINES SHALL BE CONSTRUCTED IN A MANNER SUCH AS TO MAINTAIN A MINIMUM OF FIVE (5) FEET HORIZONTAL SEPARATION FROM OTHER STORM AND MINIMUM THREE (3) FEET HORIZONTAL SEPARATION FROM WATER MAINS OTHER THAN GAS WHOSE CLEARANCES SHALL BE AS IDENTIFIED IN THE TWD TECHNICAL MANUAL.
4. CHILLED WATER LINES SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL CLEARANCE OF 12" BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. A 6" SEPARATION IS ACCEPTABLE IF THE CHILLED WATER LINE MUST CROSS ABOVE THE WATER MAIN, SEWER OR STORM PIPE.
5. ALL CROSSING SHALL BE ARRANGED SO THAT THE JOINTS OF THE CROSSING PIPES ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).
6. ALL CHILLED WATER PIPING TO HAVE A MINIMUM 18-INCHES VERTICAL CLEARANCE WHEN CROSSING SANITARY SEWER FACILITIES.

TESTING AND INSPECTION REQUIREMENT NOTES

1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL BE PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER. PRESSURE TESTS SHALL BE IN ACCORDANCE WITH CITY WATER DEPARTMENT SPECIFICATIONS. CONTRACTOR MUST NOTIFY OWNERS ENGINEER, CITY WATER DEPARTMENT INSPECTOR, AND CDD, MIN. 3 WORKING DAYS IN ADVANCE OF SCHEDULED TESTS.
2. CONTRACTOR SHALL PRESSURE TEST WATER MAINS AT 150 PSI FRO A PERIOD OF 2 HOURS IN ACCORDANCE WITH AWWA C600-87 STANDARDS. CONTRACTOR SHALL NOTIFY ENGINEER AND THE CITY TAMPA A LEAST 3 WORKING DAYS PRIOR TO START OF ANY TEST. THE CONTRACTOR SHALL MAKE ALL NECESSARY APPLICATIONS AND ARRANGEMENTS.



CLEARWATER  
380 PARK PLACE BLVD, STE 300, CLEARWATER, FL 33759  
TEL: (727) 531 - 3505    FAX: (727) 431 - 1777  
www.cardno.com    Certificate of Authorization No. 29915



ENCORE CEP - LOT 12  
EXPANSION  
CITY OF TAMPA, HILLSBOROUGH COUNTY, FLORIDA

UTILITY GENERAL NOTES

Drawing Title

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61015-23.004, F.A.C.

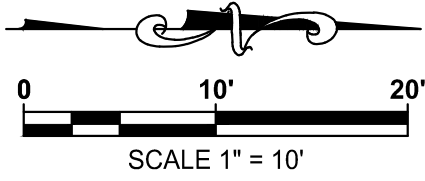
DESIGN BY: BLZ/JPH  
CHECKED BY: TFB/BLZ  
SCALE: AS NOTED

ISSUED FOR:	DATE:
<input type="checkbox"/> CD 30%	<input type="text"/>
<input type="checkbox"/> CD 60%	<input type="text"/>
<input type="checkbox"/> CD 95% Review	<input type="text"/>
<input type="checkbox"/> CD 100%	<input type="text"/>
<input type="checkbox"/> Pricing	<input type="text"/>
<input type="checkbox"/> Bidding	<input type="text"/>
<input checked="" type="checkbox"/> Permit	04/18/22
<input type="checkbox"/> Construction Record Dwg	<input type="text"/>

Drawing No.

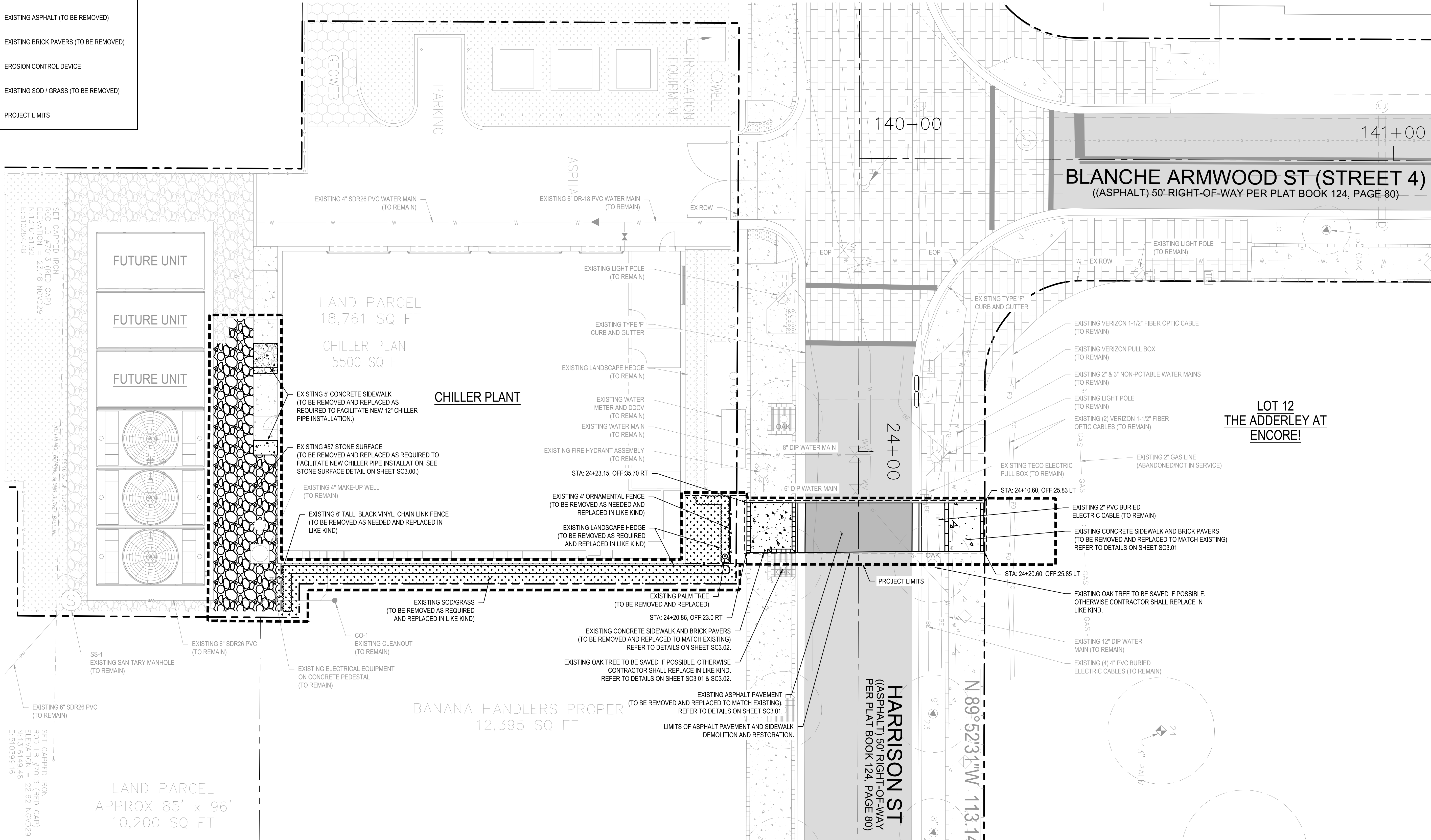
SC2.00



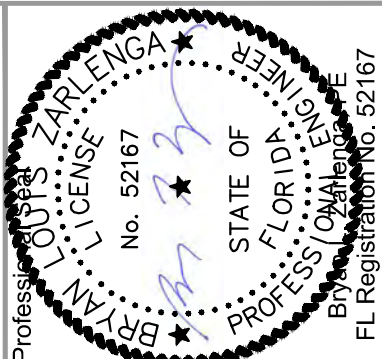


LEGEND

- NEW PROPERTY LINE (PER PLAT)
- - - PROPERTY SETBACK LINE
- [Pattern] EXISTING SIDEWALK (CONCRETE)
- [Pattern] EXISTING SIDEWALK (BRICK)
- [Pattern] EXISTING ASPHALT
- [Pattern] EXISTING SIDEWALK (TO BE REMOVED)
- [Pattern] EXISTING ASPHALT (TO BE REMOVED)
- [Pattern] EXISTING BRICK PAVERS (TO BE REMOVED)
- [Symbol] EROSION CONTROL DEVICE
- [Pattern] EXISTING SOD / GRASS (TO BE REMOVED)
- [Dashed Box] PROJECT LIMITS



CLEARWATER  
380 PARK PLACE BLVD, STE 300, CLEARWATER, FL 33759  
TEL: (727) 531-3505 FAX: (727) 431-1777  
www.cardno.com Certificate of Authorization No. 29915



**VOLT#AIR**  
CONSULTING ENGINEERS  
220 West 7th Avenue, Suite 210  
Tampa, Florida 33602  
C.O.A. 27158  
Project No. 10101



**ENCORE CEP - LOT 12  
EXPANSION**  
CITY OF TAMPA, HILLSBOROUGH COUNTY, FLORIDA  
**DEMOLITION SITE PLAN**

Drawing Title		Date	
		07/29/2022	
OWNER'S COMMENTS		Description	
1	No.		
DESIGN BY: BLZ/JPH		DATE:	
CHECKED BY: TFB/BLZ		AS NOTED	
SCALE:			
ISSUED FOR:			
CD 30%			
CD 60%			
CD 95% Review			
CD 100%			
Pricing			
Bidding			
Permit		04/18/22	
Construction			
Record Dwg			
Drawing No.			

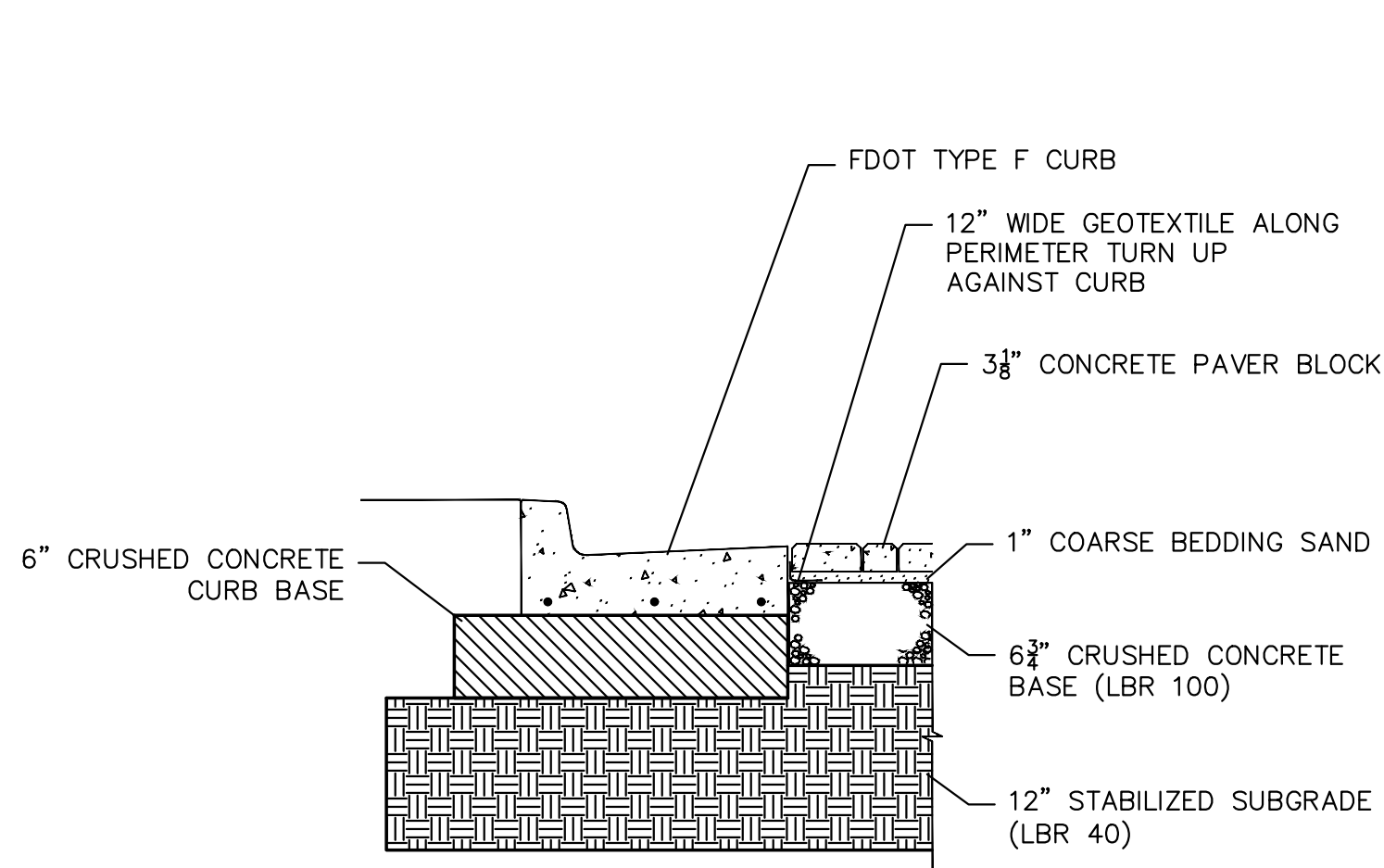
SC2.01

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61015-23.004, F.A.C.

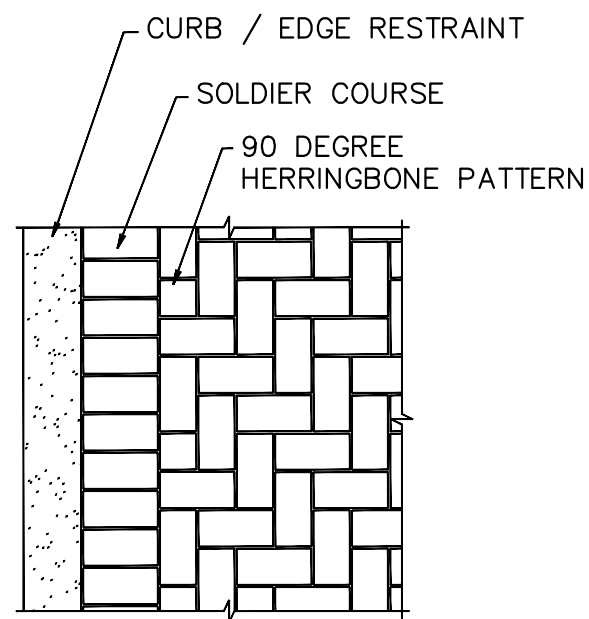


NOTE: DIRECTIONAL DRILL CAN BE PROVIDED AS AN ADD ALTERNATIVE OPTION VS. OPEN CUT.

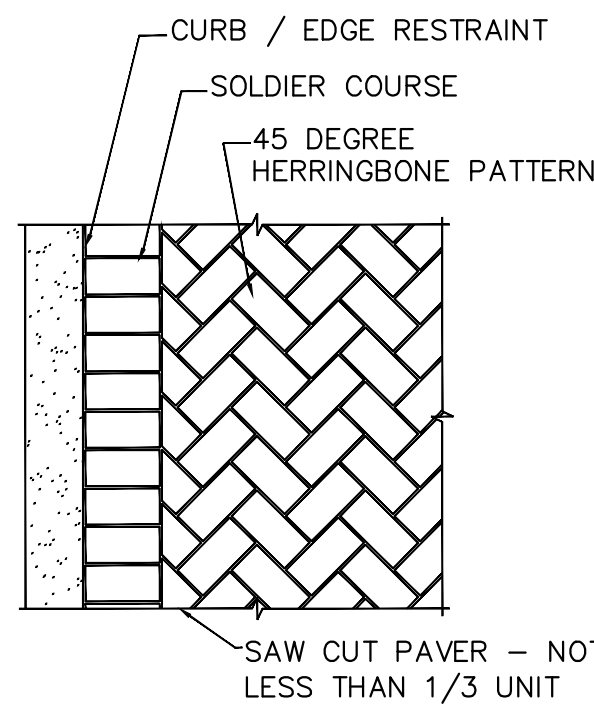




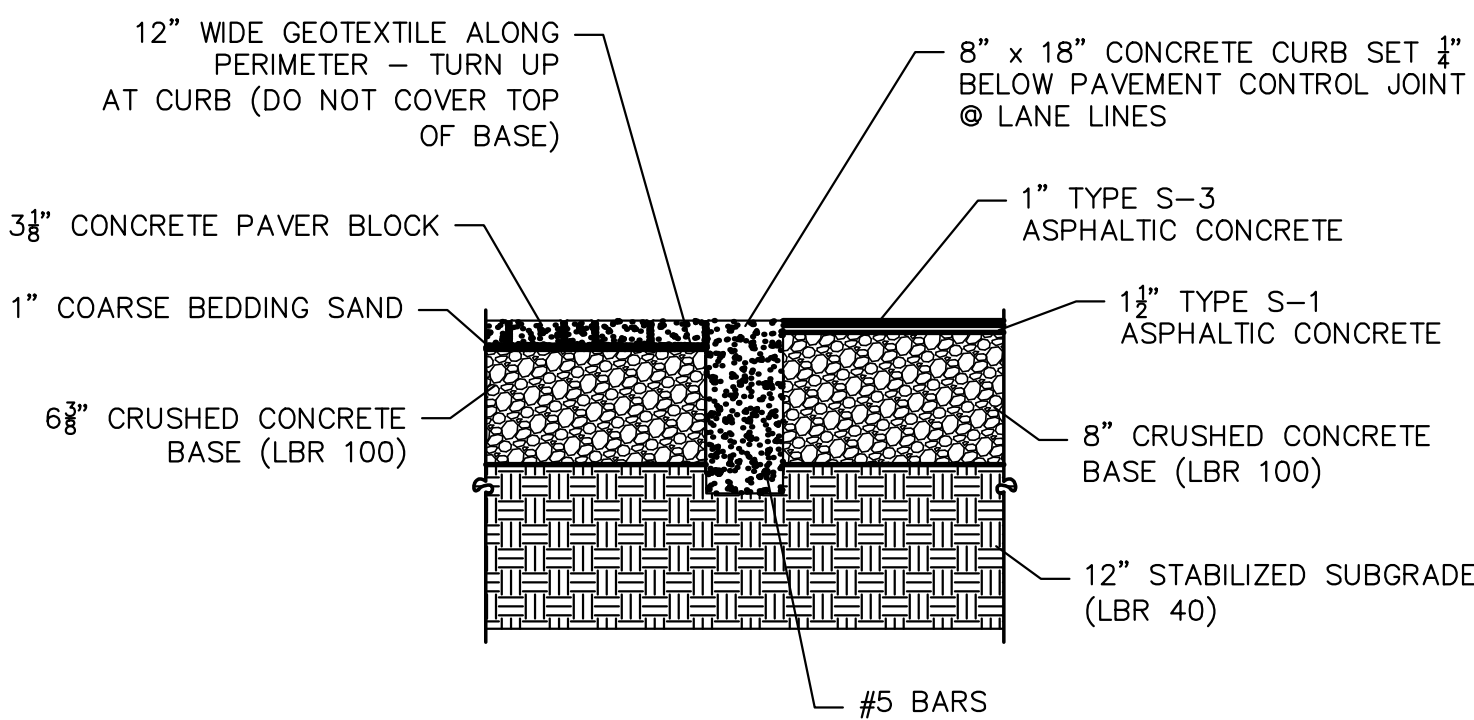
CONCRETE CURB AND GUTTER  
WITH CONCRETE PAVERS



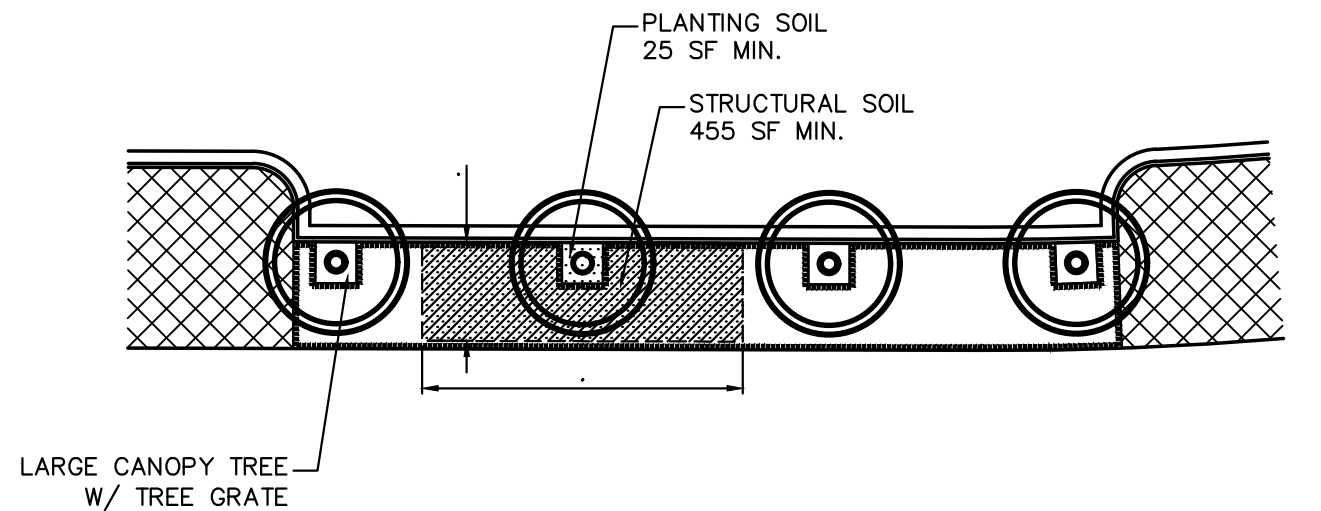
SOLDIER COURSE W/ 90°  
HERRINGBONE PATTERN



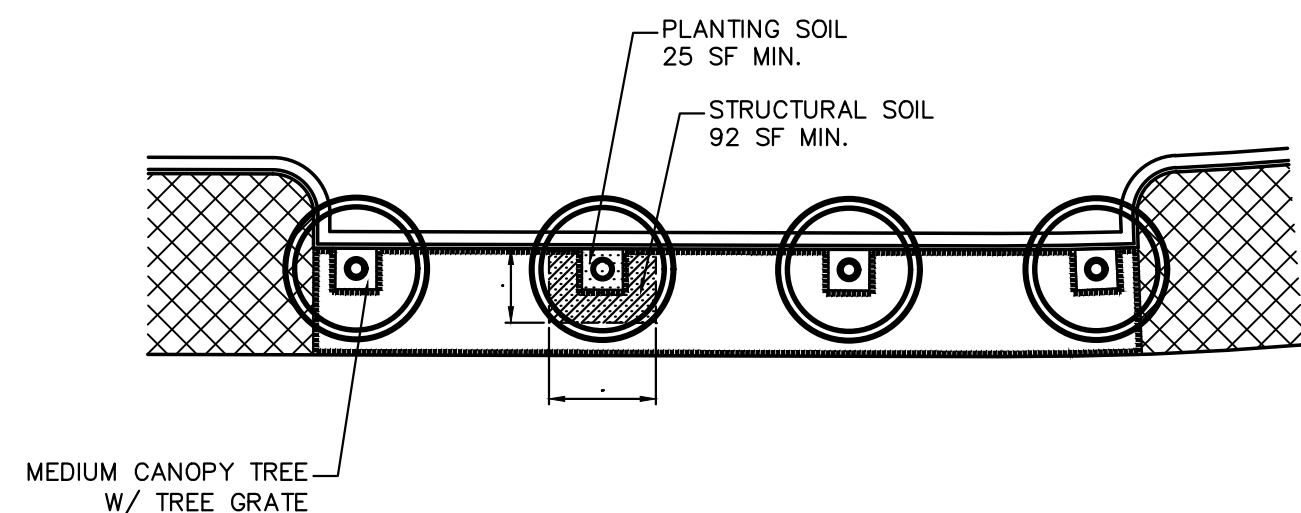
SOLDIER COURSE W/ 45°  
HERRINGBONE PATTERN



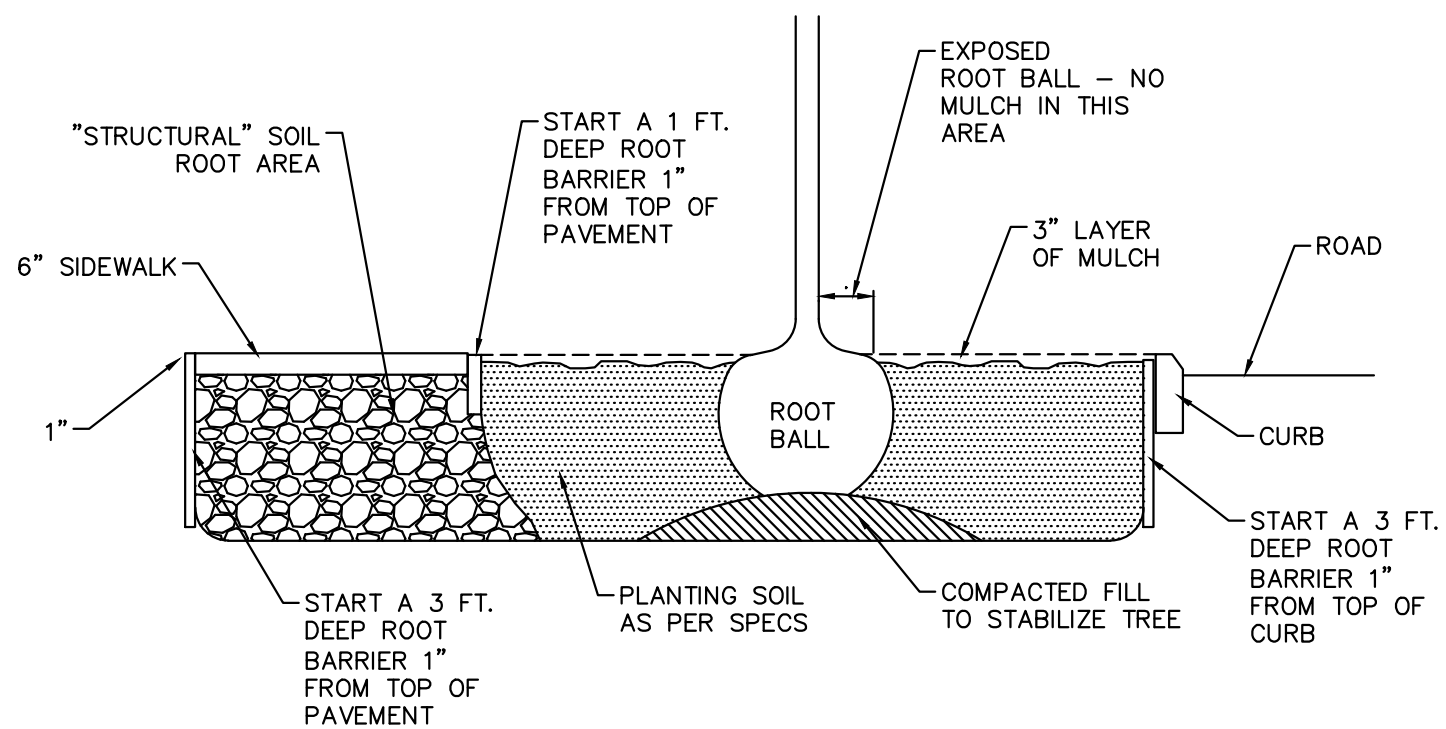
CONCRETE RIBBON CURB ABUTTING  
PAVER BLOCK/ ASPHALT CONCRETE



TYPICAL STRUCTURAL SOIL LAYOUT  
PLAN FOR LARGE CANOPY TREE

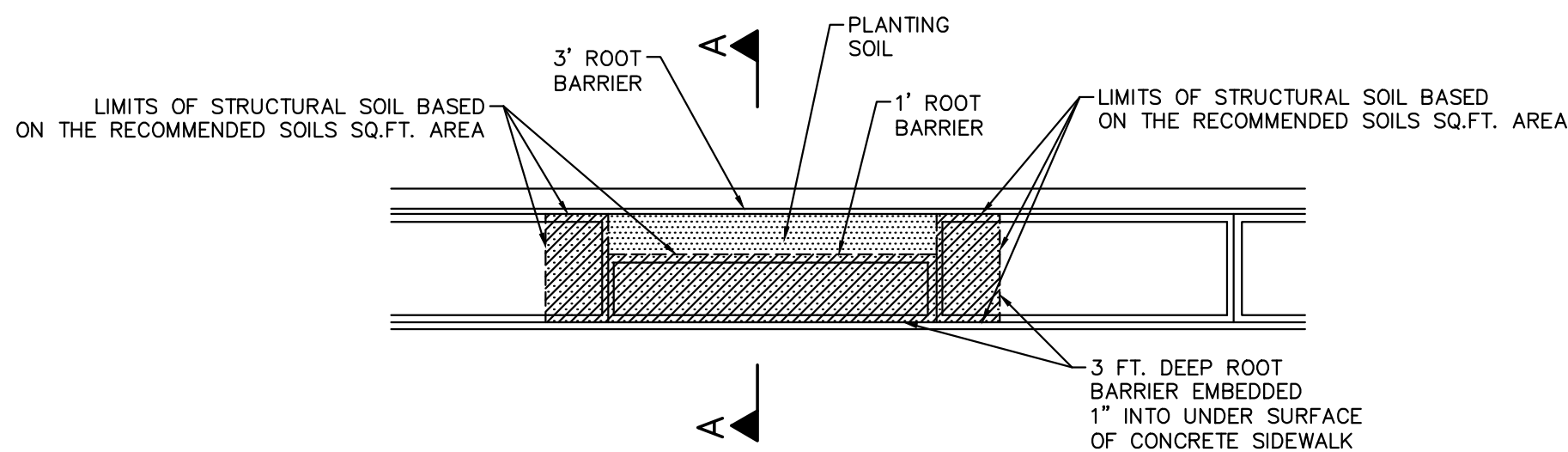


TYPICAL STRUCTURAL SOIL LAYOUT  
PLAN FOR MEDIUM CANOPY TREE



- NOTE:
1. ROOT BARRIER TO BE LB-12-2 (1FT) AND UB-36-2 (3FT) BY ROOT BARRIER CORP. OR APPROVED EQUAL
  2. SEE LAYOUT PLANS FOR EXTENT OF STRUCTURAL SOIL
  3. FOR OPEN PLANTING AREAS THAT WILL HAVE A TREE GRATE, THE SURFACE OF THE PLANTING SOIL AND ROOTBALL WILL NEED TO BE APPROXIMATELY 5" - 6" BELOW THE TOP ELEVATION OF THE ADJACENT SIDEWALK AND CURB

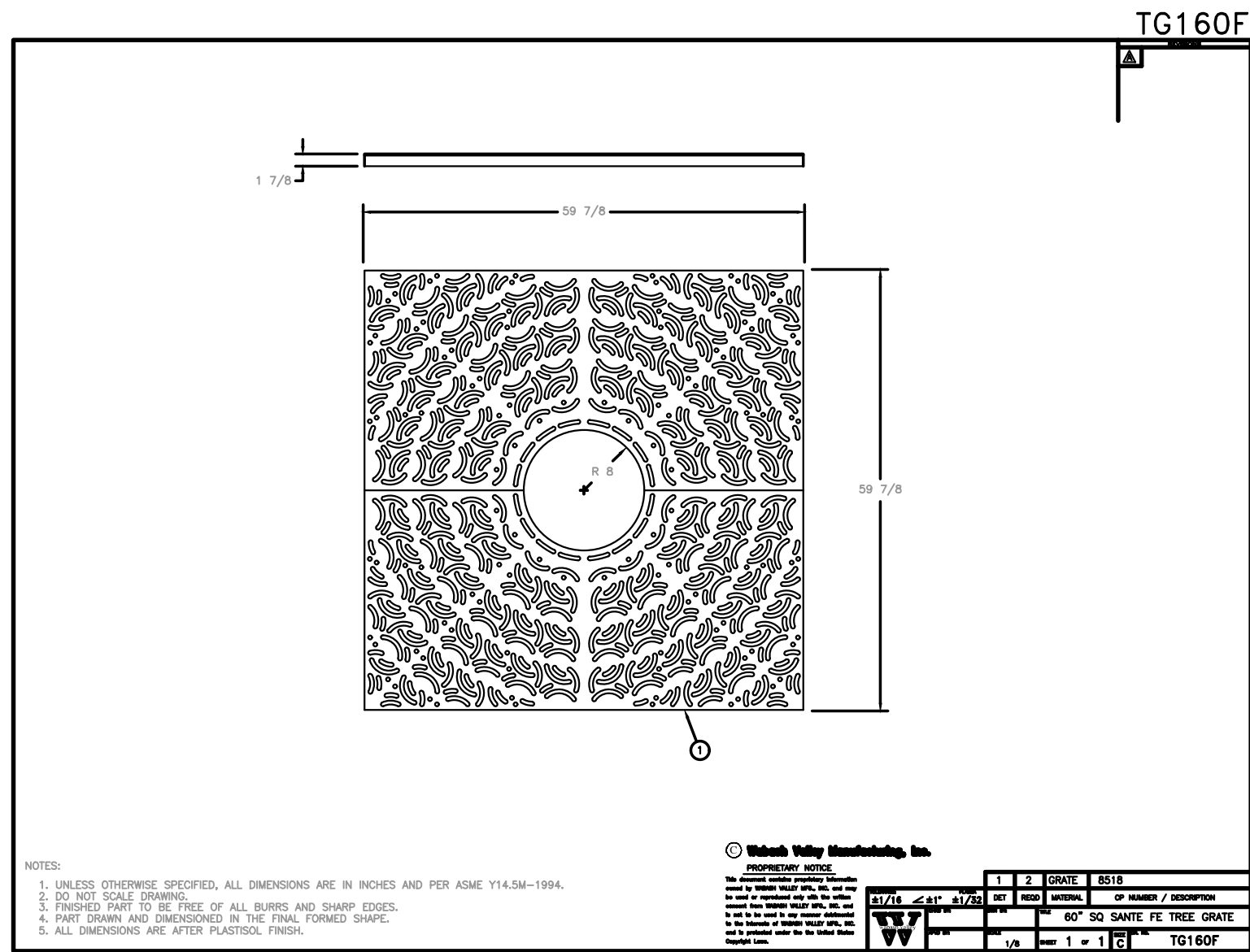
TYPICAL SECTION A - A



TYPICAL PLAN VIEW

TYPICAL STRUCTURAL SOIL LAYOUT  
DETAIL

- NOTE:
1. BASED ON THE SQ.FT. OF PLANTING SOIL SPACE FOR SMALL CANOPY TREES, THEY SHOULD NOT NEED STRUCTURAL SOIL.
  2. BASED ON THE TOTAL SQ.FT. OF THE SOIL AREAS, WHICH IS THE TOTAL OR COMBINED OF PLANTING SOIL AND STRUCUTURAL SOIL, IS:  
LARGE CANOPY TREE: 480 SQ.FT.  
MEDIUM CANOPY TREE: 117 SQ.FT.
  3. THE AMOUNT OF SQ.FT. FOR THE PLANTING SOIL IS THE OPEN PLANTING AREAS THAT ARE NOT UNDER PAVEMENT AND THE REMAINING SQ.FT. OF THE TOTAL SOIL AREA IS WHERE STRUCTURAL SOIL WILL BE PLACED



60" SQUARE TREE GRATE  
ESTIMATED NUMBER OF TREE  
GRATES = 73

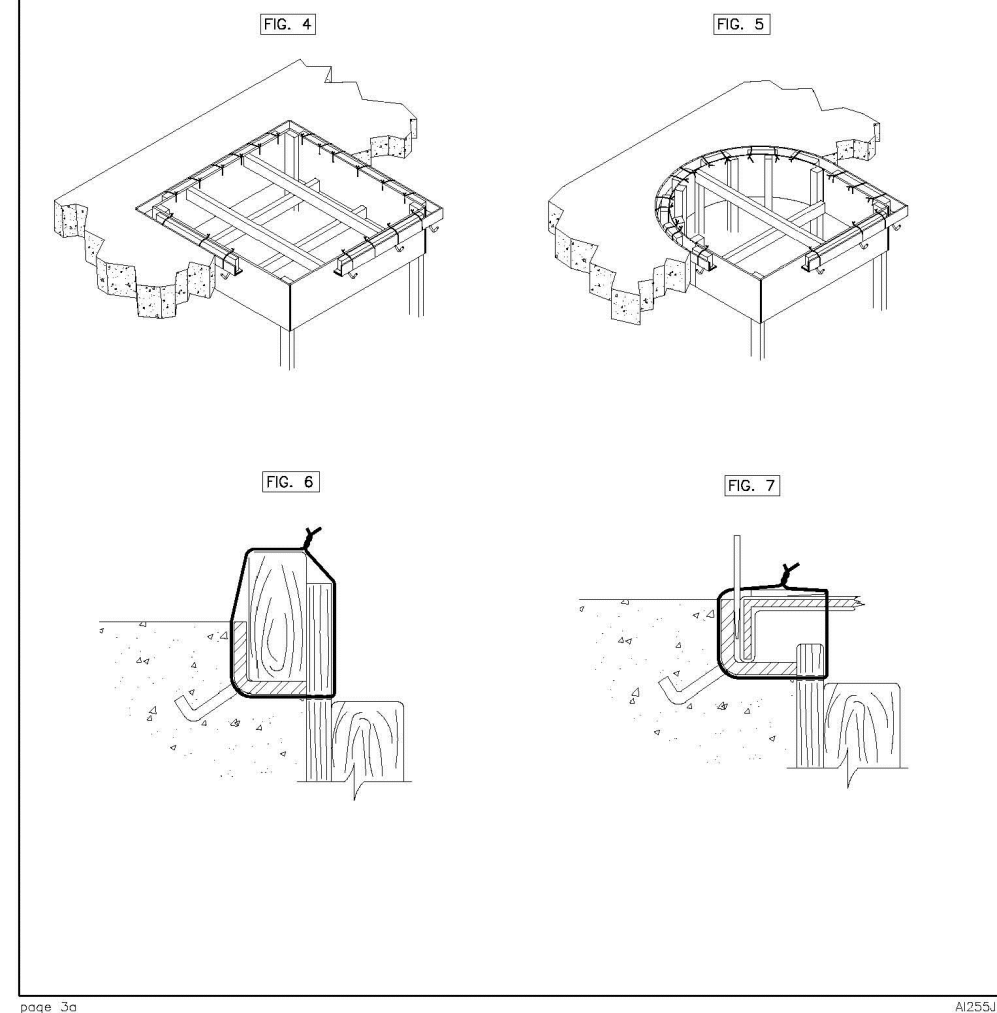
assembly procedures:

TREE GRATE FRAME INSTALLATION

FIGS 4 and 5, represents a typical tree grate frame installation. We recommend that the frame should be secured to the forming material with 9 gage wire.

FIG. 6 is illustrating a standard 2' x 4' board between the inside of the frame and plywood. We do not suggest that a 2' x 4' board be used as a standard procedure, therefore tree grate panels may be used during the installation, see FIG. 7.

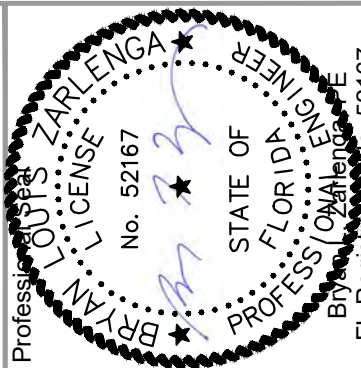
After the concrete has been allowed to thoroughly cure, all wires can be cut and trimmed allowing the removal of the forming materials or tree grate panels, if used.



TREE GRATE FRAME



CLEARWATER  
380 PARK PLACE BLVD, STE 300, CLEARWATER, FL 33759  
TEL: (727) 531-3505 FAX: (727) 431-1777  
www.cardno.com Certificate of Authorization No. 29915



**VOLT AIR**  
CONSULTING ENGINEERS  
220 West 7th Avenue, Suite 210  
Tampa, FL 33602  
COA 27158  
Project No. 10101



**ENCORE CEP - LOT 12  
EXPANSION**  
CITY OF TAMPA, HILLSBOROUGH COUNTY, FLORIDA  
**SITE PLAN DETAILS (1)**

Drawing Title		Date	
ENCORE CEP - LOT 12 EXPANSION		07/29/2022	
OWNER'S COMMENTS		Description	
1		No.	

DESIGN BY:	BLZ/JPH	DATE:	
CHECKED BY:	TFB/BLZ		
SCALE:	AS NOTED		
ISSUED FOR:	CD 30%		
	CD 60%		
	CD 95% Review		
	CD 100%		
	Pricing		
	Bidding		
	Permit	04/18/22	
	Construction		
	Record Dwg		
Drawing No.			

SC3.01

THE DETAILS ON THIS SHEET ARE FOR REFERENCE ONLY





CHWS

-CHILLED WATER SUPPLY

CHWR

-CHILLED WATER RETURN

CD

-CONDENSATE

CR

-CONDENSATE RETURN

PC

-PUMPED CONDENSATE

HWR

-HOT WATER RETURN

HWS

-HOT WATER SUPPLY

▶

-FLOW DIRECTION

⋈

-GATE VALVE

○

-BALL VALVE

⌞

-CALIBRATING BALANCING VALVE

◇

-BUTTERFLY VALVE

⊢

-GAS COCK

| |

-UNION

↘

-STRAINER

⋈

-CONTRN VALVE

⋈

-SOLENOID VALVE

⋈

-PSI REG.

⋈

-CHECK VALVE

◇

-FLOW SWITCH

⊠

-FLEX CONNECTION

⋈

-O.S.&Y. GATE VALVE

⋈

-THREE-WAY CONTROL VALVE

◐

-THERMOMETER

EQUIP

-P-TRIP

MV

-MANUAL VENT

⊙

-PRESSURE GAUGE

⊖

-ELBOW, TURNED DOWN

⊕

-ELBOW, TURNED UP

⊖

-TEE, OUTLET DOWN

⊕

-TEE, OUTLET UP

RENOVATION

←

CONNECT TO EXISTING

1

TIE NEW 12" CHILLED WATER PIPING, BOTH SUPPLY AND RETURN, INTO EXISTING CHILLED WATER PIPING LOCATED ON SITE. ROUTE NEW PIPING AS INDICATED ON THE PLANS.

2

ROUTE NEW PUMPED CONDENSATE RETURN FROM THE SITE AND RETURN TO THE RECEIVER LOCATED WITHIN THE EXISTING CENTRAL ENERGY PLANT.

3

PROVIDE VALVING FOR CONNECTION TO FUTURE CONNECTION TO LOT 13.

HVAC PIPING SYMBOLS

CHWS

CHILLED WATER SUPPLY

CHWR

CHILLED WATER RETURN

→

FLOW DIRECTION

⬜

GATE VALVE

●

BALL VALVE

⏚

CALIBRATING BALANCING VALVE

⏚

CONTROL VALVE

⦿

SOLENOID VALVE

⏚

BUTTLERFLY VALVE

⬜

CHECK VALVE

→

THERMOMETER

⚡

FLOW SWITCH

⤵

ELBOW, TURNED DOWN

⤴

ELBOW, TURNED UP

⤵

TEE, OUTLET DOWN

⤴

TEE, OUTLET UP

HVAC ABBREVIATIONS

AFF ABOVE FINISHED FLOOR  
AFR ABOVE FINISHED ROOF  
AHU AIR HANDLING UNIT  
AP ACCESS PANEL  
BOP BOTTOM OF PIPE  
BHP BRAKE HORSEPOWER  
BTU BRITISH THERMAL UNIT  
CFM CUBIC FEET PER MINUTE  
CU CONDENSING UNIT  
DDC DIRECT DIGITAL CONTROLS  
DN DOWN  
EAT ENTERING AIR TEMPERATURE  
ESP EXTERNAL STATIC PRESSURE  
EWT ENTERING WATER TEMPERATURE  
FCU FAN COIL UNIT  
FF FINAL FILTERS  
FLA FULL LOAD AMPS  
FPM FEET PER MINUTE  
GPM GALLONS PER MINUTE  
KW KILOWATT  
LAT LEAVING AIR TEMPERATURE  
LWT LEAVING WATER TEMPERATURE  
MBH THOUSAND BTUs PER HOUR  
MCA MINIMUM CIRCUIT AMPS  
MOCP MAXIMUM OVER CURRENT PROTECTION  
MOD MOTOR OPERATED CONTROL DAMPER (MOD)  
NC NORMALLY CLOSED  
NO NORMALLY OPEN  
NTS NOT TO SCALE  
OA OUTSIDE AIR  
OAL OUTSIDE AIR LOUVER  
PRV PRESSURE REDUCING VALVE  
PRS PRESSURE REDUCING STATION  
PSI POUNDS PER SQUARE INCH  
PSIG PSI GAUGE  
PTAC PACKAGED TERMINAL AIR CONDITIONER  
RA RETURN AIR  
RHC REHEAT COIL  
RPM REVOLUTIONS PER MINUTE  
RTU ROOF TOP UNIT  
SA SUPPLY AIR  
SP STATIC PRESSURE  
SS 304 WELDED STAINLESS STEEL  
TSP TOTAL STATIC PRESSURE  
UNO UNLESS NOTED OTHERWISE  
VIPH VOLTS/PHASE  
VAV VARIABLE AIR VOLUME  
VFD VARIABLE FREQUENCY DRIVE

1 SCOPE

WORK SHALL INCLUDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR A COMPLETE AND PROPERLY FUNCTIONING MECHANICAL INSTALLATION IN ACCORDANCE WITH ALL APPLICABLE CODES, AND CONTRACT DRAWINGS AND SPECIFICATIONS. WORK SHALL INCLUDE ALL WORK NORMALLY SPECIFIED IN DIVISION 23.

PAY FOR ALL REQUIRED LICENSES, FEES, INSPECTIONS AND PERMITS.

2 CODES

INSTALL ALL WORK IN ACCORDANCE WITH THE LATEST EDITION OF ALL APPLICABLE REGULATIONS AND GOVERNING CODES, INCLUDING THE REGULATIONS OF THE UTILITY COMPANIES SERVING THE PROJECT.

WHERE A CONFLICT IN CODE REQUIREMENTS OCCURS THE MORE STRINGENT REQUIREMENT SHALL GOVERN.

3 STANDARDS

ALL EQUIPMENT AND DEVICES SHALL BEAR U.L. LABEL, THE LABEL OF AN INDUSTRY RECOGNIZED APPROVED TESTING AGENCY OR A G.A. CERTIFICATION FOR SAID ITEM OF EQUIPMENT OR DEVICE.

ALL ELECTRICAL DEVICES MUST BE U.L. APPROVED.

4 DRAWINGS

DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT AND EXTENT OF WORK. EXACT LOCATIONS AND ARRANGEMENT OF MATERIALS AND EQUIPMENT SHALL BE DETERMINED, WITH THE ACCEPTANCE OF THE ARCHITECT/ENGINEER, AS WORK PROGRESSES TO CONFORM IN THE BEST POSSIBLE MANNER WITH THE SURROUNDINGS AND WITH THE ADJOINING WORK OF OTHER TRADES. WHERE LOCATIONS OF EQUIPMENT, DEVICES OR FIXTURES ARE CONTROLLED BY ARCHITECTURAL FEATURES, ESTABLISH SUCH LOCATIONS BY REFERRING TO DIMENSIONS ON ARCHITECTURAL DRAWINGS AND NOT BY SCALING DRAWINGS.

5 DISCREPANCIES

IN CASE OF DIFFERENT BETWEEN DRAWINGS AND SPECIFICATIONS, OR WHERE DRAWINGS AND SPECIFICATIONS ARE NOT CLEAR OF DEFINITE, THE SUBJECT SHALL BE REFERRED TO ARCHITECT/ENGINEER FOR CLARIFICATION AND INSTRUCTIONS.

6 ELECTRICAL PROVISIONS

WORK INCLUDES VARIOUS ELECTRICAL REQUIREMENTS (A) WHICH INCORPORATE SPECIFIC ELECTRICAL FEATURES AND COMPONENTS WHICH ARE REQUIRED TO BE PHYSICALLY INTEGRAL WITH MECHANICAL EQUIPMENT, OR (B) WHICH REQUIRE NECESSARY ELECTRICAL INTERCONNECTING COMPONENTS FOR THE MECHANICAL SYSTEMS.

DEFINITIONS: DEFINITIONS FOR THE PURPOSE OF MECHANICAL/ELECTRICAL CONTROL AND POWER COORDINATION ARE AS GIVEN BELOW. ANY ITEMS WHICH DO NOT FALL WITHIN THE SCOPE OF THIS PARAGRAPH SHALL BE COORDINATED AS INDIVIDUALLY SPECIFIED.

"FURNISH" MEANS TO PROCURE AN ITEM AND TO DELIVER IT TO THE PROJECT FOR INSTALLATION.

"INSTALL" MEANS TO DETERMINE (IN COORDINATION WITH OTHERS AS NECESSARY) THE APPROPRIATE INTENDED LOCATION OF AN ITEM AND TO SET AND CONNECT IT IN PLACE.

"PROVIDE" MEANS TO BOTH FURNISH AND INSTALL.

7 AUXILIARES AND ACCESSORIES

INCLUDE ALL AUXILIARIES AND ACCESSORIES FOR COMPLETE AND PROPERLY OPERATING SYSTEMS.

8 INVESTIGATION OF SITE

CHECK SITE AND EXISTING CONDITIONS THOROUGHLY BEFORE PROVIDING A BID PRICE. ADVISE ARCHITECT/ENGINEERS OF DISCREPANCIES OR QUESTIONS BEFORE BIDDING.

9 COORDINATION

PROVIDE ALL REQUIRED COORDINATION AND SUPERVISION WHERE MECHANICAL WORK INTERFACES DIRECTLY OR INDIRECTLY WITH WORK AND TRADES.

10 PROVISIONS FOR OPENINGS

PROVIDE ALL REQUIRED OPENINGS TO ACCOMPLISH THE WORK. PROVIDE SLEEVES OR OTHER APPROVED METHODS TO ALLOW PASSAGE OF ITEMS INSTALLED.

11 INTERRUPTION OF EXISTING SERVICES

ANY INTERRUPTION OF EXISTING MECHANICAL AND ELECTRICAL SERVICES SHALL BE COORDINATED IN ADVANCE WITH THE OWNER'S REPRESENTATIVE. THIS INCLUDES, BUT IS NOT LIMITED TO SERVICES PROVIDING CHILLED WATER, ELECTRICITY, OR OTHER CRITICAL SYSTEM AS MAY BE PERTINENT TO THIS PARTICULAR PROJECT. SERVICE INTERRUPTION TIMES AND DURATION OF INTERRUPTION OF SERVICES SHALL BE DECIDED BY THE OWNER. PROVIDE APPROPRIATED PROVISIONS (E.G., ISOLATION SHUT-OFF VALVES, DAMPERS, END CAPS, AND SIMILAR ITEMS) AS NECESSARY TO ACCOMMODATE THE REQUIRED SERVICE INTERRUPTIONS. IF SHUTDOWNS CANNOT BE ACCOMMODATED, PROVIDE MEANS FOR "WET" TAPPING OR "HOT" TAPPING OF PIPING SYSTEMS.

12 SCOPE

EQUIPMENT: ALL MECHANICAL EQUIPMENT PROVIDED SHALL BE THOROUGHLY CLEANED OF ALL DIRT, OIL, CONCRETE, ETC. ANY DENTS, SCRATCHES OR OTHER VISIBLE BLEMISHES SHALL BE CORRECTED AND THE APPEARANCE OF THE EQUIPMENT MADE "LIKE NEW" AND TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.

UPON COMPLETION, AND BEFORE FINAL ACCEPTANCE OF THE WORK, ALL DEBRIS, RUBBISH, LEFTOVER MATERIALS, TOOLS AND EQUIPMENT SHALL BE REMOVED FROM THE SITE.

PROTECTION OF WORK UNTIL FINAL ACCEPTANCE: PROTECT ALL MATERIALS AND EQUIPMENT FROM DAMAGE. ENTRANCE OF DIRT AND CONSTRUCTION DEBRIS FROM THE TIME OF INSTALLATION UNTIL FINAL ACCEPTANCE. ANY MATERIALS AND EQUIPMENTS WHICH ARE DAMAGED SHALL BE REPAIRED TO "AS NEW" CONDITION OR REPLACED AT THE DIRECTION OF THE ARCHITECT/ENGINEER. WHERE FACTORY FINISHES OCCUR AND DAMAGE IS MINOR, FINISHES MAY BE TOUCHED UP. IF, IN THE OPINION OF THE ARCHITECT/ENGINEER THE DAMAGE IS EXCESSIVE, FACTORY FINISH SHALL BE REPLACED TO "NEW" CONDITION.

13 SHOP DRAWINGS

SUBMIT SHOP DRAWINGS FOR ALL WORK INCLUDING ALL ITEMS, SERVICES AND SYSTEMS PROVIDED FOR THE PROJECT.

SHOP DRAWINGS SHALL CLEARLY SHOW THE FOLLOWING:

TECHNICAL AND DESCRIPTIVE DATA EQUAL TO OR GREATER THAN THE DATA GIVEN IN THE ITEM SPECIFICATION. INDICATE AL CHARAACTERISTICS, SPECIAL MODIFICATIONS AND FEATURES. WHERE PERFORMANCE AND CHARACTERISTICS DATA IS SHOWN ON THE DRAWINGS OR SPECIFIED, BUT SUBMITTED DATA SHALL BE PROVIDED IN A DEGREE WHICH IS BOTH QUANTITATIVELY AND QUALITATIVELY EQUAL TO THAT SPECIFIED AND SHOWN SO THAT COMPARISON CAN BE MADE. PRESENT DATA IN DETAIL EQUAL TO OR GREATER THAT THAT GIVEN IN THE ITEM SPECIFICATION AND INCLUDE ALL WEIGHTS, DEFLECTIONS, SPEEDS, VELOCITIES, PRESSURE DROPS, OPERATING TEMPERATURES, OPERATING CURVES, TEMPERATURE RANGES, SOUND RATINGS, DIMENSIONS, SIZES, MANUFACTURES' NAMES, MODEL NUMBERS, TYPES OF MATERIAL USED, OPERATING PRESSURES, FULL LOAD AMPERAGES, STARTING AMPERAGES, FOULING FACTORS, CAPACITIES, SET POINTS, CHEMICAL COMPOSITIONS, FOULING FACTORS, CAPACITIES, SET POINTS, CHEMICAL COMPOSITIONS, CERTIFICATIONS AND ENDORSEMENTS, OPERATING VOLTAGES, THICKNESSES, GAUGES AND ALL OTHER RELATED INFORMATION AS APPLICABLE TO PARTICULAR ITEM.

EXCEPTIONS TO OR DEVIATIONS FROM THE CONTRACT DOCUMENTS. SHOULD ARCHITECT / ENGINEER ACCEPT ANY ITEMS HAVING SUCH DEVIATIONS WHICH ARE NOT CLEARLY BROUGHT TO ARCHITECT/ENGINEER'S ATTENTION. IN WRITING, ON ITEM SUBMITTAL, THEN CONTRACTOR IS RESPONSIBLE FOR CORRECTION OF SUCH DEVIATIONS REGARDLESS OF WHEN SUCH DEVIATIONS ARE DISCOVERED.

14 SHOP DRAWINGS TECHNICAL INFORMATION BROCHURE

NEAR CONCLUSION OF WORK AND NOT LESS THAN 10 DAYS PRIOR TO SUBSTANTIAL INSPECTION, SUBMIT A TECHNICAL INFORMATION DOCUMENT (TID) CONTAINING ALL FINAL SHOP DRAWING AND SUBMITTAL INFORMATION FOR THE PROJECT. THIS TECHNICAL INFORMATION INFORMATION DOCUMENT SAHLL CONSIGT OF ONE OF MORE ADEQUATELY SIZED, HARD-COVER, 3-RING BINDER FOR 8 1/2"x11" SHEETS. THIS INFORMATION SHALL BE PROVIDED IN A PDF FORMAT AS WELL ON A THUMBDRIVE.

SHOP DRAWING TECHNICAL AND DESCRIPTIVE DATA SHALL BE INSERTED IN THE TID IN PROPER ORDER ON ALL ITEMS. PROVIDE COMPLETE INFORMATION, INCLUDING, BUT NOT LIMITED TO, WIRING AND CONTROL DIAGRAMS, SCALE DRAWINGS SHOWING THAT PROPOSED SUBSTITUTE EQUIPMENT WILL FIT INTO ALLOTTED SPACE (INDICATE ALL SERVICES ACCESS), CONNECTIONS, ETC.), TEST DATA, AND OTHER DATA REQUIRED TO DETERMINE IF EQUIPMENT COMPLIES FULLY WITH THE SPECIFICATIONS.

15 OPERATING INSTRUCTIONS

SUBMIT FOR CHECKING A SPECIFIC SET OF WRITTEN OPERATING INSTRUCTIONS ON EACH ITEM WHICH REQUIRES INSTRUCTIONS TO OPERATE. AFTER ACCEPTANCE, INSERT INFORMATION IN EACH TECHNICAL INFORMATION DOCUMENT.

16 MAINTENANCE INFORMATION

SUBMIT FOR ACCEPTANCE MAINTENANCE INFORMATION CONSISTING OF MANUFACTURE'S PRINTED INSTRUCTION AND PARTS LISTS FOR EACH MAJOR ITEM OF EQUIPMENT. AFTER ACCEPTANCE, INSERT INFORMATION IN EACH TECHNICAL INFORMATION DOCUMENT.

17 SYSTEM GUARANTEE

PROVIDE A ONE YEAR GUARANTEE. THIS GUARANTEE SHALL BE BY HE CONTRACTOR TO THE OWNER TO REPLACE FOR THE OWNER ANY DEFECTIVE WORKMANSHIP, EQUIPMENT, OR MATERIAL WHICH HAS BEEN FURNISHED UNDER THIS CONTRACT AT NO COST TO THE OWNER FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE SYSTEM. THIS GUARANTEE SHALL ALSO INCLUDE REASONABLE ADJUSTMENTS OF THE SYSTEM REQUIRED FOR PROPER OPERATION DURING THE GUARANTEE PERIOD. EXPLAIN THE PROVISIONS OF GUARANTEE TO OWNER AND THE "INSTRUCTION IN OPERATION CONFERENCE".

18 INSTRUCTION TO OWNER

WHEN ALL WORK IS COMPLETED, PROVIDE THE OWNER AN "INSTRUCTION IN OPERATION CONFERENCE". AT THE CONFERENCE, THE CONTRACTOR SHALL REVIEW WITH THE OWNER ALL APPROPRIATED INFORMATION.

CODE COMPLIANCE



1. TO THE BEST OF MY KNOWLEDGE, THESE PLANS AND SPECIFICATIONS ARE COMPLETE AND COMPLY WITH THE 2020 FLORIDA BUILDING CODE 7th EDITION AND 2020 FLORIDA FIRE PREVENTION CODE AND THE CODES REFERENCED WITHIN.

GENERAL

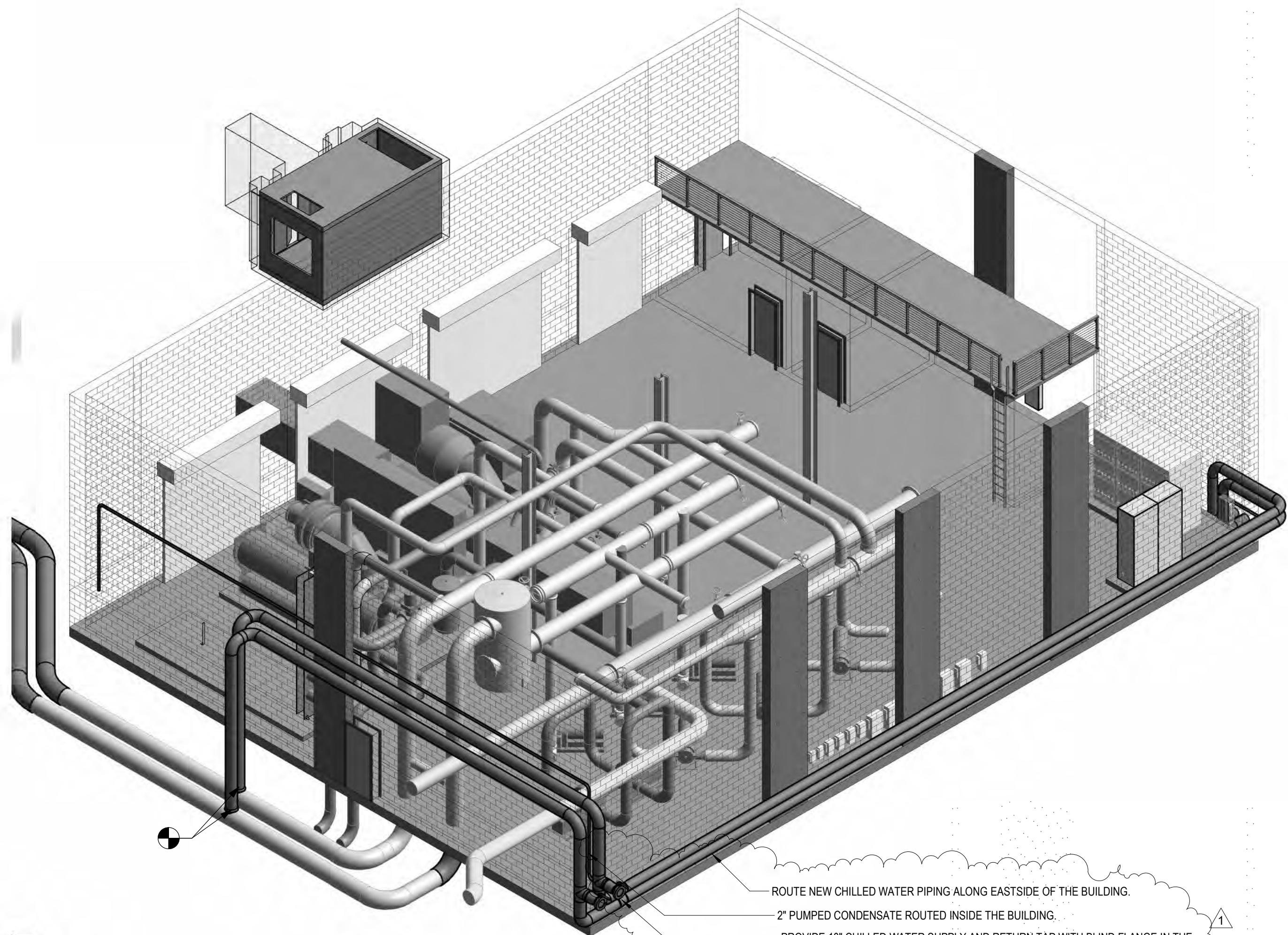
REVISION REFERENCE

DETAIL REFERENCE: TOP - DETAIL#, BOTTOM - DRAWING# SHOWN ON

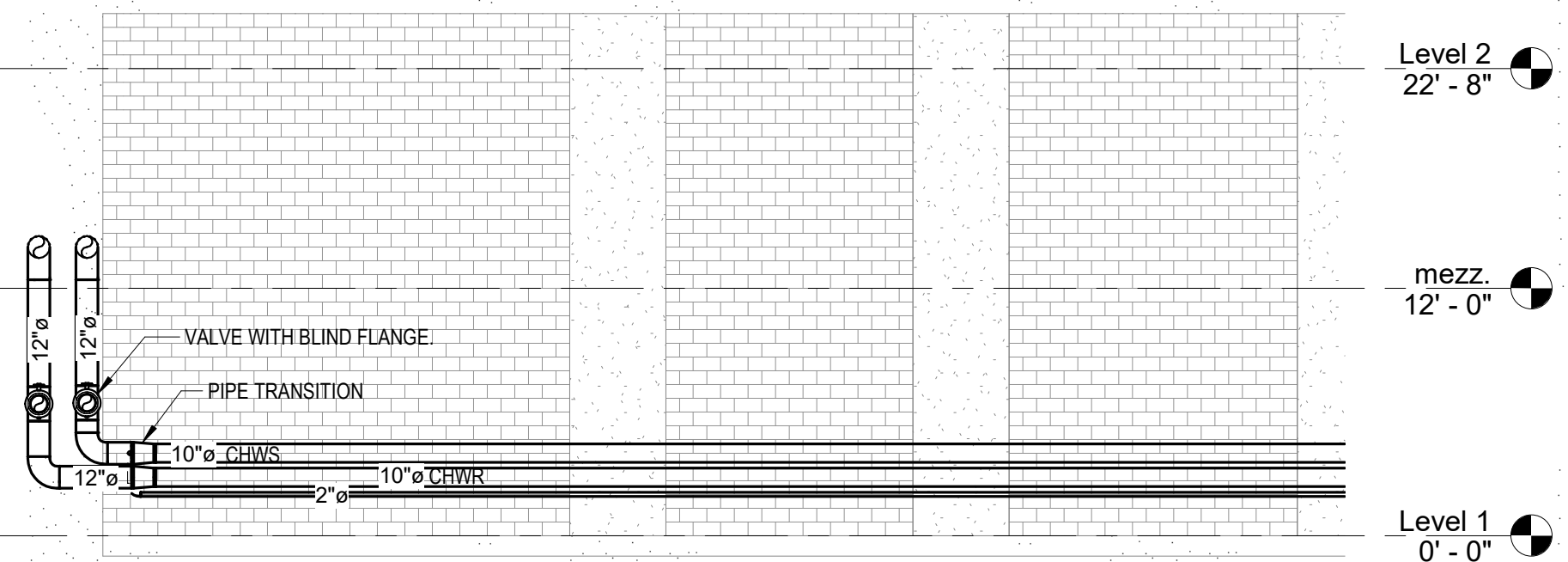
SHEET NOTE CALLOUT

	
<p><b>VOLT AIR</b> CONSULTING ENGINEERS Theodore L. Young, P.E. 6055 Benjamin Road, Suite A Tampa, Florida 33635 Tel: 813-988-7170 Fax: 813-988-7150 COA 27156, P.E. No. 0288</p>	
<p>THIS FORM IS SENTINALLY MONITORED AND SELECTED BY L. ROLAND YOUNG, JR., P.E. USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE VOID. A DIGITAL COPY MUST BE OBTAINED FROM THE ENGINEER. A CODE MUST BE SCRIBED ON ANY ELECTRONIC COPIES. TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.</p>	
	
<p><b>ENCORE CEP - LOT 12</b> <b>EXPANSION</b> <b>CITY OF TAMPA, HILLSBOROUGH COUNTY, FL</b></p>	
<p><b>MECH. LEGENDS, SYMBOLS, AND NOTES</b></p>	
<p>Drawing Title</p>	
<p>07/29/2022</p>	
<p>DATE</p>	
<p>OWNERS COMMENTS</p>	
<p>DESCRIPTION</p>	
<p>REV</p>	
<p>DRAWN BY:</p>	
<p>CHECKED BY:</p>	
<p>SCALE:</p>	
<p>ISSUED FOR:</p>	
<p>DATE:</p>	
<p><input type="checkbox"/> CD 25%</p>	
<p><input type="checkbox"/> CD 50%</p>	
<p><input type="checkbox"/> CD 95% Review</p>	
<p><input type="checkbox"/> CD 100%</p>	
<p><input type="checkbox"/> Pricing</p>	
<p><input type="checkbox"/> Bidding</p>	
<p><input checked="" type="checkbox"/> Permit</p>	
<p><input type="checkbox"/> Construction</p>	
<p>04/18/2022</p>	
<p>Drawing No:</p>	
<p><b>M000</b></p>	

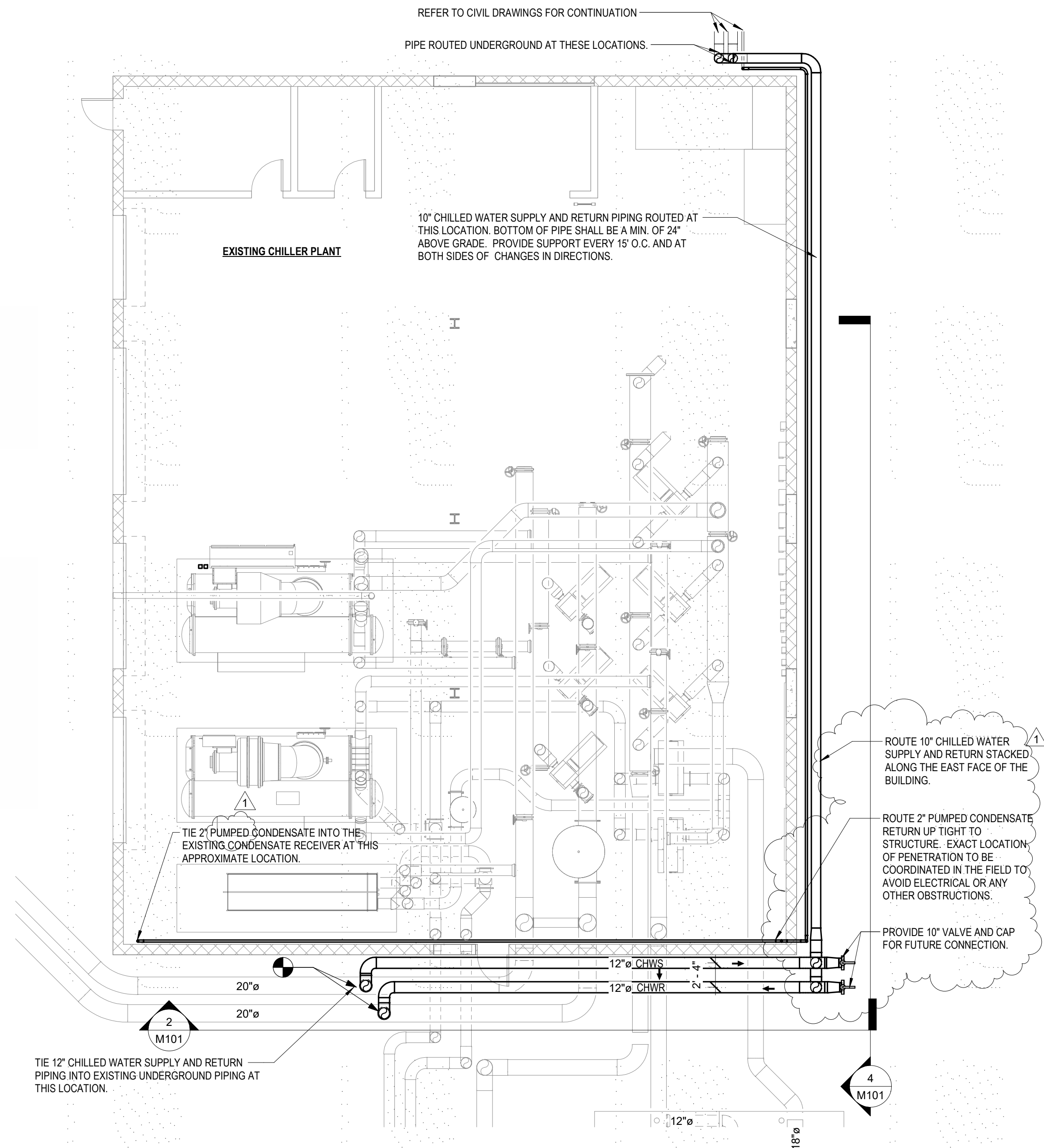




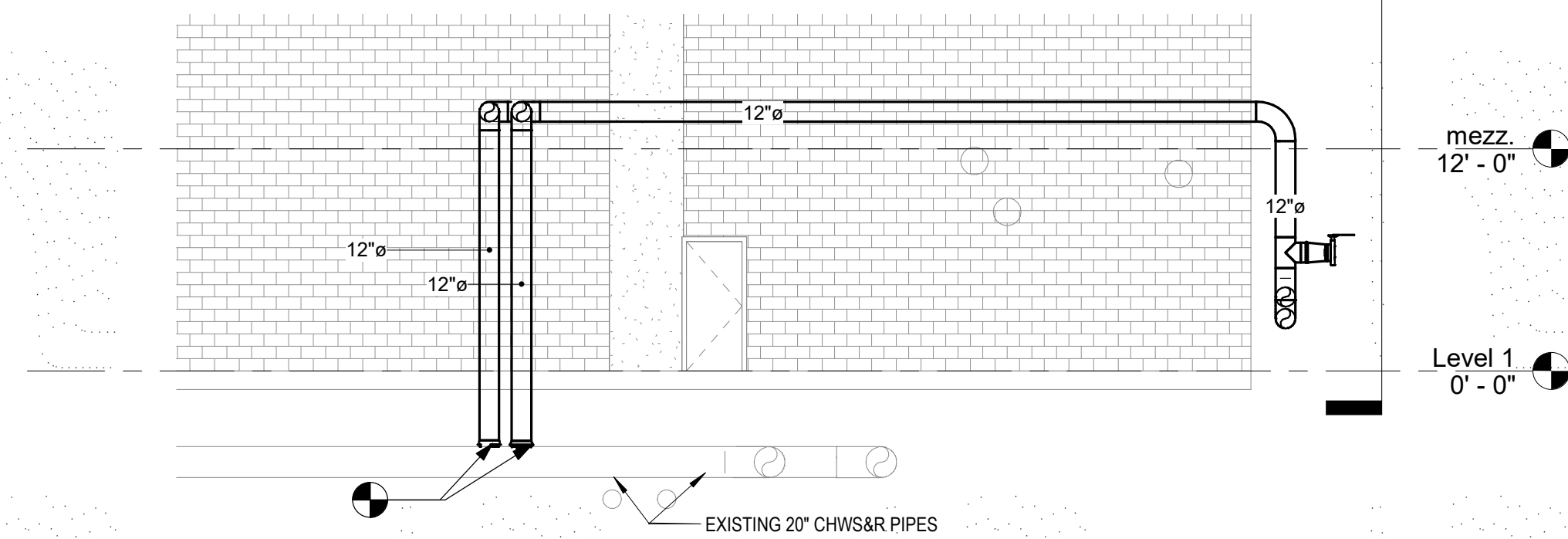
3 ISOMETRIC VIEW



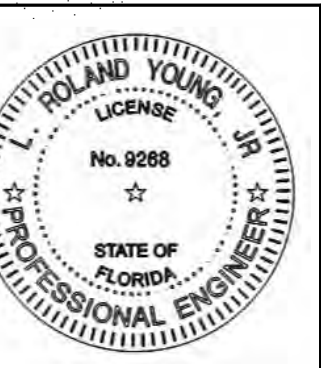
4 EASTSIDE EXTERIOR ELEVATION  
1/8" = 1'-0"



1 FLOOR PLAN - MECHANICAL - PHASE II  
1/8" = 1'-0"



2 SOUTHSIDE EXTERIOR ELEVATION  
1/8" = 1'-0"



**VOLT AIR**  
CONSULTING ENGINEERS  
11815 HWY 19, SUITE 200, TAMPA, FL 33613  
TEL: 813.889.9713  
FAX: 813.889.9714  
www.voltaire.com  
This document is the property of VOLT AIR CONSULTING ENGINEERS. IT IS TO BE USED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF VOLT AIR CONSULTING ENGINEERS. THE USER AGREES TO HOLD VOLT AIR CONSULTING ENGINEERS HARMLESS FROM ANY AND ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES, INCLUDING ATTORNEY'S FEES, THAT MAY BE INCURRED BY VOLT AIR CONSULTING ENGINEERS AS A RESULT OF THE USER'S USE OF THIS DOCUMENT. TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.



**ENCORE CEP - LOT 12**  
**EXPANSION**  
CITY OF TAMPA, HILLSBOROUGH COUNTY, FL  
**CHILLER YARD PLAN - MECHANICAL**

Drawing Title	DATE
ENCORE CEP - LOT 12 EXPANSION CHILLER YARD PLAN - MECHANICAL	07/29/2022

OWNERS COMMENTS	DESCRIPTION

REV	DATE	DESCRIPTION
1	04/18/2022	Permit

DRAWN BY: K.R.  
CHECKED BY: R.F.W.  
SCALE: 1/8" = 1'-0"  
ISSUED FOR: DATE:  
☐ CD 25%  
☐ CD 50%  
☐ CD 95% Review  
☐ CD 100%  
☐ Pricing  
☐ Bidding  
☒ Permit  
☐ Construction

Drawing No:

**M101**

### AUTOMATIC AIR VENT (TYPICAL)

TYPICAL RISE OVER CHS/R BRANCH  
PIPES TO INDIVIDUAL LOT

TYPICAL DIP UNDER CHS/R. BRANCH  
PIPES TO INDIVIDUAL LOT

SECTION A-A

### DIRECT BURIED VALVE BOX HORIZONTAL INSTALLATION (TYPICAL)

### DIRECT BURIED VALVE BOX VERTICAL INSTALLATION (TYPICAL)

### TYPICAL PIPE TRENCH

TYPICAL PRE-CAST VALVE BOX AND NEW CHS/R PIPING



## GENERAL STRUCTURAL NOTES

### GENERAL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR AND SHALL VERIFY AND COORDINATE ALL DIMENSIONS AND DETAILS BEFORE PROCEEDING WITH WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND ENGINEERS.
- DETAILS SHOWN IN ANY SECTION APPLY TO ALL SIMILAR SECTIONS AND CONDITIONS UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL FULLY BRACE AND OTHERWISE PROTECT ALL WORK IN PROGRESS UNTIL THE BUILDING IS COMPLETELY FINISHED.
- ALL STRUCTURAL ITEMS FOR THIS PROJECT HAVE BEEN DESIGNED IN ACCORDANCE WITH APPROPRIATE PROVISIONS OF EACH OF THE FOLLOWING:
  - THE FLORIDA BUILDING CODE, (SEVENTH EDITION) 2020.
  - CI STANDARD 318-14 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
  - AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" 360-16.
  - ASCE 7-16 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES".
- THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE ARCHITECTURAL AND MECHANICAL DRAWINGS. IF THERE IS A DISCREPANCY BETWEEN DRAWINGS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT PRIOR TO PERFORMING WORK. IN CASE OF CONFLICT THE MOST STRINGENT CONDITION SHALL APPLY.
- ALL DIMENSIONS MUST BE COORDINATED WITH ARCHITECTURAL DRAWINGS AND WITH EQUIPMENT MANUFACTURER (I.E. WINDOW, DOOR, AIR HANDLER, ETC.). CONTRACTOR MUST OBTAIN AN ARCHITECTURAL DIRECTIVE IN CASE OF ANY CONFLICT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN IN STRUCTURAL DRAWINGS.

### CONCRETE AND REINFORCING:

- ALL CONCRETE WORK SHALL CONFORM TO THE LATEST ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI-318".
- ALL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTHS AS INDICATED BELOW:

CONCRETE STRENGTH	MAX WATER CEMENT RATIO	TYPE AGGREGATE	LOCATION USED
3000 PSI	0.52	STONE	FOUNDATIONS
- ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE, NEW BILLET STEEL, DEFORMED BARS, CONFORMING TO ASTM A-615, GRADE 60. ALL BARS SHALL BE SECURELY SUPPORTED AND WIRED IN PLACE PRIOR TO POURING CONCRETE. ALL REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A-706.
- CONCRETE COVER FOR REINFORCING BARS SHOWN IN SECTIONS OR TYPICAL DETAILS.
- SUMPS OF OVER 4 INCHES WILL NOT BE PERMITTED UNLESS THE HRWR ADMIXTURE (SUPER PLASTICIZER) IS USED. MAXIMUM SLUMP IS THEN 8 INCHES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- NO ADMIXTURE SHALL BE USED IN CONCRETE EXCEPT WITH THE PERMISSION OF THE ENGINEERS AND AFTER LABORATORY DESIGN MIX APPROVAL. ALL ADMIXTURES SHALL CONTAIN NO MORE CHLORIDE IONS THAN ARE PRESENT IN MUNICIPAL DRINKING WATER.
- WATER REDUCING ADMIXTURE SHALL CONFORM TO THE ASTM C-494, TYPE A, AND SHALL BE USED IN ALL CONCRETE.
- AIR ENTRAINING ADMIXTURE SHALL CONFORM TO ASTM C260. AIR CONTENT OF CONCRETE SHALL BE USED AS FOLLOWS:
  - FOR CONCRETE EXPOSED TO SOIL AND/OR WEATHER, 5%.
  - FOR INTERIOR WALLS, COLUMNS, AND SLABS, 3%.
- FLY ASH - ASTM C618, TYPE C OR TYPE F SHOULD BE USED BUT NOT TO EXCEED 20% CEMENTITIOUS CONTENT.
- ALL CONCRETE ELEMENTS SHALL RECEIVE A CURING COMPOUND. THE CURING COMPOUND SHALL CONFORM TO ASTM C309 AND SHALL HAVE 30% SOLIDS MINIMUM. WATER/BLANKET CURING AS PER ACI RECOMMENDATION MAY BE USED AS ALTERNATE.

### STRUCTURAL STEEL:

- ALL STRUCTURAL STEEL WORK SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST A.I.S.C. SPECIFICATIONS.
- STRUCTURAL STEEL SHALL CONFORM TO:

WIDE FLANGE (WF)	ASTM A992 (50 KSI)
SHAPES (L,T,C,PL)	ASTM A36
STRUCTURAL TUBE (HSS)	ASTM A500 (46 KSI)
STEEL PIPE (HSS)	ASTM A500 (42 KSI)
ANCHOR BOLTS	ASTM F1554 (36 KSI) U.N.O.
FRAMING BOLTS	ASTM A325 OR A490
WELDING ELECTRODES	E70XX
- ALL HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM SPECIFICATION A325 AND SHALL BE PROVIDED WITH HARDENED WASHERS UNDER THE TURNED ELEMENT (NUT OR BOLT HEAD).
- INSTALLATION AND TIGHTENING OF ALL HIGH STRENGTH BOLTS SHALL CONFORM TO THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".
- SHOP CONNECTIONS MAY BE WELDED OR HIGH STRENGTH BOLTED. ALL BOLTS SHALL BE 3/4" DIAMETER MINIMUM. ALL CONNECTIONS SHALL CONFORM TO THE TYPICAL CONNECTION DETAILS SHOWN ON THE PLANS UNLESS SPECIFICALLY APPROVED BY THE ENGINEER.
- ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE, AWS D1.1. ALL WELDING SHALL BE PERFORMED USING E70XX U.N.O. CUTS, HOLES, COPINGS, ETC. REQUIRED IN STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES SHALL BE SHOWN IN THE STRUCTURAL STEEL SHOP DRAWINGS AND SHALL BE MADE IN THE SHOP. HOLES SHALL BE REINFORCED AS REQUIRED BY THE ENGINEER.
- BURNING OF HOLES, CUTS, ETC. IN STRUCTURAL STEEL MEMBERS IN THE FIELD WILL NOT BE PERMITTED, EXCEPT WITH THE SPECIFIC APPROVAL OF THE ENGINEER.
- ALL STEEL MEMBERS EXPOSED TO THE EXTERIOR SHALL BE HOT DIPPED GALVANIZED.
- SEE SPECIFICATIONS FOR PAINTING OF STRUCTURAL STEEL. ALL FABRICATION AND ERECTION MARKS SHALL BE COVERED DURING FIELD TOUCH-UP PAINTING.
- ALL CONNECTIONS TO BE DOUBLE ANGLE FRAMED BEAM CONNECTION PER AISC UNLESS NOTED OTHERWISE. ALL BOLTS TO BE 3/4" MINIMUM DIAMETER UNLESS NOTED OTHERWISE. SHOP CONNECTIONS MAY BE WELDED OR BOLTED. WELDS ARE TO BE EQUAL IN STRENGTH TO BOLTS.
- EXPOSED ENDS OF STRUCTURAL TUBES OR PIPES SHALL BE CAPPED WITH A MINIMUM 1/4" PLATE U.N.O.
- ALL WELDS SHALL BE VISUALLY INSPECTED AND COMPLIANT WITH AWS D1.1 ACCEPTANCE CRITERIA. ALL COMPLETE JOINT PENETRATION WELDS SHALL BE TESTED FOR THEIR FULL LENGTH BY MEANS OF AN APPROVED NONDESTRUCTIVE TEST IN ACCORDANCE WITH AWS D1.1.

### FOUNDATION NOTES:

- FOUNDATIONS FOR THIS PROJECT HAVE BEEN DESIGNED ASSUMING THE SOIL IS SUITABLE TO SUPPORT 2000 PSF SPREAD FOOTINGS WITH SETTLEMENT NOT TO EXCEED 1/8". CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER TO DO A SOIL EXPLORATION WHICH MUST INCLUDE BORINGS AT A MINIMUM RATE OF ONE FOR EVERY 3000 SQUARE FOOT OF BUILDING BUT NOT LESS THAN TWO BORINGS. THE BORINGS MINIMUM DEPTH SHOULD BE TWENTY FIVE FEET (25'-0") OR TWICE THE LARGEST DIMENSION OF THE LARGEST FOUNDATION WHICH EVER IS GREATER. THESE REQUIREMENTS MAY BE MODIFIED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER. A REPORT SIGNED AND SEALED BY A PROFESSIONAL GEOTECHNICAL ENGINEER MUST BE SUBMITTED TO MCE PRIOR TO ANY FOUNDATION WORK.
- FILL AND SUBGRADE PREPARATION SHALL BE AS NEEDED TO OBTAIN THE SAFE BEARING PRESSURE INDICATED ON NOTE 1. ALL ORGANICS AND UNSUITABLE SOIL SHOULD BE REMOVED AND A MINIMUM OF 98% MUST BE OBTAIN UNLESS GEOTECHNICAL ENGINEER RECOMMENDATIONS ALLOW A LOWER PERCENT OF COMPACTION.
- ALL COLUMN FOOTINGS SHALL BE CENTERED UNDER COLUMN CENTERLINES UNLESS OTHERWISE NOTED.
- BACKFILLING AGAINST FOUNDATION WALLS SHALL BE DONE CAREFULLY WITH SMALL COMPACTION EQUIPMENT, AFTER SLABS ON GROUND ARE IN PLACE AND CONCRETE HAS SET. NO TRUCKS, BULLDOZERS, ETC. SHALL BE ALLOWED CLOSER THAN 6'-0" TO ANY FOUNDATION WALL. ANY WALL 3'-0" OR HIGHER MUST BE BRACED DURING THE CONSTRUCTION PROCESS.
- NO FOUNDATIONS SHALL BE PLACED ABOVE 1 VERTICAL ON 2 HORIZONTAL SLOPES EXTENDED FROM THE CLOSEST EDGE OF ANY UNDISTURBED SOIL OR OTHER FOUNDATION STRUCTURE. BOTTOM OF FOOTINGS SHALL NOT BE LESS THAN 1'-0" BELOW EXISTING GRADE (U.N.O.).
- FOR FOUNDATIONS SIZE AND REINFORCING SEE SCHEDULE.

### SHOP DRAWINGS:

- NO STRUCTURAL DRAWINGS SHALL BE REPRODUCED FOR USE AS SHOP DRAWINGS.
- ALL DIMENSIONAL COORDINATION SHALL BE DONE BY THE CONTRACTOR AND/OR HIS DETAILER.
- DETAILER SHALL CHECK ALL ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ALL ATTACHMENTS, CLIPS, OPENINGS, OR DUCT WORK AFFECTING STRUCTURAL MEMBERS. ALL ITEMS SHALL BE SHOWN ON SHOP DRAWINGS.
- ALL SHOP DRAWINGS SHALL BE SUBMITTED ELECTRONICALLY IN PDF FORMAT. DISTRIBUTION AS PER ARCHITECT INSTRUCTIONS.
- CONTRACTOR SHALL HAVE SHOP DRAWINGS WHICH HAVE BEEN SATISFACTORILY REVIEWED BY THE ARCHITECT AND/OR ENGINEER AND CONFIRMED BY THE CONTRACTOR BEFORE PROCEEDING WITH ANY WORK.
- DETAILER SHALL USE THE SAME STRUCTURAL ELEMENTS NUMBERS IN HIS DETAILS AS THOSE SHOWN ON CONTRACT DRAWINGS.
- SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOULD BE SUBMITTED TO MCE WITH A MINIMUM TIME TO BE REVIEWED OF 10 WORKING DAYS. THE TIME INDICATED ABOVE IS FOR MCE REVIEW ONLY. CONTRACTOR MUST INCLUDE ENOUGH TIME FOR DELIVERY, ARCHITECTURAL REVIEW, AND OWNERS REVIEW AND WORK THIS TIME IN THE PROJECT SCHEDULE AS NEEDED.
- THERE SHALL BE NO DEVIATION FROM THESE CONSTRUCTION DOCUMENTS. IF ANY CHANGES ARE PROPOSED BY THE CONTRACTOR OR THE PROVIDER OF THE SHOP DRAWINGS, THEY SHOULD BE CLEARLY INDICATED, SIGNED AND SEALED DRAWINGS AND CALCULATIONS BY A FLORIDA PROFESSIONAL ENGINEER MUST BE PROVIDED. ANY CHANGES WITHOUT PROPER DOCUMENTATION INDICATED ABOVE WILL RESULT IN SOME REVISIONS BY THE ENGINEER OF RECORD AND/OR ARCHITECT. THE COST FOR THESE REVISIONS INCLUDING ENGINEER AND ARCHITECTURAL FEES SHALL BE PAID BY THE CONTRACTOR.

### GENERAL EXISTING CONDITIONS:

- CONTRACTOR TO SURVEY AND COORDINATE ALL EXISTING UNDERGROUND PIPING AND UTILITIES AND COORDINATE WITH FOUNDATION PLANS PRIOR TO PERFORMING ANY WORK SHOWN IN THESE DRAWINGS.
- IF ANY CONFLICTS, NOTIFY ENGINEERS IMMEDIATELY FOR REVISED DRAWINGS.
- NO NEW FOUNDATIONS SHALL UNDERMINE EXISTING BUILDING OR COOLING TOWER FOUNDATIONS.
- NO NEW FOUNDATIONS SHALL BE PLACED OVER EXISTING PIPING OR UNDERGROUND UTILITIES.

### LOAD SCHEDULE & WIND DESIGN DATA:

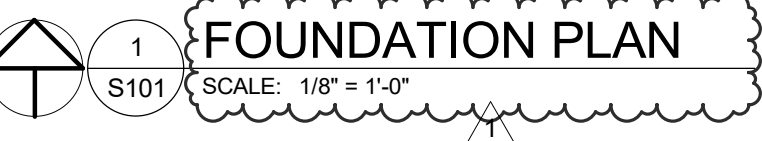
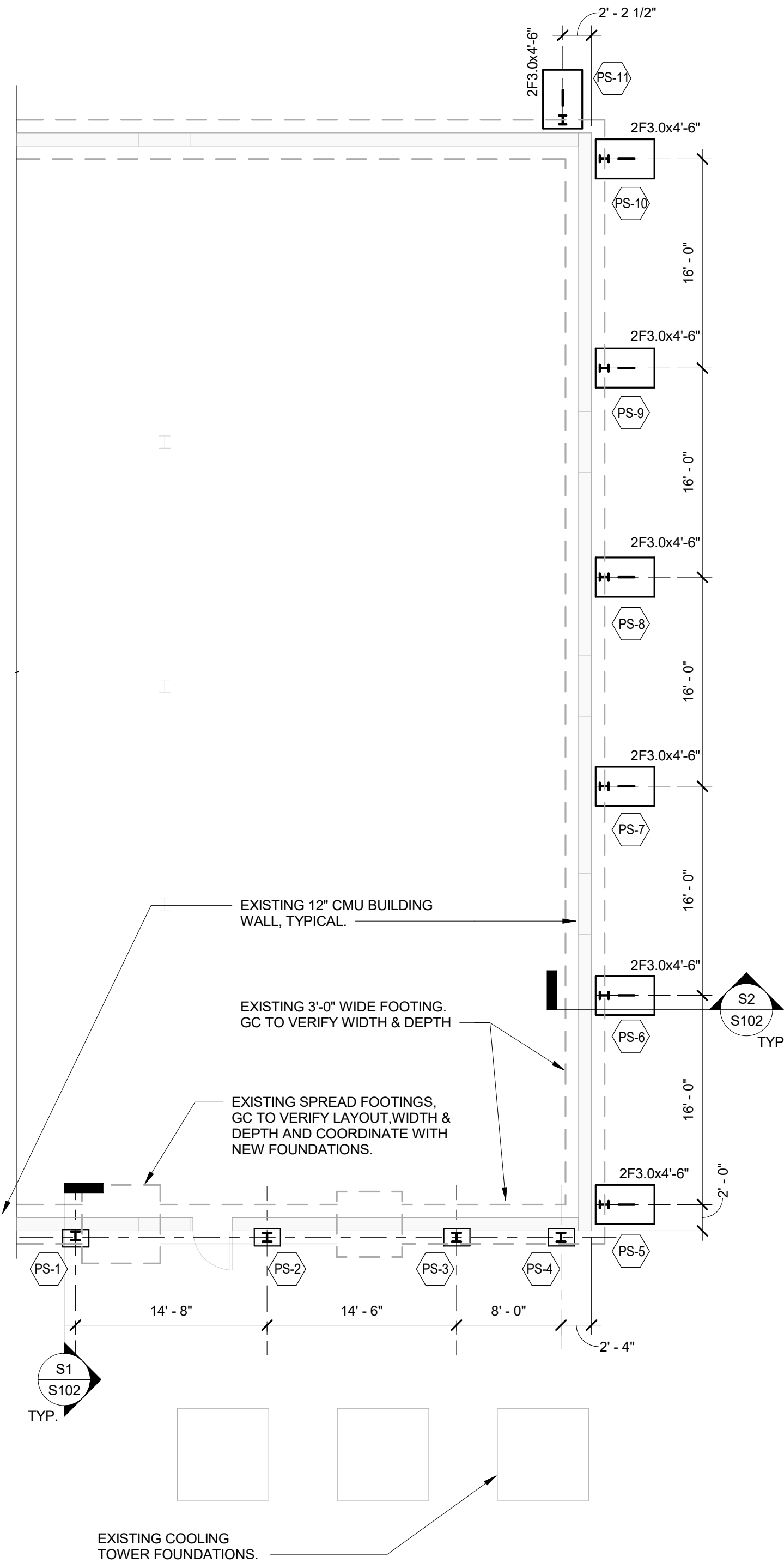
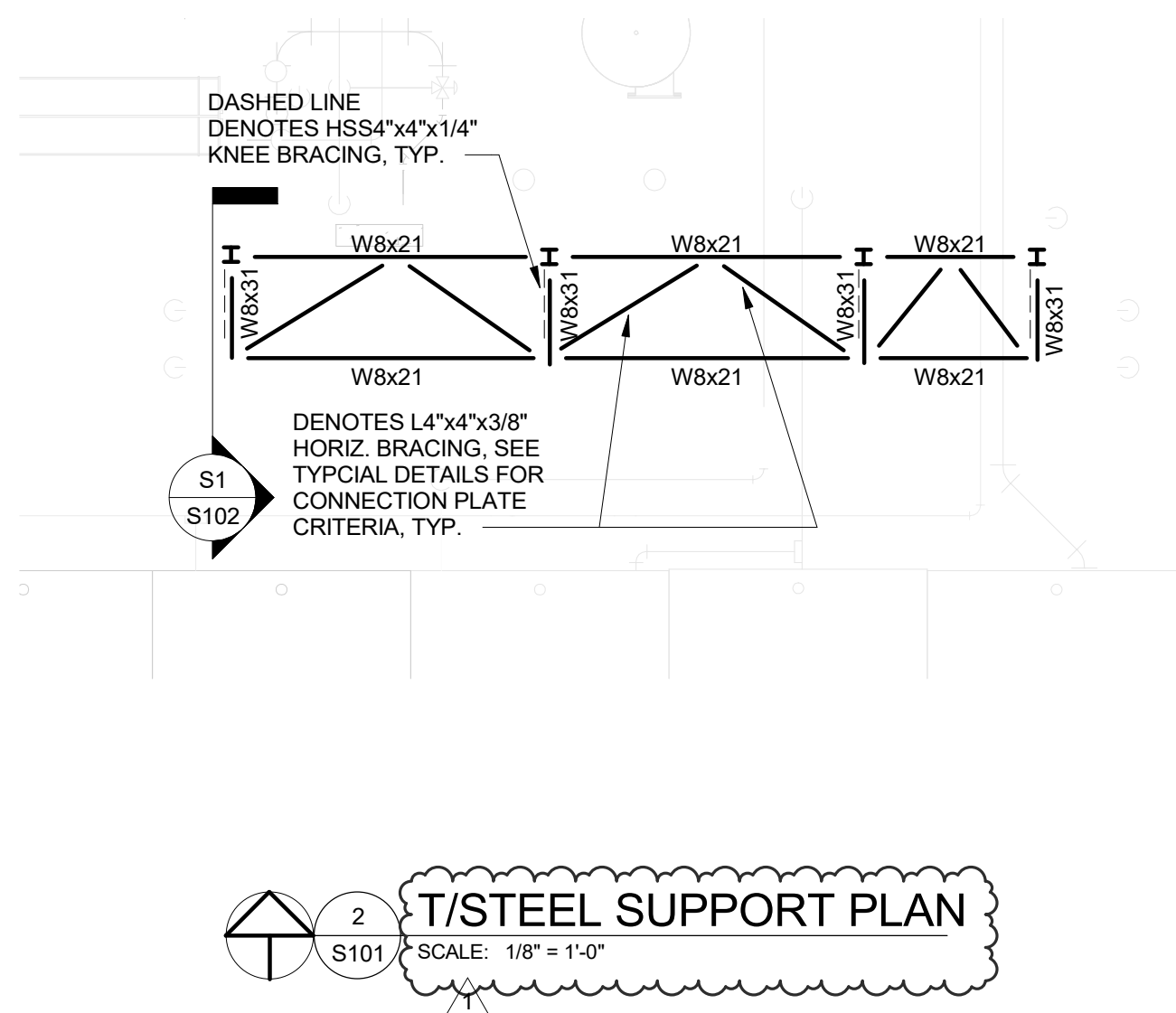
DEAD LOAD (12"Ø PIPE W/ WATER = 100-LB/FT.

#### CODE:

ASCE 7-10 FLORIDA BUILDING CODE, (SIXTH EDITION) 2017.  
ASCE/SEI 7-16

BASIC WIND SPEED	142 mph (Vult) 110 mph (Vasd)
CATEGORY (RISK)	III
EXPOSURE	B
BUILDING HEIGHT (H)	H < 20ft.
ENCLOSURE CLASSIFICATION	OPEN
INTERNAL PRESSURE COEFFICIENT	± 0.00

DESIGN WIND PRESSURE ON PIPE = 30-PSF



#### GENERAL PLAN NOTES:

- CONTRACTOR SHALL PROVIDE FULLY DIMENSIONED SURVEY OF ALL EXISTING UNDERGROUND PIPING AND UTILITIES PRIOR TO PERFORMING ANY WORK SHOWN IN THESE DOCUMENTS.
- NOTIFY ENGINEER IF CONFLICT WITH NEW FOUNDATION ELEMENTS AND EXISTING CONDITIONS IS OBSERVED OR ANTICIPATED.
- NO WORK SHALL OCCUR UNTIL COORDINATED LAYOUT IS COMPLETED WITH EXISTING ELEMENTS ABOVE AND BELOW GRADE.
- ALL FRAMING SHOWN SHALL BE HOT DIPPED GALVANIZED.

COLUMN FOOTING SCHEDULE					
MARK*	LENGTH	WIDTH	THICKNESS	TOP & BOTT. REINF.* EA. WAY U.N.O.	REMARKS
2F3.0x4'-6"	4' - 6"	3' - 0"	1' - 2"	6-#4 SW / 4-#4 LW	

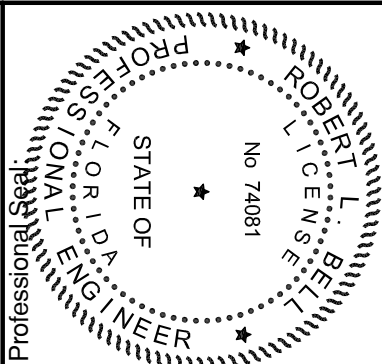


5523 WEST CYPRESS ST., STE.200  
TAMPA, FLORIDA 33607-1735  
P | 813.287.3600 F | 813.287.3622

www.mceengineers.com

THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF MASTER CONSULTING ENGINEERS, INC. AND MAY NOT BE REPRODUCED, COPIED, ALTERED OR USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN AUTHORIZATION FROM MASTER CONSULTING ENGINEERS, INC.

CA: 8426 PROJ. NO. 2030-024  
© COPYRIGHT 2022



**VOLT AIR**  
CONSULTING ENGINEERS  
6005 Benjamin Road, Suite A  
Tampa, Florida 33634 TEL 888.855.0743  
COA 27198 Project No. \_\_\_\_\_

**TRANE**



ENCORE CEP - LOT 12

EXPANSION

CITY OF TAMPA, HILLSBOROUGH COUNTY, FL.

Drawing Title

GNL. NOTES, FOUND. & FRAMING PLANS

DATE	DESCRIPTION	REV
5/23/2022	PIPE SUPPORT REVISIONS	

DRAWN BY:

CHECKED BY:

SCALE: 1/8" = 1'-0"

ISSUED FOR:

DATE:

☐ CD 25%

☐ CD 50%

☐ CD 95% Review

☐ CD 100%

☐ Pricing

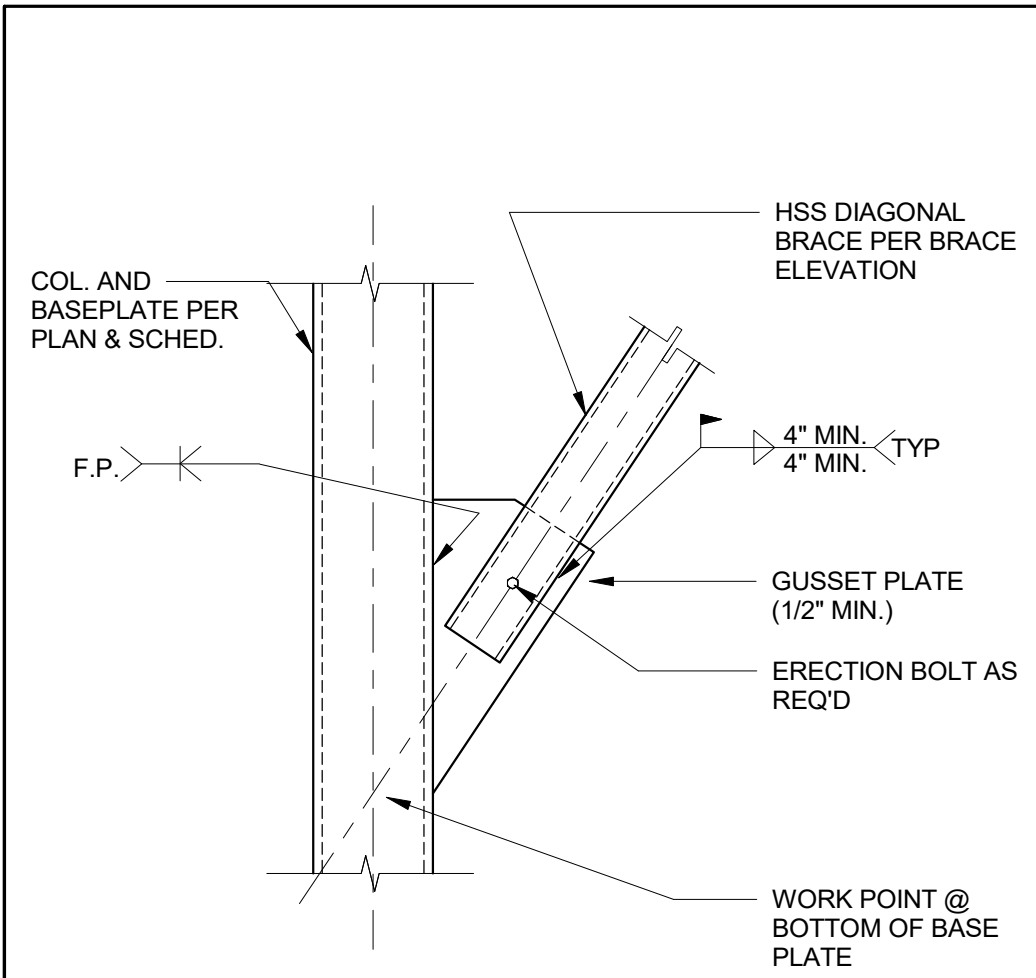
☐ Bidding

☒ Permit 04/18/22

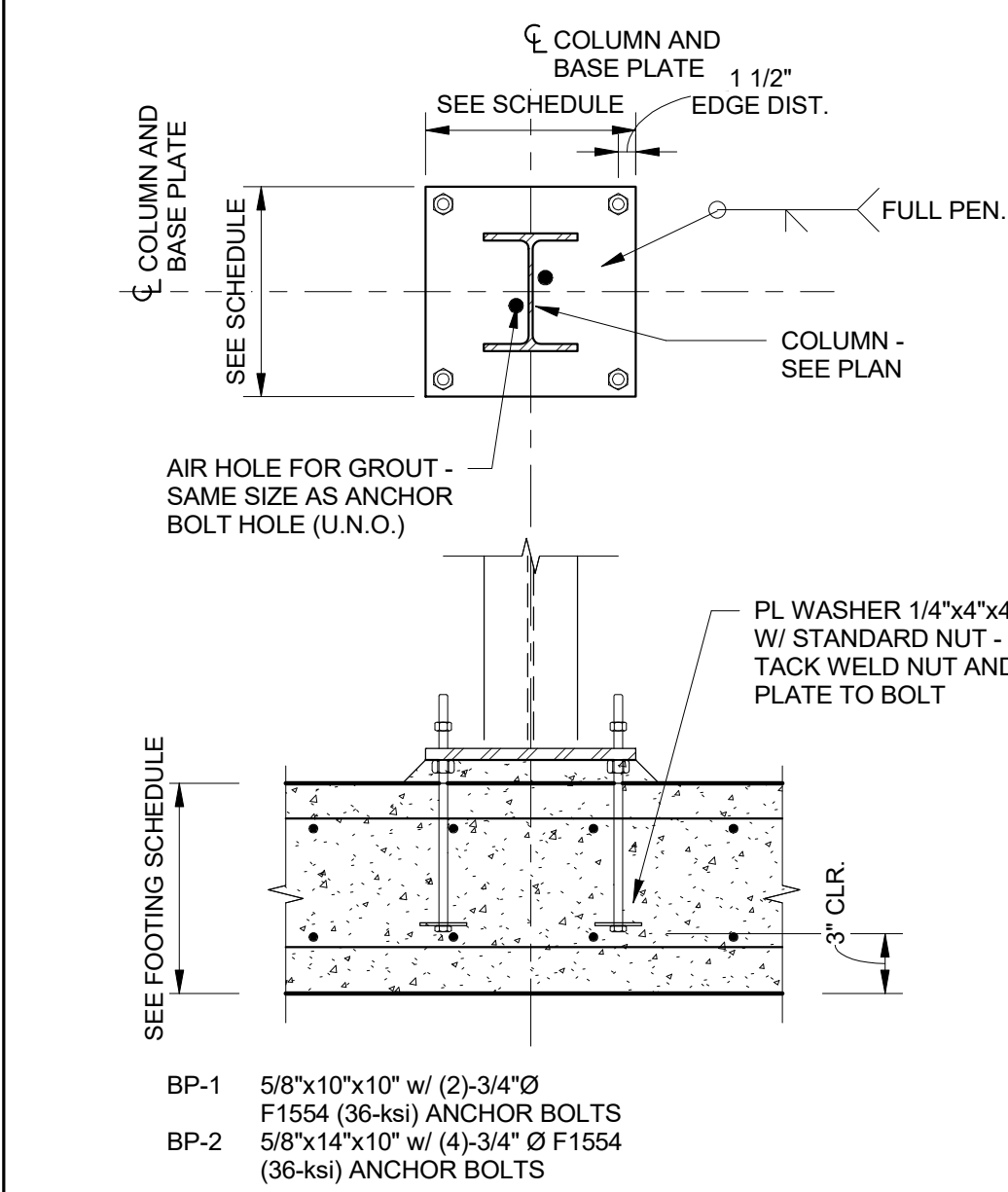
☐ Construction

Drawing No:

**S101**



TYPICAL BRACE DETAIL T2

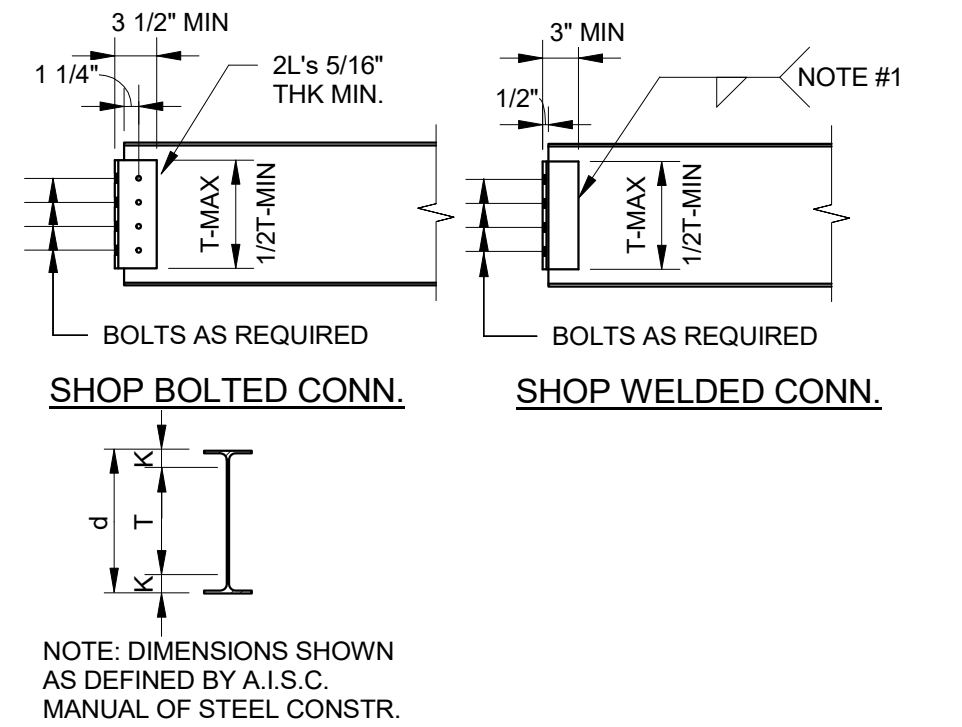


BASE PLATE DETAILS

THE MINIMUM CLEAR COVER FOR REINFORCEMENT BARS SHALL BE ONE BAR DIAMETER OR THE VALUES TABULATED BELOW, WHICHEVER IS THE GREATER.	
SLABS (LT.WT. CONC. OR STONE CONC.)	1"
GIRDERS AND BEAMS (TO STIRRUPS)	1 1/2"
JOISTS (STONE OR LT.WT.) BOTTOM BARS	1 1/4"
<b>TIED COLUMNS AND PIERS</b>	
SURFACE EXPOSED TO EARTH AND WEATHER (TO TIES)	2"
OTHER SURFACES (TO TIES)	1 1/2"
<b>FOUNDATION ELEMENTS</b>	
FORMED SURFACES	2"
SURFACES PLACED AGAINST EARTH	3"
<b>WALLS</b>	
SURFACES EXPOSED TO EARTH	2"
SURFACES EXPOSED TO WEATHER	1 1/2"
OTHER SURFACES	1"

TYPICAL CONCRETE COVER FOR REINFORCING BARS

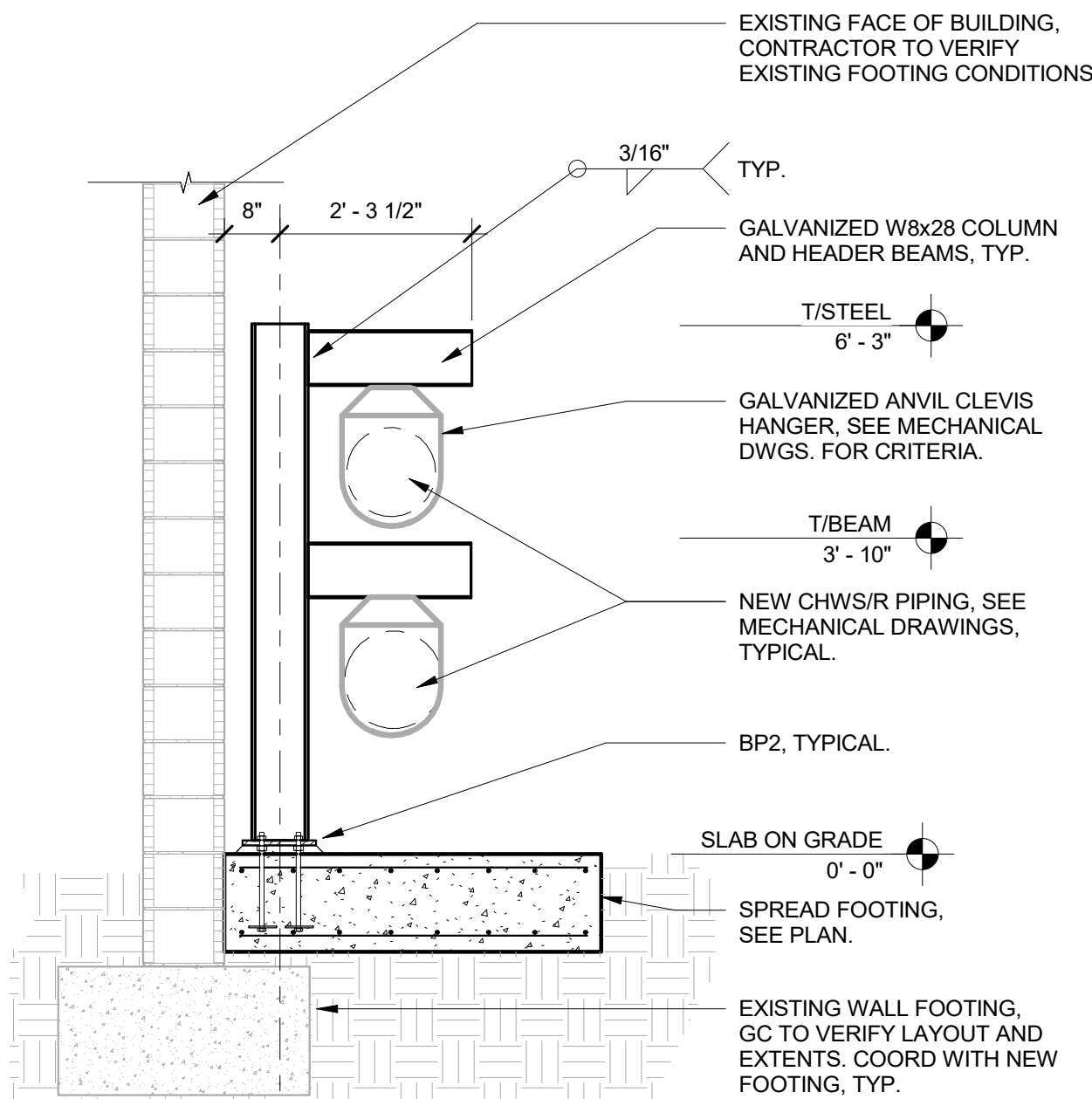
3-064



- NOTES:
- ALL CONNECTIONS SHALL BE DESIGNED FOR 1/2 MAX. UNIFORM LOAD CARRYING CAPACITY UNLESS GREATER REACTION IS SHOWN ON PLAN. IN ANY CASE, CONNECTIONS, SHALL NOT BE LESS THAN STD. A.I.S.C. CONNECTION FOR THE PARTICULAR BEAM DEPTH.
  - DETAILER SHALL SUBMIT FOR APPROVAL, STANDARD CONNECTION DETAILS CONFORMING TO ABOVE DETAILS W/ERECTION DRAWINGS.
  - MILL COLUMNS, TO BEAR OR PROVIDE FULL PENETRATION WELD AT BASE PL'S & CAP PL'S AT COLUMNS CARRYING BEAMS.
  - WHERE BEAMS FRAME TO FITTED STIFFENERS AT COLUMNS PROVIDE SHEAR PLATE CONNECTION W/ STRENGTH CAPACITY AS PER NOTE 1.
  - ALL BOLTS TO BE MIN. 3/4"Ø A325X FRAMING BOLTS FRICTION-TYPE UNLESS NOTED OTHERWISE. ALL WELDING ELECTRODES TO BE E70 XX.

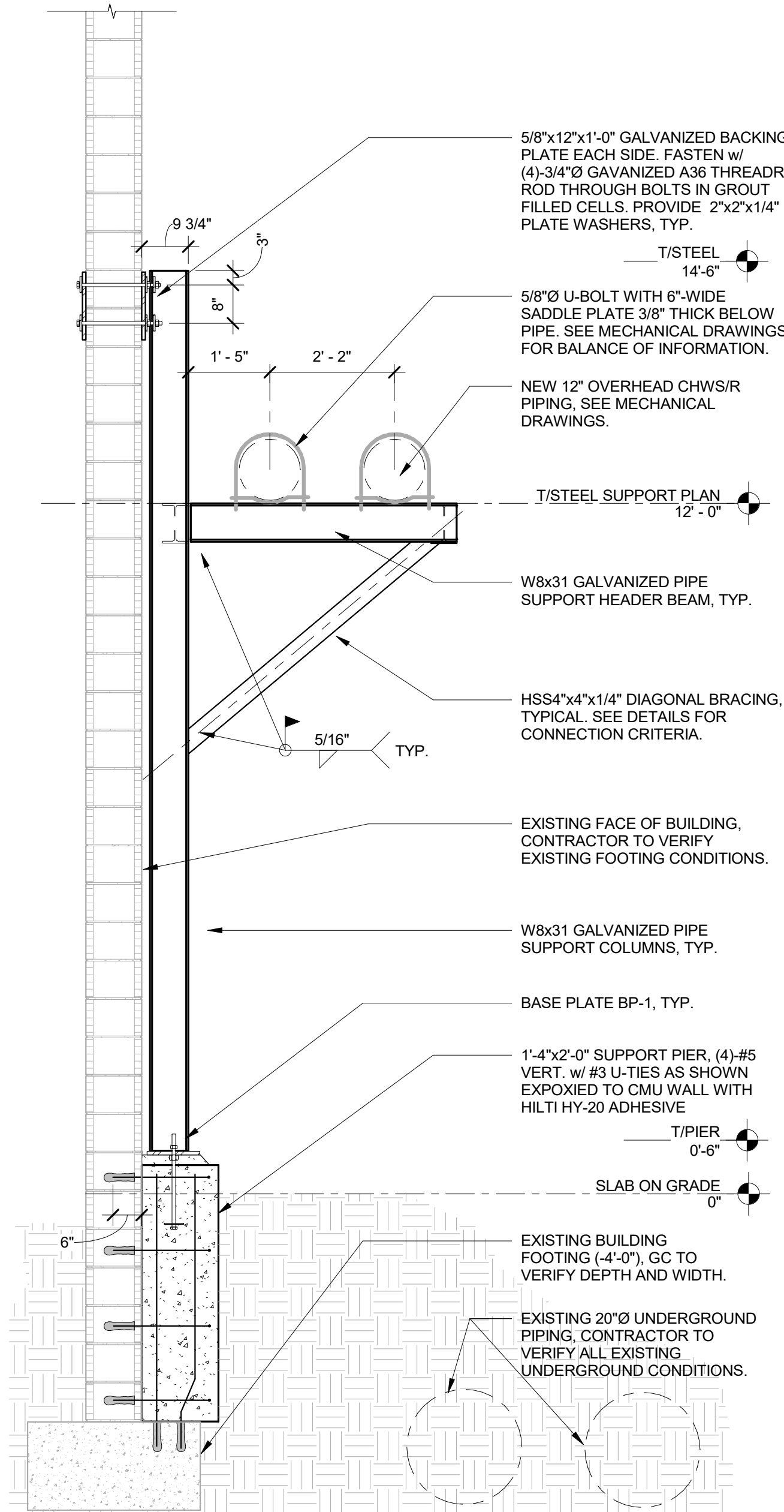
STEEL BEAM CONNECTION DETAILS

5-001



LOW PIPE SUPPORT FRAME

SCALE: 1/2" = 1'-0"

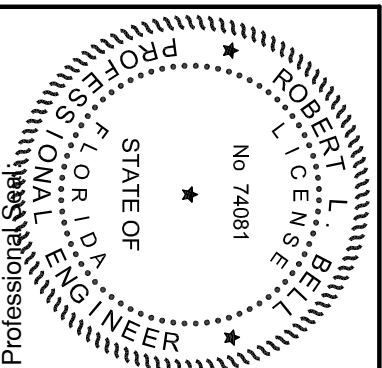


HIGH PIPE SUPPORT FRAME

SCALE: 1/2" = 1'-0"



5523 WEST CYPRESS ST., STE.200  
TAMPA, FLORIDA 33607-1735  
P | 813.287.3600 F | 813.287.3622  
www.mceengineers.com  
THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF MASTER CONSULTING ENGINEERS, INC. AND MAY NOT BE REPRODUCED, COPIED, ALTERED OR USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN AUTHORIZATION FROM MASTER CONSULTING ENGINEERS, INC.  
CA: 8426 PROJ NO. 2030-024  
© COPYRIGHT 2022



**VOLT AIR**  
CONSULTING ENGINEERS  
6905 Benjamin Road, Suite A  
Tampa, Florida 33634 TEL 888.852.8743  
COA 27198 Project No. Number



**ENCORE CEP - LOT 12**  
**EXPANSION**  
CITY OF TAMPA, HILLSBOROUGH COUNTY, FL.

**SECTIONS & DETAILS**

REV	DESCRIPTION	DATE

DRAWN BY: Author  
CHECKED BY: Checker  
SCALE: As indicated

ISSUED FOR: DATE:  
☐ CD 25%  
☐ CD 50%  
☐ CD 95% Review  
☐ CD 100%  
☐ Pricing  
☐ Bidding  
☒ Permit 04/18/22  
☐ Construction

Drawing No:

**S102**

# ENCORE CENTRAL ENERGY PLANT EXPANSION – LOT 12

**TAMPA, FLORIDA**

**SPECIFICATIONS  
(INCLUDING OWNER'S COMMENTS)**

**JULY 29, 2022**

**VOLT AIR**

VoltAir Consulting Engineers, Inc.  
6005 Benjamin Road  
Tampa, FL 33634

VA #01.21087



---

## SPECIFICATIONS TABLE OF CONTENTS

---

### **DIVISION 01 -        GENERAL REQUIREMENTS**

<u>SECTION</u>	<u>TITLE</u>
01 1000	SUMMARY
01 3300	SUBMITTAL PROCEDURES
01 4200	REFERENCES
01 6000	PRODUCT REQUIREMENTS
01 7700	CLOSEOUT PROCEDURES
01 7810	WARRANTIES
01 7823	OPERATION AND MAINTENANCE DATA
01 7839	PROJECT RECORD DOCUMENTS

### **DIVISION 23 -        HEATING, VENTILATING AND AIR CONDITIONING**

<u>SECTION</u>	<u>TITLE</u>
23 05 00	COMMON WORK RESULTS FOR HVAC
23 05 19	HYDRONIC SPECIALTIES
23 05 23	VALVES FOR HVAC
23 05 29	PIPE HANGERS & SUPPORTS
23 05 53	IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT
23 05 93	TESTING, ADJUSTING, AND BALANCING FOR HVAC
23 07 00	HVAC INSULATION
23 20 00	HVAC PIPING
23 21 14	UNDERGROUND HYDRONIC PIPING
23 25 00	CHEMICAL WATER TREATMENT

### **DIVISIONS OTHER THAN DIVISION 01 AND DIVISION 23**

WORK OF ALL OTHER DIVISIONS IS DESCRIBED ON THE DRAWINGS AS SUCH  
DESCRIPTIONS ARE APPROPRIATE TO THE WORK THAT MAY NEED TO BE DESCRIBED.

---

**END OF TABLE OF CONTENTS**

**SECTION 01 1000 - SUMMARY****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.
- B. "Architect" or "Architect-Engineer" or "Engineer": The term "Architect" or "Architect-Engineer" or "Engineer" may be used interchangeably throughout the Drawings and Specifications and shall be considered to be one and the same. Responsibilities shall be considered to be one and the same. All consultants to the Architect/Architect-Engineer/Engineer shall be considered as legally the same as the Architect/Architect-Engineer/Engineer in regard to executing the responsibilities of the Architect/Architect-Engineer/Engineer.

**1.2 WORK COVERED BY CONTRACT DOCUMENTS**

- A. The Contract Documents and Specifications, prepared for the Project by Cardno, Inc. / [www.cardno.com](http://www.cardno.com) / 380 Park Place Blvd. Suite 300, Clearwater, Florida 33759, is the basis of the Scope of Work.
- B. Should there be conflicts within the Drawings and Specifications, that which requires the highest degree of performance (quality, quantity, strength, finish, completion, complexity, sophistication, cost, etc.) will be required and shall be provided at no increase in Contract Amount.
- C. The Work will be constructed under a single prime contract.

**1.3 CONTRACTOR USE OF SITE**

- A. General: During the construction period the Contractor shall have full use of the site for construction operations. The Contractor's use of the site is limited only by the Owner's right to perform work or to retain other contractors on portions of the Project.

**1.4 WORK RESTRICTIONS**

- A. Work Restrictions, General: Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.
  - 2. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor air intakes.

**1.5 OCCUPANCY REQUIREMENTS**

- A. NOT APPLICABLE TO THIS PROJECT.

**1.6 OWNER-FURNISHED PRODUCTS**

- A. The Owner will provide a list of finish items that he will furnish. The Contractor shall

provide support systems to receive Owner's equipment, and mechanical and electrical connections.

1. The Owner will arrange for and deliver necessary shop drawings, product data, and samples to the Contractor for Owner supplied items.
2. The Owner will arrange and pay for delivery of Owner-furnished items according to the Contractor's Construction Schedule.
3. Following delivery, the Owner will inspect items delivered for damage.
4. If Owner-furnished items are damaged, defective, or missing, the Owner will arrange for replacement.
5. The Owner will arrange for manufacturer's field services and for the delivery of manufacturer's warranties to the appropriate Contractor.
6. The Contractor shall designate delivery dates of Owner-furnished items in the Contractor's Construction Schedule.
7. The Contractor shall review shop drawings, product data, and samples and return them to the Architect noting discrepancies or problems anticipated in use of the product.
8. The Contractor is responsible for receiving, unloading, and handling Owner-furnished items at the site.
9. The Contractor is responsible for protecting Owner-furnished items from damage, including damage from exposure to the elements. The Contractor shall repair or replace items damaged as a result of his operations.

**PART 2 - PRODUCTS** (Not Applicable)

**PART 3 – EXECUTION** (Not Applicable)

END OF SECTION 01 1000

**SECTION 01 3300 - SUBMITTAL 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.
- B. “Architect” or “Architect-Engineer” or “Engineer”: The term “Architect” or “Architect-Engineer” or “Engineer” may be used interchangeably throughout the Drawings and Specifications and shall be considered to be one and the same. Responsibilities shall be considered to be one and the same. All consultants to the Architect/Architect-Engineer/Engineer shall be considered as legally the same as the Architect/Architect-Engineer/Engineer in regard to executing the responsibilities of the Architect/Architect-Engineer/Engineer.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

**1.3 DEFINITIONS**

- A. Action Submittals: Written and graphic information that requires Architect’s responsive action.
- B. Informational Submittals: Written information that does not require Architect’s responsive action. Submittals may be rejected for not complying with requirements.

**1.4 SUBMITTAL PROCEDURES**

- A. General: Electronic copies of CAD Drawings of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals. The Architect may issue electronic base files at its discretion and with the concurrence of the Owner.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.



1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Resubmittal Review: Allow 15 days for review of each resubmittal.
  4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 days for initial review of each submittal.
- D. Identification: Place a permanent label or title block on each submittal for identification.
1. Indicate name of firm or entity that prepared each submittal on label or title block.
  2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
  3. Include the following information on label for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name and address of Architect.
    - d. Name and address of Contractor.
    - e. Name and address of subcontractor.
    - f. Name and address of supplier.
    - g. Name of manufacturer.
    - h. Submittal number or other unique identifier, including revision identifier.
      - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 00 6100.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 00 6100.01.A).
- E. Deviations: Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals.
- F. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
1. Additional copies submitted and designated for maintenance manuals will not be marked with action taken and will be returned.
- G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form provided by, or reviewed by the Architect. Architect will return submittals, without review, received from sources other than Contractor.
1. Transmittal Form: Provide locations on form for the following information:
    - a. Project name.



- b. Date.
  - c. Destination (To:).
  - d. Source (From:).
  - e. Names of subcontractor, manufacturer, and supplier.
  - f. Category and type of submittal.
  - g. Submittal purpose and description.
  - h. Specification Section number and title.
  - i. Drawing number and detail references, as appropriate.
  - j. Transmittal number, numbered consecutively.
  - k. Submittal and transmittal distribution record.
  - l. Remarks.
  - m. Signature of transmitter.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
- 1. Note date and content of previous submittal.
  - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
  - 3. Resubmit submittals until they are marked "No Exceptions Taken" or "Reviewed as Noted" from Architect's action stamp.
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- 1. Use for Construction: Use only final submittals with mark indicating "No Exceptions Taken" or "Reviewed as Noted" from Architect's action stamp.
- J. Contractor's Responsibility for Delivery of Submittals: The General Contractor is responsible for the costs and methods of delivery to the Architect and pick-up of reviewed submittals from the Architect upon notification that submittals are ready for Contractor pick-up.
- 1. No extension of the Contract time will be authorized because of Contractor's failure to transmit and pick-up submittals suitably in advance of the Work to permit processing.

## **PART 2 - PRODUCTS**

### **2.1 ACTION SUBMITTALS**

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
- 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
  - 2. Mark each copy of each submittal to show which products and options are applicable.
  - 3. Include the following information, as applicable:
    - a. Manufacturer's written recommendations.
    - b. Manufacturer's product specifications.

- c. Manufacturer's installation instructions.
  - d. Standard color charts.
  - e. Manufacturer's catalog cuts.
  - f. Wiring diagrams showing factory-installed wiring.
  - g. Printed performance curves.
  - h. Operational range diagrams.
  - i. Mill reports.
  - j. Standard product operation and maintenance manuals.
  - k. Compliance with specified referenced standards.
  - l. Testing by recognized testing agency.
  - m. Application of testing agency labels and seals.
  - n. Notation of coordination requirements.
  - o. Unit of Measure (i.e., lbs, yard, lf etc.)
  - p. Substantiated weight of material in unit of measure
  - q. Substantiated cost per unit of measure.
  - r. Percent of salvaged or refurbished material (including receipts).
- 4. Submit Product Data before or concurrent with Samples.
  - 5. Number of Copies: Submit two copies of Product Data plus the number required by the Contractor for distribution. Architect will retain two copies. Mark up and retain one returned copy as a Project Record Document.
  - 6. Submit alternate product selections as Substitutions. Alternate product submittals not submitted as substitutions may be returned without action by the Architect.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
- 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Dimensions.
    - b. Identification of products.
    - c. Fabrication and installation drawings.
    - d. Roughing-in and setting diagrams.
    - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
    - f. Shopwork manufacturing instructions.
    - g. Templates and patterns.
    - h. Schedules.
    - i. Design calculations.
    - j. Compliance with specified standards.
    - k. Notation of coordination requirements.
    - l. Notation of dimensions established by field measurement.
    - m. Relationship to adjoining construction clearly indicated.
    - n. Seal and signature of professional engineer if specified.
    - o. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
  - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
  - 3. Number of Copies: Submit 7 copies of each submittal. Submit additional as required where copies are required for operation and maintenance manuals. Architect will

retain two copies; remainder will be returned. Mark up and retain one returned copy as a Project Record Drawing.

- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  2. Identification: Attach label on unexposed side of Samples that includes the following:
    - a. Generic description of Sample.
    - b. Product name and name of manufacturer.
    - c. Sample source.
    - d. Number and title of appropriate Specification Section.
  3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
    - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
    - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
  4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
    - a. Number of Samples: Submit a minimum of three full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return one set of submittal with options selected.
  5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
    - a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a Project Record Sample.
      - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
      - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule or List: As required in individual Specification Sections, prepare a written

summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:

1. Type of product. Include unique identifier for each product.
  2. Number and name of room or space.
  3. Location within room or space.
  4. Number of Copies: Submit three copies of product schedule or list, unless otherwise indicated. Architect will return two copies.
    - a. Mark up and retain one returned copy as a Project Record Document.
- F. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation" for Contractor's action.
- G. Submittals Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."
- H. Contractor's Certificate and Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."
- I. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."
- J. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
1. Name, address, and telephone number of entity performing subcontract or supplying products.
  2. Number and title of related Specification Section(s) covered by subcontract.
  3. Drawing number and detail references, as appropriate, covered by subcontract.
  4. Number of Copies: Submit three copies of subcontractor list, unless otherwise indicated. Architect will return two copies.
    - a. Mark up and retain one returned copy as a Project Record Document.

## 2.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
1. Number of Copies: Submit two copies of each submittal, unless otherwise indicated. Architect will not return copies.
  2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
  3. Test and Inspection Reports: Comply with requirements specified in Division 01 Section "Quality Requirements."
- B. Coordination Drawings: Comply with requirements specified in Division 01 Section "Project Management and Coordination."

- C. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."
- D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- H. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- I. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- L. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with applicable and governing building codes and regulations in effect for the jurisdiction of the Project site. Include the following information:
  - 1. Name of evaluation organization.
  - 2. Date of evaluation.
  - 3. Time period when report is in effect.
  - 4. Product and manufacturers' names.
  - 5. Description of product.
  - 6. Test procedures and results.
  - 7. Limitations of use.
- M. Schedule of Tests and Inspections: Comply with requirements specified in Division 01 Section "Quality Requirements."
- N. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on

testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

- O. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- P. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- Q. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."
- R. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers. Provide signed and sealed submittals prepared by a licensed professional in the licensing jurisdiction of the Project site.
- S. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
  - 1. Preparation of substrates.
  - 2. Required substrate tolerances.
  - 3. Sequence of installation or erection.
  - 4. Required installation tolerances.
  - 5. Required adjustments.
  - 6. Recommendations for cleaning and protection.
- T. Manufacturer's Field Reports: Prepare written information documenting factory- authorized service representative's tests and inspections. Include the following, as applicable:
  - 1. Name, address, and telephone number of factory-authorized service representative making report.
  - 2. Statement on condition of substrates and their acceptability for installation of product.
  - 3. Statement that products at Project site comply with requirements.
  - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 6. Statement whether conditions, products, and installation will affect warranty.
  - 7. Other required items indicated in individual Specification Sections.
- U. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits

of coverage, amounts of deductibles, if any, and term of the coverage.

- V. Material Safety Data Sheets (MSDSs): Submit information directly to Owner; do not submit to Architect.

## 2.3 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit three copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
  - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

## PART 3 - EXECUTION

### 3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

### 3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate review action taken.
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements for resubmittal.
- D. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 01 3300

**SECTION 01 4200 - REFERENCES****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 DEFINITIONS**

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Architect" or "Architect-Engineer" or "Engineer":  
The term "Architect" or "Architect-Engineer" or "Engineer" may be used interchangeably throughout the Drawings and Specifications and shall be considered to be one and the same. Responsibilities shall be considered to be one and the same. All consultants to the Architect/Architect-Engineer/Engineer shall be considered as legally the same as the Architect/Architect-Engineer/Engineer in regard to executing the responsibilities of the Architect/Architect-Engineer/Engineer.
- C. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- D. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- E. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- F. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- G. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- H. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- I. "Provide": Furnish and install, complete and ready for the intended use.
- J. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

**1.3 INDUSTRY STANDARDS**

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such



standards are made a part of the Contract Documents by reference.

- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
  - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

#### 1.4 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Thomson Gale's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."

#### **PART 2 - PRODUCTS** (Not Used)

#### **PART 3 - EXECUTION** (Not Used)

END OF SECTION 01 4200

## SECTION 01 6000 - PRODUCT REQUIREMENTS

### 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.
- B. "Architect" or "Architect-Engineer" or "Engineer": The term "Architect" or "Architect-Engineer" or "Engineer" may be used interchangeably throughout the Drawings and Specifications and shall be considered to be one and the same. Responsibilities shall be considered to be one and the same. All consultants to the Architect/Architect-Engineer/Engineer shall be considered as legally the same as the Architect/Architect-Engineer/Engineer in regard to executing the responsibilities of the Architect/Architect-Engineer/Engineer.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. Related Sections include the following:
  - 1. Divisions 02 through 49 Sections for specific requirements for warranties on products and installations specified to be warranted.

#### 1.3 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
  - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
  - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other

characteristics for purposes of evaluating comparable products of other named manufacturers.

#### 1.4 SUBMITTALS

- A. Product List: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
  2. Form: Tabulate information for each product under the following column headings:
    - a. Specification Section number and title.
    - b. Generic name used in the Contract Documents.
    - c. Proprietary name, model number, and similar designations.
    - d. Manufacturer's name and address.
    - e. Supplier's name and address.
    - f. Installer's name and address.
    - g. Projected delivery date or time span of delivery period.
    - h. Identification of items that require early submittal approval for scheduled delivery date.
  3. Initial Submittal: Within 30 days after date of commencement of the Work, submit 3 copies of initial product list. Include a written explanation for omissions of data and for variations from Contract requirements.
    - a. At Contractor's option, initial submittal may be limited to product selections and designations that must be established early in Contract period.
  4. Completed List: Within 60 days after date of commencement of the Work, submit 3 copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
  5. Architect's Action: Architect will review and respond in writing to Contractor within 21 days of receipt of completed product list. Architect's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Architect's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.
- B. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
1. Substitution Request Form: Use form as accepted by the Architect.
  2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified material or product cannot be provided.
    - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
    - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as

- performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - g. Research/evaluation reports evidencing compliance with building codes and regulations adopted by the authorities having jurisdiction at the Project site.
  - h. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
  - i. Cost information, including a proposal of change, if any, in the Contract Sum.
  - j. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
  - k. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Architect's Review: If necessary, Architect will request additional information or documentation for evaluation within 7 days of receipt of a request for substitution. Architect will notify Contractor of review comments of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
- a. Form of Implementation: Review comments, Architect's Supplemental Instruction, Construction Change Directive or Change Order as determined by the Architect's review findings.
  - b. Use product specified if Architect has not issued review comments on use of a proposed substitution within time allocated.
- C. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
- 1. Architect's Review: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of review comments of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
  - a. Form of Implementation: Review comments, Architect's Supplemental Instruction, Construction Change Directive or Change Order as determined by the Architect's review findings.
  - b. Use product specified if Architect has not issued review comments on use of a comparable product request within time allocated.
- D. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

## 1.5 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
  - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
  - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will review which products shall be used.

#### 1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
  - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
  - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  - 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
- C. Storage:
  - 1. Store products to allow for observation and measurement of quantity or counting of units.
  - 2. Store materials in a manner that will not endanger Project structure.
  - 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation and climate control adequate to prevent condensation and deterioration.
  - 4. Store cementitious products and materials on elevated platforms. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
  - 5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
  - 6. Protect stored products from damage and liquids from freezing.
  - 7. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

#### 1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
  2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
  2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
  3. Refer to Divisions 02 through 49 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

## **PART 2 - PRODUCTS**

### **2.1 PRODUCT SELECTION PROCEDURES**

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
  2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
  3. Where products are accompanied by the term "as selected," Architect will make selection.
  4. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
  5. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
- B. Product Selection Procedures:
1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
  2. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
  3. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
  4. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.

5. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
6. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
  - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
7. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.
  - a. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, selection of color, pattern, density, or texture will be made from manufacturer's product line that includes both standard and premium items.

## 2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Architect will consider requests for substitution if received within 60 days after commencement of the Work. Requests received after that time may be considered or returned without review at discretion of Architect.
- B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without review, except to record noncompliance with these requirements:
  1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
  2. Requested substitution does not require extensive revisions to the Contract Documents.
  3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
  4. Substitution request is fully documented and properly submitted.
  5. Requested substitution will not adversely affect Contractor's Construction Schedule.
  6. Requested substitution has received necessary approvals of authorities having jurisdiction.
  7. Requested substitution is compatible with other portions of the Work.
  8. Requested substitution has been coordinated with other portions of the Work.
  9. Requested substitution provides specified warranty as a minimum requirement.
  10. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

## 2.3 COMPARABLE PRODUCTS

- A. Conditions: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without review, except to record noncompliance with these requirements:
1. Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
  2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  3. Evidence that proposed product provides specified warranty.
  4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
  5. Samples, if requested.

## **PART 3 - EXECUTION** (Not Used)

END OF SECTION 01 6000



**SECTION 01 7700 - 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.
- B. "Architect" or "Architect-Engineer" or "Engineer": The term "Architect" or "Architect-Engineer" or "Engineer" may be used interchangeably throughout the Drawings and Specifications and shall be considered to be one and the same. Responsibilities shall be considered to be one and the same. All consultants to the Architect/Architect-Engineer/Engineer shall be considered as legally the same as the Architect/Architect-Engineer/Engineer in regard to executing the responsibilities of the Architect/Architect-Engineer/Engineer.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Architect's Field Observation procedures.
  - 2. Warranties.
  - 3. Final cleaning.
- B. Related Sections include the following:
  - 1. Division 01 Section "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 49 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

**1.3 SUBSTANTIAL COMPLETION**

- A. Preliminary Procedures: Before requesting Architect's field observation for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
  - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Advise Owner of pending insurance changeover requirements.
  - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 5. Prepare and submit Project Record Documents, operation and maintenance manuals,

- Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
  6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
  7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
  8. Complete startup testing of systems.
  9. Submit test/adjust/balance records.
  10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  11. Advise Owner of changeover in heat and other utilities.
  12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
  13. Complete final cleaning requirements, including touchup painting.
  14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Architect's Field Observation: Submit a written request for observation for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will review the Certificate of Substantial Completion after observation or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
1. Subsequent Architect's Field Observation: Request subsequent observation when the Work identified in previous observation as incomplete is completed or corrected.
  2. Results of completed observation will form the basis of requirements for Final Completion.
- 1.4 FINAL COMPLETION
- A. Preliminary Procedures: Before requesting final observation for determining date of Final Completion, complete the following:
1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
  2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  4. Submit pest-control certificates, final field report and warranty.
  5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Architect's Field Observation: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with observation or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for

Payment after observation or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Subsequent Architect's Field Observation: Request subsequent observation when the Work identified in previous inspections as incomplete is completed or corrected.

#### 1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three (3) copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
  2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
  3. Provide an estimated value to complete the work for each item listed.
  4. Include the following information at the top of each page:
    - a. Project name.
    - b. Date.
    - c. Name of Architect.
    - d. Name of Contractor.
    - e. Page number.

#### 1.6 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Partial Occupancy: Submit properly executed warranties within 15 fifteen days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- 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 FINAL CLEANING**

- A. General: Provide final cleaning. 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 observation 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, even- textured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - e. Remove snow and ice to provide safe access to building.
    - f. Clean exposed exterior and interior 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 roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
    - h. Sweep concrete floors broom clean in unoccupied spaces.
    - i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
    - j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
    - k. Remove labels that are not permanent.
    - l. 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.
    - m. Wipe surfaces of mechanical and electrical equipment, elevator equipment or keys, and similar equipment. Remove excess lubrication, paint and mortar

- droppings, and other foreign substances.
  - n. Replace parts subject to unusual operating conditions.
  - o. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
  - p. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
  - q. Clean ducts, blowers, and coils if units were operated without filters during construction.
  - r. 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.
  - s. Leave Project clean and ready for occupancy.
- C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report.
- D. 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 7700

## **SECTION 01 7810 - WARRANTIES**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturers standard warranties on products and special warranties.
  - 1. Provide warranties in accordance with applicable statutes adopted in the jurisdiction of the Project site, as a minimum, but in no case shall the required warranties and warranty period be less than that stated in the applicable individual Specification Sections.
  - 2. Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials.
  - 3. General closeout requirements are included in Section "Closeout Procedures."
  - 4. Specific requirements for warranties for the Work and products and installations that are specified to be warranted, are included in the individual Sections of Divisions 02 through 49.
  - 5. Certifications and other commitments and Agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
- B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

#### **1.2 DEFINITIONS**

- A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.
- C. "Architect" or "Architect-Engineer" or "Engineer": The term "Architect" or "Architect-Engineer" or "Engineer" may be used interchangeably throughout the Drawings and Specifications and shall be considered to be one and the same. Responsibilities shall be considered to be one and the same. All consultants to the Architect/Architect-Engineer/Engineer shall be considered as legally the same as the Architect/Architect-Engineer/Engineer in regard to executing the responsibilities of the Architect/Architect-Engineer/Engineer.

#### **1.3 WARRANTY REQUIREMENTS**

- A. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been

corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty for the balance of the warranty period.

- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
  - 1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.

#### 1.4 SUBMITTALS

- A. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
  - 1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate Agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within ten days of completion of that designated portion of the Work.
  - 2. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner for review prior to final execution.
  - 3. Refer to individual Sections of Divisions 02 through 49 for specific content requirements, and particular requirements for submittal of special warranties.
- B. Form of Submittal: At Final Completion compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- C. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2" by 11" paper.
  - 1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the 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 the installer.
  - 2. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS, the Project title or name, and the name of the Contractor.

3. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

**PART 2 - PRODUCTS** (Not Applicable).

**PART 3 - EXECUTION**

3.1 SCHEDULE OF WARRANTIES

- A. Schedule: Provide warranties and bonds on products and installations as specified in individual Specification Sections, Divisions 02 – 49.

END OF SECTION 01 7810



**SECTION 01 7823 - 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 1 Specification Sections, apply to this Section.
- B. “Architect” or “Architect-Engineer” or “Engineer”: The term “Architect” or “Architect-Engineer” or “Engineer” may be used interchangeably throughout the Drawings and Specifications and shall be considered to be one and the same. Responsibilities shall be considered to be one and the same. All consultants to the Architect/Architect-Engineer/Engineer shall be considered as legally the same as the Architect/Architect-Engineer/Engineer in regard to executing the responsibilities of the Architect/Architect-Engineer/Engineer.

**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 and systems and equipment.
- B. Related Sections include the following:
  - 1. Division 01 Section "Closeout Procedures" for submitting operation and maintenance manuals.
  - 2. Division 01 Section "Project Record Documents" for preparing Record Drawings for operation and maintenance manuals.
  - 3. Divisions 02 through 49 Sections for specific operation and maintenance manual requirements for the Work 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 QUALITY ASSURANCE**

- A. Maintenance Manual Preparation: In preparation of manuals, use personnel thoroughly trained and experienced in the maintenance of the material or finish involved, or in the maintenance of the equipment or system involved.
  - 1. Where manuals require written instructions, use the personnel skilled in technical writing where necessary for communication of essential data.

2. Where manuals require drawings or diagrams, use draftspersons capable of preparing drawings clearly in an understandable format.

#### 1.5 SUBMITTALS

- A. Initial Submittal: Submit 2 draft copies of each manual at least 15 days before requesting inspection for Substantial Completion. Include a complete operation and maintenance directory. Architect will return one copy of draft and mark whether general scope and content of manual are acceptable.
- B. Final Submittal: Submit one copy of each manual in final form at least 15 days before final observation. Architect will return copy with comments within 15 days after final observation.
  1. Correct or modify each manual to comply with Architect's comments. Submit 3 copies of each corrected manual within 15 days of receipt of Architect's comments.

#### 1.6 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. Table of contents.
  2. List of documents.
  3. List of systems.
  4. List of equipment.
  5. List of building interior products, materials and finishes.
  6. List of building exterior products, materials and finishes.
  7. List of warranties and guarantees with guide reference to Warranties and Bonds Manual.
- B. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- C. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- D. List of Interior Products, Materials and Finishes: List exposed products, materials and finishes organized alphabetically.
- E. List Exterior Products, Materials and Finishes: List exposed products, materials and finishes organized alphabetically.
- F. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with 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 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.
- D. 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 white bond paper.

5. 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 MANUAL CONTENT

- A. In each manual, include information specified in the individual Specification section and the following information where applicable for each major component:
  1. General material, finish, system or equipment description.
  2. Copies of applicable Shop Drawings and Product Data.
  3. Material, finish, system or equipment identification, including:
    - a. Name of manufacturer.
    - b. Model number.
    - c. Serial number of each component.
  4. Maintenance procedures and schedules.
  5. Precautions against improper use and maintenance.
  6. Copies of warranties and service contracts.
  7. Sources of required maintenance materials and related services.
  8. Table of Contents: After title page, include a typewritten table of contents for each volume, arranged systematically according to the Specifications format. Include a list of each product included, identified by product name or other appropriate identifying symbol and indexed to the content of the volume.

Where more than one volume is required to accommodate the data, provide a comprehensive table of contents for all volumes in each volume of the set.
  9. General Information: Provide a general information section immediately following table of contents, listing each product included in the manual, identified by product name. Under each product, list the name, address, and telephone number of the subcontractor or installer and the maintenance contractor. Clearly delineate the extent of responsibility for each of these entities. Include a local source for replacement parts for equipment.
  10. Product Data: Where the manuals include manufacturer's standard printed data, include only those sheets that are pertinent to the part or product installed. Mark each sheet to identify each part or product included in the installation. Where the Project includes more than one item contained in the product data, identify each item, using appropriate references from the Contract Documents. Identify data that is applicable to the installation, and delete references to information that is not applicable.
  11. Written Text: Prepare written text to provide necessary information where manufacturer's standard printed data is not available, and the information is necessary for proper maintenance of materials or finishes, or for proper operation and maintenance of equipment or systems. Prepare written text where it is necessary to provide additional information or to supplement data included elsewhere in the manual. Organize text in a consistent format under separate headings for different procedures. Where necessary, provide a logical sequence of instruction for each operation or maintenance procedure.

12. Drawings: Provide specially prepared drawings where necessary to supplement manufacturer's printed data to illustrate the relationship of component parts of equipment or systems or to provide control or flow diagrams. Coordinate these drawings with information contained in Project Record Drawings to assure correct illustration of the completed installation.
13. Warranties and Service Contracts: Provide a copy of each warranty or service contract in the appropriate manual for the information of the Owner's designated operating personnel. Provide written data outlining procedures to follow in the event of product failure. List circumstances and conditions that would affect the validity of warranty.

## 2.4 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.
  3. 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 designated 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.

## 2.5 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.

#### BUILDING MATERIALS MAINTENANCE MANUAL

- F. Content: Organize manual into a separate section for each product, material, and finish used in building. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- G. 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.
- H. 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.
- I. 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.
- J. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- K. Moisture Protection and Products Exposed to the Weather: Provide complete manufacturer's data with instructions for the inspection, maintenance and repair of products exposed to the weather or designed for moisture-protection purposes.
1. List of Products: Data information is required for, but is not limited to the following:
    - a. Roofing Materials.
    - b. Joint Sealants.
    - c. Paint products.
    - d. Waterproofing products.
    - e. Door and Window units.
  2. Manufacturer's Data: Provide detailed manufacturer's information, including the following, as applicable.
    - a. Applicable standards.
    - b. Chemical composition.
    - c. Installation details.
    - d. Inspection procedures.
    - e. Maintenance information.
    - f. Repair procedures.
  3. Include manufacturer's recommended schedule for cleaning and maintenance.
- L. Schedule for Cleaning and Maintenance: Provide complete information in the materials and finishes manual on products specified in Divisions 02 – 49.
- M. 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 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. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
  - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
  - 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- F. 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.
- G. Maintenance Service Contracts: Include copies of maintenance Agreements with name and telephone number of service agent.
- H. 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. Building Materials and 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.
  - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
  - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's designated operating personnel.
- 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.
- 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 01 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 01 7823

## **SECTION 01 7839 - 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.
  - 3. 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 49 Sections for specific requirements for Project Record Documents of the Work in those Sections.

## 1.3 SUBMITTALS

- A. Record Drawings: Comply with the following:
  - 1. Number of Copies: Submit one set(s) of marked-up Record Prints.
- B. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one copy of each Product Data submittal.
  - 1. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in manual instead of submittal as Record Product Data.

## PART 2 - PRODUCTS

### 2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.
  - 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. Depths of foundations below first floor.
    - d. Locations and depths of underground utilities.
    - e. Revisions to routing of piping and conduits.
    - f. Revisions to electrical circuitry.
    - g. Actual equipment locations.
    - h. Duct size and routing.
    - i. Locations of concealed internal utilities.
    - j. Changes made by Change Order, Change Directive, or Construction Field Change.
    - k. Changes made following Architect's written orders.
    - l. 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 record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
  5. Mark important additional information that was either shown schematically or omitted from original Drawings.
  6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Transparencies: Immediately before inspection for Certificate of Substantial Completion, review marked-up Record Prints with Architect. When authorized, prepare a full set of corrected transparencies of the Contract Drawings and Shop Drawings.
1. Incorporate changes and additional information previously marked on Record Prints. Erase, redraw, and add details and notations where applicable.
  2. Refer instances of uncertainty to Architect for review.
  3. Owner will furnish Contractor one set of transparencies of the Contract Drawings for use in recording information. Print the Contract Drawings and Shop Drawings for use as Record Transparencies. Architect will make the Contract Drawings available to Contractor's print shop.
- C. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing Record Drawings where 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.
  2. Consult 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.

- D. 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. Record Transparencies: Organize into unbound sets matching Record Prints. Place transparencies in durable tube-type drawing containers with end caps. Mark end cap of each container with identification. If container does not include a complete set, identify Drawings included.
  3. Record CAD Drawings: Organize CAD information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each CAD file.
  4. Identification: As follows:
    - a. Project name.
    - b. Date.
    - c. Designation "PROJECT RECORD DRAWINGS."
    - d. Name of Architect.
    - e. Name of Contractor.

## 2.2 RECORD SPECIFICATIONS

- 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 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 Product Data, and Record Drawings where applicable.

## 2.3 RECORD PRODUCT DATA

- 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 Specifications, and Record Drawings where applicable.

## 2.4 MISCELLANEOUS RECORD SUBMITTALS

- 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 Architect's reference during normal working hours.

END OF SECTION 01 7839

**SECTION 01 7839 - 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.
- B. “Architect” or “Architect-Engineer” or “Engineer”: The term “Architect” or “Architect-Engineer” or “Engineer” may be used interchangeably throughout the Drawings and Specifications and shall be considered to be one and the same. Responsibilities shall be considered to be one and the same. All consultants to the Architect/Architect-Engineer/Engineer shall be considered as legally the same as the Architect/Architect-Engineer/Engineer in regard to executing the responsibilities of the Architect/Architect-Engineer/Engineer.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
  - 1. Record Drawings.
  - 2. Record Specifications.
  - 3. 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 49 Sections for specific requirements for Project Record Documents of the Work in those Sections.

**1.3 SUBMITTALS**

- A. Record Drawings: Comply with the following:
  - 1. Number of Copies: Submit one set(s) of marked-up Record Prints.
- B. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one copy of each Product Data submittal.
  - 1. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in manual instead of submittal as Record Product Data.

**PART 2 - PRODUCTS****2.1 RECORD DRAWINGS**

- A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.
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. Depths of foundations below first floor.
    - d. Locations and depths of underground utilities.
    - e. Revisions to routing of piping and conduits.
    - f. Revisions to electrical circuitry.
    - g. Actual equipment locations.
    - h. Duct size and routing.
    - i. Locations of concealed internal utilities.
    - j. Changes made by Change Order, Change Directive, or Construction Field Change.
    - k. Changes made following Architect's written orders.
    - l. 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 record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
  5. Mark important additional information that was either shown schematically or omitted from original Drawings.
  6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Transparencies: Immediately before inspection for Certificate of Substantial Completion, review marked-up Record Prints with Architect. When authorized, prepare a full set of corrected transparencies of the Contract Drawings and Shop Drawings.
1. Incorporate changes and additional information previously marked on Record Prints. Erase, redraw, and add details and notations where applicable.
  2. Refer instances of uncertainty to Architect for review.
  3. Owner will furnish Contractor one set of transparencies of the Contract Drawings for use in recording information. Print the Contract Drawings and Shop Drawings for use as Record Transparencies. Architect will make the Contract Drawings available to

Contractor's print shop.

- C. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing Record Drawings where 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.
  - 2. Consult 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.
- D. 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. Record Transparencies: Organize into unbound sets matching Record Prints. Place transparencies in durable tube-type drawing containers with end caps. Mark end cap of each container with identification. If container does not include a complete set, identify Drawings included.
  - 3. Record CAD Drawings: Organize CAD information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each CAD file.
  - 4. Identification: As follows:
    - a. Project name.
    - b. Date.
    - c. Designation "PROJECT RECORD DRAWINGS."
    - d. Name of Architect.
    - e. Name of Contractor.

## 2.2 RECORD SPECIFICATIONS

- 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 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 Product Data, and Record Drawings where applicable.

## 2.3 RECORD PRODUCT DATA



- 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 Specifications, and Record Drawings where applicable.

## 2.4 MISCELLANEOUS RECORD SUBMITTALS

- 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 Architect's reference during normal working hours.

END OF SECTION 01 7839

**SECTION 23 05 00 - COMMON WORK RESULTS FOR HVAC****PART 1 – GENERAL****1.00 GENERAL STATEMENT REGARDING DIVISION 23**

- A. This Division 23 includes those certain applicable sections that were included in the original Phase 1 of the original central energy plant project containing chillers, heat exchanger, cooling tower, piping, controls, airside systems such as ductwork and cooling coils, underground piping and other various sections that were applicable to the original project. After Phase 1 was completed which provided the original centrifugal chiller to make chilled water and the glycol centrifugal chiller as associated with the ice storage system and underground distribution system, Phase 2 was executed which only added a single chiller for chilled water and associated cooling towers and pumps. No Division 23 specifications were provided with Phase 2.
- B. The work of this project precedes the implementation of Phase 3 and is not a phase but is an added extension of the underground chilled water distribution system and condensate return system to serve Lot 12 just north of the central energy plant.
- C. Based on the above, these Division 23 specifications were selected to be edited from the original Phase 1 project to provide consistency of materials and systems that were provided in Phase 1 which were applicable to the work related to providing the new chilled water system for Lot 12. In utilizing these original specifications, it is intended that the new work related to Lot 12 be constructed with the same requirements as the original Phase 2. The sections of Phase 1 which were applicable to this Lot -12 project were chosen to be edited to apply to the new work related to the new chilled water extension to Lot 12. As such, where work of Phase 1 was/is no longer relevant, those portions of these sections were modified either by deletion of requirements or by statements that certain subsections and/or paragraphs were/are not applicable to this work of Lot 12.

**1.01 SECTION INCLUDES**

- D. Division 01: General Requirements
- E. Common work results for requirements specifically applicable to Division 23.
- F. Reference to requirements of Specifications Division 01 General Requirements. General Provisions of the Contract and General and Supplementary Conditions apply to this Division.

**1.02 REFERENCES**

- A. AGA: American Gas Association.
- B. ANSI: American National Standards Institute.
- C. ARI: American Refrigeration Institute.
- D. ASHRAE: American Society of Heating Refrigeration and Air Conditioning Engineers.
- E. ASME: American Society for Mechanical Engineers.
- F. ASTM: American Society for Testing and Materials.

- G. AWWA: American Water Works Association.
- H. FM: Factory Mutual
- I. IRI: Industrial Risk Insurers
- J. MSS: Manufacturer's Standardization Society of the Valve and Fitting Industry.
- K. NEMA: National Electrical Manufacturers' Association.
- L. NFPA: National Fire Protection Association.
- M. SMACNA: Sheet Metal and Air Conditioning Contractors' National Association.
- N. UL: Underwriters' Laboratories, Inc.
- O. U.L Fire Resistance Index
- P. ASTM E814-88: Standard Test Method for Fire Tests of Through-Penetration Firestops.

### 1.03 SUBMITTALS

- A. Submit under provisions of Division 01 and as may be specifically required in individual sections of any Division..
- B. Incomplete submittals containing unmarked cutsheets or not providing specific detail of what is being proposed will be rejected and will not be reviewed.
- C. Include Products as specified in the individual sections of Division 23.
- D. Submit shop drawing and product data grouped to include complete submittals of related systems, products, and accessories in a single submittal.
- E. Prepare shop drawings completely independent of the Engineer of Record's CADD files. Should the Contractor or Vendor wish to use the Engineer of Record's CADD files as the basis for developing their shop drawings, a release form, obtainable from the Engineer or Architect, must be signed and a nominal charge of \$30.00 per sheet must be made payable to the engineering firm to cover the cost of preparing the drawings for use by others.
- F. Submit copies of shop drawings in accordance with Division 01, including:
  - 1. Building Automation System including direct digital control drawings.
  - 2. Concrete pads and foundations including anchor bolt and sleeve locations.
  - 3. Prepare and submit coordination drawings as specified herein. Facilitate the coordination effort with work of all other Divisions including, but not limited to, the following:
    - a. Central Plant
    - b. Chiller Room
    - c. Electric Switchgear Rooms
    - d. Coordinated room layouts shall include:
      - 1) Room dimensions.
      - 2) Support column locations.
      - 3) Locations and dimensions of equipment foundations and pads required.
      - 4) Locations and dimension of equipment and apparatus, including electrical control panels and starters, and service and coil pull areas.
      - 5) Dimensioned floor drain locations.
      - 6) Locations of wall mounted equipment.

- 7) Trench locations and sizes.
  - 8) Sleeve locations in mechanical rooms and equipment rooms.
  - 9) AHU (fan) and duct layouts in AHU equipment rooms.
  - 10) Piping 3" and larger.
  - 11) Conduit 3" and larger.
- 4. Roof layouts including:
  - a. Air Intakes.
  - b. Vents.
- G. Brochures: Submit manufacturer's product data and brochures including:
  - 1. Complete descriptions.
  - 2. Illustrations.
  - 3. Rating data, accessories, dimensional data, and applicable options and features marked for the specific items scheduled on drawings and specified herein.
  - 4. Capacities stated in the terms specified.
  - 5. Performance curves for all air handling units, fans, and pumps.

#### **1.04 REGULATORY REQUIREMENTS**

- A. Perform Work specified in Division 23 in accordance with standards listed below of the latest applicable edition adopted by the Authority Having Jurisdiction. Where these Specifications are more stringent, they shall take precedence. In case of conflict, obtain a decision from the Engineer of Record.
  - 1. Florida Building Code, 2007 with 2009 supplements.
  - 2. NFPA 30: Flammable and Combustible Liquids Code (2003)
  - 3. NFPA 54: National Fuel and Gas Code (2006)
  - 4. NFPA 70: National Electrical Code (2008)
  - 5. NFPA 72: National Fire Alarm Code (2002)
  - 6. NFPA 90A Standard for the Installation of Air Conditioning and Ventilating Systems (2002)
  - 7. NFPA 90B: Standard for the Installation of Warm Air Heating and Air Conditioning Systems (2006)
  - 8. NFPA 92A: Recommended Practice for Smoke Control Systems (2006)
  - 9. NFPA 101: Life Safety Code (2006)
  - 10. NFPA 214: Standard on Water Cooling Towers (2005)
  - 11. NFPA 241: Standard for Safeguarding Building Construction, Alteration and Demolition Operations (2004)
  - 12. Special regulations, supplement, and amendments of the State and/or local authorities having jurisdiction.
- B. Comply with the applicable edition date of each regulation as adopted by the authorities having jurisdiction.

#### **1.05 PROJECT/SITE CONDITIONS**

- A. Layouts indicated on drawings are diagrammatical and intended to show relative positions and arrangement of equipment, ductwork and piping. Coordinate mechanical work with other trades and measurements obtained at the job site, as applicable, prior to installation. Generally, install work in locations shown on Drawings, using as necessary, rises, drops, offsets, transitions, and alternate routings to fit in the available space unless prevented by Project conditions.
- B. If prevented by project conditions, prepare drawings showing proposed rearrangement of Work, including changes to Work specified in other sections. Obtain permission of Engineer of Record before proceeding.

- C. Place anchors, sleeves, and supports prior to pouring concrete or installation of piping and related masonry work.
- D. Cause no interruption of existing utilities and services unless unavoidable and then only with approval of the Owner. Schedule work which will cause interference or interruption in advance with Owner, authorities having jurisdiction, and all affected trades.
- E. Determine sizes and verify locations of existing utilities on or near site.
- F. Keep roads clear of materials and debris.
- G. Visit site and stay continuously informed of conditions under which Work must be performed.
- H. Locate equipment requiring periodic servicing so that it is readily accessible. Provide means of service access, following appropriate manufacturer's recommended service clearance space or, as applicable, means of access using duct, wall, or ceiling access doors.
- I. Install ductwork and piping to leave sufficient space for AHJ inspection of the immediate area of the work.

#### **1.06 FEES AND PERMITS**

- A. Obtain and pay for all necessary permits and inspection fees required to perform Division 23 work.

#### **1.07 COORDINATION DRAWINGS**

- A. Prior to commencement of installation, prepare coordination drawings for work under this division, as specified in Division 01, in full cooperation with persons performing work under other Divisions, including but not limited to mechanical, electrical, plumbing, fire protection, telecommunications, audio/visual and miscellaneous steel if and as such work may be related to the coordinated task(s).
- B. Drawings shall not be formally submitted but shall be kept on site for reference. Notify Architect and CM of conflicts that cannot be resolved.
- C. Coordination Drawings shall be prepared to include the following:
  - 1. Drawn to a scale of 1/4" = 1'-0".
  - 2. Room dimensions.
  - 3. Sheet size matching contract documents.
  - 4. Duct sizes with bottom elevation from finished floor.
  - 5. Show equipment, columns, and beams.
  - 6. Duct fitting details.
  - 7. Construction details of plenums and casings.
  - 8. Concrete pad and foundation layouts including anchor bolt and sleeve locations.
  - 9. Dimensioned floor drain locations.
  - 10. Wall mounted equipment.
  - 11. Piping 2" and larger, with elevations from finished floor to bottom of pipe.
  - 12. Space allocation for conduits and cable trays.
  - 13. Ceiling height.
- D. Additional Specific Shop Drawing Requirements for Piping and All Steel Supports and Framework:
  - 1. Prepare coordination drawings for all new chilled water supply and return piping and pumped condensate return piping including detailed isometric diagram showing complete coordination with building structure, interior components of existing system and any and all other areas where the new piping is located/installed.

2. Drawings shall show complete piping system from point of connection to 20 inch chilled water supply/return to valve box located on civil drawings where future connection is to be made to serve the facilities to be installed on Lot 12.
3. These shop drawings of the field-fabricated piping layout shall be presented in plan, elevation and isometric view and SHALL BE APPROVED BY THE ARCHITECT-ENGINEER PRIOR TO INITIATING INSTALLATION OF THE PIPING SYSTEMS.

#### **1.08 COMPLETENESS OF WORK**

- A. The Contract Documents depict HVAC systems which are intended to be complete and functioning systems. All products, materials, and labor necessary to render a fully functional system to fulfill the design intent shown on the documents shall be provided by the Contractor.
- B. Catalog numbers referenced throughout the Division 23 Drawings and Specifications are intended to convey a general understanding of the type and quality of the product required. Where written descriptions differ from information conveyed by a catalog number, the written description shall govern. No extra shall be allowed because a catalog number is found to be incomplete or obsolete.

#### **1.09 REFERENCE STANDARDS AND DEFINITIONS**

- A. Comply with provisions of Division 01.

#### **1.10 PRODUCT SUBSTITUTIONS**

- A. Comply with provisions of Division 01.

#### **1.11 RECORD DRAWINGS**

- A. Provide record drawings that illustrate the work of Division 23 as finally constructed. Deliver record drawings to the Architect in a form suitable for production.
- B. Record drawings shall reflect all changes made to the Contract Documents, whether generated by addenda, change orders, or field conditions. Maintain a daily record of these changes and keep current set of drawings showing these changes.
- C. Deliver record drawings to Engineer of Record within 30 days of Substantial Completion.

#### **1.12 OWNING AND OPERATING MANUALS**

- A. Comply with the requirements of Division 01, but provide a minimum of three sets.
- B. Manuals shall include clear and comprehensive instructions with appropriate graphics and project specific marked data to enable owner to operate and maintain all systems specified in this Division.
- C. Copies of final reviewed submittals indicating all model numbers, serial numbers, cut sheets, and all performance criteria on furnished equipment shall be included.

### **PART 2 - PRODUCTS**

#### **2.01 EQUIPMENT SUPPORTS**

- A. Structural steel for supports: ASTM A36.
  1. Use galvanized members installed in fan plenums or areas of high humidity or condensation, and outside. All fasteners shall be stainless steel. Any damage caused by cutting, drilling, or welding or any other means to galvanized surface must be repaired by apply two coats of cold-galvanizing.
  2. Furnish other members with shop coat of red primer.

3. Retouch primer after field welding.

## **2.02 FLASHINGS AND COUNTERFLASHINGS**

- A. Furnish materials and coordinate installation for flashing and counterflashing roof penetrations for vents, pipe, drains, and ducts.
- B. Materials:
  1. Sheetmetal: 24 gauge minimum ASTM A525, Class G90.
  2. Sheet lead: 3 pounds per square foot.
  3. Stainless steel: Minimum 20 gauge.
  4. Sheet copper: 24 OZ/SF.
  5. Vent Stack Fitting: Josam 1830 or Jay R. Smith 1750

## **2.03 WALL AND CEILING ACCESS PANELS**

- A. Style and type as required for material in which installed.
- B. Size: 24"x24" minimum, as indicated, or as required to allow inspection, service and removal of items served.
- C. 14 gauge minimum sheet metal for doors, 16 gauge frames of cadmium-plated or galvanized construction. Doors shall have expanded plaster rings where located in plaster walls or flanged finish where located in drywall or block construction.
- D. Panels shall have spring hinges with screwdriver locks in non-public areas. Key lock, keyed alike, for panels in public areas.
- E. Prime painted or rust inhibitive paint finish.
- F. UL labeled when in fire-rated construction, 1-1/2 hour rating.
- G. Provide in walls, floors, and ceilings to permit access to all equipment and piping requiring service or adjustment. Examples of such equipment needing access are fire and/or smoke dampers, mechanical system valves, and equipment needing periodic or replacement maintenance.
- H. Furnish and locate access panels under this Division. Coordinate with trades who are responsible for building system in which panels are to be installed.
- I. Acceptable manufactures: Milcor, Nystrom, Karp, J.L. Industries, or Williams Brothers.
  1. For masonry and drywall construction: Milcor Style M.
  2. For plastered masonry walls and ceiling: Milcor Style K.
  3. For ceramic tile or glazed structural tile: Use stainless steel panels.

## **2.04 PIPE ENCLOSURES**

- A. Minimize number of covers by enclosing maximum number of pipes in each drop.
- B. Anchor to equipment or partition.
- C. Fasten seams and joints with stainless steel pop rivets.
- D. Provide 1-1/2" ceiling flange as closure.

## **2.05 SLEEVES**

- A. Materials
  - 1. Concrete floors, concrete and masonry walls: 18 gauge galvanized sheetmetal.
  - 2. Drywall partitions: 18 gauge galvanized steel sheet metal.
- B. Sleeves shall be sized such that the annular space between outside surface of pipe or pipe insulation and the inside surface of the sleeve is not less than 1/2". Provide larger annular space if required by firestopping product installation instructions.
- C. Sleeves supporting riser piping 4" and larger shall have three 6" long reinforcing rods welded radially at 120 degree spacing to the sleeve and shall be installed with the rods embedded in the concrete slab.

## **2.06 ESCUTCHEON PLATES**

- A. Provide B & C No. 10 or equal chrome plated escutcheon plates where pipes penetrate partitions or ceilings in finished areas.

## **PART 3 - EXECUTION**

### **3.01 EXCAVATING AND BACKFILLING**

- A. Contractor shall review and shall perform excavation and backfilling in accordance with the most stringent requirements of the Contract Documents. Contractor shall request clarification before proceeding if there are conflicting instructions.
- B. Contract Documents show the approximate location of underground utilities known to exist in the area of construction. Contractor shall determine the exact location of utilities.
  - 1. Locate and uncover existing utilities which require new connections before trenching in the vicinity of indicated utility connection.
  - 2. Clear all vegetation and other objectionable material from the area required for the excavation and backfill operations. Disposal of material removed by the clearing operation shall be approved by the Owner's Representative.
- C. Provide trenching, excavating, and backfilling necessary for performance of work indicated in Contract Documents.
- D. Excavate to depths indicated on the drawings or as necessary to permit the installation of pipe, bedding, backfill, structures or appurtenances. Provide a firm, undisturbed, uniform surface in the bottom of trenches. Where excavation exceeds the required depth, bring the excavation to proper grade through the use of an approved incompressible backfill material. Store excavated material and dispose of surplus excavated material.
  - 1. Excavate trench to sufficient depth to permit a minimum of 36" of cover over the top of the pipe unless otherwise required by pipe elevations indicated on the Drawings. The trench width shall be 18" plus the diameter of the pipe and/or the largest bell.
- E. Trenching and excavation shall be unclassified. No extra will be paid in the event that rock is encountered.
  - 1. Should rock excavation be required, use only experienced personnel for blasting.
  - 2. Exercise extreme care when blasting with signals of danger given before firing any charge.
  - 3. Conform to and obey all public authority regulations for the protection of life and property.
- F. Provide sheathing, shoring, dewatering, and cleaning necessary to keep trenches at their grades in proper condition and to meet applicable codes.
- G. Upon completion of excavation, and prior to the laying of the pipe, the trench bottom shall be brought up to the required elevation with min. 6" pipe bedding. Pipe bedding shall be select material deposited in the trench, and shall be compacted, leveled off, and shaped to obtain a smooth



compacted bed along the laying length of the pipe. Material for pipe bedding shall comply with local codes. In absence of local code requirements the bedding shall be bank sand or select back fill material approved by the Engineer of Record. Any material used shall pass a 1/4 inch screen.

- H. Clean and inspect pipe for defects before lowering into trench for assembly. Install pipe in accordance with provisions of Contract Documents and with the recommendations of the pipe manufacturer.
1. Ensure pipe is of proper strength and classification for specified service. Discard damaged or defective pipe discovered during pipe laying operations.
  2. Maintain alignment and grade during layout operation. Use acceptable method for maintaining grade and alignment to produce desired results.
  3. Trenches shall be backfilled only after piping has been inspected, tested, and approved by the Engineer of Record. All backfill material shall be placed in the trench either by hand or by approved mechanical methods. The compaction of backfill material shall be accompanied by tamping, with hand tools or approved pneumatic tampers, by using vibratory compactors, by puddling, or by any combination of the three. The method of compaction shall be approved and all compaction shall be done to the satisfaction of the Engineer of Record. Backfill completely around pipe, including 18" above the pipe, with suitable bank sand, tamped in 4" layers under, around, and over pipe. Water down backfill as required. The remainder of the backfill shall be select backfill material tamped at intervals of no more than 12" depths. All materials to be used as selected material backfill shall be approved by the Engineer of Record. If, in the opinion of Engineer of Record, the excavated material does not meet the requirements of selected material, the Contractor shall be required to screen the material prior to its use as selected material backfill. Material used in the upper portion of the backfill or subgrade shall not contain stone, rock, or other material larger than six inches in its longest dimension. No wood, vegetable matter, or other material which, in the opinion of the Engineer of Record, is unsuitable shall be included in the backfill. The upper 24" of backfill may be water jetted, if desired. Backfill shall be brought up to finish grade identified on the Architectural Drawings, including additional backfill required to offset settlement during consolidation.

### **3.02 CUTTING AND PATCHING**

- A. Repair or replace damage caused by installation of work of Division 23.
- B. Perform repairs with materials which match existing materials and install in accordance with the appropriate section of these specifications.

### **3.03 FLASHING AND COUNTERFLASHING**

- A. Counterflash ducts and pipes where penetration of roofs and outside walls occur.

### **3.04 CONNECTION TO EQUIPMENT FURNISHED BY OWNER**

- A. Connect or install equipment shown on mechanical drawings that requires mechanical connections.
- B. Provide piping, shutoff valves, unions, and other piping appurtenances required for a complete installation.

### **3.05 DELIVERY, STORAGE, AND PROTECTION**

- A. Insofar as possible, deliver items in manufacturer's original unopened packaging. Where deliver in

original packaging is not practical, provide cover and shielding for all items with protective materials to keep them from being damaged. Use care in loading, transporting, unloading, and storing to keep items from being damaged.

- B. Store items in a clean, dry place, and protect from damage. Mechanical equipment may not be staged or stored outdoors unless intended for outdoor use.
- C. Protect nameplates on motors, pumps, and similar equipment. Do not paint or insulate over nameplate data.
- D. Protect valves and piping from damage. Cover equipment during work of finishing trades.
- E. Keep dirt and debris out of pipes and ducts.
- F. Repair, restore, and replace damaged items.
- G. Cover factory finished equipment during work of finished trades, such as fan coils, fin tubes, etc.
- H. Protect cooling and/or heating coils with temporary filter media during construction.

### **3.06 SLEEVES**

- A. Floors: Sleeve all pipe penetrations. Extend sleeve 1-1/2" above finished floor, except piping within pipe chases. Sleeve shall be flush with underside of floor.
- B. Masonry or concrete walls: Sleeve all pipe penetrations. Sleeves shall be flush on both sides of wall.
- C. Seal voids between outside surface of sleeve and wall, partition or floor. Seals shall be airtight.
- D. Install piping, insulation and sleeves in strict accordance with applicable U.L. floor or partition assembly instructions. Coordinate with Division 07 firestop manufacturer's installation instructions.
- E. Penetrations not sleeved or firestopped:
  - 1. Seal voids between pipe and partition. Seals shall be airtight.

### **3.07 ESCUTCHEON PLATES**

- A. Provide chromium plated escutcheon plates for exposed uninsulated pipes projecting through floors or walls in "finished" spaces. Mechanical rooms, store rooms, electric closets, and janitor closets are not considered "finished" spaces.
- B. Clearance between sleeve and pipe: Minimum of 1/2 inch for hot piping and 1 inch for cold piping or as otherwise dictated by U.L. Fire Resistance Directory.

### **3.08 EQUIPMENT GUARDS**

- A. Use suitable structural frames with minimum 12 gauge, 3/4" galvanized mesh, or expanded metal mesh. Attach to equipment by removable clips and bolts with wing nuts, or other approved connectors.
- B. At belts, provide opening for measuring RPMs.
- C. Provide at all belts, couplings, moving machinery and equipment.
- D. Design for easy access to belts and other items requiring replacement.

- E. Comply with OSHA regulations.

### 3.09 CLEANING HVAC SYSTEMS

A. General Cleanup:

1. Upon completion of contract and progressively as work proceeds, clean up dirt, debris, oil materials, etc., and remove from site, keeping premises in neat and clean condition to satisfaction of the Engineer of Record. See Division 01 of specifications for further requirements.
2. Seepage, discoloration or other damage to parts of the building, its finish, or furnishings due to Contractor's failure to properly clean piping systems or duct systems shall be repaired without cost to the Owner.

B. Factory Finishes:

1. Clean items with factory finishes. Touch up bare places, scratches and other minor damage to finishes. Use only factory supplied paint of matching color and formula. If finishes are badly damaged or if there are many damaged, scratched or bare places, refinish the entire item.

C. Ducts and Apparatus:

1. Thoroughly clean ducts and apparatus casings before fans and filters are operated.

D. HVAC Closed and Open Water Systems:

1. Initial flushing:
  - a. Remove loose dirt, mill scale, metal chips, weld beads, rust, and like deleterious substances without damage to any system components.
  - b. Bypass factory equipment unless acceptable means of protection are provided, or by subsequent inspection of water boxes and other "hide-out" areas takes place.
  - c. Isolate or protect "clean" system components including pumps and pressure vessels and any component that may be damaged.
  - d. Open all valves, drains, vents, strainers, and the like at all system levels. Close all valves isolating piping from the existing central piping systems.
  - e. Remove plugs, caps, spool pieces, and components to facilitate early discharge from the system.
  - f. Sectionalized system to obtain debris carrying velocity of six feet per second.
  - g. Connect dead end supply and return headers and the like as necessary, or provide drains in dead end eccentric caps.
  - h. Install temporary strainers where necessary to protect downstream equipment.
  - i. Supply and drain-off "flushing" water by fire hoses, garden hoses, temporary or permanent piping, Contractor's booster pumps, and the like.
  - j. Flush for not less than four hours. Drain all dirt legs. If water drained is not visibly clean, repeat the above procedure until dirt legs are visibly clean.
2. Cleaning (Closed Systems Only):
  - a. Utilize defoamers to preclude damage to existing work, and specifically adjacent electrical equipment.
  - b. Utilize heat to maximize effectiveness of compounds or use live steam injection where practical and safe. Do not raise cleaning water temperature in excess of 150 degrees F. Install a thermometer in the piping system and constantly monitor the water during cleaning to prevent over-heating.
  - c. Install temporary strainers, reinforced against blowout, sized to not impair equipment performance, to preclude passing of particles larger than 60% of smallest radial and at a minimum to retain all particles larger than 1000 microns.
  - d. Permanent facility pumps shall not be used for circulating cleaning water. Contractor shall supply temporary pumps for this process.
    - 1) If the system construction, flow rates, and pressures are such that it is impractical for the Contractor to provide temporary pumps, the permanent facility pumps may be used with the specific express permission of the Owner, provided the guarantee on the entire pump assembly is

unconditionally extended for two years after date of Substantial Completion. Leakage from pump seals or other damage resulting from circulating the uncleaned water shall require immediate rectification at no additional cost to the Owner.

- e. Add 20 pounds of Garratt Callahan Formula 248, or equal, alkaline cleaner for each 1000 gallons of system water for chemical cleaning (approximate .2% solution). Formula 248 is a dry blend of buffered phosphates, a corrosion inhibitor, a surfactant, and an iron oxide sequestrant.
- f. Circulate for a period of at least 72 hours.
- g. Every eight hours, blow-down the condensers and system low points for three minutes.
- h. Drain and flush the system. Rapid flushing from the lowest point in the system is needed to remove debris.
- i. Inspect the system and repeat first four steps.
- j. Begin the corrosion control program immediately at double the normal inhibitor dosage for one week. After one week, drop to the normal dosage.
- k. Chemical treatment compound: Use Garratt Callahan Company Formula 12-L closed system inhibitor strictly following manufacturer's directions.

### **3.10 OPERATION OF HVAC SYSTEMS DURING CONSTRUCTION**

- A. Install specified filters prior to system operation. In addition to specified filters, install a roughing filter upstream of mixed air filter. Roughing filter shall consist of two layers of roll filter media clipped and sealed to entering side of filter frame. Change roughing filter as necessary to minimize dust collection on specified filters.
- B. Cover return and exhaust air grilles with temporary filter media. Attach media to avoid damage to grille or ceiling. Change temporary media as required to protect against dust buildup on ductwork. Remove temporary media from grilles after flooring is installed, walls are sanded and painted and other dust generating construction has been completed.
- C. During periods of excessive dust generation such as drywall sanding, seal off return and exhaust openings and grilles to prevent dust from accumulating in ductwork.
- D. If outside air source contains less dust than building air, adjust A/C unit dampers to operate with as much outside air as possible without causing a freezing conditions for coil or exceeding capacity of coil to adequately condition supply air.
- E. Furnish and install a new set of specified filter media prior to start of system test and balance. Furnish a new, clean set of the specified media and turn over to Owner's Representative.

### **3.11 TESTING MECHANICAL SYSTEMS**

- A. Test all systems and equipment installed to demonstrate proper operation.
- B. Advise Engineer of Record of scheduled systems testing and completed system demonstration/operation schedules so that he may witness, if desired.
- C. Correct and retest work found defective when tested.
- D. Make repairs to piping systems with new materials. Peening, doping, or caulking of joints or holes will not be acceptable.
- E. Domestic Water Piping: Any domestic water system that are modified shall be tested upon completion of rough-in, before fixtures are connected, at a hydrostatic pressure of 125 psig or 150% of working pressure whichever is greater for a period of two hours.

- F. HVAC Circulating Water Piping: Hydrostatically test piping at 150 psig pressure or at 1-1/2 times design pressure as indicated on drawings, whichever is greater, for a period of six hours without evidence of leaking.
- G. Ductwork Pressure Testing: Refer to Section 23 31 13 for required pressure testing for ductwork.
- H. Chemical Water Treatment Systems: Have equipment manufacturer field check installations of boiler water treatment systems, and cooling tower water treatment systems, including field calibration of pumps, controllers and other operable parts. Chemical water treatment for HVAC including cleaning, testing, and treatment shall be performed in accordance with Section 23 25 00.
- I. System Balance and Testing: Prepare to assist test and balance firm by assuring systems are complete and operational.
- J. Records of Testing: Maintain records of system testing and results thereof. Deliver results as part of project closing file and on an intermediate basis as requested by Architect.

END OF SECTION

**SECTION 23 05 19 - HYDRONIC SPECIALTIES****PART 1 - GENERAL****1.01 WORK INCLUDED**

- A. This section includes requirements for the following equipment and materials as applicable to this project:
  - 1. Water-to-water heat exchanger
  - 2. Pressurized Expansion Tanks
  - 3. Tank air control fittings
  - 4. Tangential air separator
  - 5. Suction diffuser
  - 6. P.T. test plugs
  - 7. Pressure test kit
  - 8. Pressure gauges
  - 9. Thermometers
  - 10. Thermometer test wells
  - 11. Relief valves
  - 12. Auto-flow balancing valves.
  - 13. Flow measure station
  - 14. Flow balancing valve
  - 15. Flow measuring meter
  - 16. Annubar flow sensor and meter

**1.02 RELATED WORK**

- A. Division 01: General Requirements
- B. Work involving HVAC piping.

**1.03 SUBMITTALS**

- A. Submit product data for review of any of the following that are applicable to this project.
  - 1. Water-to-water heat exchanger
  - 2. Pressurized expansion tanks
  - 3. Tank air control fitting
  - 4. Tangential air separator
  - 5. Suction diffuser
  - 6. Flow measuring station
  - 7. Auto Flow balancing valve
  - 8. Flow measuring meter
  - 9. Annubar flow sensor and meter
  - 10. Pressure gauges and P.T. plugs
  - 11. Thermometers
  - 12. Strainers
  - 13. Relief Valves

**PART 2 - PRODUCTS****2.01 ACCEPTABLE MANUFACTURERS**

- A. Armstrong
- B. Bell & Gossett ITT
- C. Keckley
- D. Trerice Company

- E. Taco
- F. Thrush
- G. Wheatley
- H. Peterson Engineering
- I. Mueller
- J. Dieterich Standard
- K. Water side connections: Flanged

## **2.02 PRESSURIZED EXPANSION TANK**

- A. No new expansion tank is required.

## **2.03 TANK AIR CONTROL FITTINGS**

- A. No new tank is required.

## **2.04 TANGENTIAL AIR SEPARATOR**

- A. No new air separator is required.

## **2.05 SUCTION DIFFUSER**

- A. No new suction diffusers are required.

## **2.06 P.T. TEST PLUGS**

- A. Provide 1/4" solid brass pressure/temperature test plugs at locations shown on drawings.
- B. Provide N2 Nordel self-closing valve rated for 275 degrees F service.
- C. P.T. test plugs shall be installed at locations necessary for testing if not already installed and also installed where shown on drawings.

## **2.07 PRESSURE GAUGES**

- A. If any pressure gauges are required, they shall be round face, dial type by Trerice.
- B. Trerice 800 LF, 3-1/2" face, glycerin filled, ASME B40.1 Grade A accuracy, 1% full scale.
  - 1. Constant flow primary chilled water 0-100 psi range
  - 2. Variable flow primary chilled water 0-160 psi
  - 3. Secondary chilled water 0-160 psi
  - 4. Condenser water 0-100 psi
- C. Gauge cocks: Trerice model 735 needle valves.
- D. Provide Trerice model 872 snubber on all gauges.

## **2.08 THERMOMETERS**

- A. Range:
  - 1. Chilled water: 30 degrees F. - 130 degrees F
  - 2. Condenser water: 30 degrees F.- 130 degrees F

## **2.10 THERMOMETER TEST WELLS**

- A. Provide Trerice stainless steel thermometer test wells at locations shown on drawings.
- B. Provide stainless steel test wells with 2-1/2" extension neck and screw plug capped with chain

and filled with light clear oil.

## **2.11 RELIEF VALVES**

- A. Provide relief valves for each hydronic system as shown on drawings.
- B. Construct valve to ASME requirements, tested by National Board of pressure vessels, and labeled with ASME symbol.
- C. Construct valve body of non-ferrous material.
- D. Provide diaphragm type valve operating with slow opening and closing feature.
- E. Valve to seat against face of EPDM rubber.
- F. Set differential between opening and closing pressure to prevent water flash and water hammer.
- G. Include manual lever for testing valve.

## **2.12 TRIPLE DUTY VALVES**

**None required.**

## **2.13 FLOW MEASURING STATION**

- A. Provide only if shown on drawings. Type: Similar to Bell & Gossett, Type OP.
- B. Provide orifice insert with provisions for connecting a portable differential pressure meter for flow measurement.
- C. Plate all surfaces and provide with name tags showing the capacity curve applicable to this meter.
- D. Provide brass threads on sizes 1/2" thru 2" machine 2-1/2" thru 4" for socket weld; 5" and above for butt weld.
- E. Provide meter connections with built-in check valves suitable for working pressure as specified on drawings at 250 degrees F.
- F. Provide measuring station with engraved tag attached indicating design flow, pressure, and flow characteristics of station.

## **2.14 AUTO-FLOW BALANCE VALVE**

- A. Provide only if shown on drawings. Type: Similar to Flow Design Model AC with 2-32 psi spring range.
- B. Factory set to automatically limit flow to within 5% of flow range. Pressure drop through valve shall not exceed 5 ft. for 2 inch size. Valves flow range shall be independently tested and certified by professional engineer.
- C. Provide with removable cartridge without the use of special tools or cutting piping. Provide two extended pete ports on each valve to clear insulation.
- D. Valve shall be constructed for 400 psig design at 250 degrees F. The flow cartridge shall have stainless steel internal parts. Machined threads shall be provided to adjust cartridge height without the use of shims or crimped sheet metal. Valve body shall be brass with brass ball valve and 'O' ring type union. All valves shall be factory leak tested.



- E. Provide integral union on the downstream side of the assembly.
- F. Refer to piping details for additional information.
- G. Provide electronic pressure (0-75 psi) and temperature (-10 - 230 F) test kit.

#### **2.15 FLOW BALANCING VALVE**

- A. Provide only if shown on drawings. Type: Similar to Armstrong "CBV", B & G "Circuit Setter" or Taco "AccuFlow".
- B. Provide calibrated, non-ferrous valve with provisions for connecting a portable differential pressure meter for flow measurement and balance.
- C. Provide meter connections with built-in check valves.
- D. Provide integral pointer to register degree of valve opening with tamper proof memory feature.
- E. Provide valve with drain connection.
- F. Construct valve with integral seals to prevent leakage around rotating element.
- G. Construct valve for 125 psi working pressure at 150 degrees F.
- H. Provide preformed polyurethane insulation for easy access to valve without disturbing field applied adjacent insulation.
- I. Provide valve with engraved tag attached indicating design flow, pressure, and flow characteristic of station.

#### **2.16 FLOW MEASURING METER**

- A. Provide only if shown on drawings. Type: Similar to Bell & Gossett, Model RO-5.
- B. Provide portable readout meter capable of indicating pressure differential across previously specified flow measuring devices.
- C. Provide necessary hoses, shutoff and vent valves, and carrying case.
- D. Reading range to be midscale of units to be read.

#### **2.17 ANNULAR FLOW SENSOR AND METER**

- A. Provide only if shown on drawings. Provide annular primary flow element as manufactured by Dieterich Standard Corporation where shown on drawings.
- B. Include annular primary flow element station and permanently mounted indicator.
- C. Provide measuring station with safety shutoff valves and permanent coupling connections.
- D. Provide metal tag showing design flow rates, meter readings for design flow rates, meter fluid, line size, and tag and station number.
- E. Construct measuring element of stainless steel.
- F. Provide either nipple section or weld insert type, stations depending on pipe size, rated at 275 psi at 400 degrees F.

- G. Provide rotatable sensing elements allowing pressure sensing ports to be pointed downstream when station is not in use.
- H. Permanent pressure loss to system not to exceed 5" w.g.
- I. Guarantee accuracy of flow measuring element within 2% as verified by independent testing laboratory.
- J. Provide totally dry, single diaphragm type meter with 6" dial pointer indicator. Construct wetted parts of 316 stainless steel. Provide meter with variable pulsation dampening control and integral equalizing valve with two bleed valves.
- K. Furnish meter with master chart for direct conversion of meter readings to gallons per minute.

## **2.18 WATER TO WATER PLATE/FRAME HEAT EXCHANGER**

- A. Existing heat exchanger is not anticipated to have any work required as related to this project.

## **2.19 STRAINERS**

- A. Provide only if shown on drawings. Acceptable manufacturers: Mueller, Keckley, Elliott, Webster.
- B. Cast semi-steel body or cast iron construction for steel piping and bronze body construction for copper piping; equipped with removable, Monel or stainless steel 20 mesh, water screen; maximum pressure drop 2 psi with free area at least four times area of pipe. Provided with blow-off outlet piped to nearest floor drain.

# **PART 3 - EXECUTION**

## **3.01 INSTALLATION**

- A. Install hydronic specialty items in locations shown on drawings.
- B. Insulate any components subject to sweating or any hot or cold service in accordance with Section 23 07 00.
- C. Utilize manufacturer's instructions to install specialty items. Manufacturer's instructions must be adhered to for proper operation of air removal devices and flow control valves.
- D. Provide manual air vents at top of pipe risers and other locations where air can be trapped or collected.
- E. Pipe relief valve outlets and drain connections from hydronic systems to nearest floor drain or to other approved location.
- F. Locate thermometers and pressure gauges no higher than 7 feet above finished floor elevation, positioned to be read from the floor.
- G. After systems are started up, placed in service and tested/adjusted to perform as designed, contractor shall provide competent representative to demonstrate proper operation and provide instruction to maintenance personnel to include performance on both cooling and heating cycles.

END OF SECTION

**SECTION 23 05 23 - VALVES FOR HVAC****PART 1 - GENERAL****1.01 RELATED WORK**

- A. Division 01: General Requirements
- B. Section 23 20 00: HVAC Piping

**1.02 QUALITY ASSURANCE**

- A. Valve bodies, shells, and seats: Factory tested.
- B. Bronze body valves:
  - 1. Materials for pressure containing parts: ASTM B-62 (less than 200 psi), B-61 (200 psi and above)
  - 2. Design, workmanship, testing: MSS-SP-80
- C. Iron body valves:
  - 1. Materials for pressure containing parts: ASTM A126, Grade B
  - 2. Face-to-face and end-to-end dimensions: ANSI B16.10
  - 3. Design, workmanship, testing: MSS-SP-70, 71
- D. Butterfly valves:
  - 1. Face-to-face and end-to-end dimensions: MSS-SP-67
- E. Valve stems: ASTM B584-78, Class 13C (cast silicon brass), ASTM B-371-79, Alloy A (rolled silicon brass), or other material equally resistant to dezincification.
- F. Pressure castings: Free of impregnating materials.
- G. Valve name or trademark and working pressure stamped or cast into body.
- H. Standard for 200 PSI and 300 PSI valves with metallic seats: ASTM B61-76.

**1.03 SUBMITTALS**

- A. Submit product data for review.

**PART 2 - PRODUCTS****2.01 ACCEPTABLE MANUFACTURERS**

- A. Iron body valves: Nibco, Kitz, Stockham, Crane, Milwaukee, Dezurik, Mueller, or Kennedy.
- B. Bronze body valves: Nibco, Kitz, Stockham, Milwaukee, Dezurik, or Kennedy.
- C. Butterfly valves: Nibco, Kitz, Stockham, Crane, Mueller, or Dezurik, Keystone.
- D. Ball valves: Nibco, Kitz, Apollo, Watts, Milwaukee, Jamesbury, or Hammond.

**2.02 MATERIALS**

- A. Nibco Figure numbers are indicated below unless noted otherwise:

- B. Globe Valves:
  - 1. Sweat: 2" and less, Figure S-235. Solder ends, 300 psi W.O.G.
- C. Check Valves:
  - 1. HVAC Circulating Water Piping:
    - a. System pressures 125 psi and less: Figure 910, non slam.
- D. Ball Valves
  - 1. HVAC Circulating Water Piping
    - a. 2" and less Figure T-585-70 or S-585-70, 2-piece, full port, 600 psi, WOG, TFE seats
  - 2. Provide ball valves with locking handles
  - 3. Provide extended lever for insulated service
- E. Butterfly Valves - 2-1/2" And Up:
  - 1. HVAC Circulating Water Piping: Figure LD-2000, lug type, 200 psi, Class 125, EPDM liner, aluminum bronze disc.
  - 2. Butterfly valves rated bubble tight for dead end service at full pressure in both directions without the need for downstream blind flange.
  - 3. Provide hand wheel and closed housing worm gear on valves 8 inches and larger. Provide clamp lock hand lever operators on valves less than 8 inches.
- F. Lubricated plug cocks:
  - 1. For valves 2" and less, Nordstrom Figure No. 114
  - 2. For valves 2-1/2" to 4", Nordstrom Figure No. 115
  - 3. For valves 5" and up, Nordstrom Figure No. 169
  - 4. Provide visual position indicators on all plug cocks
- G. Valve connections: Two inches and smaller - threaded; 2-1/2 inches and larger - flanged.
- H. Provide chain operators for gate valves, butterfly valves, and plug cocks located in mechanical rooms as required by mechanical plans or where valves are mounted above 7'-0" A.F.F.

### **PART 3 - EXECUTION**

#### **3.01 INSTALLATION**

- A. Furnish and install valves in piping connections where HVAC equipment must be isolated from piping system.
- B. Furnish and install valves in all piping systems to isolate the portion of the system which must be shut down for service or maintenance purposes.
- C. Install valves in water piping systems so ordinary maintenance work can be performed on the equipment that the valves isolate, without having to drain the system beyond the valve.
- D. Locate valves so as to be easily accessible by maintenance personnel.

END OF SECTION

**SECTION 23 05 29 - PIPE HANGERS & SUPPORTS****PART 1 - GENERAL****1.01 RELATED WORK**

- A. Division 01: General Requirements
- B. Section 23 07 00: HVAC Insulation
- C. Section 23 20 00: HVAC Piping

**1.02 SUBMITTALS**

- A. Submit product data for review.

**PART 2 - PRODUCTS****2.01 ACCEPTABLE MANUFACTURERS**

- A. Anvil, Carpenter and Patterson, Fee and Mason, B-Line, Viking, Reliable, and Michigan. Anvil numbers are used for reference.

**2.02 HANGERS**

- A. Anvil Figure #260 MSS Type 1, clevis hangers for:
  - 1. Non-insulated steel and galvanized piping 2" through 24" diameter
  - 2. Non-insulated cast iron pipe
  - 3. Non-insulated PVC piping
- B. Anvil Figure #260 clevis hangers with Figure 167, MSS Type 40 galvanized insulation protection shields (sized for supporting insulation having a compressive strength of 4 psi). Support piping on outside of insulation. Size hangers so that pipe insulation passes through them without interruption.
  - 1. All other insulated piping
- C. Anvil Figure CT-69, MSS Type 10 with adjustable wrought tubing ring hanger, copper plated for:
  - 1. Non-insulated copper tubing with no longitudinal movement
- D. Anvil Figure #171, MSS Type 41 with pipe roller, Anvil Figure #16x protection saddle and Anvil Figure 167, MSS Type 40 galvanized insulation protection shields (sized for supporting insulation having a compressive strength of 4 psi, at 8 foot intervals). Support piping on outside of insulation. Size hangers so that pipe insulation passes through them without interruption. Use these for:
- E. Anvil Figure #CT-121, MSS Type 8, riser clamps (at floor penetrations) to support:
  - 1. Copper pipe risers
- F. Anvil Figure #261, MSS Type 8, riser clamps (at floor slab penetrations) to support:
  - 1. Steel pipe risers
  - 2. PVC pipe risers
- G. Anvil Powerstrut Trapeze Hangers: Where three or more lines of pipe run parallel, support them with trapeze hangers, sized for maximum 3/16" deflection.

**2.03 INSERTS**

- A. Concrete Insert: Anvil Figure #281, MSS Type 18, universal concrete inserts, adequately sized

and correctly positioned to support full load operating systems.

- B. Concrete Insert, Wedge Type: Anvil Figure #281, 1/4" to 7/8".
- C. Lightweight Concrete Insert: Anvil Figure #285.
- D. Continuous Concrete Insert: Anvil Powerstrut Figure #PS-349 pre-galvanized.

## **2.04 EXPANSION ANCHORS**

- A. Hilti Kwik-bolt, zinc plated, metal expansion anchor.
- B. Anchor to meet U.L., ICBO-4627 and FM listings.

## **2.05 CLAMPS**

- A. C-Clamps: Anvil Figure #92, MSS Type 23.
  - 1. Use these for attaching hangers to steel beams. Do not weld hanger rods to structural steel members.
- B. Malleable Beam Clamps: Anvil Figure #218, MSS Type 30: Use these for attaching hangers to bar joists.

## **2.06 HANGERS RODS**

- A. Provide mild steel, all-thread rods with maximum loads as follows: 1.
  - 3/8" - 300 lbs
  - 2. 1/2" - 600 lbs.
  - 3. 5/8" - 1,200 lbs.
  - 4. 3/4" - 2,000 lbs.
  - 5. 1" - 5,000 lbs.

## **2.07 PIPE SUPPORTS**

- A. Coordinate with structural steel work related to support of piping.

# **PART 3 - EXECUTION**

## **3.01 PIPE HANGERS**

- A. Support pipes on so that equipment, pumps, and fittings do not bear weight or stresses from vibration and swaying of pipe.
- B. Maximum allowable spacing of pipe hangers is listed below. Space hangers and brackets at closer intervals where necessary to maintain levels, slopes, and drainage, or to prevent sagging or swaying of pipe.
- C. Steel Pipe – Water: Comply with Florida Mechanical Code requireents or as otherwise shown on drawings.

## **3.02 PIPE SUPPORTS**

- A. Coordinate with pipe supporting steel and other piping supports which are shown on drawings..

END OF SECTION

**SECTION 23 05 53 - IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT****PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Identification of HVAC piping and equipment as specified herein.

**1.02 RELATED WORK**

- A. Division 01: General Requirements
- B. Work involving HVAC piping.

**PART 2 - PRODUCTS****2.01 NAMEPLATES AND TAGS**

- A. Acceptable manufacturers: Seton Nameplate Corporation, Marking Services Inc. or equal.
- B. Rigid plastic, "Setonite" or bakelite with engraved lettering, minimum 1/2" high.
- C. Brass tags, at least 1-1/2" inches in diameter, with alpha-numeric I.D., permanently stamped black filled letters showing the service, and black filled numbers showing the valve or equipment number. At substantial completion, a schedule of all valves shall be submitted to the Engineer of Record and the owner.

**2.02 PIPE MARKERS**

- A. Plastic Pipe Markers: Factory fabricated, flexible, semi-rigid plastic, preformed to fit around pipe or pipe covering.
- B. Plastic Tape Markers: flexible vinyl film tape with pressure sensitive adhesive and printed marking.

**2.03 PIPE IDENTIFICATION AND PAINTING**

- A. Identify all piping as specified herein painted under Division 09.
- B. Paint piping as specified in this section and as specified in Division 09.
- C. Painting of HVAC piping:
  - 1. The following piping within each equipment room, fan room, boiler room, and central plant shall be painted in its entirety under Division 9. This piping shall also be stenciled for identification. Color codes are listed here for information only.
  - 2. Chilled Water: Blue
  - 3. Condenser Water: Green
  - 4. Glycol: Yellow
- D. Pipe Identification:
  - 1. Identify piping by stenciling or tagging (to denote contents and direction of flow) on piping at no more than 25 foot intervals at valves, and at least once in each separate space through which the pipe passes. Colors shall conform to ASME 13.1.
  - 2. Stenciling shall be a minimum of 2" high letters.
- E. Buried piping does not require identification marking, unless noted otherwise in specifications.

f

- F. All exterior piping along east wall and north wall is not required to have identification for aesthetic purposes since it will be covered with metal jacketing and is known to be chilled water supply and return piping.
- G. piping in central plant for condensate return piping from building HVAC systems shall be labeled to identify contents and direction of flow.

**2.04 EQUIPMENT AND APPARATUS IDENTIFICATION**

- A. None required except for any new valves.
- B. Valve Tags
  - 1. Each manual and automatic control valve shall be identified with a brass tag. The tag shall contain an alpha-numeric I.D. which shall include floor-level and building section as part of the I.D.
  - 2. A valve schedule shall be provided to the Engineer of Record and the owner. Mount valve schedule under glass and mount as directed by Owner's Representative.
  - 3. Securely fasten tags to valves with a brass "S" hook or chain.

END OF SECTION



**SECTION 23 05 93 - TESTING, ADJUSTING, AND BALANCING FOR HVAC****PART 1 - GENERAL****1.01 WORK INCLUDED**

- A. Perform test and balance work by engaging services of an independent test and balance agency (TAB) which is engaged solely in full time test and balance work, is a member of the Associated Air Balance Council (AABC).
- B. Perform test and balance in accordance with AABC National Standards, including revisions to the date of the contract.

**1.02 RELATED WORK**

- A. Division 01: General Requirements
- B. New piping for Lot 12.

**1.03 SERVICES**

- A. During construction, the Balancing Agency shall inspect the installation of new piping systems, and other parts of the HVAC system. The inspections shall be performed periodically as work progress. A minimum of two inspections are required.
  - 1. The TAB shall submit a written report of each inspection to the Owner's Representative.
- B. Upon completion of the installation and start-up of the chilled water system, the balancing agency shall test and balance the new piping system to confirm flow and pressure.
- C. If these specifications set forth more stringent requirements than the AABC National Standards, these specifications shall prevail.

**1.04 QUALIFICATIONS OF THE TAB FIRM**

- A. The firm shall have completed six projects of like size and scope.
- B. The firm shall maintain current insurance coverages in the minimum amounts specified in other sections of these specifications. The insurance coverage shall be carried with companies satisfactory to the Owner. Certificates of each of the above policies, together with a statement by the issuing company to the effect that said policy will not be cancelled without ten (10) days prior notice being given the Owner, shall be delivered to the Owner before any work is started.
- C. The firm shall be capable of performing the services specified at the location of the facility described within the time specified, of preparing and submitting the detailed report of the actual field work performed, and following up the basic work as may be required.
- D. The test and balance firm shall submit biographical data on the individual proposed to directly supervise the project. It shall also submit its record of at least two years specialized experience in the field of air and hydronic system balance, and shall possess calibrated instrumentation. The supervisory personnel for the test and balance firm shall be certified test and balance engineers. Project managers and technicians shall be permanent, full-time employees of the TAB firm.

**1.05 THE TAB REPORT**

- A. The TAB activities will culminate in a report to the Owner's representative. The intent of the final report is to provide a reference of actual operating conditions for the Owner's operating personnel.
- B. Measurements and recorded readings of system flow conditions in new piping must be done on-site by the permanently employed technicians or engineers of the firm.
- C. Comment sheets and punch lists shall be signed by the Contractor to acknowledge receipt. Any outstanding items at the time of completion shall be included in the report.
- D. The report shall be certified and approved by the test and balance engineer of the firm.

## **PART 2 - PRODUCTS**

### **2.01 NOT APPLICABLE PART**

## **3 - EXECUTION**

### **3.01 SYSTEMS PREPARATION**

- A. Contractor shall insure the systems are ready for test and balance.
- B. The TAB shall perform its services in close coordination with the new piping work.
- C. Correct deficiencies of materials and workmanship identified as delaying completion of TAB work.
- D. Air Distribution Systems:
  - 1. No work is applicable.
- E. Water Circulating Systems:
  - 1. Verify maximum flows in new chilled water supply and return piping to Lot 12.
- F. Automatic Controls:
  - 1. No work is applicable.
- G. Provide and coordinate services of qualified, responsible trades, suppliers and personnel as required to correct, repair, adjust or replace any and all deficient items or conditions found during the testing, adjusting and balancing period.
- H. In order that all systems may be properly tested, balanced, and adjusted, operate new piping systems for the length of time necessary to properly verify their completion and readiness for TAB.
- I. Project completion schedules shall provide sufficient time to permit the completion of TAB services prior to Owner occupancy.
- J. Contractor shall provide access as requested by the TAB firm. Also, any malfunction encountered by TAB personnel shall be reported to the Engineer of Record. Correct report malfunction so balancing work can proceed.

### **3.02 TAB PROCEDURES**

- A. The TAB shall perform trouble shooting functions such as obtaining pressure profiles, temperature and pressure readings or related data to assist in determining any system balancing problems. The TAB shall render to the Contractor and Architect suggested solutions to any balancing problem which may occur.
- B. Airside:
  - 1. No work is applicable.

- C. Waterside:
  - 1. Chilled Water through new piping systems: Submit TAB suggested verification procedure for approval before implementing test and balance of the flow to Lot 12:
- D. Controls:
  - 1. No work is applicable.
- E. Capacity and Performance Test
  - 1. Cooling: Only flow verification of chilled water supply and return to Lot 12 is required.

### 3.03 REPORTS

- A. Problems Encountered:
  - 1. Report any items not installed, improperly installed or not functioning properly.
- B. Final Report:
  - 1. The test-and-balance report shall be complete with logs, data, and records as required herein. All logs, data, and records shall be typed on white bond paper and bound. The report shall be certified accurate and complete by the balancing agency's certified test-and-balance engineer.
  - 2. The report shall contain the following general data in a format selected by the balancing agency:
    - a. Project number
    - b. Contract number
    - c. Project title
    - d. Project location
    - e. Project Engineer of Record
    - f. Project mechanical engineer
    - g. Test and balance agency
    - h. Test and balance engineer
    - i. General contractor
    - j. Division 23 contractor
    - k. Dates tests were performed
    - l. Certification
  - 3. The test-and-balance report shall be recorded on report forms conforming to the recommended forms in the AABC National Standards. At a minimum, the report shall include:
    - a. Preface - A general discussion of the system, any abnormalities and problems encountered.
    - b. Instrumentation list - The list of instruments including type, model, manufacturer, serial number, and calibration dates.
    - c. System Identification and description.
  - 4. Any unresolved problems will be reported in a general remarks section in front of the test and balance data.
  - 5. Any unusual operations or pertinent remarks which may aid the maintenance personnel or ease the reading of the report will be made in the general remarks section of the report.
  - 6. Report operating data and final tests in final report. This data will include, but not necessarily be limited to the scope of work outlined above.
  - 7. The final report shall be submitted to the Owner not later than one month after completion of the construction.
- C. Air handling equipment test-report forms.:
  - 1. None required.
- D. Pump test forms:
  - 1. None required.
- E. Chiller test forms:

- 1. None required.
- F. Heat-exchanger test forms:
  - 1. None required.
- G. Cooling-coil test forms:
  - 1. None required.
- I. Cooling-tower test forms:
  - 1. None required.

#### **3.04 CALLBACK**

- A. At the time of final inspection, the balancing agency shall recheck, in the presence of the Owner's Representative , specific and random selections of data recorded in the certified test-and-balance report.
- B. Points and areas for recheck shall be selected by the Owner's Representative.
- C. If random tests demonstrate a measured flow deviation of 10 percent or more from that recorded in the certified test-and-balance report, the report shall automatically be rejected. In the event the report is rejected, all systems shall be readjusted and tested, new data recorded, a new certified test- and-balance report submitted, and a new inspection test made, all at no additional cost to the owner.
- D. TAB firm shall provide for one callback request to retest any unresolved problems noted in the final report. The revised results are forwarded through channels, after completion of test.

#### **3.05 OPPOSED SEASON TESTING**

- A. None required.

END OF SECTION

**SECTION 23 07 00 - HVAC INSULATION****PART 1 - GENERAL****1.01 RELATED WORK**

- A. Division 01: General Requirements
- B. New piping for Lot 12.

**1.02 DEFINITIONS**

- A. Exposed - Equipment, ducts and piping in areas which will be visible without removing ceilings or opening access panels.
- B. Concealed - Installed above ceiling, in walls or chases.
- C. Outdoors - Exposed to the weather or ambient conditions.
- D. Underground - Buried.

**1.03 CERTIFICATION/QUALITY ASSURANCE**

- A. Manufacturer Qualifications: ISO 9001-2000 certified.
- B. Fire-Test Response Characteristics: Testing in accordance with ASTM E-84. Insulation and related materials, adhesives, coatings, sealers, jackets and tapes, shall have a fire-test response characteristic of: Flame spread rating of 25 or less; Smoke development of 50 or less.
- C. Materials shall meet the requirements of NFPA 90-A.

**1.04 SUBMITTALS**

- A. Submit manufacturer's product data and installation procedures for review.

**PART 2 - PRODUCTS****2.01 PIPE AND EQUIPMENT INSULATION**

- A. Materials for Pipe and Equipment: Provide factory premolded or precut insulation for pipe, pipe fittings, and valves.
- B. Fitting insulation: Same thickness and material as adjoining pipe insulation.
- C. Cellular Glass (Foamglas):
  - 1. Acceptable manufacturers: Pittsburgh Corning "Foamglas" type; minimum "R" value of 2.63
  - 2. Mastic: Water based, Foster 30-80 or equal
  - 3. Use on the following services:
    - a. Chilled water piping, 2" and less pipe, 1-1/2" thick, 2-1/2" and greater, 2" thick.
    - b. At hanger and support points as specified herein.
- D. Flexible Tubular Elastomeric:
  - 1. None required.
- E. Flexible Sheet Elastomeric:

1. Provide closed-cell flexible sheet type; minimum "R" value of 3.57
2. Acceptable manufacturers: Armacell, AP Armaflex; Rubatex
3. Use on the following services:
  - a. Refrigeration machine cooler, suction piping, and pipe connections: 1-1/2" thick (2 layers of 3/4" each)
  - b. Chilled water pump casings and flanges: 1" thick (2 layers of 1/2" each)
  - c. Plate and Frame Heat Exchanger: 1" thick (2 layers of 1/2" each)

- F. Fiberglass Pipe Insulation:
1. None allowed.

## **2.02 DUCTWORK INSULATION**

- A. None required.

## **2.03 MATERIALS FOR FITTINGS, VALVES, AND SPECIAL COVERINGS**

- A. For new chilled water piping, use premolded/precut insulation for pipe fittings, elbows, tees, butterfly valves, and couplings 2-1/2 and larger. Finish shall be as specified under Products above or as specified below.
- B. For any service when above grade exposed-to-the-weather outside building or in tunnels or manholes, cover straight pipe insulation with 0.016" thick smooth, aluminum jacket equivalent to Childers and cover fittings with factory formed covers equivalent to Elljacs. Install jacket seams on bottom of pipe.
- C. For any service, when below grade direct buried, cover straight pipe and fitting insulation with equivalent of Pittsburgh Corning "Pittwrap" or "Pittcoat No. 300 with PC Fabric 79". Valves in systems operating above 60 degrees F and installed in valve boxes shall not be insulated, however the valves shall be painted with rust-resistant product equivalent to Rustoleum.
- D. For flexible tubular elastomeric pipe and fitting insulation when exposed-to-view inside building or exposed to the weather, finish with two coats of fire retardant self-extinguishing vinyl lacquer type highly flexible coating equivalent to Armstrong "Armaflex Finish", custom color blended to match surrounding surfaces.

## **PART 3 - EXECUTION**

### **3.01 INSTALLATION - GENERAL**

- A. Deliver and store insulation materials in manufacturers containers and kept free from dirt, water, chemical and mechanical damage.
- B. Complete piping pressure testing prior to applying insulation.
- C. Apply insulation in workmanlike manner by experienced, qualified, workmen.
- D. Surfaces shall be clean and dry when covering is applied. Covering to be dry when installed and before and during application of any finish, unless such finish requires specifically a wetted surface for application.
- E. Adhesives, cements and mastics shall be compatible with materials applied and shall not attack materials in either wet or dry state.

### **3.02 BLANKET TYPE DUCT INSULATION**

- A. None required.

**3.03 BOARD TYPE DUCT INSULATION**

- A. None required.

**3.04 FLEXIBLE SHEET ELASTOMERIC INSULATION**

- A. Prior to application of flexible sheet elastomeric insulation, thoroughly clean all metal surfaces, making sure that all dirt, scale, loose paint, plaster, and oil has been removed and that surfaces are dry. If surface has been primed, test a two square foot section using adhesive equivalent to Armstrong No. 520 in order to determine whether solvent in adhesive will loosen or lift the primer. If primer is loosened, then remove it. When testing proves acceptable, adhere insulation with smooth side out, using thin but adequate coating of same adhesive. Follow manufacturer's instructions. Coat all butt edges of each sheet. Stagger all joints. Insulate all standing seams or flanges with same thickness of insulation material as that used on main surface.

**3.05 INSTALLATION OF PIPE COVERING**

- A. Foamglass insulation shall be strictly applied as follows:
1. Both the circumferential and longitudinal joints shall be buttered with fire-resistive pliable sealer. Voids and cracks shall be filled with sealer. Mastic shall be Foster 30-80 or equal. Secure insulation with 3/4" wide x 0.010" thick aluminum bands on 8" centers.
  2. The circumferential joints shall be staggered.
  3. Fittings, valves, flanges, and air vents shall be insulated with the same thickness of insulation using factory fabricated fitting sections or pre-molded insulated fittings.
  4. Block type insulation shall be adhered by stick-clips or bands, in addition to the sealer, as required to provide support for the insulation.
  5. Finish in equipment rooms and elsewhere where exposed-to-view shall be white 8 oz canvas paintable jacket.
  6. Finish where exposed-to-the-weather shall be .016 inch thick, Childers, or equal, aluminum jacket on lines and Eljacs, or equal, pre-formed aluminum covering on fittings.
  7. Finish on underground insulation shall be Pittsburgh Corning Pittwrap as recommended by manufacturer.
- B. Apply flexible tubular elastomeric insulation to pipe and fittings with all joints tightly fitted and sealed with adhesive.

**3.06 REFRIGERATION MACHINE INSULATION**

- A. None required.

END OF SECTION

**SECTION 23 20 00 - HVAC PIPING****PART 1 - GENERAL****1.01 WORK INCLUDED**

- A. Piping and pipe fittings for:
  - 1. HVAC Circulating Water Piping

**1.02 RELATED WORK**

- A. Division 01: General Requirements
- B. Section 23 05 00: Common Work Results for HVAC
- C. Section 23 05 19: Hydronic Specialties
- D. Section 23 05 23: Valves for HVAC
- E. Section 23 07 00: HVAC Insulation

**1.03 SUBMITTALS**

- A. Submit product data for review on piping and fittings. Submittal data shall include:
  - 1. Manufacturer of pipe.
  - 2. Tests or listings by recognized testing laboratory that certifies material composition is in accordance with ANSI/ASTM requirements.
  - 3. Product data for pipe and fittings to be used on each piping system.
  - 4. Welding procedures for steel pipe.
  - 5. Solder and brazing product data and installation procedures for copper pipe.
  - 6. Product data and installation procedures for grooved piping systems.
- B. Welders' Certification Information:
  - 1. Submit a copy of the proposed specification which the welder(s) will follow for all welding installation. Include with the specification a Procedure Qualification Record and certificates of the welders and welding operators required under provisions of ANSI/ASME Section 9 and ANSI/AWS D1.1. All welders shall have been tested and certified within the last two years by the National Certified Pipe Welding Bureau or other recognized testing agency acceptable to the Architect-Engineer. A copy of each welder's certification shall be available at the job site during construction. Submit this information and obtain approval of Architect-Engineer prior to starting construction.

**PART 2 - PRODUCTS****2.01 STEEL PIPE**

- A. Black steel: Electric resistance welded or seamless, ASTM A53 or ASTM A106 Grade B. Mill wrap uninsulated underground steel pipe with Republic X-Tru-Coat or equal.
  - 1. Through 10" standard weight Schedule 40
  - 2. 12" pipe and larger: standard weight with 0.375" wall thickness
- B. Provide for the following services:
  - 1. Chilled water supply and return piping 1-1/4" diameter and larger. (Contractor option: copper up to 2" diameter; see "COPPER PIPE" below.)
  - 2. Condenser water supply and return piping.
  - 3. Glycol piping.



- C. Schedule 40, A53 or A106 galvanized pipe for:
  - 1. Cooling Coil condensate drain piping. (Contractor option: Copper; see "COPPER PIPE" below.)
  - 2. Waste, vent, and drain piping 1-1/2" diameter and smaller.

## **2.02 STEEL PIPE FITTINGS**

- A. Flanges, Fittings, and Unions: Mark in accordance with MSS-SP-25.
- B. Fittings:
  - 1. 2-1/2" and larger: Class 150, wrought steel, butt welded fittings, ASME B16.9
  - 2. 2" and Smaller
- C. Flanges, 2-1/2" and larger: Class 150, A53 wrought forged steel, slip-on or weld neck, ASME/ANSI B16.5.
- D. Gaskets:
  - 1. Inorganic fibers, 1/16 or 1/8 inch thick, reinforced EPDM binder, 550 deg F (continuous) and 700 psig operation, Garlock 5507 or equal:
    - a. Chilled water
  - 2. Spiral wound "chevron" metallic gaskets, flexible graphic filler, class 150 and 300 service, Flexitallic LS, CG or equal
- E. Unions, 2" and smaller: Material as specified under fittings, screwed with brass seat.
- F. Branch connections from mains or headers, 2-1/2" and larger: Welded tees or welding outlets, Bonney Forge Weldolets or Thredolets. Use forged outlets only if branch line is at least one pipe size smaller than main or header.
- G. Galvanized steel pipe fittings: Same as above, except galvanized coated.
  - 1. Provide drainage pattern type fittings for waste, vent, and drain piping.
- H. Bolting Materials: Same finished carbon steel bolts and hex nuts, ASTM A307. Threads and Dimensions: ASME/ANSI B1.1 and B18.2.
  - 1. Use galvanized bolts and nuts on piping outside the building.
- I. Thread Lubricant: Similar to Crane "Formula 425".
- J. Mechanical coupled joints shall not be used for HVAC systems.

## **2.03 COPPER PIPE**

- A. Conform to ASTM B-88 specification for wrought seamless copper.
- B. Type L, hard for:
  - 1. HVAC chilled water pipe, 1" and smaller. Contractor option for copper or steel pipe 1-1/4" to 2".
- C. Use Type K, rolled, soft for: Piping installed under floor slabs.
- D. Type M, hard for:
  - 1. For non-pressurized drain, waste and vent piping.
  - 2. Fan coil unit condensate piping.

## **2.04 COPPER PIPE FITTINGS**

- A. Sweat type, wrought copper, ASTM B62, with dimensions conforming to ASTM/ANSI B16.22 and sweep patterns for copper tubing.

- B. Dielectric Connections:
  - 1. Provide at junction of copper pipe and equipment with steel piping systems.
  - 2. Central, Dielectric insulating unions, and insulating flange unions, as manufactured by Central Plastic Company, or CTS Fabrication USA (1-1/2" thru 8").
  - 3. Provide copper solder joint to plated female iron pipe for sizes 1/2" through 2".
  - 4. Provide insulating flange unions, malleable female iron pipe thread to copper solder joint flange unions for sizes 2-1/2" through 4".
  - 5. Brass fittings and valves may not be used for dielectric union locations.
- C. Unions: Brass ground joint, 250 lb. working pressure.
- D. Nipples: Brass.

## **2.05 PVC PIPE AND FITTINGS**

- A. PVC pipe, fittings, cement, and joint cleaner for entire project shall be supplied by a single manufacturer.
- B. PVC schedule 40, Type I, DWV, ASTM D-2665, 1120, 160 PSI at 73 degrees F. Solvent cement shall meet ASTM No. D-2564 for (PVC-DWV) plastic and pipe fittings. If permitted by governing code authority, may be used for:
  - 1. Fan coil unit cooling coil condensate drains above grade only if room is not used as return air plenum.
  - 2. Cooling coil condensate piping shall be UV resistant where exposed.

## **2.06 MISCELLANEOUS PIPE ACCESSORIES**

- A. Escutcheons: Chrome pipe escutcheons, slip-on or split type where pipe passing through finished walls or ceiling may be visible.
- B. Exposed Metal Pipe and Trim: Chrome plated.
- C. Control System Connectors: Crane No. 386, 1" steel half couplings, or 1" female pipe thread connectors.
- D. Install 18 gauge sheetmetal or galvanized steel pipe saddles to protect insulation.

## **PART 3 - EXECUTION**

### **3.01 INSTALLATION**

- A. Clean inside of pipe before installation. Keep installed piping clean, and protect ends from foreign matter by capping or plugging them.
- B. Install pipe so that it does not interfere with opening of doors or apparatus, access to equipment, or to electrical equipment.
- C. Do not install pipes in such a way that they will apply torque to pumps. After pumps have been installed and pumps have been operated, recheck and realign pumps if necessary.
- D. Run pipes in straight lines and square with building. Install risers plumb. Make offsets only where indicated and where necessary.
- E. Install branch connections using separate tee or lateral fittings for each branch. Do not combine branches into "bullhead tee" arrangement.
- F. Do not install water pipes in electric rooms, tele/data rooms, transformer rooms, or audio/visual

rooms.

- G. Do not install piping above electrical equipment such as starters, variable frequency drives, motor control centers, or disconnects. Maintain code required clearance above, below and to sides of electrical equipment.
- H. Provide flanges or unions throughout the pipe systems at all equipment. Make provisions for servicing and removal of equipment without dismantling piping.
- I. Grading Pipes for Drainage:
  - 1. Slope cooling coil condensate drains at 1/8" per foot.
- J. Piping Expansion:
  - 1. Install piping to allow thermal expansion and contraction without injury to piping, equipment or structure.
    - a. Use loops or expansion joints where necessary and where detailed.
    - b. Provide pipe guides.
  - 2. Where screwed piping is used for soil, waste, or vent risers, or downspouts, use caulked joints or expansion joints at intervals to allow expansion movement.
- K. Branch Lines:
  - 1. Where possible branch lines shall come off top of mains to prevent sediment, welding slag, or pipe burrs from entering the branch lines and causing valve leakage or failure.

### 3.02 PIPE JOINTING

- A. Preparing Pipe Ends:
  - 1. Machine cut pipe ends square.
  - 2. Ream pipe ends, after cutting, to full diameter.
  - 3. Where pipe is to be threaded, secure pipe in pipe stand, die cut, full depth, right hand threads. Threads to be taper type.
  - 4. All threaded pipe joints to have suitable pipe sealant applied to threads prior to assembly of joint. Joints shall be leak proof.
  - 5. Where pipe is to be welded, die-cut end of butt joints at 30 degree taper. Weld should have a full penetration with no bubbles or holes. Remove all slag.
- B. Welded Steel Piping:
  - 1. Where welded piping is specified, make welds by oxy-acetylene process or electric process in accordance with ASME/ANSI B31.1.
    - a. Welding Rods: Grade recommended for purpose by manufacturer's and identification.
  - 2. Line welds, single V-butt type:
    - a. Mill or machine bevel pipe at 37 1/2 degrees to within 1/16" of inside wall, except that in field limited amount of pipe may be flame beveled.
    - b. Pipe with a wall thickness of 3/16" or less need not be beveled but may be welded by melting down into building up over abutting ends.
    - c. Separate abutting ends of joints before welding to permit complete fusion to bottom without overlapping.
    - d. Tack in two or more points to maintain alignment, and fusion weld.
  - 3. Make all welds of sound weld metal, thoroughly fused into ends of pipe, and to bottom of vee.
    - a. Build in excess of pipe wall to give reinforcement to one fourth pipe wall thickness.
    - b. Weld metal shall present a gradual increase in thickness from surface of pipe to center of weld.
    - c. Minimum weld width: Two and one half times thickness of pipe wall.
  - 4. Use welding ells at turns in welded lines
  - 5. Do not weld pipe couplings in place of welding fittings for any branch connections.

6. Weld-o-lets and thread-o-lets:
    - a. Scribe and cut openings in main pipes for welded branches accurately taking care to remove all of plugs and cuttings from main pipe.
    - b. Full weld fillet welds for full depth of fillet, with additional beads to form well rounded connection as recommended by weld-o-let manufacturer.
  7. Cut openings into pipe for welded connections accurately to give matched intersections.
  8. Make welded fittings of same material with same pressure and temperature rating as pipe with which they are used.
  9. Make flanged connections to control valves, pump suction and specialties with ANSI standard welding neck flanges. All other flange connections may be made with slip-on flanges provided they are seal welded on inside.
  10. Fuse all fillet welds for flanges or fittings into pipe and plate for minimum distance of 1-1/2 times pipe wall thickness and depth weld on 1-1/4 times pipe wall thickness.
- C. Soldered and Brazed Joints:
1. Make Type L and M copper pipe joints with suitable flux and 95/5, lead free solder.
  2. Make Type K copper pipe joints with silver (BAg Series) brazing filler material with flux or copper-phos (BCup Series) brazing filler material without flux per the recommendations of the Copper Development Association.
- D. "T" Drill Branch Tee Connections for Copper Piping Systems:
- E. PVC Joints:
1. Make joints in accordance with cement manufacturer's printed instructions.
- F. Bracing Joints:
1. Provide braces and bridle rods as required to reinforce joints.
  2. If mechanical lock type couplings are used, then prepare pipe ends and make joints in accordance with pipe coupling manufacturer's printed instructions.
  3. Where large pipes underground are subject to shock because of sudden changes in liquid flow rate, provide concrete "kicker" blocks at joints, fittings, and changes of pipe direction. Provide "kicker" blocks in accordance with applicable pipe industry trade or research organization recommendations.

### **3.03 ESCUTCHEONS**

- A. Provide chrome plated escutcheons where uninsulated pipes penetrate walls or ceilings of finished spaces.

### **3.04 STRAINERS**

- A. Install strainers so the strainer basket can be removed without spilling water on motors and electrical equipment.

### **3.05 AIR VENTING**

- A. Provide manually operated air vents at high points in vertical risers and at water coils to eliminate air from systems. Air vents are not required at reheat coils.
- B. Use ball valves for manual air vents.

### **3.06 VALVE ACCESS**

- A. Locate ceiling/wall access panels at shut-off and control valves for proper access and operation. Furnish and install access doors in accordance with Section 23 05 00 and other Divisions as applicable.

### **3.07 GAS PIPE CONDUIT**

- A. Install and vent under floor gas piping in cast iron pipe conduit as indicated on drawings. Vent to atmosphere, outside building, at least 15 feet from any fresh air intake, door or operable windows.

### **3.08 COOLING TOWER BLEED**

- A. Provide cooling tower bleed-off and strainer in cooling tower discharge line. Connect capped bleed-off tube in vertical discharge line and extend it to within 2" of drain. Drill capped end to bleed 1% of condenser water circulated.

### **3.09 CONTROL SYSTEM CONNECTORS**

- A. Weld connectors at points indicated, and at other points where necessary for installation of thermometers and automatic controls.

### **3.10 TESTING**

- A. Before piping is concealed or insulated, recheck it for leaks.
- B. Rework or replace defective and leaking joints, and joints which are otherwise unsatisfactory. Peening, caulking, and doping are not permitted.

END OF SECTION

**SECTION 23 21 14 - UNDERGROUND HYDRONIC PIPING****PART 1 - GENERAL****1.01 WORK INCLUDED**

- A. Underground piping systems for:
  - 1. Chilled water
- B. A manufacturer's factory representative who is technically qualified to supervise the piping installation shall be present at each initial phase of unloading, storing, assembly (including cold springing), backfilling and testing. This representative shall report in writing to the Engineer and the contractor any work not in accordance with the manufacturer's instructions, and special conditions which may result in an unsatisfactory distribution system.

**1.02 SUBMITTALS**

- A. Submit the following for review.
  - 1. Product data
  - 2. Scaled layout drawing showing all sections of conduit system. Show grades, underground utilities, buildings, pipe invert elevations, locations of anchors, oversized elbows and other parts of system.

**1.03 RELATED WORK**

- A. Division 01: General Requirements
- B. Section 23 05 00: Common Work Results for HVAC
- C. Section 23 20 00: HVAC Piping

**PART 2 - PRODUCTS****2.01 ACCEPTABLE MANUFACTURERS**

- A. Underground system shall be Themacor. Existing underground piping is Themacor and no other manufacturer is acceptable for new underground piping regardless of location.

**2.02 MATERIALS**

- A. General description: The underground piping system shall include a prefabricated assembly consisting of steel service pipe, insulated as indicated, PVC conduit casing, and end seals for conduit. Ells and laterals shall be furnished in accordance with the specifications covering straight conduit, and shall be supplied by the conduit manufacturer. Straight sections of conduit shall be manufactured in standard pipe lengths.
- B. Service Pipe: Black steel pipe ASTM A-53 or A-106 Grade B seamless, standard weight. Pipe shall be cut to length and the ends beveled. All piping shall be shipped from the manufacturer with end caps.
- C. Casing: Jacketing material shall be extruded, black, high density polyethylene (HDPE), having a wall thickness not less than 150 mils for jacket sizes larger than 12" to 20", and 175 mils for jacket sizes greater than 20". The conduit assembly shall meet H-20 highway loading with 24" compacted cover.

- D. End Seals: Heat shrink end seal moisture barrier factory applied to the ends of the polyurethane insulation.
- E. Service pipe insulation: Polyurethane foam insulation, meeting the following specifications:
  - 1. Type - CFC-Free
  - 2. Density - 1.9 to 2.1 lb/cu. ft.
  - 3. Shrinkage - None at 70 F
  - 4. Aged "K" (70 F - 72 hrs.) - 0.150 BTU per in. per hr, per degree
  - 5. Closed Cell Content - 90%
- F. Insulation thickness shall be 2" nominal and shall completely fill the annular space between the carrier pipe and conduit inner wall.
- G. Service pipe shall be concentric to casing pipe. The allowable maximum deviation from center line of carrier pipe shall be plus or minus 1/4 inch at the casing center point and plus or minus 1/16 inch at the end seals.
- H. Insulated Fittings: Fittings shall be black steel seamless welding per ASTM 234 preinsulated by the manufacturer of the Pipe System using the same insulation thickness and casing as the pipe. The fitting casing shall be a one piece seamless molded HDPE fitting cover, a butt fusion welded, or an extrusion welded and mitered HDPE jacket. Ends seals on fittings shall be the same as used on the pipe. Changes in pipe size shall be accomplished by eccentric fittings in order to provide continuous gravity draining.
- I. Straight run joints shall be field-insulated polyurethane foam poured in an HDPE sleeve, and sealed with a heat shrink blanket. Blanket shall totally encapsulate HDPE sleeve with overlap.
- J. Wall Penetration Sleeves: If required at any location, provide sleeves where chilled water conduit system passes through masonry or concrete walls and floors. Sleeves shall be minimum 10 gauge steel, minimum 1" inside diameter greater than casing outside diameter. Sleeves shall be held securely in proper position and location during construction. Sleeves shall be of sufficient length to pass through entire thickness of walls or slabs. Sleeves in floor slabs shall extend 2 inches above the finished floor. Provide mechanical rubber seal in annular space between casing and sleeve. Apply waterproof sealant around outside surface of sleeve where it passes through wall or floor.
- K. Dielectric Fittings: Provide dielectric fittings at joints of dissimilar metals as required by Section 23 20 00.

### PART 3 - EXECUTION

#### 3.01 INSTALLATION

- A. Thermacor piping shall be provided in all underground locations of new piping work including installation below any existing roadway or sidewalks. Such areas where piping will be installed shall be restored to their original condition after the piping installation has been completed and approved.
- B. The installing contractor shall perform the following field tests on the underground distribution system and shall provide a written report to the Engineer verifying that these tests were satisfactorily performed.
  - 1. All new chilled water piping shall be hydrostatically tested before insulation is applied at field joints and shall hold for six (6) hours at a pressure one and one-half times the working pressure or 150 psig, whichever is greater.
  - 2. Trenches shall be of the necessary width for proper laying of pipe, and the banks will be as nearly vertical as practicable (within proper safety guidelines). The bottom of the

trenches shall be accurately graded to provide uniform bearing and support for each section of the pipe on gravel at every point along its entire length. Whenever wet or otherwise unstable soil that is incapable of properly supporting the pipe is encountered in the bottom of the trench, such soil shall be removed to the depth required and the trench backfilled and compacted in accordance with the compaction requirements herein to the proper grade with fine gravel as specified hereinafter. This material shall be compacted to a density equal to that of the acceptable portion of the trench. The trench shall be excavated to a minimum overdepth of six inches below the trench depths indicated or specified. Overdepths in the excavation shall be backfilled with gravel. Water accumulation shall be removed by pumping or by other approved methods.

3. The trenches shall not be backfilled until conduit casings have been proven tight and field joints waterproofed. The trenches shall be carefully backfilled with sand and/or gravel as shown on drawing details. Pavement distributed by trenching operations shall be replaced with materials equal to adjacent paving.

### **3.02 JOINT CONSTRUCTION**

- A. Shall be made with welded fittings for piping and flanged fittings for valves.
- B. Dissimilar Materials Piping Joints: Construct joints using adapters that are compatible with both piping materials, outside diameters, and system working pressure.

### **3.03 PIPING SYSTEMS - COMMON REQUIREMENTS**

- A. General Locations and Arrangements: Drawings indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated except where deviations to layout are approved on coordination drawings.
- B. Install piping components having pressure rating equal to or greater than system operating pressure.
- C. Install piping free of sags and bends.
- D. Locate groups of pipes parallel to each other, spaced to permit valve servicing.
- E. Install fittings for changes in direction and branch connections.
- F. Fittings not permitted are:
  1. Elbows, tees and pipe reducers fabricated from pipe
  2. Tees and elbows fabricated by butt welding branch line to main
  3. Bullheading tees

### **3.04 PIPING INSTALLATION**

- A. General: Installation of pre-insulated piping system shall be in accordance with ANSI B31.1 and the specifications and piping system manufacturer instructions. Manufacturer field representative shall conduct a pre-installation clinic to prequalify contractor personnel in the proper procedures for the installation.
- B. Open ends of pipe lines and equipment shall be properly capped or plugged during installation to keep dirt or other foreign matter out of the system.
- C. Pipe lengths shall be strung along the line of the trench so as to minimize additional handling during installation. Do not remove protecting materials from pipe ends until the pipe is lowered into the trench and ready for assembly.



- D. As a rule, the pre-insulated pipe shall be hand passed into the trench using two men. Federal safety regulations shall be observed. If slings are necessary use only canvas straps, no cable or chain slings shall be used.
- E. Welding: End covers shall remain in place until welding operations are ready to begin. Welding in trenches should be minimized. System sections including fittings shall be first laid out and aligned. Safety procedures shall conform to ASH1 249.1.
- F. Insulation of Joints: Attach preformed polyurethane insulation using fiberglass tape. Push casing sleeve over the insulated joint so that it is positioned evenly.

### **3.05 PIPING INSTALLATION, IMPORTANT SPECIAL CONDITIONS**

- A. All underground piping shall be installed with extreme care to avoid inclusion of any dirt, debris, or other solid or particulate matter being allowed to be contained within the piping system as it is welded and joined to provide a closed piping system.
- B. No dirt or debris or other foreign matter shall be contained within the new piping system upon final completion of installation and before flow testing is performed.
- C. Any dirt, debris or other foreign matter shall be removed at the expense of the Contractor.
- D. Pretest the existing chilled water conditions before performing work to verify baseline of existing conditions of chilled water system cleanliness before performing any installation work of the new chilled water piping system. Post-test the same system after completion to verify that no foreign matter was allowed into the system by executing the installation of the new piping work.

### **3.06 GUARANTEE**

- A. The manufacturer shall furnish a guarantee for the furnished components of the system for a period of one year from the date of acceptance, either for beneficial use or final acceptance, whichever is earlier. The installing contractor shall also furnish a guarantee for proper installation of the entire system for the same period of time.

END OF SECTION

**SECTION 23 25 00 - CHEMICAL WATER TREATMENT****PART 1 - GENERAL****1.01 SCOPE OF WORK**

- A. The chemical treatment described by this section is intended to apply to only the new chilled water piping that is provided.

**1.02 INCLUDED WORK**

- A. Provide chemical treatment for the new piping work.
- B. Equipment, material, and chemicals shall be provided by a single water treatment firm for individual responsibility to insure system compatibility.
- C. Supplier shall consult with the operating maintenance personnel and obtain services and equipment as requested by them.
- D. The products and systems set forth in Part 2 are performance oriented without regard to raw water conditions at the site, existing special conditions or an individual manufacturer's equipment or chemicals. Proposers shall obtain samples of the water to be supplied to the facility, analyze it and submit their proposals for equipment and chemicals based on the water to be treated and any other special conditions. A copy of the water analysis must be furnished with the proposal. The requirements of this paragraph also apply to additions and renovations to existing facilities where the proposer is already rendering chemical water treatment.
- E. The chemical water treatment supplier shall provide necessary products for cleaning and operation of closed chilled water systems for the new work.

**1.03 RELATED WORK**

- A. Division 01: General Requirements
- B. Section 23 05 00: Common Results for HVAC

**1.04 SUBMITTALS**

- A. Submit shop drawings, product data, and manufacturer's installation instructions for review.

**PART 2 - PRODUCTS****2.01 ACCEPTABLE SUPPLIERS**

- A. Acceptable suppliers include:
- B. Tampa Bay Trane (Basis of Design)
- C. Chemical water treatment supplier must have qualified service representation within 200 miles of facility, shall render monthly service to facility, and be available for emergency service as required.

**2.02 CONDENSER WATER SYSTEMS**

- A. Not applicable to this new work.

**2.03 BASIN CLEANING AND FILTRATION SYSTEM**

- A. Not applicable to this new work.

**2.04 CHILLED WATER SYSTEMS**

- A. Provide chemicals and associated treatment in accord with manufacturer's recommendations for the closed loop chilled water system this is provided as new work.

**2.05 DOMESTIC WATER SYSTEM**

- A. Not applicable to this new work.

**2.06 GLYCOL FEEDER SYSTEM**

- A. Not applicable to this new work.

**2.07 TEST CABINET, EQUIPMENT AND TEST CHEMICALS**

- A. Not applicable to this new work.

**PART 3 - EXECUTION****3.01 INSTALLATION**

- A. The chemical water treatment system representative shall field verify the completed installation to insure that all necessary chemicals and test equipment is on hand when needed and is provided in accord with approved recommendations.

**3.02 SYSTEM PREPARATION FOR OPERATION**

- A. Closed Water Systems: Proceed as described in all or part **as is applicable to the new chilled water piping provided for Lot 12:**
1. Initial Flushing:
    - a. Remove loose dirt, mill scale, metal chips, weld beads, rust, and like deleterious substances without damage to any system components.
    - b. Bypass factory equipment, unless acceptable means of protection are provided and by subsequent inspection of water boxes and other "hide out" areas takes place.
    - c. Isolate or protect "clean" system components including pumps and pressure vessels and any component that may be damaged.
    - d. Open all valves, drains, vents, strainers and the like at all system levels.
    - e. Remove plugs, caps, spool pieces and components to facilitate early discharge from system.
    - f. Sectionalize system to obtain debris carrying velocity of 6 FPS if possible.
    - g. Connect dead end supply and return headers and the like, as necessary or provide drains in dead end eccentric caps.
    - h. Install temporary strainers where necessary to protect downstream equipment.

- i. Supply and remove "flushing" water and drainage by fire hoses, garden hoses, temporary or permanent piping, or system booster pumps.
  - j. Flush for not less than 4 hours.
  - k. Inspect system including any storage tanks and basins to determine if debris accumulation required dewatering and cleaning prior to the next phase.
  - l. For systems indicated with glycol, fill system from pre-mixed tanker trucks or barrels at indicated concentrations. Handle glycol in accordance with manufacturer's instructions and regulatory requirements.
2. Cleaning:
- a. Remove adherent dirt (organic soil), oil, grease, hydrocarbons, welding and soldering flux, mill varnish, piping compounds rust (iron oxide), and like deleterious substances not removed in initial flushing without chemical or mechanical damage to any system component.
  - b. Utilize defoamers to preclude damage to existing work and, specifically, adjacent electrical equipment.
  - c. Utilize heat to maximize effectiveness of compounds or use live steam injection where practical and safe. Do not raise cleaning water temperature in excess of 150 degrees F.
  - d. Install temporary strainers, reinforced against blowout, sized to not impair equipment performance, to preclude passing of particles larger than 60% of smallest radial and at a minimum to retain all particles larger than 1000 microns.
  - e. Permanent facility pumps shall not be used for circulating cleaning water, except in compliance with the following provisions:
    - 1) System construction, flow rates and pressure are such that it is impractical for the Contractor to provide temporary pumps and construction procedures, initial flushing workmanship, and cleaning provisions.
    - 2) Mechanical seal area of each pump stuffing box is continuously flushed, under head in excess of pump internal pressure, at a rate not less than 1/2 gpm with water passing through specified cyclones or a 5 micron filter if other than a protected potable water supply.
    - 3) The guarantee on the entire pump assembly is unconditionally extended for two years after date of facility acceptance. Leakage from pump seals, scored horizontal turbine pump shafts with vibration in excess of two mils at shutoff head during that period, shall be construed as damage, requiring immediate rectification.
  - f. Add a 4% solution by weight of a pulverized acid product for chemical cleaning. As the solution reacts with deposits, the pH of the solution increases. When the solution loses strength, a color change will take place from blue green to blue to purple. Continue to add until color remains blue green for two hours.
  - g. Flush system per "flushing instructions".
  - h. Next phase is to passivate metal surfaces. Add 5 lbs. (or as specified) per 1000 gallon system capacity. Circulate for 48 hours. Perform total soluble inorganic phosphate (TIP) tests to determine the passivating qualities and make adjustments accordingly. System shall not be on a heat load. Sixty to ninety degrees F is in preferable heat range. After passivation "flush" system and refill with potable Municipal water.
  - i. Blowdown all strainers or remove and clean as frequently as possible during cleaning and passivating stages.
  - j. Replace all filter elements as necessary.
  - k. Prepare system for "final flushing" by displacing all cleaning and passivating solutions and installing primary filter elements in cleaned filter

- body.
- 3. Final Flushing:
  - a. Return systems to conditions required by "Initial Flushing" after all cleaning and passivating solutions have been displaced by clean make-up disinfected water.
  - b. Flush all dead ends and isolated "clean" equipment.
  - c. Operate gently, all valves to dislodge any debris in valve body by throttling velocity.
  - d. Flush for not less than 4 hours.
- 4. Chemical Treatment Compound:
  - a. A liquid solution of borate-nitrite with color concentration indicator shall be added to provide protection from corrosion, fouling. Product must contain a scale modifier with borate as the pH buffer. Additions shall be added at 1 gallon per 1000 gallons system capacity (or as required). Nitrite levels shall be maintained at 300-500 ppm in chilled closed systems and 800-1000 ppm in hot closed systems.

### **3.03 OWNER OPERATOR TRAINING**

- A. Provide the maintenance personnel with written recommendations for maintenance of the new work provided.
- B. Instruct Owner's operating personnel in the requirements of the treatment and testing program.

END OF SECTION

## Tab 2

# PROJECT MANUAL

**FOR**

## CHILLER SYSTEM OPERATION AND MAINTENANCE SERVICES

**FOR**

**ENCORE  
COMMUNITY DEVELOPMENT DISTRICT**

TO BE SUBMITTED TO:

ENCORE  
COMMUNITY DEVELOPMENT DISTRICT

c/o Rizzetta & Company, Inc., attention Jennifer Goldyn,  
2700 S. Falkenburg Rd, STE 2745, Riverview, FL 33758  
**No later than September 9, 2022 at 2:00 p.m.**

TO: Encore Community Development District

FROM:

(Proposer)

In accordance with the Request for Proposals for Chiller System Operation and Maintenance Services for Encore Community Development District, the undersigned proposes to conduct all work necessary to provide complete chiller system operation and maintenance services as described in the project scope and detailed specifications.

All Proposals shall be in accordance with the Project Manual.

## **Table of Contents**

- I. Acknowledgement of Receipt of Documents and Proposal Signature Form**
- II. Notice of Request for Proposals**
- III. Instructions to Proposers**
- IV. Evaluation Criteria**
- V. Contractor Questionnaire Forms**
  - a. Contractor Qualification Statement
  - b. Corporate Officers
  - c. Supervisory Personnel
  - d. Company Owned Major Equipment
  - e. Status of Contracts On Hand
  - f. Affidavit for Individual
  - g. Affidavit for Partnership
  - h. Affidavit for Corporation
  - i. Sworn Statement on Public Entity Crimes
  - j. Sworn Statement Regarding Discrimination
  - k. Sworn Statement Regarding Scrutinized Companies
- VI. Project Scope and Detailed Specifications**
- VII. Proposal Cost Summary Form**
- VIII. Form of Contract**
- IX. Chiller Plant Plans and Specifications**



**ACKNOWLEDGEMENT OF RECEIPT OF DOCUMENTS AND**  
**PROPOSAL SIGNATURE FORM**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER SYSTEM OPERATIONS AND MAINTENANCE SERVICES**

TO BE SUBMITTED TO:

ENCORE COMMUNITY DEVELOPMENT DISTRICT  
c/o Rizzetta & Company, Inc.  
Attn: Jennifer Goldyn  
2700 S. Falkenburg Rd, STE 2745  
Riverview, Florida 33758

**Due by 2:00 p.m., Friday, September 9, 2022**

TO: Encore Community Development District ("District")

FROM: \_\_\_\_\_ ("Contractor" or "Proposer")

This Proposal for chiller system operation and maintenance services has been submitted on the date listed below by the above-named Proposer.

The undersigned acknowledges, by the below execution of this Proposal, s/he has full authority to execute this Acknowledgment and submit this Proposal on behalf of the Proposer, that all information provided herein has been provided in full and that such information is truthful and accurate. Proposer agrees through submission of this Proposal to honor all pricing information for one hundred and twenty (120) days from the date of the Proposal opening, and if awarded the contract on the basis of this Proposal, to enter into and execute the contract in substantially the form included in the Project Manual. In submitting this Proposal, the Proposer further authorizes, agrees, and submits to a business credit check.

Proposer understands inclusion of false, deceptive, or fraudulent statements on this Proposal constitutes fraud; and that the District considers such action on the part of the Proposer to constitute good cause for denial, suspension, and/or revocation of a proposal for work for the District.

The Proposer submits s/ he has carefully examined the site of the proposed Work and the existing conditions, as well as the drawings and specifications. Also, Proposer has thoroughly reviewed the Project Manual, including the Request for Proposal, Instructions to Proposers, Evaluation Criteria, Form of Contract, plans and specifications, and acknowledges that the following addenda covering revisions to thereto, and the cost, if any, of such revisions has been included in Proposer's enclosed pricing.

Addendum No. \_\_\_\_\_ Dated: \_\_\_\_/\_\_\_\_/\_\_\_\_

Addendum No. \_\_\_\_\_ Dated: \_\_\_\_/\_\_\_\_/\_\_\_\_

Addendum No. \_\_\_\_\_ Dated: \_\_\_\_/\_\_\_\_/\_\_\_\_

The undersigned hereby authorize(s) and request(s) any person, firm or corporation to furnish any pertinent information requested by the District, or their authorized agents, deemed necessary to verify the statements made in this proposal or attachments hereto, or regarding the ability, standing, and general reputation of the Proposer.

\_\_\_\_\_  
Name of Organization

By: \_\_\_\_\_

This \_\_\_\_ day of \_\_\_\_\_, 2022

By: \_\_\_\_\_  
Name and Title of Person Signing

**STATE OF** \_\_\_\_\_  
**COUNTY OF** \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Notary Public, State of Florida  
Print Name: \_\_\_\_\_  
Commission No.: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

**REQUEST FOR PROPOSALS**  
**CHILLER SYSTEM OPERATIONS AND MAINTENANCE SERVICES FOR**  
**ENCORE COMMUNITY DEVELOPMENT DISTRICT**

Notice is hereby given that the Encore Community Development District (“**District**”), located in the City of Tampa, Florida, will accept proposals from qualified firms interested in providing chiller system (“**Chiller Plant**”) operations and maintenance services, all as more specifically set forth in the Project Manual.

The Project Manual, including among other materials, instructions to Proposers, proposal forms, contract documents, project scope, and technical specifications (collectively, the “**Project Manual**” or “**RFP**”), will be available upon request from Greg Woodcock, District Engineer, at [greg.woodcock@cardno.com](mailto:greg.woodcock@cardno.com) and are expected to be available beginning **August 10, 2022, at 12:00 p.m. (EST)**. The District reserves the right in its sole discretion to make changes to the Project Manual up until the Proposal Deadline (defined herein), and to provide notice of such changes only to those Proposers who have provided their contact information to the District Engineer via e-mail at [greg.woodcock@cardno.com](mailto:greg.woodcock@cardno.com).

There will be a **mandatory pre-proposal conference on August 16, 2022, at 12:00 p.m. (EST)** at the Chiller site location located at **1299 E. Harrison Street, Tampa, FL 33602** (or at an alternative location to be determined and announced). All proposers must request a copy of the Project Manual no later than the time of the pre-proposal conference. **Proposers who do not attend the pre-proposal meeting may not be eligible to submit a proposal.**

In order to submit a proposal, each Proposer must (1) be authorized to do business in the City of Tampa, Hillsborough County, and in the State of Florida; (2) hold all required local, state, and federal licenses in good standing; and (3) have at least five (5) years of experience with chiller system operation and maintenance projects. Additionally, as further described in the Project Manual, each Proposer shall be accompanied by a proposal guarantee in the form of a proposal bond or certified cashier’s check in an amount not less than five percent (5%) of the total bid to be retained in the event the successful proposer fails to execute a contract with the District within fourteen (14) calendar days after the receipt of the Notice of Award. **TIME IS OF THE ESSENCE WITH RESPECT TO THE PROJECT.**

Firms desiring to provide services for this project must submit one (1) original and one (1) electronic copy (PDF format and all documents included on a USB flash drive) of the required Proposal **no later than September 9, 2022 at 2:00 p.m. (EST)** (“**Proposal Deadline**”) at the offices of the District Manager c/o Rizzetta & Company, Inc., 2700 S. Falkenburg Rd, STE 2745, Riverview, FL 33758 (“**District Manager’s Office**”) (or at an alternative location to be determined and announced).

Proposals shall be in the form provided in the Project Manual and submitted in a sealed envelope, marked with a notation “PROPOSAL FOR CHILLER SYSTEM OPERATIONS AND MAINTENANCE SERVICES.” The District reserves the right to return unopened to the Proposer any Proposals received after the time and date stipulated above. Any proposal not completed as

specified or missing the required proposal documents may be disqualified. Each Proposal shall remain binding for a minimum of one hundred twenty (120) days after the Proposal opening.

Rankings will be made based on the Evaluation Criteria contained within the Project Manual. Price will be one factor used in determining the proposal that is in the best interest of the District, but the District explicitly reserves the right to make such award to other than the lowest price proposal. **District reserves the right to reject any and all Proposals, make modifications to the work, award the contracts in whole or in part with or without cause, provide for the delivery of the project in phases, and waive minor or technical irregularities in any Proposal, as it deems appropriate, and if the District determines in its discretion that it is in the District's best interests to do so.** Any protest regarding the Project Manual, including but not limited to protests relating to the proposal notice, the proposal instructions, the proposal forms, the contract form, the scope of work, technical documents, the specifications, the evaluation criteria, the evaluation process, or any other issues or items relating to the Project Manual, must be filed in writing, within seventy-two (72) calendar hours (excluding Saturdays, Sundays, and state holidays) after the Project Manual are made available. The formal protest setting forth with particularity the facts and law upon which the protest is based shall be filed within seven (7) calendar days (including Saturdays, Sundays, and state holidays) after the initial notice of protest was filed. Failure to timely file a notice of protest or failure to timely file a formal written protest shall constitute a waiver of any right to object or protest with respect to aforesaid plans, specifications or contract documents. Additional information and requirements regarding protests are set forth in the Project Manual and the District's Rules of Procedure, which are available from the District Manager.

Any and all questions relative to this project shall be directed in writing by e-mail only to Greg Woodcock, District Engineer, at [greg.woodcock@cardno.com](mailto:greg.woodcock@cardno.com), copy Jennifer Goldyn at [jgoldyn@rizzetta.com](mailto:jgoldyn@rizzetta.com) and Sarah Sandy at [sarah.sandy@kutakrock.com](mailto:sarah.sandy@kutakrock.com). No phone inquiries please.

#### NOTICE OF SPECIAL MEETING TO OPEN PROPOSALS

All proposals will be publicly opened at a special meeting of the District to be held at **2:30 p.m. (EST), September 9, 2022**, at the District Manager's Office. Proposals will be publicly opened at that time and place, with Proposer names and total pricing announced at that time, provided that Proposals may be maintained on a confidential basis to the extent permitted by Florida law. No decisions of the District's Board of Supervisors will be made at that time. A copy of the agenda for the meeting can be obtained from the District Manager's Office or by emailing [jgoldyn@rizzetta.com](mailto:jgoldyn@rizzetta.com).

The meeting is open to the public and will be conducted in accordance with the provisions of Florida law. There may be occasions when one or more Board Supervisors or staff members will participate by telephone. At the above location will be present a speaker telephone so that any Board Supervisor or staff member can attend the meeting and be fully informed of the discussions taking place either in person or by telephone communication. The meeting may be continued in progress without additional notice to a time, date, and location stated on the record.

Any person requiring special accommodations to participate in this meeting is asked to advise the District Manager's Office at 813-533-2950, at least 48 hours before the meetings. If you are hearing or speech impaired, please contact the Florida Relay Service by dialing 7-1-1, or 1-800-955-8771 (TTY) / 1-800-955-8770 (Voice), for aid in contacting the District Office.

Encore Community Development District  
Jennifer Goldyn, District Manager

**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**Chiller System Operation and Maintenance Services**

**Instructions to Proposers**

**SECTION 1. DUE DATE; SUMMARY OF SCHEDULE.** Sealed proposals must be received no later than **September 9, 2022, at 2:30 p.m.** at the offices of the District Manager c/o Rizzetta & Company, Inc., 2700 S. Falkenburg Rd, STE 2745, Riverview, FL 33758 (“**District Manager’s Office**”), Attention: Jennifer Goldyn. Proposals will be opened at a public meeting to be held at **2:30 p.m., Friday, September 9, 2022**, at the District Manager’s Office. Proposals received after the time and date stipulated above will be returned un-opened to the proposer. Any proposal not completed as specified or missing the required proposal documents as provided in the Project Manual may be disqualified. The District anticipates the following RFP schedule, though certain dates may be subject to change:

<b>DATE/TIME</b>	<b>EVENT</b>
<b>August 10, 2022</b>	RFP Notice is issued.
<b>August 10, 2022 at 12:00 p.m.</b>	Project Manual Available for Distribution.
<b>August 16, 2022 at 12:00 p.m.</b>	Mandatory Pre-Proposal Meeting for Proposers.
<b>August 22, 2022 at 5:00 p.m.</b>	Deadline for questions.
<b>September 9, 2022 at 2:00 p.m.</b>	Proposals submittal deadline.
<b>September 9, 2022 at 2:30 p.m.</b>	Public meeting to open bids held.
<b>Week of September 12, 2022</b>	Anticipated Evaluation Committee meeting evaluate proposals received followed by Board meeting to consider the committee’s recommendations

**SECTION 2. MANDATORY PRE-PROPOSAL MEETING.** A mandatory pre-proposal meeting will be held on site at the District’s Chiller Plant located at **1299 E. Harrison Street, Tampa, FL 33602** at **12:00 p.m. on Tuesday, August 16, 2022**. The pre-proposal conference may include, but not be limited to, a discussion of contract requirements, inspections, evaluations, and submittal requirements. **Proposers who do not attend the pre-proposal meeting will not be eligible to submit a proposal.**

**SECTION 3. SIGNATURE ON PROPOSAL.** In addition to executing all forms, affidavits, and acknowledgments for which signature and notary blocks are provided, the Proposer must correctly sign the Acknowledgment of Receipt of Documents and Proposal Signature Form included in the Project Manual. If the proposal is made by an individual, that person’s name and business address shall be shown. If made by a partnership, the name and business address of an authorized member of the firm or partnership shall be shown. If made by a corporation, the person signing the proposal shall show the name of the state under the laws of which the corporation was chartered.

**SECTION 4. FAMILIARITY WITH THE PROJECT.** The Proposer, by and through the submission of the Proposal, agrees that he shall be held responsible for having heretofore examined the project site, the location of all proposed work and for having satisfied himself from his own personal knowledge and experience or professional advice as to the character, conditions, and location of the site, the nature of the turf, shrubs, trees, palms, vegetation, weeds, sprinklers and irrigation systems, roads, sidewalks and paved paths, ground, surface and subsurface, and any other conditions surrounding and affecting the work, any obstruction, the nature of any existing construction, and all other physical characteristics of the job, in order that the Proposer may include in the prices which the Proposer proposes all costs pertaining to the work and thereby provide for the satisfactory landscape and irrigation maintenance thereof. The Proposer agrees to accept the site in an “as is” condition and hold its prices for the period set forth in this proposal package, regardless of any changes to the site that may occur from the time of Proposal submission and through the time of contract award and the start of any work under the contract. The Proposer, in preparing the Proposal, shall take into consideration that work by other contractors may be in progress at or near the site and that the Proposer shall not interfere with work done by such other contractors.

**SECTION 5. FAMILIARITY WITH THE LAW, ASSOCIATED CODES AND REGULATIONS.** By submitting a proposal, the Proposer is assumed to be familiar with all federal, state, and local laws, ordinances, rules and regulations, licenses, codes and manufacturer specifications and applicable warranties that in any manner affect the work. Ignorance on the part of the Proposer will in no way relieve it from responsibility to perform the work covered by the proposal in compliance with all such laws, ordinances, rules and regulations, licenses, codes and manufacturer specifications and applicable warranties.

**SECTION 6. QUALIFICATIONS OF PROPOSER.** The contract, if awarded, will only be awarded to a responsible Proposer who is qualified by experience to do the work specified herein. The Proposer shall submit with its proposal satisfactory evidence of experience in similar work and show that it is fully prepared with the necessary organization, capital, and equipment to complete the work to the satisfaction of the District.

**SECTION 7. SUBMISSION OF ONLY ONE PROPOSAL AND DISQUALIFICATION.** Proposers shall be disqualified and their proposals rejected if the District has reason to believe that collusion may exist among the Proposers.

**SECTION 8. INTERPRETATIONS AND ADDENDA.** All questions about the meaning or intent of the Project Manual are to be directed in writing via e-mail only to Greg Woodcock, District Engineer, at [greg.woodcock@cardno.com](mailto:greg.woodcock@cardno.com), copy Jennifer Goldyn at [jgoldyn@rizzetta.com](mailto:jgoldyn@rizzetta.com) and Sarah Sandy at [sarah.sandy@kutakrock.com](mailto:sarah.sandy@kutakrock.com). Interpretations or clarifications considered necessary in response to such questions will be issued by Addenda to all parties recorded as having received the Project Manual. The deadline for questions shall be by **5:00 p.m., August 22, 2022**. Only questions answered by formal written Addenda will be binding. No interpretations will be given verbally. All questions and answers will be distributed to all Proposers. No inquiries will be accepted from subcontractors; the Proposer shall be responsible for all queries.

**SECTION 9. SUBMISSION OF PROPOSAL.** Submit one (1) original and one (1) electronic copy (PDF format and all documents included on a USB flash drive) of the required Proposal **no later than September 9, 2022 at 2:00 p.m. EST (“Proposal Deadline”)** at the District Manager’s Office, Attention: Jennifer Goldyn (or at an alternative location to be determined and announced). Proposals shall be in the form provided in the Project Manual and submitted in a sealed envelope, marked with a notation “PROPOSAL FOR CHILLER SYSTEM OPERATIONS AND MAINTENANCE SERVICES.” If the proposal is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation ““PROPOSAL FOR CHILLER SYSTEM OPERATIONS AND MAINTENANCE SERVICES ENCLOSED” on the face of it.

**SECTION 10. PROPOSAL GUARANTEE.** Each Proposer shall submit a proposal guarantee in the form of a bid bond or cashier’s check in the amount of five percent (5%) of the total amount of the base bid with its proposal. The proposal guarantee shall be held until the time of award of contract with the successful Proposer at which time the proposal guarantee shall be returned to all unsuccessful Proposers. If the successful Proposer does not enter into the contract within fourteen (14) days as set forth below, including providing required insurance documentation, the Proposer shall forfeit its proposal guarantee to the District.

**SECTION 11. MODIFICATION AND WITHDRAWAL.** Proposals may be modified or withdrawn by an appropriate document duly executed and delivered to the place where proposals are to be submitted at any time prior to the time and date the proposals are due. No proposal may be withdrawn after opening for a period of one hundred and twenty (120) days.

**SECTION 12. PROJECT MANUAL.** The Project Manual will be available beginning August 10, 2022, at 12:00 p.m. upon request from Greg Woodcock, District Engineer, at [greg.woodcock@cardno.com](mailto:greg.woodcock@cardno.com).

**SECTION 13. PROPOSAL FORMS.** All blanks on the proposal forms must be completed in ink or typewritten. The proposal shall contain an acknowledgment of receipt of all Addenda (the numbers of which must be filled in on the Acknowledgement of Receipt of Documents and Proposal Signature Form). In making its proposal, each Proposer represents that it has read and understands the Project Manual, is familiar with the project site, conditions at the site, including existing site improvements, existing buildings, utilities and streets, specification and scope of services, and that the proposal is made in accordance therewith, including verification of the contents of the Project Manual against the Table of Contents. Additionally, by submitting a proposal, each Proposer agrees it will submit to a business credit report.

**SECTION 14. MINORITY BUSINESS ENTERPRISE (“MBE”).** Proposers must provide evidence of the firm’s efforts to encourage and utilize minorities and minority business enterprise firms in its operations. Proposers must include specific areas or disciplines where minority sub-consultants or vendors are proposed to be utilized. There shall be a goal of not less than 20% for the purpose of awarding contracts to MBE’s or prime consultants with MBE participation of at least 20% of the total contract effort. For the purposes of the Project Manual, all references to “minority business enterprise” or “MBE” shall mean a business that is owned or controlled by one or more socially or economically disadvantaged persons. Such persons include African-



Americans, Puerto Ricans, Spanish-Speaking Americans, Native Americans, Eskimos, Aleuts, Hasidic Jewish persons, Asian Pacific Americans, and Asian Indians. "Owned or controlled by" means one or more socially and economically disadvantaged person(s), or a for-profit business or nonprofit organization controlled by such person(s), that possess at least 51 percent (51%) of the ownership of the business and its management and daily business operations are controlled by such person(s).

**SECTION 15. BASIS OF AWARD/RIGHT TO REJECT.** The District reserves the right to reject any and all proposals, make modifications to the work, award the contract in whole or in part with or without cause to one proposer or separate proposers, and waive minor or technical informalities or irregularities in proposals as it is deemed in the best interests of the District in its sole discretion.

**SECTION 16. CONTRACT AWARD.** Within fourteen (14) days of receipt of the Notice of Award from the District, or longer period if extended by the District in its sole discretion, the Proposer shall enter into and execute the contract in substantially the form included in the Project Manual. Proposer agrees through submission of the Proposal to honor all pricing information one hundred and twenty (120) days from the date of the Proposal opening.

**SECTION 17. INSURANCE.** All Proposers shall include as part of their Proposal a current Certificate of Insurance detailing the company's insurance coverage, or some other evidence of insurance or insurability, as more particularly described in the Project Manual. In the event the Proposer is notified of award, it shall provide proof of insurance identifying the District, its officers, agents, staff, consultants and supervisors and the Housing Authority of the City of Tampa, Florida ("THA"), its Board of Directors, officers and staff as additional insureds, within fourteen (14) calendar days after notification, or within such approved extended period as the District may grant. Failure to provide proof of insurance coverage shall constitute a default and the Proposer shall forfeit its proposal guarantee.

**SECTION 18. INDEMNIFICATION.** The successful Proposer shall fully indemnify, defend and hold harmless the District, its officers, agents, staff, consultants and supervisors and THA, its Board of Directors, officers and staff, from and against all claims, damages, costs and losses arising, in whole or in part, from Contractor's negligence or breach of contract, as more fully set forth in the contract documents that form part of the Project Manual as provided herein.

**SECTION 19. LIMITATION OF LIABILITY.** Nothing herein shall be construed as or constitute a waiver of District's limitations on liability contained in section 768.28, Florida Statutes, or other statute or law.

**SECTION 20. MANDATORY AND PERMISSIVE REQUIREMENTS.** The only mandatory requirements contained within the Project Manual are that: (1) be authorized to do business in the City of Tampa, Hillsborough County, and in the State of Florida; (2) hold all required local, state, and federal licenses in good standing; and (3) have at least five (5) years of experience with chiller system operation and maintenance projects. All of the requirements or provisions set forth in the Project Manual shall be deemed "permissive," in that a Proposer's failure to meet any requirement described in mandatory terms such as "shall," "will," "mandatory," or similar language does not

automatically disqualify the Proposer's Proposal, but instead may be taken into account in the evaluation and scoring of the Proposal.

**SECTION 21. PROPOSAL REQUIREMENTS.** All proposals should include the following information in addition to any other requirements of the Project Manual:

- A. A narrative description of the Proposer's approach to providing the services as described in the scope of services.
- B. Completed Proposal Cost Summary Form.
- C. List position or title and corporate responsibilities of key management or supervisory personnel. Proposer should include resumes for each person listed.
- D. Describe proposed staffing levels. Include information on current operations, administrative, maintenance and management staffing of both a professional and technical nature. Proposer should include resumes with applicable certifications.
- E. Provide a list of five current clients for whom Proposer provides the same or similar services as requested in this Proposal. The Proposer should include information relating to the work it conducted for each reference as well as a name, address and phone number of a contact person.
- F. Information related to other projects of similar size and scope where Proposer has provided, or is currently providing, chiller operations and maintenance services.
- G. A copy of its insurance certificate indicating the types of coverage and limits for general, property, automobile liability insurance, and worker's compensation insurance.
- H. A copy of the Proposer's most recent audited financial statements, if any.
- I. Completed copies of all other forms included within the Project Manual.

**SECTION 22. SUBSTITUTIONS.** Proposers, by submitting a Proposal, represent that the Proposal is based upon the materials and equipment described in the Project Manual. Requests for substitutions will be considered prior to receipt of Proposals if they reach the District Engineer on or before by 5:00 p.m., August 22, 2022. Submittal shall include complete information on quality comparison to specified items and cost savings amounts. Acceptance by the District of a proposed substitution will be issued in the form of Addendum, in compliance with Section 8 in these Instructions to Proposers.

**SECTION 23. PROTESTS.** Any protest regarding the Project Manual, including the evaluation criteria, specifications or other requirements contained in the Request for Proposal, must be filed in writing, at the District Manager's Office within seventy-two (72) hours (excluding Saturdays, Sundays, and state holidays) after the Project Manual are made available. The formal

protest setting forth with particularity the facts and law upon which the protest is based shall be filed within seven (7) calendar days (including Saturdays, Sundays, and state holidays) after the initial notice of protest was filed. Failure to timely file a notice of protest or failure to timely file a formal written protest shall constitute a waiver of all rights to object or protest with respect to aforesaid Project Manual, specifications, contract documents or other requirements of this Request for Proposals.

**SECTION 24. EVALUATION OF PROPOSALS.** The proposals shall be ranked based on the District's evaluation of the Proposer's ability to perform the services for the project as demonstrated by the documentation provided by the Proposer, reference checks of the Proposer's clients and a business credit check. The criteria to be used in the evaluation are presented in the Evaluation Criteria sheet, contained within the Project Manual. Price will be one factor used in determining the Proposal that is in the best interest of the District, but the District explicitly and clearly reserves the right to make such award to other than the lowest priced Proposal.

**SECTION 25. BLACK OUT PERIOD/CONE OF SILENCE.** The blackout period is defined as between the time the Request for Proposals is issued by the District and the time the Board awards the contract. During this black out period, and except as otherwise expressly authorized herein, any attempt to communicate either directly or indirectly with District staff or officials related to this solicitation for goods or services, in person, by mail, by facsimile, by telephone, by electronic mail, or by any other means of communication, will result in disqualification of their award and/or contract. This does not apply to pre-solicitation conferences, contract negotiations, or communications with staff not concerning this solicitation.

**SECTION 26. REFERENCE TERMS.** Any headings in this document are for the purposes of reference only and shall not limit or otherwise affect the meaning thereof. Any reference to gender shall be construed to include all genders, firms, partnerships and corporations. References in the singular shall be construed to include the plural and references in the plural shall be construed to include the singular.

**ENCORE COMMUNITY DEVELOPMENT DISTRICT  
CHILLER SYSTEM OPERATION AND MAINTENANCE SERVICES  
EVALUATION CRITERIA**

- 1. Ability of Personnel (15 Points)**  
(E.g., geographic locations of the firm's headquarters or permanent office in relation to the project; capabilities and experience of key personnel; present ability to manage this project; evaluation of existing work load; proposed staffing levels; etc.)
- 2. Proposer's Experience (25 Points)**  
(E.g., past record and experience of the Proposer in similar projects and/or with similar systems; volume of work previously performed by the firm; past performance for other units of local government in other contracts; character, integrity, reputation of respondent; etc.)
- 3. Understanding of Scope of Work (10 Points)**  
Extent to which the proposal demonstrates an understanding of the District's needs for the services requested.
- 4. Clarity and Organization of Presentation (5 Points)**  
Degree to which proposal is well organized, easy to understand, evidences ability to communicate in a clear and concise manner, and ease of determining completeness.
- 5. Ability to Perform Required Services (15 Points)**  
Extent to which the proposal demonstrates the adequacy of Proposer's financial resources, organization, equipment, capital and financial stability as a business entity necessary to complete the services required.
- 6. Price (20 Points)**  
Points will be awarded to the Proposer submitting the lowest total price proposal, (i.e., the summation of the unit price extensions using quantity estimates provided, the allowances shown, plus the proposal contractor's fee) for completing the work. All other proposals will receive a percentage of the amount based upon the difference between the Proposer's bid and the low bid.
- 7. Minority Business (10 Points)**  
Points will be awarded to Proposers that are MBE's that have a track record of utilizing minority businesses that have a workforce composed of minorities, etc. Considerations also include evidence provided of Proposer's efforts to encourage and utilize minorities, MBE firms, minority sub-consultants, and vendors and an evaluation of the information provided on specific ways in which the goals stated in Section 14 of Project Manual instructions are to be achieved.

**100 Total Points Possible**

**(on any question requiring more space, use an extension sheet if needed)**

DATE SUBMITTED: \_\_\_\_\_, 2022

1. Proposer \_\_\_\_\_  

[Company Name]

☐ Individual  
☐ Partnership  
☐ Limited Liability Company  
☐ Corporation  
☐ Subsidiary Corporation
  2. Parent Company Name \_\_\_\_\_
  3. Parent Company Address:  
Street Address \_\_\_\_\_  
P.O. Box (if any) \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax no. \_\_\_\_\_  
1st Contact Name \_\_\_\_\_ Title \_\_\_\_\_  
2nd Contact Name \_\_\_\_\_ Title \_\_\_\_\_
  4. Proposer Company Address (if different):  
Street Address \_\_\_\_\_  
P. O. Box (if any) \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax no. \_\_\_\_\_  
1st Contact Name \_\_\_\_\_ Title \_\_\_\_\_  
2nd Contact Name \_\_\_\_\_ Title \_\_\_\_\_
  5. List the location of the office from which the Proposer would perform work for the Encore Community Development District:  
Street Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax No. \_\_\_\_\_  
1st Contract Name \_\_\_\_\_ Title \_\_\_\_\_
  6. Is the Proposer incorporated in the State of Florida? yes ( ) no ( )

6.1 If yes, provide the following:

- o Is the Company in good standing with the Florida Department of State, Division of Corporations? yes ( ) no ( )

If no, please explain \_\_\_\_\_

\_\_\_\_\_

- o Date incorporated \_\_\_\_\_ Charter No. \_\_\_\_\_

6.2 If no, provide the following:

- o The State with whom the Proposer company is incorporated? \_\_\_\_\_

- o Is the company in good standing with the State? yes ( ) no ( )

In no, please explain \_\_\_\_\_

\_\_\_\_\_

- o Date incorporated \_\_\_\_\_ Charter No. \_\_\_\_\_

- o Is the Proposer company authorized to do business in the State of Florida? yes ( ) no ( )

7. Is the Proposer a registered or licensed contractor with the State of Florida?  
yes ( ) no ( )

7.1 If yes, provide the following (use additional sheets if needed):

Type of registration(s) or license(s) (i.e. certified general contractor, certified electrical contractor, chiller operator, etc.) \_\_\_\_\_

\_\_\_\_\_

- o License No(s). \_\_\_\_\_ Expiration Date(s) \_\_\_\_\_

- o Qualifying individual \_\_\_\_\_ Title \_\_\_\_\_

- o List company(s) currently qualified under this license \_\_\_\_\_

\_\_\_\_\_

7.2 Is the Proposer a registered or licensed Contractor with Hillsborough County? yes ( ) no ( )

7.3 Has the Proposer performed chiller operation/maintenance or similar work for a community development district within the past 5 years? yes ( ) no ( )

7.3.1 If so, please provide the following information for each (use additional sheets if needed):

CDD Name(s):

Type of Work:

Contact Info:

Current Client?:

- 7.4 Has the Proposer performed chiller operation/maintenance or similar work for a governmental entity within the past 5 years? yes ( ) no ( )

7.4.1 If so, please provide the following information for each governmental entity (use additional sheets if needed):

Governmental Entity Name(s):

Type of Work:

Contact Info:

Current Client?:

8. List the Proposer's total annual dollar value of work completed for each of the last three years:  
(2021)\_\_\_\_\_ (2020)\_\_\_\_\_ (2019)\_\_\_\_\_.

9. What are the Proposer's current insurance limits? (Attach copy of certificates of insurance):

General Liability \$ \_\_\_\_\_  
Automobile Liability \$ \_\_\_\_\_  
Workers Compensation \$ \_\_\_\_\_  
Employer's Liability \$ \_\_\_\_\_  
Expiration Date \_\_\_\_\_

- 9.1 Name of Proposer's Bonding Company \_\_\_\_\_  
Address \_\_\_\_\_

Approved Bonding Capacities: Aggregate Limit \$ \_\_\_\_\_  
Single Project Limit \$ \_\_\_\_\_  
Total Current Contracts Bonded \$ \_\_\_\_\_

10. Has the Proposer been cited by OSHA for any job site or company office/shop safety violations in the past two years? yes ( ) no ( )

If yes, please describe each violation, fine, and resolution \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 10.1 What is Proposer's current Experience Modifier Rate? \_\_\_\_\_

- 10.2 Has Proposer experienced any worker injuries resulting in a worker losing more than 10 working days as a result of an injury in the past two years? yes ( ) no ( )

If yes, please describe each incident, attaching additional sheets if necessary: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Please state whether or not the Proposer or any of its affiliates are presently barred or suspended from bidding or contracting on any state, local, or federal-aid contracts in any state(s)? Yes \_\_\_\_\_ No \_\_\_\_\_ If so, state the name(s) of the company(ies) \_\_\_\_\_

The state(s) where barred or suspended \_\_\_\_\_  
State the period(s) of debarment or suspension \_\_\_\_\_

12. Has any employee, officer or partner of the Proposer ever been an officer, partner, or owner of some other organization that has failed to complete a chiller operation and maintenance contract?

Yes \_\_\_\_\_ No \_\_\_\_\_ If so, state name of individual, other organization and reason therefore. \_\_\_\_\_

13. List any judgments, suits, claims, and/or liens pending against the Proposer: \_\_\_\_\_

13.1 List and describe (including the amount of the damages paid) any lawsuits or claims for damages against the Proposer during the past five years related to the performance or delivery of chiller operation and maintenance services on any account which resulted in a judgment against the Proposer or a written settlement agreement and/or payment of money in excess of \$10,000.00 by the Proposer, and state whether such sums were paid by the Proposer or an insurance carrier on its behalf:

14. Has the Proposer or any of its affiliates or related entities ever been either disqualified or denied prequalification status by a governmental entity? ( ) yes ( ) no

If so, discuss the circumstances surrounding such denial or disqualification as well as the date thereof and whether or not Proposer was reinstated.

15. Within the past five (5) years, has the Proposer failed to complete a project within the scheduled contract time? yes ( ) no ( )

If so, discuss the circumstances surrounding such failure to complete a project on time as well as the date thereof. \_\_\_\_\_



- 
- 
- 
16. Attach the Proposer's most recent audited financial statements that should at the minimum demonstrate financial resources, liabilities, capital equipment, and financial status.
17. As per the Instructions to Proposers, Section 20, provide information on five (5) current clients for whom Proposer provides the same or similar services as requested in this Proposal, including contact person(s), address(es) and telephone number(s) for each. The Proposer should include information relating to the work it conducted for each.
18. Is Proposer a Minority Business Enterprise, as defined by the federal Department of Housing and Urban Development? ( ) yes ( ) no
- 18.1 If yes, provide date first certified as an MBE \_\_\_\_\_.
- 18.2 Whether or not Proposer is an MBE, provide number of minorities employed by Proposer by category of job (e.g., administrative, supervisory, technical, etc.) and number of total workforce.  
\_\_\_\_\_
- 18.3 Identify subcontractors Proposer intends to utilize to perform the work, and whether or not subcontractors are MBE. \_\_\_\_\_
- 18.4 Provide evidence in response to Instructions to Proposers, Section 14, related to MBE efforts.

The undersigned hereby authorize(s) and request(s) any person, firm or corporation to furnish any pertinent information requested by the Encore Community Development District or its authorized agents, deemed necessary to verify the statements made in this document or documents attached hereto, or necessary to determine whether the Encore Community Development District should qualify the Proposer for bidding on its chiller operation and maintenance project, including a business credit check and such matters as the Proposer's ability, standing, integrity, quality of performance, efficiency and general reputation.

\_\_\_\_\_  
Name of Proposer

By: \_\_\_\_\_

FEIN: \_\_\_\_\_

\_\_\_\_\_  
[Type Name and Title of Person Signing]

Date: \_\_\_\_\_

**STATE OF** \_\_\_\_\_  
**COUNTY OF** \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Notary Public, State of Florida  
Print Name: \_\_\_\_\_  
Commission No.: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

## CORPORATE OFFICERS

Company Name \_\_\_\_\_

Date \_\_\_\_\_

Provide the following information for Officers of the Proposer and parent company, if any.

NAME OF PROPOSER	POSITION OR TITLE	CORPORATE RESPONSIBILITIES	INDIVIDUAL'S RESIDENCE CITY, STATE
FOR PARENT COMPANY (if applicable)			

### SUPERVISORY PERSONNEL

Company Name \_\_\_\_\_

Date \_\_\_\_\_

What is the experience of the key management and supervisory personnel of the Proposer for both administration as well as operations? (Attach resumes of key personnel here)

INDIVIDUAL'S NAME	PRESENT TITLE	DESCRIPTION OF DIRECT JOB RESPONSIBILITIES	YEARS OF EXPERIENCE IN PRESENT POSITION	TOTAL YEARS OF RELATED EXPERIENCE

**PROPOSER OWNED MAJOR EQUIPMENT**  
**(Attach additional sheets if necessary)**

Company Name \_\_\_\_\_

Date \_\_\_\_\_

QUANTITY	DESCRIPTION	CAPACITY	No. LOCATED IN	
			FLORIDA	OTHER

**STATUS OF CONTRACTS ON HAND**  
**(Attach additional sheets if necessary)**

Company Name \_\_\_\_\_

Date \_\_\_\_\_

Furnish requested information about all of Proposer's active contracts, whether as prime or subcontracts; whether in progress or awarded but not yet started; and regardless of with whom contracted. All amounts to be shown to nearest \$1,000. Contractor may consolidate and list as a single item all contracts which individually do not exceed 3% of total active contracts and in total do not exceed 20% of the active total contracts.

				PROPOSER'S UNCOMPLETED AMOUNT AS OF THIS DATE		COMPLETION DATE		
OWNER, LOCATION AND DESCRIPTION OF PROJECT	CURRENT CONTRACT AMOUNT AS PRIME	CURRENT CONTRACT AMOUNT AS SUBCONTRACTOR	CURRENT AMOUNT SUBJECT TO OTHERS	AS PRIME CONTRACTOR	AS SUBCONTRACTOR	ORIGINAL CONTRACT DATE	APPROVED REVISED DATE	CURRENT ESTIMATE DATE
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
Subtotal Uncompleted Work				\$	\$			
Total Uncompleted Work on Hand					\$			

## AFFIDAVIT FOR INDIVIDUAL

State of \_\_\_\_\_ ss:

County of \_\_\_\_\_

\_\_\_\_\_, being duly sworn, deposes and says that the statements and answers to the questions concerning experience contained herein are correct and true as of this date; and that he/she understands that intentional inclusion of false, deceptive or fraudulent statements on this statement constitutes fraud; and, that the District considers such action on the part of the Proposer to constitute grounds for rejecting Proposer's proposal or work, if discovered after award of any contract.

\_\_\_\_\_  
(Proposer must also sign here)

**STATE OF** \_\_\_\_\_  
**COUNTY OF** \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Notary Public, State of Florida

Print Name: \_\_\_\_\_

Commission No.: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

## AFFIDAVIT FOR PARTNERSHIP

State of \_\_\_\_\_ ss:

County of \_\_\_\_\_

\_\_\_\_\_, is a member of the firm of \_\_\_\_\_, being duly sworn, deposes and says that the statements and answers to the questions of the foregoing experience questionnaire are correct and true as of the date of this affidavit; and, that he/she understands that intentional inclusion of false, deceptive or fraudulent statements on this statement constitutes fraud; and, that the District considers such action on the part of the Proposer to constitute grounds for rejecting Proposer's proposal or work, if discovered after award of any contract.

\_\_\_\_\_  
(Signature of a General Partner is Required)

**STATE OF** \_\_\_\_\_  
**COUNTY OF** \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Notary Public, State of Florida

Print Name: \_\_\_\_\_

Commission No.: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

## AFFIDAVIT FOR CORPORATION

State of \_\_\_\_\_ SS:

County of \_\_\_\_\_

\_\_\_\_\_  
(title) \_\_\_\_\_  
of the \_\_\_\_\_  
(a corporation described herein) being duly sworn, deposes and says that the statements and answers to the questions in the foregoing concerning experience are correct and true as of the date of this affidavit; and, that he/she understands that intentional inclusion of false, deceptive or fraudulent statements in this statement constitutes fraud; and, that the District considers such action on the part of the Proposer to constitute grounds for rejection of Proposer's proposal or work, if discovered after award of any contract.

\_\_\_\_\_  
(Officer must also sign here)

**STATE OF** \_\_\_\_\_  
**COUNTY OF** \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Notary Public, State of Florida  
Print Name: \_\_\_\_\_  
Commission No.: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_



**SWORN STATEMENT PURSUANT TO SECTION 287.134(2)(a), FLORIDA STATUTES,  
ON DISCRIMINATION**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to Encore Community Development District  
(print name of the public entity)  
  
by \_\_\_\_\_  
(print individual's name and title)  
  
for \_\_\_\_\_  
(print name of entity submitting sworn statement)  
  
whose business address is \_\_\_\_\_  
\_\_\_\_\_  
  
and (if applicable) its Federal Employer Identification Number (FEIN) is \_\_\_\_\_  
  
(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement)  
\_\_\_\_\_  
  
2. I understand that a "discrimination" or "discriminated" as defined in section 287.134(1)(b), *Florida Statutes*, means a determination of liability by a state circuit court or federal district court for a violation of any state or federal law prohibiting discrimination on the basis of race, gender, national origin, disability, or religion by an entity; if an appeal is made, the determination of liability does not occur until the completion of any appeals to a higher tribunal.  
  
3. I understand that "discriminatory vendor list" as defined in section 287.134(1)(c), *Florida Statutes*, means the list required to be kept by the Florida Department of Management Services pursuant to section 287.134(3)(d), *Florida Statutes*.  
  
4. I understand that "entity" as defined in section 287.134(1)(e), *Florida Statutes*, means any natural person or any entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts let by a public entity, or which otherwise transacts or applies to transact business with a public entity.  
  
5. I understand that an "affiliate" as defined in section 287.134(1)(a), *Florida Statutes*, means:
  1. A predecessor or successor of an entity that discriminated; or
  2. An entity under the control of any natural person or entity that is active in the management of the entity that discriminated. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one entity of shares constituting a controlling interest in another entity, or a pooling of equipment or income among entities when not for fair market value under an arm's length agreement, shall be a prima facie case that one entity controls another entity  
6. I understand that, pursuant to section 287.134(2)(a), *Florida Statutes*, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the

construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity.

Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Indicate which statement applies.)

\_\_\_\_ Neither the entity submitting this sworn statement, nor any affiliate of the entity, has been placed on the discriminatory vendor list.

\_\_\_\_ The entity submitting this sworn statement, or an affiliate of the entity, appears on the discriminatory vendor list.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/VENDOR EXECUTING THIS AFFIDAVIT TO VERIFY THAT NONE OF THE SUBCONTRACTORS/SUPPLIERS UTILIZED FOR THIS BID/QUOTE HAVE BEEN PLACED ON THE DISCRIMINATORY VENDOR LIST. IN THE EVENT IT IS LATER DISCOVERED THAT A SUBCONTRACTOR/SUPPLIER HAS BEEN PLACED ON THE DISCRIMINATORY VENDOR LIST, THE CONTRACTOR/VENDOR SHALL SUBSTITUTE THE SUBCONTRACTOR/ SUPPLIER WITH ANOTHER WHO HAS NOT PLACED ON THE DISCRIMINATORY VENDOR LIST. ANY COST ASSOCIATED WITH THIS SUBSTITUTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR/VENDOR.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY.

\_\_\_\_\_  
Signature by authorized representative of Proposer

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the \_\_\_\_\_ who is personally known to me or who has produced \_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
Signature of Notary Public taking acknowledgement

My Commission Expires: \_\_\_\_\_(SEAL)

**SWORN STATEMENT PURSUANT TO SECTION 287.135(5), FLORIDA STATUTES, REGARDING  
SCRUTINIZED COMPANIES WITH ACTIVITIES IN SUDAN LIST OR SCRUTINIZED COMPANIES  
WITH ACTIVITIES IN THE IRAN PETROLEUM ENERGY SECTOR LIST**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR  
OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to Encore Community Development District  
by \_\_\_\_\_  
(print individual's name and title)  
for \_\_\_\_\_  
(print name of entity submitting sworn statement)  
whose business address is \_\_\_\_\_

2. I understand that, subject to limited exemptions, section 287.135, *Florida Statutes*, declares a company that, at the time of bidding or submitting a proposal for a new contract or renewal of an existing contract, is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to section 215.473, *Florida Statutes*, or that has business operations in Cuba or Syria, or is participating in a boycott of Israel, is ineligible for, and may not bid on, submit a proposal for, or enter into or renew a contract with a local governmental entity for goods or services of \$1 million or more.
3. Based on information and belief, at the time the entity submitting this sworn statement submits its proposal to the Encore Community Development District, neither the entity, nor any of its officers, directors, executives, partners, shareholders, members, or agents, is listed on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, that it does not have business operations in Cuba or Syria, and that it is not participating in a boycott of Israel.
4. If awarded the Contract, the entity will immediately notify the Encore Community Development District in writing if either the entity, or any of its officers, directors, executives, partners, shareholders, members, or agents, is placed on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List.

\_\_\_\_\_  
Proposer  
STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

\_\_\_\_\_  
Signature by authorized representative of

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization  
this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the  
\_\_\_\_\_ who is personally known to me or who has produced  
\_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
acknowledgement  
My Commission Expires: \_\_\_\_\_ (SEAL)

\_\_\_\_\_  
Signature of Notary Public taking

**SWORN STATEMENT ON PUBLIC ENTITY CRIMES**  
**PURSUANT TO SECTION 287.133(2)(a), FLORIDA STATUTES**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to Encore Community Development District  
(print name of the public entity)
- by \_\_\_\_\_  
(print individual's name and title)
- for \_\_\_\_\_  
(print name of entity submitting sworn statement)
- whose business address is \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- and (if applicable) its Federal Employer Identification Number (FEIN) is \_\_\_\_\_

(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement.)

\_\_\_\_\_

2. I understand that a "public entity crime" as defined in section 287.133(1)(g), *Florida Statutes*, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid, proposal, reply, or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
3. I understand that "convicted" or "conviction" as defined in section 287.133(1)(b), *Florida Statutes*, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
4. I understand that an "affiliate" as defined in section 287.133(1)(a), *Florida Statutes*, means:
1. A predecessor or successor of a person convicted of a public entity crime; or
  2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
5. I understand that a "person" as defined in section 287.133(1)(c), *Florida Statutes*, means any natural person or any entity organized under the laws of any state or of the United States with the legal power to enter into a

binding contract and which bids or applies to bid on contracts let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Indicate which statement applies.)

- \_\_\_ Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.
- \_\_\_ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees members or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.
- \_\_\_ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the final order)

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/VENDOR EXECUTING THIS PUBLIC ENTITY CRIME AFFIDAVIT TO VERIFY THAT NONE OF THE SUBCONTRACTORS/SUPPLIERS UTILIZED FOR THIS BID/QUOTE HAVE BEEN CONVICTED OF A PUBLIC ENTITY CRIME SUBSEQUENT TO JULY 1, 1989. IN THE EVENT IT IS LATER DISCOVERED THAT A SUBCONTRACTOR/SUPPLIER HAS BEEN CONVICTED OF A PUBLIC ENTITY CRIME, THE CONTRACTOR/VENDOR SHALL SUBSTITUTE THE SUBCONTRACTOR/ SUPPLIER WITH ANOTHER WHO HAS NOT RECEIVED A CONVICTION. ANY COST ASSOCIATED WITH THIS SUBSTITUTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR/VENDOR.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES, FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

\_\_\_\_\_  
(Signature)

STATE OF FLORIDA

COUNTY OF \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization  
this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, of the  
\_\_\_\_\_ who is personally known to me or who has produced  
\_\_\_\_\_ as identification and who did (did not) take an oath.

\_\_\_\_\_  
acknowledgement

\_\_\_\_\_  
Signature of Notary Public taking

My Commission Expires: \_\_\_\_\_ (SEAL)

## **PROJECT SCOPE AND DETAILED SPECIFICATIONS**

### **Introduction**

The Encore Community Development District (“District”) seeks a contractor (“Contractor”) to operate and maintain the Encore Central Energy Plant (“CEP”). The District’s chilled water service is provided by the CEP, which is comprised of a chiller plant building and associated infrastructure that will allow for centralized production and distribution of cooling energy to the entire District. The chiller plant produces chilled water that is transported via an underground piping network to each building lot.

A contract executed for operation and maintenance services is expected to commence on October 1, 2022.

The Proposal must address those items identified in the Instructions to Proposers, including but not limited to, a written narrative description of the Proposer’s plan for operating and maintaining the CEP as per the scope of services, including tasks to be performed by sub-contractors, if any. The Contractor’s proposal will be evaluated using the Evaluation Criteria provided in this Project Manual.

### **General Plant Description**

In general, the CEP is a chilled water plant, including, but not limited to, chillers, pumps, cooling towers, ice bank, heat exchangers, piping, valves, controls and instrumentation, electrical switchgear, motors, meters, wiring and panels. Detailed CEP technical descriptions and specifications, operation and maintenance guidance, and warranty information can be found in the CD, and incorporated herein by this reference, as a material part of this Project Scope and Detailed Specifications.

### **Scope of Professional Services**

The scope of work is to operate and maintain the CEP, including all associated infrastructure. Such work generally includes, but is not limited to, the following:

- Responsibility for the proper, efficient and cost effective operation of the CEP at all times.
- All necessary operation and maintenance services required to keep the CEP and equipment in first class operating condition, including general cleaning and upkeep of the facilities.
- Coordination and meeting with the District, its staff and consultants, stakeholders and residents to ensure needs are met.
- Recommend, manage and oversee any capital and system repairs and replacement work.
- Conduct the work in full compliance with all federal, state, and local laws, ordinances, rules and regulations, licenses, codes and manufacturer specifications and applicable warranties.
- Monitor all applicable warranties to ensure operation and maintenance of the CEP is done in strict compliance with said warranties.
- Generate various reports related to performance efficiencies, compliance and other such reports as reasonably requested by the District or its designee.

- Assist District staff and consultant(s) in proactively managing the CEP by, among other things, continuously providing system-wide monitoring and analyzing of information to produce outcome-oriented recommendations for improvement and system performance goals.
- Water treatment services for both open and closed loops.
  - Monthly testing for open loop
  - Quarterly testing for closed loop
  - Chemicals shall be included for water treatment services and shall be reflected in the bid.
- Water Softener Salt: Includes salt and consumables for water softener treatment of well provided make up water for open loop.
- Maintenance of the well water pumping system
- Monthly recording and documenting the water usage of the plant, and submitting this information to the city
- Exercising of the shutoff valves in the closed loop throughout the campus
- Full coverage and maintenance on the BTU recording data meter at each building's heat exchanger, and communication devices to transmit the data back to the Summit system
- Calculation, reporting, and management of the load factor of the plant to keep demand charges to a minimum
- Development of a cooling contingency plan to provide emergency cooling to the campus in the event that the plant is unable to produce chilled water
- Preventive Maintenance (Mechanical): Includes a monthly inspection program on the chiller, cooling tower, heat exchanger, pumps, variable frequency drives, controls, and switch gear. Detailed task list for each piece of equipment is enclosed.
- Predictive Maintenance (Mechanical): Includes chiller vibration analysis (annually), chiller eddy current testing (every 3 years), infrared testing (annually), oil analysis (annually), refrigerant analysis (annually), and motor current analysis (annually).
- OEM Recommended Services: Includes chiller tube brushing (condenser tubes annually, evaporator tubes every 3 years), cooling tower cleaning (annually), evaporator coil cleaning (annually), and control system inspections (monthly) and database backup (quarterly)
- On-site operations personnel: On-site personnel to oversee plant operations, coordinate with building owners and site issues, provide plant supervision and assist owner in chilled water metering and billing issues.
- Janitorial/Building Upkeep Services: Includes general building cleanliness and upkeep inside chiller plant.
- Alarm/monitor the cooling tower tower's blow down. Correct excessive water consumption within 24 hours.
- Trend, alarm and monitor water treatment chemical levels (hardness, PH and conductivity). Provide 48 hour response to any WT alarms to correct deficiencies.
- Legionella testing and reporting of the cooling towers by a 3rd certified testing party
- Successful management and execution of the EnerNOC program.
- Monthly calculation of chilled water consumption at connected buildings (i.e. Reed, Trio, Ella buildings) and reporting of monthly readings in ton-hours, or as otherwise directed by the District and its designee, which shall be reported to the District Manager.



## **Payment Terms—General**

The District is responsible for the utility costs (electricity, water and sewer) required to operate the CEP. Contractor shall monitor utility consumption and offer suggestions to achieve cost savings.

The Contractor must maintain records conforming to usual accounting practices. The Contractor will render monthly invoices to the District in writing, which shall be mailed or otherwise delivered to the District by the fifth day of the next succeeding month. Monthly invoices will become due and payable within forty-five days of receipt of a valid invoice, and in compliance with Florida's Prompt Payment Act as may be amended from time to time.

The District reserves the right to directly purchase materials (e.g., chemicals) if doing so would result in material savings for the District. Adjustments to the contract shall be made in each case where materials are directly purchased by the District.

Contractor shall be responsible for providing the equipment necessary to provide the services described herein. Contractor is further responsible for parts necessary for repairs, taking into account the warranties as more particularly described in the CD attached as Attachment 1, and shall separately bill the District at cost, with no markup, for such repair parts, except as otherwise limited herein.

## **Detailed Scope of Professional Services and Specifications**

### *CEP Operation and Performance*

1. Contractor shall provide comprehensive service to ensure the CEP is operated and maintained in order to meet all manufacturer specifications and warranty requirements, as more fully described and set forth in the bid documents, and the 365 day a year, 7 days a week, 24 hour demand as dictated by the District. It is expected that the Contractor perform such services in the most cost effective manner for the District and in full consideration of the District's LEED certification.
2. Contractor shall schedule chiller operations to meet specific District requirements, which will change from time to time, in the most efficient and cost effective manner possible.
3. Contractor shall maintain the proper chemicals routinely used in the operation and proper care of the CEP and its equipment. Chemical inventories will be stored in sufficient quantities to ensure continuous operation, in a place suitable to the District or its designee, and in compliance with all applicable OSHA , state and federal regulations and standards. Responsibility for the cost of the chemicals to be determined, cost for the introduction and monitoring of the chemicals in the CPE, is to be borne by the Contractor.
4. The Contractor will proactively manage the CEP and its associated systems. The Contractor will provide continuous, system-wide monitoring and then analyze the information and produce outcome-oriented recommendations for the improvement.
5. The Contractor shall provide inspections quarterly, or more frequently if reasonably requested by the District, and will report on the system performance. The Contractor will utilize available resources to benchmark the performance of the CEP and to suggest scheduling,

- controls sequence changes, and other energy conservation measures that should be considered to reduce total costs of operation and to assure system reliability.
6. The Contractor will complete a system performance audit and furnish a report at least once annually during the term of the contract.
  7. Successful management and execution of the EnerNOC program.

#### *CEP Maintenance and Monitoring*

1. Contractor shall conduct and perform all corrective, routine and planned maintenance to ensure uninterrupted operation of the CEP and optimal performance of the equipment.
2. Contractor shall work closely with all manufacturers of the equipment and controls and the Housing Authority of the City of Tampa, Florida (“**THA**”). Contractor shall perform all maintenance as per manufacturer’s specifications for such all equipment.
3. Contractor shall provide a detailed list of all routine and planned maintenance including scope and schedule of said maintenance.
4. Contractor shall provide lists of deficiencies and follow-up instructions to make sure all deficiencies have been corrected.
5. Contractor shall maintain the CEP in a first class condition at all times.
6. Monthly calculation of chilled water consumption at connected buildings (i.e. Reed, Trio, Ella buildings) and reporting of monthly readings in ton-hours, or as otherwise directed by the District and its designee, which shall be reported to the District Manager.

#### *Coordination with the District and its Designee*

1. The Contractor shall attend monthly meetings, or more frequently as may be required in the District’s reasonable discretion, with the District and/or its designee.
2. Contractor shall work in close coordination with the District and its designee, who shall administer this contract on behalf of the District.
3. Contractor shall assist in establishing an annual operating budget for the CEP including an energy management plan for the budget year.
4. Contractor shall assist in the development of the capital repair and replacement budget for the CEP.
5. Contractor shall assist in identifying the scope, costs, potential bidders and choice of bidders and/or equipment for any repair or capital repair or replacement.
6. The Contractor shall frequently review operating sequences and practices for the equipment with the District and its designee and advise of operational improvement opportunities.

#### *Reports and Records*

1. Contractor shall submit monthly reports that include all scheduled and nonscheduled maintenance performed during the preceding month, amount of chilled ton hours delivered to the District as a whole, the number of gallons of water supplied to the cooling towers, and the kilowatt hours used by the CEP equipment and any other relevant or related information or reports as reasonably requested by the District or its designee.
2. Contractor shall keep all records and reports detailing the hours of operation and the condition on all pieces of equipment and any other records or reports required for warranty purposes or otherwise.

3. Contractor shall maintain records evidencing compliance with the CEP maintenance specifications.
4. Contractor shall develop an emergency action plan for review and approval by the District and its designee.
5. Contractor shall keep records and reports on the CEP and services related thereto in compliance with all applicable local, state, and federal laws, rules, regulations, codes, licenses, Tier II (if applicable) regulations, and manufacturer specifications and warranties and consistent with the LEED certification. Contractor's work must meet all applicable professional standards.

### *The Contract*

The contract shall be for a three (3) year period with a beginning date of October 1, 2022, at the price stated in the contract and may be renewed in writing by mutual agreement of the parties hereto for up to two (2) additional twelve (12) month periods, for a total of five (5) years. The Proposer shall provide a yearly price for each of the three years of the contract and shall additionally provide pricing for optional years four and five. The District reserves the right to terminate the contract in accordance with the provisions of the contract.

### *Insurance*

The Contractor shall maintain throughout the term of the contract the following insurance:

1. Worker's Compensation Insurance in accordance with the laws of the State of Florida.
2. Comprehensive General Liability Coverage with limits of not less than \$3,000,000 (three million dollars) combined single limit bodily injury and property damage liability, and covering at least Independent Contractors Coverage for bodily injury and property damage in connection with any subcontractors' operation.
3. Employer's Liability Coverage with limits of at least \$1,000,000 (one million dollars) per accident or disease.
4. Excess Liability Coverage in the amount of \$10,000,000 shall be in the form of an umbrella policy rather than following a form excess policy. This policy or policies shall be specifically endorsed to be excess of the required Comprehensive General Liability Coverage, Employer's Liability Coverage or Automobile Liability Insurance.
5. Automobile Liability Insurance for bodily injuries in limits of not less than \$1,000,000 (one million dollars) combined single limit bodily injury and for property damage, providing coverage for any accident arising out of or resulting from the operation, maintenance, or use by the Contractor of any owned, non-owned, or hired automobiles, trailers, or other equipment required to be licensed.

The District, its officers, agents, staff, consultants and supervisors and THA, its Board of Directors, officers and staff shall be named as additional insureds. The Contractor shall furnish the District with the Certificate of Insurance evidencing compliance with this requirement. No certificate shall be acceptable to the District unless it provides that any change or termination within the policy periods of the insurance coverages, as certified, shall not be effective within thirty (30) days of prior written notice to the District. Insurance coverage shall be from a reputable insurance carrier, licensed to conduct business in the State of Florida, and such carrier shall have a Best's Insurance Reports rating of at least A-VII.

If the Contractor fails to have secured and maintained the required insurance, the District has the right but not the obligation to secure such required insurance in which event the Contractor shall pay the cost for that required insurance and shall furnish, upon demand, all information that may be required in connection with the District's obtaining the required insurance. Failure to obtain or maintain adequate insurance coverage is grounds for termination of the contract, in the sole discretion of the District.

### *Management and Labor*

The Contractor shall maintain daily staffing sufficient to facilitate the planning and execution of the services as provided for herein. Contractor's employees shall be appropriately dressed and clean/neat in appearance. All employees must display identification prominently while on District property. All employees must be properly trained in the operation of the CEP.

### *Access to District Property and CEP*

Contractor shall be afforded access to the District and the CEP at all times for the purpose of performing the services provided for herein.

### *Licenses and Compliance*

Contractor agrees to operate the CEP in compliance with all applicable local, state and federal laws, rules, regulations, including but not limited to Florida's Building Code, the National Electric Code and the manufacturer's specifications, and consistent with the LEED certifications of the CEP. Contractor's work must meet all applicable professional standards and Contractor must possess all licenses necessary to operate and maintain the CEP in full compliance with the Project Manual, including these Project Scope and Detailed Specifications.

### **Plant Performance Specifications**

Prior to commencement of the contract, the District or its designee shall cause to have conducted a complete audit of the CEP and all equipment and controls. The primary purpose of the audit is to determine the operating condition, efficiency and wear and tear of the CEP, recognizing it is a new facility. These results will be shared and discussed with the Contractor so that the Contractor has full knowledge of the CEP. The operating condition of the CEP is of paramount importance to the operation of the District, its reputation and marketability.

Each year of operation, or on or about October 1, 2023, whichever is later, the District and the Contractor shall agree to negotiate in good faith terms for specific plant performance specifications. Such performance specifications may include, but are not limited to, chilled water product specifications (i.e. quality, capacity, supply temperature, supply pressure, chilled water return conditions) and specific performance specification determination solutions (i.e. density and specific heat ratios, actual capacity ratios, etc). It is anticipated that each calendar year, the performance standards established will be revised based on current year's numbers. The Contractor agrees to negotiate the performance standards in good faith for the full term of the contract.

## **New Lot Connection**

Future development within the District will, from time to time, require connections from developed buildings to the CEP in order to provide chilled water to end users (each, a **“Connection”**).

Contractor shall provide the labor, materials and services necessary to connect new lot developments to the District’s CEP, including but not limited to installation of chilled water piping, heat exchanger(s), chilled water metering equipment, and other infrastructure improvements as may be necessary to accomplish each Connection. The Connection shall commence upon the issuance of a written Work Authorization (as defined in the Agreement) describing the scope of the work to be performed, the compensation for said work, and other necessary terms for the work. Such Work Authorizations shall be signed by the District and the Contractor, and acknowledged by the developer or owner of the lot for which the connection is needed (each a “Developer”).

Contractor shall be responsible for obtaining all permits and approvals necessary to complete the Connection. The District, to the extent not granted in the Agreement, agrees to grant the Contractor permission to access property owned by the District as may be reasonably necessary to complete the Connection; provided, however, that commencement of any work for the Connection shall be contingent upon obtaining any necessary approvals from the Developer or other landowners whose property may be affected by the Connection. It is incumbent upon the Contractor to determine if other access permissions are necessary; the District makes no representations regarding the same.

Contractor shall be responsible for coordinating with the Developer to determine the scope of the work needed to complete the Connection, the cost of completing the Connection, and the timeline for the work. Upon request from the Developer, the Contractor shall provide the Developer with an estimated order of magnitude cost during the due diligence phase of the lot sale agreement, and shall provide a final cost upon completion of all relevant construction documents.

Upon completion of the Connection, the Contractor shall provide the District with acceptable as-built drawings showing the locations of all improvements installed in the course of performing the Connection. The District shall own all components of the Connection.

Compensation for such Connections shall be as determined in each Work Authorization and may be set forth as a lump sum, time-and-materials, or such other arrangement as may be agreed to by the Parties, provided however such compensation shall be consistent with the rates, fees, and charges adopted by the District, as may be amended from time to time. Contractor recognizes that unless otherwise stated in such Work Authorization, the compensation shall be payable by the Developer to the District at lot closing or at such other time as agreed to by the District and the Developer.

Contractor shall perform the Connection: (i) in accordance with generally accepted professional and design standards and practices for projects of similar design and complexity as the development occurring within the District; (ii) in compliance with all applicable federal, state, county municipal, building and zoning, land use, environmental, public safety, non-discrimination and disability accessibility laws, codes, ordinances, rules and regulations, including, without limitation, all professional registration (both corporate and individual) for all

required basic disciplines that it shall perform; and (iii) in an expeditious and economical manner consistent with the best interest of the District. Any work product of the Contractor shall not call for the use nor infringe any patent, trademark, services mark, copyright or other proprietary interest claimed or held by any person or business entity absent prior written consent from the District

**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
***CHILLER SYSTEM OPERATION AND MAINTENANCE SERVICES***  
**PROPOSAL COST SUMMARY**

**NOTE:** The Proposal Cost Summary shall identify (on a separate sheet) the following: (1) the derivation of the total fee by indicating assumptions made in estimating costs including those of third-party contractors, and (2) a breakout of estimated costs, including hourly rates, job classifications, hours to be worked, a breakdown of work to be performed for personnel working on the project and all other expenses.

**Base Bid – Chiller Plant Operation and Maintenance Services—Annual Lump Sum**

Year 1 \_\_\_\_\_  
Year 2 \_\_\_\_\_  
Year 3 \_\_\_\_\_

**Possible Annual Extension—Annual Lump Sum**

Year 4 \_\_\_\_\_  
Year 5 \_\_\_\_\_

Total Base Bid (Years 1, 2, and 3)                      \$ \_\_\_\_\_

---

Total Base Bid written in words

**ENCORE COMMUNITY DEVELOPMENT DISTRICT**  
**CHILLER SYSTEM OPERATION AND MAINTENANCE SERVICES**  
**PROPOSAL COST SUMMARY (CONT'D)**

FIRST YEAR TOTAL PRICE	\$
SECOND YEAR TOTAL PRICE	\$
THIRD YEAR TOTAL PRICE	\$
<b>TOTAL BASE BID FOR THREE YEARS:</b>	\$
OPTIONAL YEAR 4 TOTAL PRICE:	\$
OPTIONAL YEAR 5 TOTAL PRICE:	\$

Contractor Company Name\_\_\_\_\_

Contractor Address\_\_\_\_\_

Contractor Representative\_\_\_\_\_

Contractor Signature\_\_\_\_\_

Title\_\_\_\_\_

Telephone Number\_\_\_\_\_

Date\_\_\_\_\_

**Note: Owner may choose to purchase materials tax exempt; however proposal amounts must include and identify sales tax. To the extent Owner purchases materials tax exempt during the life of the Service Agreement, Owner shall receive a compensating credit against the amount due the Contractor for the cost of such materials and sales tax included in the Proposal Price.**



**ENCORE COMMUNITY DEVELOPMENT DISTRICT  
AGREEMENT FOR CHILLER SYSTEM OPERATION  
AND MAINTENANCE SERVICES**

**THIS AGREEMENT** (“Agreement”) is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2022, by and between:

**Encore Community Development District**, a local unit of special-purpose government established pursuant to Chapter 190, Florida Statutes, being situated in the City of Tampa, Florida, and having offices at c/o Rizzetta & Company, Inc., 2700 S. Falkenburg Rd, STE 2745, Riverview, FL 33758 (“District”); and

\_\_\_\_\_, a \_\_\_\_\_, whose address is \_\_\_\_\_ (the “Contractor,” and collectively with the District, the “Parties”).

**RECITALS**

**WHEREAS**, the District was established for the purpose of operating and maintaining certain infrastructure improvements, including a chiller system (“Chiller”); and

**WHEREAS**, the District has a need to retain an independent contractor to provide Chiller operation and maintenance services; and

**WHEREAS**, Contractor submitted a proposal attached hereto as **Exhibit A**, which is incorporated herein by this reference as a material part of this Agreement and represents that it qualified to perform the services more particularly described in the “Project Scope and Detailed Specifications”, attached hereto as **Exhibit B** and incorporated herein by this reference as a material part of this Agreement.

**NOW, THEREFORE**, in consideration of the mutual covenants contained in this Agreement, it is agreed that the Contractor is hereby retained, authorized, and instructed by the District to perform in accordance with the following covenants and conditions, which both the District and the Contractor have agreed upon:

**1. INCORPORATION OF RECITALS.** The recitals stated above are true and correct and are incorporated by reference as a material part of this Agreement.

**2. SCOPE OF SERVICES.** The District desires that the Contractor provide a high quality level of professional Chiller operation and maintenance services consistent with presently accepted industry standards and best practices and in strict accordance with **Exhibit B** (the “Work”). Contractor shall solely be responsible for the means, manner and methods by which its duties, obligations and responsibilities are met to the satisfaction of the District in its sole discretion.

**3. MANNER OF CONTRACTOR' S PERFORMANCE.** The Contractor agrees, as an independent contractor, to undertake the Work and/or perform such services as specified in this Agreement or any addendum executed by the Parties or in any authorized written Work Authorization (as defined herein) by the District issued in connection with this Agreement and accepted by the Contractor. All Work shall be performed in a neat and professional manner reasonably acceptable to the District and shall be in accordance with industry and professional standards. The Work shall be strictly supervised and the Contractor bears full responsibility for any and all acts or omissions of those engaged in the Work on behalf of the Contractor. The performance of all by the Contractor under this Agreement and related to this Agreement shall conform to any written instructions issued by the District.

- a) The Contractor hereby warrants that all labor furnished under this Agreement shall be competent to perform the tasks undertaken, that the product of such labor shall yield only first-class results, that all materials and equipment provided shall be new, of high quality and free of defects, that the completed Work will be complete, of high quality, without defects, and that all Work strictly complies with the requirements of this Agreement. The Contractor further warrants that all Work shall also comply with the Chiller specifications, warranties, requirements and all legal requirements applicable to the Work, including related laws, rules, regulations, ordinances, permits, etc, which list is not exhaustive. Any Work not strictly complying with the requirements of this subparagraph shall constitute a breach of this Agreement, and as is more particularly described in Exhibit B.
- b) Contractor hereby warrants and agrees it currently possesses and will actively maintain all requisite licenses, permits and other authorizations necessary to perform the Work, as more particularly described in Exhibit B.
- c) The Contractor shall obtain and pay for all required permits, fees and licenses customarily obtained by the Contractor, and all others as required herein.
- d) Should any Work and/or services be required which are not specified in this Agreement or any addenda, but are nevertheless necessary for the proper provision of the Work to the District, such work or services shall be fully performed by the Contractor as though set out fully herein. Additional services not part and parcel of the Work are as provided for in Paragraph 4.c. herein.
- e) The District shall designate in writing a person to act as the District's representative with respect to the Work to be performed under this Agreement. The District's representative shall have complete authority to transmit instructions, receive information, interpret and define the District's policies and decisions with respect to materials, equipment, elements, and systems pertinent to the Contractor's Work.
  - i. The District hereby designates \_\_\_\_\_ to act as its representative ("District designee"). The Contractor shall not take

direction from anyone other than the District designee (e.g., the Contractor shall not take direction from individual District Board Supervisors, any residents, etc.). The District shall have the right to change its designee at any time by written notice to the Contractor.

- ii. The Contractor agrees to meet the District designee no less than one (1) time per month, or as more reasonably and frequently requested by the District or its designee, to discuss any items of interest or concern regarding this Agreement.
- f) Contractor shall use all due care to protect the property of the District, its residents, businesses, and landowners from damage. Contractor agrees to repair any damage resulting from Contractor's Work and activities within twenty-four (24) hours.
- g) By entering into this Agreement, the Contractor represents it:
- i. Has become familiar with the Work site; and
  - ii. Has become familiar with local conditions under which the Work is to be completed; and
  - iii. Has received, reviewed and carefully examined all of the Work described in Exhibit B and found it to be complete, accurate, adequate, consistent, coordinated and sufficient and has not relied in any way on warranties or representations by the District in performance of the Work or the contents of Exhibit B; and
  - iv. Has made the District aware of any conflict, ambiguity, error or omission in the its proposal attached as Exhibit A or the specifications, including the CD, attached as Exhibit B, prior to proceeding with the Work; and
  - v. Fully understands and acknowledges that the District makes NO REPRESENTATION OR WARRANTY OF ANY NATURE WHATSOEVER TO THE CONTRACTOR CONCERNING THE TECHNICAL SPECIFICATIONS OF THE CHILLER AND ITEMS IN EXHIBIT B; and
  - vi. Possesses the requisite knowledge, experience, licensure, expertise and other qualifications necessary to provide the Work in a first class manner.

#### **4. COMPENSATION; TERM.**

- a) As compensation for services described in this Agreement, the District agrees to pay the Contractor on a monthly basis after receiving a correct invoice (in

compliance with section 4(d) herein). Annually, the amount paid shall be as follows:

Year 1: \_\_\_\_\_

Year 2: \_\_\_\_\_

Year 3: \_\_\_\_\_

These amounts shall not include parts or materials for repair or replacement, taking into account warranties that may apply, which parts if required shall be billed separately to the District at no mark up. Routine supplies for upkeep at the facility used by Contractor shall be paid by Contractor (e.g., paper towels, bathroom supplies, etc). Such annual amounts are exclusive of additions and/or deductions by Work Authorization as set forth in Section 4(c) below.

- b) The term of service under the contract shall run for three (3) years, commencing October 1, 2022, and ending September 30, 2025, unless terminated earlier as provided for herein. If the District should desire to extend this Agreement for up to two (2) additional one-year terms, the District shall notify Contractor in writing and compensation shall be as provided for in **Exhibit A**.
- c) Should the District desire Contract provide additional work and/or services, the Contractor agrees to negotiate in good faith to undertake such additional work or services. All additional work or services must be approved by the District in a written work authorization ("Work Authorization") prior to the commencement of work. The Contractor shall be compensated for such agreed additional work and/or services based upon a payment amount acceptable to the Parties and agreed in writing, to the extent not already provided for in this Agreement and its exhibits; provided however, such compensation shall be consistent with any the rates, fees, and charges adopted by the District, as may be amended from time to time. Nothing herein shall be construed to require the District to use the Contractor for any such additional work or services. For avoidance of all doubt, all Connection (as defined in **Exhibit B**) related work and/or services must be authorized by the District pursuant to a written Work Authorization describing the scope of the work to be performed, the compensation for said work, and any other necessary terms for such work.
- d) The Contractor shall maintain records conforming to usual accounting practices. Further, the Contractor agrees to render monthly invoices to the District, in writing, which shall be delivered or mailed to the District by the fifth (5th) day of the next succeeding month. Each monthly invoice shall contain, at a minimum, the District's name, the Contractor's name, the invoice date, an itemized listing of all costs billed on the invoice with a description of each sufficient for the District to approve each cost, the time frame within which the services were provided, and the address or bank information to which payment is to be remitted. Consistent with Florida's Prompt Payment Act, Section 218.70 et seq., Florida Statutes, these monthly invoices are due and payable within forty-five (45) days of receipt by the District. The District shall notify

Contractor of any disputed charges on the invoice within 15 days of receipt and agrees to process the undisputed charges within the 45-day window.

- e) Subject to the terms herein, Contractor will promptly pay all costs of labor, materials, services and equipment used in the performance of the Work, and upon the request of the District, Contractor will provide proof of such payment. Contractor agrees that it shall comply with Section 218.735(6), Florida Statutes, requiring payments to subcontractors and suppliers be made within ten (10) days of receipt of payment from the District. Unless prohibited by law, District may at any time make payments due to Contractor directly or by joint check, to any person or entity for obligations incurred by Contractor in connection with the performance of Work, unless Contractor has first delivered written notice to District of a dispute with any such person or entity and has furnished security satisfactory to District insuring against claims therefrom. Any payment so made will be credited against sums due Contractor in the same manner as if such payment had been made directly to Contractor. The provisions of this Section are intended solely for the benefit of District and will not extend to the benefit of any third persons, or obligate District or its sureties in any way to any third party. Subject to the terms of this Section, Contractor will at all times keep the District's property, and each part thereof, free from any attachment, lien, claim of lien, or other encumbrance arising out of Work.

**5. WARRANTY AND COVENANT.** The Contractor warrants to the District that all materials furnished under this Agreement and any Work Authorizations shall be new unless otherwise specified, and that all services and materials shall be of good quality, free from faults and defects in material and workmanship. The Contractor hereby warrants any materials for a period of one (1) year following the date of final acceptance of the work by the District. If within one (1) year after final acceptance by District, any Work is found to be defective, deficient, or not in conformance with the Agreement, including any Work Authorization issued thereunder, Contractor shall correct it promptly after receipt of written notice from District. Contractor shall also be responsible for and pay for replacement or repair of adjacent materials, property, or Work which may be damaged as a result of such replacement or repair. Neither final acceptance of a Connection, nor final payment therefore, nor any provision of the Agreement shall relieve Contractor of responsibility for defective or deficient materials or Connections within the warranty period.

## **6. INSURANCE.**

- a) The Contractor shall maintain throughout the term of this Agreement the following insurance:
  - i. Worker's Compensation Insurance in accordance with the laws of the State of Florida.
  - ii. Comprehensive General Liability Coverage with limits of not less than \$3,000,000 (three million dollars) combined single limit bodily injury and

property damage liability and covering at least Independent Contractors Coverage for bodily injury and property damage in connection with any subcontractors' operation.

- iii. Employer's Liability Coverage with limits of at least \$1,000,000 (one million dollars) per accident or disease.
  - iv. Excess Liability Coverage in the amount of \$10,000,000 (ten million dollars) shall be in the form of an umbrella policy rather than following a form excess policy. This policy or policies shall be specifically endorsed to be excess of the required Comprehensive General Liability Coverage, Employer's Liability Coverage or Automobile Liability Insurance.
  - v. Automobile Liability Insurance for bodily injuries in limits of not less than \$1,000,000 (one million dollars) combined single limit bodily injury and for property damage, providing coverage for any accident arising out of or resulting from the operation, maintenance, or use by the Contractor of any owned, non-owned, or hired automobiles, trailers, or other equipment required to be licensed.
- b) The District, its staff, officers, agents, staff, consultants and supervisors and the THA, its Board of Directors and staff shall be named as additional insureds. The Contractor shall furnish the District with the Certificate of Insurance evidencing compliance with this requirement. No certificate shall be acceptable to the District unless it provides that any change or termination within the policy periods of the insurance coverages, as certified, shall not be effective within thirty (30) days of prior written notice to the District.
- c) Insurance coverage shall be from a reputable insurance carrier, licensed to conduct business in the State of Florida, and such carrier shall have a Best's Insurance Reports rating of at least AVII. If the Contractor fails to have secured and maintained the required insurance, the District has the right but not the obligation to secure such required insurance in which event the Contractor shall pay the cost for that required insurance (or the District may deduct such amount from any payment due to Contractor) and shall furnish, upon demand, all information that may be required in connection with the District's obtaining the required insurance. Failure to obtain or maintain adequate insurance coverage is grounds for termination of the Contract, in the sole discretion of the District.

## **7. INDEMNIFICATION.**

- a) Obligations under this Section shall include the payment of all settlements, judgments, damages, liquidated damages, penalties, forfeitures, back pay, awards, court costs, mediation costs, litigation expenses, attorney fees, and paralegal fees (incurred in court, out of court, on appeal, or in bankruptcy proceedings) as ordered.

- b) The Contractor shall indemnify, save, hold harmless, and defend the District, its staff, officers, agents, staff, consultants and supervisors, and the Housing Authority of the City of Tampa, Florida (“**THA**”), its Board of Directors and staff, from all loss, damage, or injury, including all judgments, liens, liabilities, debts, and obligations resulting from the acts or omissions of Contractor, the Contractor’s officers, directors, agents, assigns, subcontractors, or employees which cause harm to persons or property. Without limiting the foregoing, if the Contractor causes any damage to property within or without the District, including but not limited to any items on or related to the chiller system components, as a result of the Contractor’s act(s) or omission(s) in performing its duties under this Agreement, the Contractor shall immediately notify the District, and shall repair all damage and/or replace damaged property to the satisfaction of the District or reimburse the District for such damages.
- c) The Contractor agrees that nothing in this Agreement shall serve as or be construed as a waiver of the District’s or its staff, supervisors or consultants limitations on liability contained in Section 768.28, Florida Statutes, or other law. Any subcontractor retained by the Contractor shall acknowledge the same in writing, and it shall be Contractor’s responsibility to secure such acknowledgments. Further, nothing herein shall be construed to limit or restrict the District’s rights against the Contractor under applicable law.

**8. COMPLIANCE WITH GOVERNMENTAL REGULATION AND MANUFACTURER SPECIFICATIONS AND WARRANTIES.** The Contractor shall keep, observe, and perform all requirements of applicable local, State and Federal laws, rules, regulations, ordinances, permits, licenses, codes, as well as the manufacturer specifications and warranties, or other requirements or approvals. Further, the Contractor shall notify the District in writing within five (5) days of the receipt of any notice, order, required to comply notice, or a report of a violation or an alleged violation, made by any local, State, or Federal governmental body or agency or subdivision thereof with respect to the services being rendered under this Agreement or any action of the Contractor or any of its agents, servants, employees, or material men, or appliances, or any other requirements applicable to provision of services. Additionally, the Contractor shall promptly comply with any requirement of such agency after receipt of any such notice, order, request to comply notice, or report of a violation or an alleged violation.

**9. DEFAULT AND PROTECTION AGAINST THIRD PARTY INTERFERENCE.** A default by either party under this Agreement shall entitle the other to all remedies available at law or in equity for breach of this Agreement, which may include, but not be limited to, the right of damages, injunctive relief, and/or specific performance. The District shall be solely responsible for enforcing its rights under this Agreement against any interfering third party. Nothing contained in this Agreement shall limit or impair the District’s right to protect its rights from interference by a third party to this Agreement.

**10. CUSTOM AND USAGE.** It is hereby agreed, any law, custom, or usage to the contrary notwithstanding, that the District shall have the right at all times to enforce the conditions

and agreements contained in this Agreement in strict accordance with the terms of this Agreement, notwithstanding any conduct or custom on the part of the District in refraining from so doing; and further, that the failure of the District at any time or times to strictly enforce its rights under this Agreement shall not be construed as having created a custom in any way or manner contrary to the specific conditions and agreements of this Agreement, or as having in any way modified or waived the same.

**11. SUCCESSORS.** This Agreement shall inure to the benefit of and be binding upon the heirs, executors, administrators, successors, and assigns of the Parties to this Agreement, except as expressly limited in this Agreement.

**12. TERMINATION.** The District agrees that the Contractor may terminate this Agreement with or without cause by providing one hundred and eighty (180) days written notice of termination to the District; provided, however, that the District shall be provided a reasonable opportunity to cure. The Contractor agrees the District may terminate this Agreement immediately with cause by providing written notice of termination to the Contractor. The District may terminate this Agreement without cause by providing thirty (30) days written notice. Upon any termination of this Agreement, the Contractor shall be entitled to payment for Work rendered up until the effective termination of this Agreement, subject to whatever claims or off-sets the District may have against the Contractor, as the sole means of recovery for termination. For the purpose of this provision, all notices will be sent to the addresses shown in Section 19 herein.

**13. ASSIGNMENT.** Neither the District nor the Contractor may assign this Agreement without the prior written approval of the other. Any purported assignment of this Agreement without such prior written approval shall be void.

**14. INDEPENDENT CONTRACTOR STATUS.** In all matters relating to this Agreement, the Contractor shall be acting as an independent contractor. Neither the Contractor nor employees or subcontractors of the Contractor, if there are any, are employees of the District under the meaning or application of any Federal or State Unemployment or Insurance Laws or Old Age Laws or otherwise. The Contractor agrees to assume all liabilities or obligations imposed by any one or more of such laws with respect to employees of the Contractor, if there are any, in the performance of this Agreement. The Contractor shall not have any authority to assume or create any obligation, express or implied, on behalf of the District and the Contractor shall have no authority to represent the District as an agent, employee, or in any other capacity, unless otherwise set forth in this Agreement.

**15. HEADINGS FOR CONVENIENCE ONLY.** The descriptive headings in this Agreement are for convenience only and shall neither control nor affect the meaning or construction of any of the provisions of this Agreement.

**16. AGREEMENT.** This instrument shall constitute the final and complete expression of the agreement between the District and Contractor relating to the subject matter of this Agreement.



**17. ENFORCEMENT OF AGREEMENT.** In the event that either the District or the Contractor is required to enforce this Agreement by court proceedings or otherwise, then the prevailing party shall be entitled to recover all fees and costs incurred, including reasonable attorneys' fees, paralegal fees and costs for trial, mediation, or appellate proceedings.

**18. AMENDMENTS.** Amendments to and waivers of the provisions contained in this Agreement may be made only by an instrument in writing which is executed by both the District and the Contractor.

**19. AUTHORIZATION.** The execution of this Agreement has been duly authorized by the appropriate body or official of the District and the Contractor, both the District and the Contractor have complied with all the requirements of law, and both the District and the Contractor have full power and authority to comply with the terms and provisions of this Agreement.

**20. NOTICES.** Any notice, demand, request or communication required or permitted hereunder ("Notice") shall be in writing and sent by hand delivery, United States certified mail, or by recognized overnight delivery service, addressed as follows:

**A. If to the District:** Encore Community Development District  
2700 S. Falkenburg Rd, STE 2745  
Riverview, FL 33758  
Attn: District Manager

**With a copy to:** Kutak Rock LLP  
107 West College Avenue  
Tallahassee, FL 32301  
Attn: District Counsel

**B. If to Contractor:**

**With a copy to:**

Except as otherwise provided in this Agreement, any Notice shall be deemed received only upon actual delivery at the address set forth above. Notices delivered after 5:00 p.m. (at the place of delivery) or on a non-business day, shall be deemed received on the next business day. If any time for giving Notice contained in this Agreement would otherwise expire on a non-business day, the Notice period shall be extended to the next succeeding business day. Saturdays, Sundays, and legal holidays recognized by the United States government shall not be regarded as business days. Counsel for the District and counsel for the Contractor may deliver Notice on behalf of the District and the Contractor. Any party or other person to whom Notices are to be sent or copied may notify the other parties and addressees of any change in name or address to which Notices shall be sent by providing the same on five (5) days written notice to the parties and addressees set forth herein.

**21. THIRD PARTY BENEFICIARIES.** This Agreement is solely for the benefit of the District and the Contractor and no right or cause of action shall accrue upon or by reason, to or for the benefit of any third party not a formal party to this Agreement. Nothing in this Agreement

expressed or implied is intended or shall be construed to confer upon any person or corporation other than the District and the Contractor any right, remedy, or claim under or by reason of this Agreement or any of the provisions or conditions of this Agreement; and all of the provisions, representations, covenants, and conditions contained in this Agreement shall inure to the sole benefit of and shall be binding upon the District and the Contractor and their respective representatives, successors, and assigns.

**22. CONTROLLING LAW AND VENUE.** This Agreement and the provisions contained in this Agreement shall be construed, interpreted, and controlled according to the laws of the State of Florida. Venue for any legal actions regarding this Agreement shall be Hillsborough County, Florida.

**23. EFFECTIVE DATE.** This Agreement shall be effective on October 1, 2022, and shall remain in effect until September 30, 2025, unless terminated by either the District or the Contractor in accordance with the terms of this Agreement or renewed in writing as provided for in the exhibits and this Agreement.

**24. COMPLIANCE WITH PUBLIC RECORDS LAWS.** Contractor understands and agrees that all documents of any kind provided to the District in connection with this Agreement may be public records, and, accordingly, Contractor agrees to comply with all applicable provisions of Florida law in handling such records, including but not limited to Section 119.0701, *Florida Statutes*. Contractor acknowledges that the designated public records custodian for the District is Jennifer Goldyn, District Manager ("Public Records Custodian"). Among other requirements and to the extent applicable by law, the Contractor shall 1) keep and maintain public records required by the District to perform the service; 2) upon request by the Public Records Custodian, provide the District with the requested public records or allow the records to be inspected or copied within a reasonable time period at a cost that does not exceed the cost provided in Chapter 119, *Florida Statutes*; 3) ensure that public records which are exempt or confidential, and exempt from public records disclosure requirements, are not disclosed except as authorized by law for the duration of the contract term and following the contract term if the Contractor does not transfer the records to the Public Records Custodian of the District; and 4) upon completion of the contract, transfer to the District, at no cost, all public records in Contractor's possession or, alternatively, keep, maintain and meet all applicable requirements for retaining public records pursuant to Florida laws. When such public records are transferred by the Contractor, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the District in a format that is compatible with Microsoft Word or Adobe PDF formats.

**IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, *FLORIDA STATUTES*, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 2700 S. FALKENBURG RD, STE 2745, RIVERVIEW, FL 33758, PHONE: (813) 533-2950, E-MAIL JGOLDYN@RIZZETTA.COM**

**25. SEVERABILITY.** The invalidity or unenforceability of any one or more provisions of this Agreement shall not affect the validity or enforceability of the remaining portions of this Agreement, or any part of this Agreement not held to be invalid or enforceable.

**26. ARM'S LENGTH TRANSACTION.** This Agreement has been negotiated fully between the District and the Contractor as an arm's length transaction. The District and the Contractor participated fully in the preparation of this Agreement with the assistance of their respective counsel. In the case of a dispute concerning the interpretation of any provision of this Agreement, the Parties are each deemed to have drafted, chosen, and selected the language, and any doubtful language will not be interpreted or construed against any party.

**27. COUNTERPARTS.** This Agreement may be executed in any number of counterparts, each of which when executed and delivered shall be an original; however, all such counterparts together shall constitute but one and the same instrument.

**28. E-VERIFY.** The Contractor shall comply with and perform all applicable provisions of Section 448.095, *Florida Statutes*. Accordingly, to the extent required by Florida Statute, Contractor shall register with and use the United States Department of Homeland Security's E-Verify system to verify the work authorization status of all newly hired employees. The District may terminate this Agreement immediately for cause if there is a good faith belief that the Contractor has knowingly violated Section 448.091, *Florida Statutes*. By entering into this Agreement, the Contractor represents that no public employer has terminated a contract with the Contractor under Section 448.095(2)(c), *Florida Statutes*, within the year immediately preceding the date of this Agreement.

**IN WITNESS WHEREOF,** the Parties execute this Chiller System Operation and Maintenance Services Agreement the day and year first written above.

**ATTEST:**

**ENCORE COMMUNITY  
DEVELOPMENT DISTRICT**

By: \_\_\_\_\_  
☐ Secretary  
☐ Assistant Secretary

By: \_\_\_\_\_  
☐ Chairperson  
☐ Vice Chairperson

**ATTEST:**

\_\_\_\_\_

By: \_\_\_\_\_  
Its: \_\_\_\_\_

By: \_\_\_\_\_  
Its: \_\_\_\_\_

**Exhibit A: Contractor's Proposal**

**Exhibit B: Project Scope and Detailed Specifications included on a CD.**