

CITY OF CORONA

Riverside County, California

FORMAL

UTILITIES DEPARTMENT



CONTRACT DOCUMENTS AND SPECIFICATIONS

FOR

DESALTER SURGE ANTICIPATOR IMPROVEMENTS

NIB 24-080CA

FUNDED BY

CITY OF CORONA
UTILITIES DEPARTMENT

APRIL 2024

PREPARED BY

CITY OF CORONA
FINANCE DEPARTMENT – PURCHASING DIVISION
400 S. VICENTIA AVE., SUITE 320
CORONA, CA 92882
951-279-3620

**CONTRACT DOCUMENTS AND SPECIAL PROVISIONS
FOR THE
CITY OF CORONA

DESALTER SURGE ANTICIPATOR IMPROVEMENTS**

**FORMAL
NIB 24-080CA**

APPROVALS

For City of Corona

DocuSigned by:

Kenny T. Nguyen

A97EFAC39264407

Kenny Nguyen, PE
CIP Manager

4/29/2024

Date

DocuSigned by:

Savat Khamphou

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Savat Khamphou
Public Works Director/City Engineer

4/29/2024

Date

CITY OF CORONA

DESALTER SURGE ANTICIPATOR IMPROVEMENTS

NIB 24-080CA

BID AND CONTRACT DOCUMENTS

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CITY OF CORONA UTILITIES DEPARTMENT

NOTICE INVITING BIDS

The City of Corona Utilities Department (“City”) will receive sealed bids for the **Desalter Surge Anticipator Improvements Project, NIB 24-080CA** through the City’s PlanetBids electronic bidding system no later than **2:00 p.m., May 30, 2024**. Bids submitted after this time will not be accepted by the electronic bidding system. At said time it will be bidder’s responsibility to log into the PlanetBids system for the City of Corona to view the apparent low bidder for the project. Bids shall be valid for 90 calendar days after the bid opening date. Bids must be submitted on the City’s Bid Forms.

Prospective Bidders must visit the City’s Bids and Requests for Proposals Vendor Portal at <https://www.planetbids.com/portal/portal.cfm?CompanyID=39497> and register as a new vendor in PlanetBids in order to download Contract Documents, including the Instructions to Bidders, plans and specifications, and to receive addenda and notifications when issued. Bidders will also submit electronic bids through this website. The City will also make the Contract Documents available for review at one or more plan rooms.

The City conducted a public invitation to prequalify bidders, and this Contract requires bidder prequalification by the City of Corona Utilities Department. Only bidders who have successfully completed the prequalification process for the applicable category of work by the bid opening date and time, as posted on the City’s PlanetBids electronic bidding system shall be entitled to submit a bid for this Project. Bids submitted by firms not prequalified to bid this Project will not be accepted and will be returned unopened. The list of prequalified contractors for this Project is available for download from the City’s PlanetBids electronic bidding system at <https://www.planetbids.com/portal/portal.cfm?CompanyID=39497>.

All electronic Bids must be accompanied a bid security in favor of the City in an amount not less than ten percent (10%) of the submitted Total Bid Price pursuant to Section 12. Bid Guarantee (Bond) of the Instructions to Bidders.

A mandatory Pre-Bid Conference will be held at the project site located at the City of Corona Desalter, 745 Public Safety Way, Corona, CA 92880 on the following date(s) and time(s): **May 7, 2024, 10:00 a.m. All participants attending the mandatory Pre-Bid Conference are required to furnish and wear Personal Protective Equipment (PPE) consisting of, at minimum, yellow or orange reflective safety vests, hard hats, long trousers, closed-toe shoes and eye protection.** Each and every Bidder must attend the Pre-Bid Conference. Bidders are required to RSVP their attendance at the Pre-Bid Conference no later than **5:00 p.m., May 6, 2024** by emailing Carol Appelt at carolyn.appelt@coronaca.gov with the name(s) and phone number(s) of Bidder’s personnel attending the mandatory pre-bid conference. Prospective bidders may not visit the Project Site without making arrangements through the City. Bids will not be accepted from any bidder who did not attend the Pre-Bid Conference.

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NOTICE INVITING BIDS

Before the Contract is awarded, the successful bidder shall be a licensed contractor pursuant to the Business and Professions Code and shall be licensed in the following appropriate classification(s) of contractor's license(s), for the work bid upon, and must maintain the license(s) throughout the duration of the Contract: **"A" General Engineering Contractor.**

It shall be Bidder's responsibility to allow sufficient time to complete and submit its bid including all required documentation referred to in the Contract Documents prior to the stated deadline. Electronic bid submission cannot be completed unless bidder properly uploads all required documents. Each bid shall be accompanied by the security referred to in the Contract Documents, the non-collusion declaration, the list of proposed subcontractors, and all additional documentation required by the Instructions to Bidders.

Bidders are solely responsible for the "on time" submission of their electronic Bid. The City will only consider Bids from prequalified contractors that have transmitted successfully and have been issued a confirmation number with a time stamp from PlanetBids indicating that the Bid was submitted successfully. Transmission of Bids by any other means will not be accepted. Bidders shall be solely responsible for informing themselves with respect to the proper utilization of the online bid management system, for ensuring the capability of their computer system to upload the required documents, and for the stability of their internet service. Failure of the Bidder to successfully submit an electronic Bid shall be the Bidder's sole risk and no relief will be given for late and/or improperly submitted Bids.

Bidders experiencing any technical difficulties with the bid submission process may contact Planet Bids Support at 818-992-1771. If you continue to have difficulty, call City of Corona Purchasing Department at 951-736-2274. Neither the City, nor PlanetBids, make any guarantee as to the timely availability of assistance, or assurance that any given problem will be resolved by the bid submission date and/or time.

The successful bidder will be required to furnish the City with a Performance Bond equal to 100% of the successful bid, and a Payment (Labor and Materials) Bond equal to 100% of the successful bid, prior to execution of the Contract. All bonds are to be secured from a surety that meets all of the State of California bonding requirements, as defined in Code of Civil Procedure Section 995.120, and is admitted by the State of California

Pursuant to Public Contract Code Section 22300, the successful bidder may substitute certain securities for funds withheld by City to ensure his performance under the Contract.

The Work is subject to the payment of not less than prevailing wages pursuant to Chapter 1 (beginning at Section 1720 et seq.) of Part 7 of Division 2 of the California Labor Code, as well as Title 8, Section 16000 et seq. of the California Code of Regulations ("Prevailing Wage Laws"). The Director of the Department of Industrial Relations ("DIR") has determined the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract which will be awarded to the

NOTICE INVITING BIDS

successful bidder, copies of which are on file and will be made available to any interested party upon request from the City's Representative or online at <http://www.dir.ca.gov/dlsr>. A copy of these rates shall be posted by the successful bidder at the job site.

Pursuant to SB 854, which amended the Prevailing Wage Laws, this Contract is subject to compliance monitoring and enforcement by the DIR. Beginning March 1, 2015, with very limited exceptions no contractor or subcontractor may be listed on a bid proposal for this Contract unless registered with the DIR pursuant to Labor Code section 1725.5. Beginning April 1, 2015, no contractor or subcontractor may be awarded this Contract unless registered with the DIR pursuant to Labor Code section 1725.5. The DIR registration number for each contractor and subcontractor must be identified on the bid proposal - failure to identify this number could result in the bid being rejected as non-responsive. It is each bidder's responsibility to ensure that they have fully complied with SB 854. The City will report all necessary contracts to the DIR as required by the Prevailing Wage Laws.

The successful bidder and all subcontractor(s) under him, shall comply with all applicable Prevailing Wage Laws, which include, but are not limited to the payment of not less than the required prevailing rates to all workers employed by them in the execution of the Contract, the employment of apprentices, the hours of labor, the payment of overtime, and the debarment of contractors and subcontractors. The successful bidder and all subcontractor(s) under him shall also be responsible for any and all violations and fines imposed on them pursuant to the Prevailing Wage Laws.

Pursuant to Public Contract Code Section 3400(b), if the City has made any findings designating certain materials, products, things, or services by specific brand or trade name, such findings and the materials, products, things, or services and their specific brand or trade names will be set forth in the Special Conditions. In addition, the applicable approved Notice Designating Sole Source Equipment and Product Specifications is available upon request from the City's contact person specified herein. Please note that if PCC 3400(c) findings have been made and are applicable to this Project, there may be only one subcontractor qualified or authorized to perform a portion of the Work, so each bidder must take note and ensure that you list the proper subcontractor on the Designation of Subcontractors form.

The successful bidder must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the South Coast Air Quality Management District (SCAQMD) and/or California Air Resources Board (CARB). Although the SCAQMD and CARB limits and requirements are more broad, the successful bidder shall specifically be aware of their application to "portable equipment", which definition is considered by SCAQMD and CARB to include any item of equipment with a fuel-powered engine. The successful bidder will be required to indemnify City against any fines or penalties imposed by SCAQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by the successful bidder, its subcontractors, or others for whom the successful bidder is responsible under its indemnity obligations.

NOTICE INVITING BIDS

CARB implemented amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulations (“Regulation”) which are effective on January 1, 2024 and apply broadly to all self-propelled off road diesel vehicles 25 horsepower or greater and other forms of equipment used in California. A copy of the Regulation is available at:


<https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/off-road-diesel/appa-1.pdf>. Bidders are required to comply with all CARB and Regulation requirements, including, without limitation, all applicable sections of the Regulation, as codified in Title 13 of the California Code of Regulations section 2449 *et seq.* throughout the duration of the Project. Bidders must provide, with their Bid, copies of Bidder’s and all listed subcontractors’ most recent, valid Certificate of Reported Compliance (“CRC”) issued by CARB. Failure to provide valid CRCs as required herein may render the Bid non-responsive.

Award of Contract: The City shall award the Contract for the Project to the lowest responsive, responsible bidder as determined from the base bid alone by the City. The City reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process.

For further information, contact Purchasing at (951) 279-3620 or via email at Carolyn.Appelt@CoronaCA.gov.

DocuSigned by:

 CB312E179B8E463...
 Savat Khamphou, PE
 Public Works Director

DS


Date: 4/29/2024

**CITY OF CORONA
UTILITIES DEPARTMENT**

INSTRUCTIONS TO BIDDERS

1. AVAILABILITY OF CONTRACT DOCUMENTS

Bids must be submitted to the City through the City's PlanetBids electronic bidding system on the Bid Forms which are a part of the Bid Package for the Project. Prospective bidders may obtain a complete set of Contract Documents at no cost through the City's PlanetBids electronic bidding system. The City may also make the Contract Documents available for review at one or more plan rooms, as indicated in the Notice Inviting Bids. Please Note: Prospective bidders who choose to review the Contract Documents at a plan room must still register with the City's PlanetBids electronic bidding system to obtain the required Contract Documents if they decide to submit a bid for the Project.

2. EXAMINATION OF CONTRACT DOCUMENTS

The City has made copies of the Contract Documents available, as indicated above. Bidders shall be solely responsible for examining the Project Site and the Contract Documents, including any Addenda issued during the bidding period, and for informing itself with respect to local labor availability, means of transportation, necessity for security, laws and codes, local permit requirements, wage scales, local tax structure, contractors' licensing requirements, availability of required insurance, and other factors that could affect the Work. Bidders are responsible for consulting the standards referenced in the Contract. Failure of Bidder to so examine and inform itself shall be at its sole risk, and no relief for error or omission will be given except as required under State law.

3. INTERPRETATION OF CONTRACT DOCUMENTS

Discrepancies in, and/or omissions from the Plans, Specifications or other Contract Documents or questions as to their meaning shall be immediately brought to the attention of the City by submission of a written request for an interpretation or correction to the City. Such submission, if any, must be sent through the City's PlanetBids electronic bidding system: <https://www.planetbids.com/portal/portal.cfm?CompanyID=39497> utilizing the Questions & Answers tab. **Questions must be submitted no later than 5:00 p.m., May 17, 2024.**

Any interpretation of the Contract Documents will be made only by written addenda duly issued through the City's Planetbids electronic bidding system. The City will not be responsible for any explanations or interpretations provided in any other manner. No person is authorized to make any oral interpretation of any provision in the Contract Documents to any bidder, and no bidder should rely on any such oral interpretation.

Bids shall include complete compensation for all items that are noted in the Contract Documents as the responsibility of the Contractor.

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INSTRUCTIONS TO BIDDERS

4. INSPECTION OF SITE; PRE-BID CONFERENCE AND SITE WALK

Each prospective bidder is responsible for fully acquainting itself with the conditions of the Project Site (which may include more than one site), as well as those relating to the construction and labor of the Project, to fully understand the facilities, difficulties and restrictions which may impact the cost or effort required to complete the Project. To this end, a Pre-Bid Conference and Site Walk will be held on the date(s) and time(s) indicated in the Notice Inviting Bids.

5. ADDENDA

The City reserves the right to revise the Contract Documents prior to the bid opening date. Revisions, if any, shall be made by written Addenda. All addenda issued by the City shall be included in the bid and made part of the Contract Documents. Pursuant to Public Contract Code Section 4104.5, if the City issues an Addendum which includes material changes to the Project less than 72 hours prior to the deadline for submission of bids, the City will extend the deadline for submission of bids. The City may determine, in its sole discretion, whether an Addendum warrants postponement of the bid submission date. Copies of Addenda will be posted to the City's PlanetBids electronic bidding system website. Each prospective bidder that has registered to receive a set of the Contract Documents will be notified by email when Addenda have been posted for the Project to the electronic bidding system. Please Note: Bidders are responsible for ensuring that they have received any and all Addenda. To this end, each bidder should contact the City's Finance Department – Purchasing Division to verify that he has received all Addenda issued, if any, prior to the bid opening. Bidders shall acknowledge receipt of all Addenda by indicating in the appropriate place in the Bid that they have received all Addenda.

6. ALTERNATE BIDS

If alternate bid items are called for in the Contract Documents, the lowest bid will be determined on the basis of the base bid only. However, the City may choose to award the contract on the basis of the base bid alone or the base bid and any alternate or combination of alternates. The time required for completion of the alternate bid items has been factored into the Contract duration and no additional Contract time will be awarded for any of the alternate bid items. The City may elect to include one or more of the alternate bid items, or to otherwise remove certain work from the Project scope of work, accordingly each Bidder must ensure that each bid item contains a proportionate share of profit, overhead and other costs or expenses which will be incurred by the Bidder.

7. COMPLETION OF BID FORMS

Bids shall only be prepared using copies of the Bid Forms which are included in the Contract Documents and are provided herein. The use of substitute bid forms other than clear and correct photocopies of those provided by the City will not be permitted. Bids shall be executed by an authorized signatory as described in these Instructions to Bidders. In addition, Bidders shall fill in all blank spaces (including inserting "N/A" where applicable) and initial all interlineations, alterations, or erasures to the Bid Forms. Bidders shall neither delete, modify, nor supplement

the printed matter on the Bid Forms nor make substitutions thereon. Deviations in the bid form may result in the bid being deemed non-responsive.

8. MODIFICATIONS OF BIDS

Each Bidder shall submit its Bid in strict conformity with the requirements of the Contract Documents. Unauthorized additions, modifications, revisions, conditions, limitations, exclusions or provisions attached to a Bid may render it non-responsive and may cause its rejection. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms, nor make substitutions thereon. Oral, telephonic and electronic modifications will not be considered, unless the Notice Inviting Bids authorizes the submission of electronic bids and modifications thereto and such modifications are made in accordance with the Notice Inviting Bids.

9. DESIGNATION OF SUBCONTRACTORS; PCC 3400(C) FINDINGS

Pursuant to State law, Bidders must designate the name, location, DIR registration and contractor's license number of each subcontractor who will perform work or render services for the Bidder in an amount that exceeds one half of one percent (1/2%) of the Bidder's Total Bid Price, as well as the portion of work each such subcontractor will perform on the form provided herein by the City. No additional time will be provided to bidders to submit any of the requested information in the Designation of Subcontractor's form. Please note that if the "PCC 3400(c)" column in the Designation of Subcontractor's form states "yes", then a portion of the work described is impacted by findings made by the City that a particular material, product, thing or service must be used and has been designated by a specific brand or trade name (a copy of the applicable approved Notice Designating Sole Source Equipment and Products Specifications is available upon request from the City). In such cases, there may be only one subcontractor qualified or authorized to perform a portion of the work described, so Bidders must take note and ensure that you list the proper subcontractor.

10. LICENSING REQUIREMENTS

Pursuant to Section 7028.15 of the Business and Professions Code and Section 3300 of the Public Contract Code (as well as Public Contract Code Section 20103.5 when federal funds are involved), the successful bidder must possess proper licenses for performance of this Contract before the Contract is awarded. Subcontractors must possess the appropriate licenses for each specialty subcontracted before the Contract is awarded. The City shall have the right to request, and Bidders shall provide within five (5) calendar days, evidence satisfactory to the City of all valid license(s) currently held by that Bidder and each of the Bidder's subcontractors, before awarding the Contract. Please also note that, pursuant to Public Contract Code Section 20676, sellers of "mined material" must be on an approved list of sellers published pursuant to Public Resources Code Section 2717(b) in order to supply mined material for this Contract.

11. SIGNING OF BIDS

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders may be asked to provide evidence in the form of an authenticated resolution of its Board of Directors

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INSTRUCTIONS TO BIDDERS

or a Power of Attorney evidencing the capacity of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom.

If a Bidder is a joint venture or partnership, it may be asked to submit an authenticated Power of Attorney executed by each joint venturer or partner appointing and designating one of the joint venturers or partners as a management sponsor to execute the Bid on behalf of Bidder. Only that joint venturer or partner shall execute the Bid. The Power of Attorney shall also: (1) authorize that particular joint venturer or partner to act for and bind Bidder in all matters relating to the Bid; and (2) provide that each venturer or partner shall be jointly and severally liable for any and all of the duties and obligations of Bidder assumed under the Bid and under any Contract arising therefrom. The Bid shall be executed by the designated joint venturer or partner on behalf of the joint venture or partnership in its legal name.

12. BID GUARANTEE (BOND)

Each bid shall be accompanied by: (a) cash; (b) a certified check made payable to the City; (c) a cashier's check made payable to the City; or (d) a bid bond payable to the City executed by the bidder as principal and surety as obligor in an amount not less than 10% of the maximum amount of the bid. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. The cash, check or bid bond shall be given as a guarantee that the bidder shall execute the Contract if it be awarded to the bidder, shall provide the payment and performance bonds and insurance certificates and endorsements as required herein within ten (10) calendar days after notification of the award of the Contract to the bidder. Failure to provide the required documents may result in forfeiture of the bidder's bid deposit or bond to the City and the City may award the Contract to the next lowest responsive, responsible bidder, or may call for new bids.

Each bidder shall be required to provide a copy of their bid security when submitting their electronic bid. Bidders may submit a scanned copy of their bid bond as the City does not require original, embossed corporate seals on any bonds. However, the City reserves the right at any time to demand an original bond with an embossed corporate seal, and Contractor shall supply such bond within seven (7) calendar days of any such request. Other original bid security (in the form of cash, cashier's check or certified check) shall be delivered to the City's Finance Department – Purchasing Division office, 400 South Vicentia Ave., Suite 320, Corona, CA 92882 by the bid closing date and time specified in the Notice Inviting Bids.

An electronic bid not accompanied by (a) cash; (b) certified check made payable to the City; (c) or cashier's check made payable to the City; or (d) an acceptable bid bond payable to the City may be rejected.

13. SUBMISSION OF SEALED BIDS

All Bids must be submitted at the time and place and in the manner set forth in the Notice Inviting Bids. Bids must be made on the bid forms set forth herein. If the Notice Inviting Bids requires the use of the electronic bidding system, pursuant to Public Contract Code Sections 1600 and 1601, Bids must be made on the bid forms provided therein.

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INSTRUCTIONS TO BIDDERS

City reserves the right to not accept electronically transmitted bids where not specifically authorized in the Notice Inviting Bids, and may reject any bid not strictly complying with City's designated methods for delivery

14. DELIVERY AND OPENING OF BIDS

Bids will be received by the City in the manner set forth in the Notice Inviting Bids up to the date and time shown therein. It is the Bidder's sole responsibility to ensure that its Bid is received as specified. Bids may be submitted earlier than the dates(s) and time(s) indicated.

Bid results will be posted to the City's PlanetBids electronic bidding system no earlier than the close of bid. The City may in its sole discretion, elect to postpone the opening of the submitted Bids. City reserves the right to reject any or all Bids and to waive any informality or irregularity in any Bid. The Bid shall state the unit prices, the total amount of each bid item and the Total Bid Price for which the Bidder proposes to complete the work as specified by the Contract Documents, including but not limited to labor, materials and goods. If the unit price and the total amount stated by a Bidder for any item do not agree, the unit price alone shall be considered as representing Bidder's intention, and the total price for that item shall be corrected by the City to conform thereto.

15. WITHDRAWAL OF BID

Electronic bids may be withdrawn prior to the date and time set forth in the Notice Inviting Bids. If hard copy bids are authorized by the City, a Bid may be withdrawn by the Bidder prior to bid opening only by means of a written request signed by the Bidder or its properly authorized representative.

16. RELIEF FROM THE BID DUE TO A MISTAKE

Pursuant to Sections 5100 through 5107 of the Public Contract Code, a Bidder may be relieved of its bid by the City.

Pursuant to Section 5103 of the Public Contract Code, the Bidder shall establish to the satisfaction of the City that:

- A. A mistake was made.
- B. The Bidder gave the City written notice of the mistake within 5 days after the date of the Bid opening specifying in detail how the mistake occurred.
- C. The mistake made the Bid materially different than the Bidder intended it to be.
- D. The mistake was made in filling out the Bid and not due to error in judgment or to carelessness in inspecting the Work site, or in reading the Plans and Specifications.

Pursuant to Section 5105 of the Public Contract Code, a Bidder who claims a mistake shall be prohibited from participating in further bidding on the Contract on which the mistake was claimed.

17. BASIS OF AWARD; BALANCED BIDS

The City shall award the Contract to the lowest responsive, responsible Bidder submitting a responsive Bid. The City may reject any Bid which, in its opinion when compared to other bids received or to the City's internal estimates, does not accurately reflect the cost to perform the Work. The City may reject as non-responsive any bid which unevenly weights or allocates costs, including but not limited to overhead and profit to one or more particular bid items.

18. DISQUALIFICATION OF BIDDERS; INTEREST IN MORE THAN ONE BID

No bidder shall be allowed to make, submit or be interested in more than one bid. However, a person, firm, corporation or other entity that has submitted a subproposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a subproposal or quoting prices to other bidders submitting a bid to the City. No person, firm, corporation, or other entity may submit subproposal to a bidder, or quote prices of materials to a bidder, when also submitting a prime bid on the same Project.

19. INSURANCE REQUIREMENTS

The successful bidder shall procure the insurance in the form and in the amount specified in the Contract Documents.

20. AWARD PROCESS

Once all Bids are opened and reviewed to determine the lowest responsive and responsible Bidder, the City Council may award the contract. The apparent successful Bidder should begin to prepare the following documents: (1) the Performance Bond; (2) the Payment (Labor and Materials) Bond; and (3) the required insurance certificates and endorsements. Once the City notifies the Bidder of the award, the Bidder will have ten (10) consecutive calendar days from the date of this notification to execute the Contract and supply the City with all of the required documents and certifications. Regardless whether the Bidder supplies the required documents and certifications in a timely manner, the Contract time will begin to run ten (10) calendar days from the date of the notification. Once the City receives all of the properly drafted and executed documents and certifications from the Bidder, the City shall issue a Notice to Proceed to that Bidder.

21. FILING OF BID PROTESTS

Bidders may file a "protest" of a Bid with the City's Purchasing Manager. In order for a Bidder's protest to be considered valid, the protest must:

- A. Be filed in writing within five (5) calendar days after the bid opening date;

- B. Clearly identify the specific irregularity or accusation;
- C. Clearly identify the specific City staff determination or recommendation being protested;
- D. Specify, in detail, the grounds of the protest and the facts supporting the protest; and
- E. Include all relevant, supporting documentation with the protest at time of filing.

If the protest does not comply with each of these requirements, it will be rejected as invalid.

If the protest is valid, the City's Purchasing Manager, or other designated City staff member, shall review the basis of the protest and all relevant information. The Purchasing Manager will provide a written decision to the protestor.

22. WORKERS COMPENSATION

Each bidder shall submit the Contractor's Certificate Regarding Workers' Compensation form.

23. SUBSTITUTION OF SECURITY

The Contract Documents call for monthly progress payments based upon the percentage of the work completed. The City will retain five percent (5%) of each progress payment as provided by the Contract Documents. At the request and expense of the successful Bidder, the City will substitute securities for the amount so retained in accordance with Public Contract Code Section 22300. City expenses for administration of the Escrow Agreement shall be billed quarterly to the Contractor pursuant to the City's current Fee Recovery Schedule effective February 3, 2023:

Set up fees (one time only)	\$282.00
Monthly maintenance fee	\$63.00

24. PREVAILING WAGES

Refer to the Notice Inviting Bids and Article 8 of the Contract for Prevailing Wage requirements.

25. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS

In accordance with the provisions of the Labor Code, contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Section 1777.1 or Section 1777.7 of the Labor Code. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid to a debarred subcontractor by the Contractor for the Project shall be returned to the

City. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

26. PERFORMANCE BOND AND PAYMENT (LABOR AND MATERIALS) BOND REQUIREMENTS

Within the time specified in the Contract Documents, the Bidder to whom a Contract is awarded shall deliver to the City the Performance Bond and Payment (Labor and Materials) Bond in the form supplied by the City and included in the Contract Documents. Failure to do so may, in the sole discretion of City, result in the forfeiture of the Bid Guarantee. The surety supplying the bond must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of California and satisfactory to the City. The Performance Bond and the Payment (Labor and Materials) Bond shall be for one hundred percent (100%) of the Total Bid Price. The City does not require original, embossed corporate seals on any bonds. However, the City reserves the right at any time to demand an original bond with an embossed corporate seal, and Contractor shall supply such bond within seven (7) calendar days of any such request.

27. REQUEST FOR SUBSTITUTIONS

The successful bidder shall comply with the substitution request provisions set forth in the Special Conditions, including any deadlines for substitution requests **which may occur prior to the bid opening date.**

28. SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES AND FEES

Contractor and its subcontractors performing work under this Contract will be required to pay California sales tax and other applicable taxes, and to pay for permits, licenses and fees required by the agencies with authority in the jurisdiction in which the work will be located, unless otherwise expressly provided by the Contract Documents.

29. EXECUTION OF CONTRACT

As required herein the Bidder to whom an award is made shall execute the Contract in the amount determined by the Contract Documents. The City may require appropriate evidence that the persons executing the Contract are duly empowered to do so.

30. SAFETY REQUIREMENTS/VIOLATIONS

Safety at the Project site during performance of the work is of paramount concern to the City. Accordingly, bidders must not have committed any serious violations within the last two (2) years or any willful violations within the last five (5) years of federal or state OSHA regulations. Bidders must identify the number of OSHA violations on the Information Required of Bidders page. Any serious or willful violation falling within the timeframes noted above may render a bid as non-responsive. We strongly encourage full disclosure, since failure to identify all violations on the Information Required of Bidders page may result in rejection of the bid as non-

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INSTRUCTIONS TO BIDDERS

responsive or the bidder as non-responsive following a hearing. A citation properly appealed through OSHA is not considered to be a violation until the matter is closed and considered final by OSHA. The City still expects this information to be disclosed by the bidder, with an explanation and documentation showing that the matter is properly under appeal with OSHA and not considered closed or final. Failure to be forthcoming with this information may result in rejection of the bid as non-responsive.

31. IRAN CONTRACTING ACT

Pursuant to the Iran Contracting Act of 2010 (Public Contract Code 2200-2208), Vendors/Bidders are ineligible to bid on or submit a proposal for any contract with a public entity for goods or services of one million dollars (\$1,000,000) or more if the Vendor/Bidder engages in investment activities in Iran. For bids \$1,000,000 or more, Bidders must certify that it is not on the list of ineligible vendors prohibited from doing business with the State of California and shall complete the Iran Contracting Act Certification form and submit with their bid. Failure to do so may deem Contractor's Bid non-responsive.

31. FLEET COMPLIANCE CERTIFICATION

The City is a Public Works Awarding Body, as defined under Title 13 California Code of Regulations section 2449(c)(46). Accordingly, Bidders must submit, with their Bids, valid Certificates of Reported Compliance ("CRC") for the Bidder's fleet and for the fleet(s) of its listed subcontractors (including any applicable leased equipment or vehicles). Bidder must additionally complete and submit the Fleet Compliance Certification, included in the Bid Documents. Failure to provide a CRC for the Bidder, and for all listed subcontractors, or failure to complete the Fleet Compliance Certification, may render the bid non-responsive.

END OF INSTRUCTIONS TO BIDDERS

BID FORM

NAME OF BIDDER: _____

The undersigned, hereby declares that we have carefully examined the location of the proposed Work, and have read and examined the Contract Documents, including all plans, specifications, and all addenda, if any, for the following Project:

DESALTER SURGE ANTICIPATOR IMPROVEMENTS, NIB 24-080CA

The undersigned agrees that this Bid Form constitutes a firm offer to the City which cannot be withdrawn for the number of calendar days indicated in the Notice Inviting Bids from and after the bid opening, or until a Contract for the Work is fully executed by the City and a third party, whichever is earlier.

The Contract duration shall commence on the date stated in the City's Notice to Proceed, and shall be completed by the Contractor in the time specified in the Contract Documents. In no case shall the Contractor commence construction prior to the date stated in the City's Notice to Proceed.

Bidder certifies that it is either:

☐ **CURRENTLY LICENSED:** Bidder is currently licensed in accordance with the law providing for the registration of Contractor as follows:

License No. _____

Expiration Date _____

Class of License _____

☐ **TO BE LICENSED:** Bidder shall have the following license in accordance with the law providing for the registration of Contractors before the Contract is awarded:

Class of License _____

If the bidder is a joint venture, each member of the joint venture must include the above information.

The undersigned acknowledges receipt, understanding and full consideration of the following addenda to the Contract Documents.

Addenda No. _____ Dated: _____

Addenda No. _____ Dated: _____

Addenda No. _____ Dated: _____

Addenda No. _____ Dated: _____

1. Attached is the required bid security in the amount of not less than 10% of the Total Bid Price.
2. Attached is the fully executed Non-Collusion Declaration form.
3. Attached is the completed Designation of Subcontractors form.
4. Attached is the completed Bidder Information Form.
5. Attached is the completed Contractor's Certificate Regarding Workers' Compensation form.
6. Attached is the completed Fleet Compliance Certification
7. Attached is the fully executed Iran Contracting Act Certification form (required for projects with a bid amount exceeding \$1,000,000).

Bidder acknowledges and understands that, pursuant to Public Contract Code Section 20676, sellers of "mined material" must be on an approved list of sellers published pursuant to Public Resources Code Section 2717(b) in order to supply mined material for this Contract.

The basis of Award of this Contract shall be on the lowest total for the Bid Schedule. In case of discrepancy between the unit price and the item cost set forth for a unit basis item, the unit price shall prevail and, shall be utilized as the basis for determining the lowest responsive, responsible bidder. However, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or is the same amount as the entry in the "Item Cost" column, then the amount set forth in the "Item Cost" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price. Final payment shall be determined by the Engineer from measured quantities of work performed based upon the unit price.

If alternate bid items are called for in the Contract Documents, the lowest bid will be determined on the basis of the base bid only. However, the City may choose to award the contract on the basis of the base bid alone or the base bid and any alternate or combination of alternates.

I hereby certify under penalty of perjury under the laws of the State of California, that all of the information submitted in connection with this Bid and all of the representations made herein are true and correct.

Signature: _____

Print Name: _____

Title: _____

Date: _____

BID SCHEDULE

Contractor shall complete the Electronic Bid Schedule found in the Line Items tab within the PlanetBids electronic bidding system and enter its bid prices there to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the Project. A copy of the Bid Schedule below is provided for reference purposes only and need not be completed.

NO.	ITEM DESCRIPTION	UNIT OF MEASURE	EST. QTY.	ITEM COST
1.	Mobilization/Demobilization	LS	1	
2.	Startup, Testing, Disinfection, Cleanup and Commissioning	LS	1	
3.	Trenching, Backfill, Compaction, & Pavement Restoration	LS	1	
4.	Structural Concrete Demolition and Repair	LS	1	
5.	Mechanical Stainless Steel Pipe, Fittings, and Supports	LS	1	
6.	Rupture Disc Assemblies	LS	1	
7.	12" Butterfly Valves and Actuator (MOV) Assemblies for Surge Relief Discharge Assembly	LS	1	
8.	4" Butterfly Valve and Actuator Assemblies for Permeate Dump Valve Assemblies	LS	1	
9.	NEMA Electrical Control Panels and Boxes	LS	1	
10.	Miscellaneous Electrical	LS	1	

**CONTRACTOR'S CERTIFICATE REGARDING
WORKERS' COMPENSATION**

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract.

Name of Bidder _____

Signature _____

Name _____

Title _____

Dated _____

BID BOND

The makers of this bond are, _____, as Principal, and _____, as Surety and are held and firmly bound unto the City of Corona, hereinafter called the City, in the penal sum of TEN PERCENT (10%) OF THE TOTAL BID PRICE of the Principal submitted to CITY for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying bid dated _____, 2024, for **Desalter Surge Anticipator Improvements, NIB 24-080CA**.

If the Principal does not withdraw its bid within the time specified in the Contract Documents; and if the Principal is awarded the Contract and provides all documents to the City as required by the Contract Documents; then this obligation shall be null and void. Otherwise, this bond will remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents shall in affect its obligation under this bond, and Surety does hereby waive notice of any such changes.

In the event a lawsuit is brought upon this bond by the City and judgment is recovered, the Surety shall pay all litigation expenses incurred by the City in such suit, including reasonable attorneys' fees, court costs, expert witness fees and expenses.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and corporate seal of each corporation.

(Corporate Seal)

Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____

Attorney-in-Fact

Title _____

(Attach Attorney-in-Fact Certificate)

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached and not the truthfulness, accuracy or validity of that document.

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) ss. _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

(Seal)

NOTE: A copy of the Power-of-Attorney to local representatives of the bonding company must be attached hereto.

DESIGNATION OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act of the Public Contract Code of the State of California (PCC section 4100 et seq.), each bidder shall set forth below: (a) the name and the location of the place of business (b) the license number and the DIR registration number, and (c) the portion of the Work which will be done by each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the Work in an amount in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price. Notwithstanding the foregoing, if the Work involves streets and highways, then the Contractor shall list each subcontractor who will perform work or labor or render service to Contractor in or about the Work in an amount in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If Contractor is fully qualified to perform a portion of the Work listed below and will perform such Work, Contractor shall circle "yes" under the "will you be self-performing" column below. Otherwise, if no subcontractor is specified for a portion of the Work or if more than one subcontractor is specified for the same portion of Work, and if that portion of Work is in excess of the amounts described in the paragraph above, then the Contractor shall be deemed to have agreed that it is fully qualified to perform that portion of Work and that it shall perform that portion itself.

If the "PCC 3400(c)" column states "yes" below, then please take note that a portion of the Work described is impacted by findings made by the City that a particular material, product, thing or service must be used and has been designated by a specific brand or trade name.¹ In such cases, there may be only one subcontractor qualified or authorized to perform a portion of the Work described, so please take note and ensure that you list the proper subcontractor.

¹ A copy of the applicable approved Notice Designating Sole Source Equipment and Products Specifications is provided in the Special Conditions and Appendix A.
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DESIGNATION OF SUBCONTRACTORS

Description of Work	PCC 3400(c) Apply?	Will you be Self- Performing? (Please circle)	If no, list Subcontractor	Location, License Number & DIR Registration Number of Subcontractor	Portion of Work by Subcontractor
		Yes or No			
		Yes or No			
		Yes or No			
		Yes or No			
		Yes or No			

Name of Bidder _____

Signature _____

Name and Title _____

Dated _____

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DESIGNATION OF SUBCONTRACTORS

INFORMATION REQUIRED OF BIDDERS

A. INFORMATION ABOUT BIDDER

[***Indicate not applicable (“N/A”) where appropriate.***]

NOTE: Where Bidder is a joint venture, pages shall be duplicated and information provided for all parties to the joint venture.

1.0 Name of Bidder: _____

2.0 Type, if Entity: _____

3.0 Bidder Address: _____

Email Address

Telephone Number

4.0 _____
License Number DIR Registration Number

5.0 How many years has Bidder’s organization been in business as a Contractor?

6.0 How many years has Bidder’s organization been in business under its present name? _____

6.1 Under what other or former names has Bidder’s organization operated?: _____

7.0 If Bidder’s organization is a corporation, answer the following:

7.1 Date of Incorporation: _____

7.2 State of Incorporation: _____

7.3 President’s Name: _____

7.4 Vice-President’s Name(s): _____

7.5 Secretary’s Name: _____

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INFORMATION REQUIRED OF BIDDERS

- 7.6 Treasurer's Name: _____
- 8.0 If an individual or a partnership, answer the following:
- 8.1 Date of Organization: _____
- 8.2 Name and address of all partners (state whether general or limited partnership):
- _____
- _____
- _____
- 9.0 If other than a corporation or partnership, describe organization and name principals:
- _____
- _____
- 10.0 List other states in which Bidder's organization is legally qualified to do business.
- _____
- _____
- _____
- 11.0 What type of work does the Bidder normally perform with its own forces?
- _____
- _____
- 12.0 Has Bidder ever failed to complete any work awarded to it? If so, note when, where, and why:
- _____
- _____

- 13.0 Has Bidder entered into a settlement agreement involving a public works project of more than \$100,000 within the last two years with any City or public agency? If so, note when, where, and why. *This information may be the basis for rejecting the bid as nonresponsive or the Bidder as nonresponsible following a hearing.*

- 14.0 Within the last five years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, attach a separate sheet of explanation:

- 15.0 Have you been or are you on any federal state list of debarred or suspended bidders? If yes, state the beginning and ending dates of the period of disbarment:

- 16.0 List Trade References:

- 17.0 List Bank References (Bank and Branch Address):

18.0 Name of Bonding Company and Name and Address of Agent:

B. LIST OF CURRENT PROJECTS (Backlog)

[***Duplicate Page if needed for listing additional current projects.***]

Project	Description of Bidder's Work	Completion Date	Cost of Bidder's Work	Contact Name & Phone

C. LIST OF COMPLETED PROJECTS - LAST THREE YEARS

[***Duplicate Page if needed for listing additional completed projects.***]

Please include only those projects which are similar enough to demonstrate Bidder's ability to perform the required Work.

Project Client	Description of Bidder's Work	Period of Performance	Cost of Bidder's Work	Contact Name & Phone

D. EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE

Personnel:

The Bidder shall identify the key personnel to be assigned to this project in a management, construction supervision or engineering capacity.

1. List each person's job title, name and percent of time to be allocated to this project:

2. Summarize each person's specialized education:

3. List each person's years of construction experience relevant to the project:

4. Summarize such experience:

Bidder agrees that personnel named in this Bid will remain on this Project until completion of all relevant Work, unless substituted by personnel of equivalent experience and qualifications approved in advance by the City.

Additional Bidder's Statements:

If the Bidder feels that there is additional information which has not been included in the questionnaire above, and which would contribute to the qualification review, it may add that information in a statement here or on an attached sheet, appropriately marked:

E. SAFETY REQUIREMENTS/VIOLATIONS

Number of Serious OSHA Violations within the last two (2) years and the number of Willful OSHA violations within the last five (5) years (must state zero if none):

___ Serious ___ Willful ___ Repeat ___ Other ___ Unclass ___ Total

F. CONTRACTOR/SUBCONTRACTOR REGISTRATION FORM



City of Corona

Contractor / Subcontractor Registration Form

All prospective bidders, as well as all subcontractors, are required to complete this form.

Firm Info:

Firm Name: _____

Firm Address: _____

City: _____ State _____ Zip _____

Phone: _____ Fax: _____

Taxpayer ID: _____ Business License: _____

Employer ID: _____ DUNS Number: _____

Contract Amount: _____ Estimated Start: _____

Estimated Completion Date: _____ Trade(s) to be: _____

Email: _____

Website: _____

Contact Info:

Contact Name: _____

Title: _____

Email: _____

Phone: _____ Cell: _____

☐ **Alternate Address** (if different from above) **to Receive Remittance:**

Mailing Address: _____

City: _____ State: _____ Zip: _____

Contractor / Subcontractor Registration Form- Page 2

Contractor Licenses (if applicable)

License Number: _____

Licenses Type: _____

License Number: _____

Licenses Type: _____

License Number: _____

Licenses Type: _____

Firm Name:

(as reported on W9)

Product / Services Information :

NAICS Codes: *

*find list of available NAICS Codes at <http://www.census.gov/epcd/www/naisc.html>
and select 2007 NAICS codes 6 digit only OR request hard copy from
Public Works Department, phone number 951-736-2266

The City requires this information for statistical purposes only.

Primary Owner of the Firm* (51% ownership or more)	<input type="checkbox"/> Male	<input type="checkbox"/> Sole Proprietorship
	<input type="checkbox"/> Female or	<input type="checkbox"/> Partnership
*Required		<input type="checkbox"/> Corporation
		<input type="checkbox"/> Limited Liability Partnership
		<input type="checkbox"/> Limited Liability Corporation
		<input type="checkbox"/> Joint Venture
		<input type="checkbox"/> Non- Profit
		<input type="checkbox"/> Governmental/Municipality/Regulatory Agency
	<input type="checkbox"/> Utility	

Contractor / Subcontractor Registration Form- Page 3

Ethnicity:

*select one from following:

	AFRICAN AMERICAN
	ASIAN AMERICAN
	CAUCASIAN AMERICAN
	HISPANIC AMERICAN
	NATIVE AMERICAN
	PACIFIC ISLANDER AMERICAN
	HASIDIC JEWS

Ownership Classification

Classification:

*

*select from the following **List of Ownership Classification Codes**

(Select all that apply):

	WBE	(Women Owned Business Enterprise)
	OBE	(Other Business Enterprise)
	DBE	(Disadvantage Business Enterprise)
	DVBE	(Disable Veteran Business Enterprise)
	SLBE	(Small Local Business Enterprise)
	8(a)	(Small Business Administration 8 (a) Enterprise)
	SDB	(Small Disadvantage Business Enterprise)
	LBE	(Local Business Enterprise)
	MLBE	(Micro Local Business Enterprise)
	SBE	(Small Business Enterprise)
	MBE	(Minority Business Enterprise)

Certified by an Agency?

☐

No

☐

Yes (enter Certification Number and Certifying Agency below)

Certification #

Agency

Certification #

Agency

Information regarding a vendor's racial or gender ownership status will not be used as a factor in the City's selection process for any contract.

G. VERIFICATION AND EXECUTION

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

I declare under penalty of perjury under the laws of the State of California that the foregoing information is true and correct:

Name of Bidder _____

Signature _____

Name _____

Title _____

Dated _____

**NON-COLLUSION DECLARATION
(TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID)**

The undersigned declares:

I am the _____, [title] of _____
_____[bidder], the party making the forgoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or a sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, plotted, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price, or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____
[date], at _____ [city], _____ [state].

Signature

Typed or Printed Name

Title

Party Submitting Bid

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached and not the truthfulness, accuracy or validity of that document.

State of California)
County of Riverside) ss.

On _____(date), before me, _____
insert name and title of the officer),

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same
in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument
the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the
foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

[Seal]

FLEET COMPLIANCE CERTIFICATION
IN-USE OFF-ROAD DIESEL FUELED FLEETS

Bidder hereby acknowledges that they have reviewed the California Air Resources Board's policies, rules and regulations and are familiar with the requirements of Title 13, California Code of Regulations, Division 3, Chapter 9, effective on January 1, 2024 (the "Regulation"). Bidder hereby certifies, subject to penalty for perjury, that the option checked below relating to the Bidder's fleet, and/or that of their subcontractor(s) ("Fleet") is true and correct:

- ☐ The Fleet is subject to the requirements of the Regulation, and the appropriate **Certificate(s) of Reported Compliance have been attached hereto.**
- ☐ The Fleet is exempt from the Regulation under section 2449.1(f)(2), and a signed description of the subject vehicles, and **reasoning for exemption has been attached hereto.**
- ☐ Bidder and/or their subcontractor is unable to procure R99 or R100 renewable diesel fuel as defined in the Regulation pursuant to section 2449.1(f)(3). Bidder shall keep detailed records describing the normal refueling methods, their attempts to procure renewable diesel fuel and proof that shows they were not able to procure renewable diesel (i.e. third party correspondence or vendor bids).
- ☐ The Fleet is exempt from the requirements of the Regulation pursuant to section 2449(i)(4) because this Project has been deemed an Emergency, as defined under section 2449(c)(18). Bidder shall only operate the exempted vehicles in the emergency situation and records of the exempted vehicles must be maintained, pursuant to section 2449(i)(4).
- ☐ The Fleet does not fall under the Regulation or are otherwise exempted and a **detailed reasoning is attached hereto.**

Name of Bidder: _____

Signature: _____

Name: _____

Title: _____

Date: _____

IRAN CONTRACTING ACT
(Public Contract Code sections 2202-2208)

**(TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID
IF BID AMOUNT IS \$1,000,000 OR MORE)**

Prior to bidding on, submitting a proposal or executing a contract or renewal for a public entity contract for goods or services of \$1,000,000 or more, a bidder must either: a) certify it is **not** on the current list of persons engaged in investment activities in Iran created by the California Department of General Services (“DGS”) pursuant to Public Contract Code section 2203(b) and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS; or b) demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code section 2203(c) or (d).

To comply with this requirement, please insert your name and Federal ID Number (if available) and complete **one** of the options below. Please note: California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts. (Public Contract Code section 2205.)

CERTIFICATION

I, the official named below, certify I am duly authorized to execute this certification on behalf of the bidder identified below, and the bidder identified below is **not** on the current list of persons engaged in investment activities in Iran created by DGS and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person/vendor, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

<i>Bidder Name/Financial Institution (Printed)</i>		<i>Federal ID Number (or n/a)</i>
<i>By (Authorized Signature)</i>		
<i>Printed Name and Title of Person Signing</i>		
<i>Date Executed</i>	<i>Executed in (City/State)</i>	

CONTRACT

THIS CONTRACT is made this ____ day of _____, 20____, in the County of Riverside, State of California, by and between the City of Corona, hereinafter called City, and _____, hereinafter called Contractor. The City and the Contractor for the considerations stated herein agree as follows:

ARTICLE 1. SCOPE OF WORK. The Contractor shall perform all Work within the time stipulated in the Contract and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all of the Work required in strict compliance with the Contract Documents as specified in Article 5 below for the following Project:

DESALTER SURGE ANTICIPATOR IMPROVEMENTS, NIB 24-080CA

The Contractor and its surety shall be liable to the City for any damages arising as a result of the Contractor's failure to comply with this obligation.

ARTICLE 2. TIME FOR COMPLETION. The Work shall be commenced on the date stated in the City's Notice to Proceed. The Contractor shall complete all Work required by the Contract Documents within **120 working days** from the commencement date stated in the Notice to Proceed. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work.

ARTICLE 3. CONTRACT PRICE. The City shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs, the sum of _____ Dollars (\$_____). Payment shall be made as set forth in the General Conditions.

ARTICLE 4. LIQUIDATED DAMAGES. In accordance with Government Code section 53069.85, it is agreed that the Contractor will pay the City the sum of **\$1,000.00** for each and every calendar day of delay beyond the time prescribed in the Contract Documents for finishing the Work, as Liquidated Damages and not as a penalty or forfeiture. In the event this is not paid, the Contractor agrees the City may deduct that amount from any money due or that may become due the Contractor under the Contract. This Article does not exclude recovery of other damages specified in the Contract Documents.

ARTICLE 5. COMPONENT PARTS OF THE CONTRACT. The "Contract Documents" include the following:

Notice Inviting Bids
Instructions to Bidders
Contractor's Bid Forms
Contractor's Certificate Regarding Workers' Compensation
Bid Bond

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CONTRACT

Designation of Subcontractors
Information Required of Bidders
Non-Collusion Declaration form
Contract
Performance Bond
Payment (Labor and Materials) Bond
General Conditions
Special Provisions (or Special Conditions)
Technical Specifications
Greenbook Standard Specifications (Sections 1-9 Excluded)
Addenda
Plans and Contract Drawings
Approved and fully executed change orders
Any other documents contained in or incorporated into the Contract

The Contactor shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. This Contract shall supersede any prior agreement of the parties.

ARTICLE 6. PROVISIONS REQUIRED BY LAW. Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this Project.

ARTICLE 7. INDEMNIFICATION. Contractor shall provide indemnification as set forth in the General Conditions.

ARTICLE 8. PREVAILING WAGES. Contractor is aware of the prevailing wage requirements of Chapter 1 (beginning at Section 1720 et seq.) of Part 7 of Division 2 of the California Labor Code, as well as Title 8, Section 16000 et seq. of the California Code of Regulations (“Prevailing Wage Laws”), which require the payment of prevailing wage rates and the performance of other requirements on “public works” and “maintenance” projects. Contractor and its subcontractors shall fully comply with the Prevailing Wage Laws for their employees and any others to whom such laws are applicable. Contractor and its subcontractors shall also be responsible for any and all violations and fines imposed on them pursuant to the Prevailing Wage Laws. Pursuant to SB 854, which amended the Prevailing Wage Laws, this Contract is subject to compliance monitoring and enforcement by the DIR. Beginning April 1, 2015, no contractor or subcontractor may be awarded this Contract unless registered with the DIR pursuant to Labor Code section 1725.5. The City will report all necessary contracts to the DIR as required by the Prevailing Wage Laws. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Work available to interested parties upon request, and shall post copies at

the Contractor's principal place of business and at the Project site. It is most efficient for the Contractor to obtain a copy of the prevailing wages in effect at the commencement of this Contract from the website of the Division of Labor Statistics and Research of the DIR located at www.dir.ca.gov/dlsr/. In the alternative, the Contractor may obtain a copy of the prevailing wages from the City's Representative. Contractor shall defend, indemnify and hold the City, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

ARTICLE 9. ASSIGNMENT/CORONA UTILITY AUTHORITY. Contractor understands that the City has entered into a Water Enterprise Management Agreement and a Wastewater Enterprise Management Agreement, both dated as of February 6, 2002, with the Corona Utility Authority ("CUA") for the maintenance, management and operation of those utility systems (collectively, the "CUA Management Agreements"). To the extent that this Contract is deemed to be a "material contract" under either of the CUA Management Agreements, the following provisions shall apply: (1) City enters into this Contract on behalf of the CUA and subject to the terms of the applicable CUA Management Agreement(s); and (2) Contractor has no right to terminate this Contract, either with or without cause, based upon the existence or non-existence of either or both of the CUA Management Agreements. Therefore, if an applicable CUA Management Agreement expires or terminates for any reason, Contractor shall remain fully obligated to perform under this Contract on behalf of the CUA or another third party contracted by the CUA for the maintenance, management and operation of the applicable utility system.

**[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK
SIGNATURES ON FOLLOWING PAGE]**

IN WITNESS WHEREOF, this Contract has been duly executed by the above-named parties, on the day and year above written.

CITY OF CORONA	<u>[NAME OF CONTRACTOR]</u>
By:	By:
_____ Signature	_____ Signature
_____ Name	_____ Name
_____ Title	_____ Title
Attest:	_____ License Number
_____ Sylvia Edwards, City Clerk City of Corona, California	
Recommended By:	By:
_____ Signature	_____ Signature
_____ Name	_____ Name
_____ Title	_____ Title

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the City of Corona (hereinafter referred to as "City") has awarded to _____, (hereinafter referred to as the "Contractor") an agreement for **DESALTER SURGE ANTICIPATOR IMPROVEMENTS, NIB 24-080CA** (hereinafter referred to as the "Project").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, _____ the undersigned Contractor and

_____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the City in the sum of _____

DOLLARS and _____ CENTS (\$ _____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including, if provided as part of the Contract Documents, the one-year guarantee of all materials and workmanship; and shall indemnify and save harmless the City, its officers and agents, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the guarantee obligation shall hold good for a period of one (1) year after the acceptance of the work by City, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the City from loss or damage resulting from or caused by defective materials or faulty workmanship,

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PERFORMANCE BOND

the obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the City's rights or the Contractor or Surety's obligations under the Contract Documents, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

Whenever Contractor shall be, and is declared by the City to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the City's option:

- (1) Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- (2) Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a contract between such bidder, the Surety and the City, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract Documents and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.
- (3) Permit the City to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract Documents and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the City may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the City, when declaring the Contractor in default, notifies Surety of the City's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project and the provisions of Section 2819 and 2845 of the California Civil Code. Without limiting the foregoing, such changes, extensions of time and alterations or additions

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PERFORMANCE BOND

shall include, but are not limited to, changes or alterations to the Contract Documents (including, without limitation, an increase in the total dollar amount of the Contract Documents), extensions of time, or modifications of the time, terms, or conditions of payment to the Contractor.

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SIGNATURES ON FOLLOWING PAGE]**

**SIGNATURE PAGE FOR
CITY OF CORONA
PERFORMANCE BOND**

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20____.

CONTRACTOR/PRINCIPAL

(Corporate Seal of Contractor/
Principal, if a Corporation)

Name of Contractor/Principal (Type or Print)

By: _____
Name (Signature)

Name (Type or Print)

Title (Type or Print)

SURETY

(Seal of Surety)

Name of Surety (Type or Print)

By: _____
Attorney-In-Fact

The rate of premium on this bond is _____ per thousand. The total amount of premium charges, \$ _____.
(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of Agent or
Representative for service of
process in California, if different
from above)

(Telephone number of Surety and
Agent or Representative for service
of process in California)

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PERFORMANCE BOND

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached and not the truthfulness, accuracy or validity of that document.

State of California
County of _____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

NOTE: A copy of the Power-of-Attorney to local representatives of the bonding company must be attached hereto.

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached and not the truthfulness, accuracy or validity of that document.

State of California

County of _____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

NOTE: A copy of the Power-of-Attorney to local representatives of the bonding company must
be attached hereto.

PAYMENT BOND (LABOR AND MATERIALS)

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the City of Corona (hereinafter designated as the "City"), by action taken or a resolution passed _____, 20____ has awarded to _____ hereinafter designated as the "Principal," a contract for the work described as follows: **DESALTER SURGE ANTICIPATOR IMPROVEMENTS, NIB 24-080CA** (the "Project"); and

WHEREAS, the work to be performed by the Principal is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, said Principal is required to furnish a bond in connection with said Contract Documents; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor, the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the City in the penal sum of _____ DOLLARS and _____ CENTS (\$_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Section 9100 of the Civil Code, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the Contract Documents, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 18663 of the Revenue and Taxation Code, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified, and also, in case suit is brought upon this bond, all litigation expenses incurred by the City in such suit, including reasonable attorneys' fees, court costs, expert witness fees and investigation expenses.

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PAYMENT (LABOR AND MATERIALS) BOND

This bond shall inure to the benefit of any of the persons named in Section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract (including the Contract Documents), plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the Contract Documents, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or City and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 9100 of the Civil Code, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

Notwithstanding any other provision of this bond, it is expressly understood, acknowledged and agreed that it shall provide all of the protections required by California Civil Code Sections 9550 through 9566, including the specific coverage protections required by Section 9554.

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SIGNATURES ON FOLLOWING PAGE]

**SIGNATURE PAGE FOR
CITY OF CORONA
PAYMENT BOND**

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed unoriginal thereof, have been duly executed by the Principal and Surety above named, on the _____ day of _____ 20_____ the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

CONTRACTOR/PRINCIPAL

(Corporate Seal of Contractor/
Principal, if a Corporation)

Name of Contractor/Principal (Type or Print)

By: _____

Name (Signature)

Name (Type or Print)

Title (Type or Print)

SURETY

(Seal of Surety)

Name of Surety (Type or Print)

By: _____

Attorney-In-Fact

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached and not the truthfulness, accuracy or validity of that document.

State of California

County of _____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

NOTE: A copy of the Power-of-Authority to local representatives of the bonding company must be attached hereto.

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached and not the truthfulness, accuracy or validity of that document.

State of California
County of _____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

NOTE: A copy of the Power-of-Authority to local representatives of the bonding company must be attached hereto.

GENERAL CONDITIONS

ARTICLE 1. DEFINITIONS

- a. Acceptable, Acceptance or words of similar import shall be understood to be the acceptance of the Engineer and/or the City .
- b. Act of God an Act of God is an earthquake of magnitude 3.5 on the Richter scale and tidal waves.
- c. Approval means written authorization by Engineer and/or City .
- d. Contract Documents includes all documents as stated in the Contract.
- e. City and Contractor are those stated in the Contract. The terms City and Owner may be used interchangeably.
- f. Day shall mean calendar day unless otherwise specifically designated.
- g. Engineer shall mean the Director of Utilities, or his or her designee, of the Utilities Department for the City of Corona, acting either directly or through properly authorized agents, such as agents acting within the scope of the particular duties entrusted to them. Also sometimes referred to as the “City’s Representative” or “Representative” in the Contract Documents.
- h. Equal, Equivalent, Satisfactory, Directed, Designated, Selected, As Required and similar words shall mean the written approval, selection, satisfaction, direction, or similar action of the Engineer and/or City.
- i. Indicated, Shown, Detailed, Noted, Scheduled or words of similar meaning shall mean that reference is made to the drawings, unless otherwise noted. It shall be understood that the direction, designation, selection, or similar import of the Engineer and/or City is intended, unless stated otherwise.
- j. Install means the complete installation of any item, equipment or material.
- k. Material shall include machinery, equipment, manufactured articles, or construction such as form work, fasteners, etc., and any other classes of material to be furnished in connection with the Contract. All materials shall be new unless specified otherwise.
- l. Perform shall mean that the Contractor, at Contractor’s expense, shall take all actions necessary to complete The Work, including furnishing of necessary labor, tools, and equipment, and providing and installing Materials that are indicated, specified, or required to complete such performance.

- m. Project is The Work planned by City as provided in the Contract Documents.
- n. Provide shall include provide complete in place, that is furnish, install, test and make ready for use.
- o. Recyclable Waste Materials shall mean materials removed from the Project site which are required to be diverted to a recycling center rather than an area landfill. Recyclable Waste Materials include asphalt, concrete, brick, concrete block, and rock.
- p. Specifications means that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the work. Except for Sections 1-9 of the Standard Specifications for Public Works Construction (“Greenbook”), 2021 Edition, which are specifically excluded from incorporation into these Contract Documents, the Work shall be done in accordance with the Greenbook, including all current supplements, addenda, and revisions thereof. In the case of conflict between the Greenbook and the Contract Documents, the Contract Documents shall prevail.
- q. The Work means the entire improvement planned by the City pursuant to the Contract Documents.
- r. Work means labor, equipment and materials incorporated in, or to be incorporated in the construction covered by the Contract Documents.

ARTICLE 2. CONTRACT DOCUMENTS

- a. **Contract Documents.** The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all.
- b. **Interpretations.** The Contract Documents are intended to be fully cooperative and to be complementary. If Contractor observes that any documents are in conflict, the Contractor shall promptly notify the Engineer in writing. In case of conflicts between the Contract Documents, the order of precedence shall be as follows:
 - 1. Change Orders or Work Change Directives
 - 2. Addenda
 - 3. Special Provisions (or Special Conditions)
 - 4. Technical Specifications
 - 5. Plans (Contract Drawings)
 - 6. Contract
 - 7. General Conditions
 - 8. Instructions to Bidders
 - 9. Notice Inviting Bids
 - 10. Contractor’s Bid Forms
 - 11. Greenbook Standard Specifications (Sections 1-9 Excluded)

12. Standard Plans
13. Reference Documents

With reference to the Drawings, the order of precedence shall be as follows:

1. Figures govern over scaled dimensions
 2. Detail drawings govern over general drawings
 3. Addenda or Change Order drawings govern over Contract Drawings
 4. Contract Drawings govern over Standard Drawings
 5. Contract Drawings govern over Shop Drawings
- c. **Conflicts in Contract Documents.** Notwithstanding the orders of precedence established above, in the event of conflicts, the higher standard shall always apply.
- d. **Organization of Contract Documents.** Organization of the Contract Documents into divisions, sections, and articles, and arrangement of drawings shall not control the Contractor in dividing The Work among subcontractors or in establishing the extent of Work to be performed by any trade.

ARTICLE 3. CONTRACTS DOCUMENTS: COPIES & MAINTENANCE

Contractor shall maintain a clean, undamaged set of Contract Documents at the Project site.

ARTICLE 4. DETAIL DRAWINGS AND INSTRUCTIONS

- a. **Examination of Contract Documents.** Before commencing any portion of The Work, Contractor shall again carefully examine all applicable Contract Documents, the Project site and other information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall immediately notify the Engineer of any potential error, inconsistency, ambiguity, conflict or lack of detail or explanation. If Contractor performs, permits, or causes the performance of any Work which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction. In no case shall the Contractor or any subcontractor proceed with Work if uncertain as to the applicable requirements.
- b. **Additional Instructions.** After notification of any error, inconsistency, ambiguity, conflict or lack of detail or explanation, the Engineer will provide any required additional instructions, by means of drawings or other written direction, necessary for proper execution of Work.
- c. **Quality of Parts, Construction and Finish.** All parts of The Work shall be of the best quality of their respective kinds and the Contractor must use all diligence to inform itself fully as to the required construction and finish. In no case shall Contractor proceed with

The Work without obtaining first from the Engineer such Approval may be necessary for the proper performance of Work.

- d. **Contractor's Variation from Contract Document Requirements.** If it is found that the Contractor has varied from the requirements of the Contract Documents including the requirement to comply with all applicable laws, ordinances, rules and regulations, the Engineer may at any time, before or after completion of the Work, order the improper Work removed, remade or replaced by the Contractor at the Contractor's expense.

ARTICLE 5. EXISTENCE OF UTILITIES AT THE WORK SITE

- a. The City has endeavored to determine the existence of utilities at the Project site from the records of the owners of known utilities in the vicinity of the Project. The positions of these utilities as derived from such records are shown on the Plans.
- b. No excavations were made to verify the locations shown for underground utilities. The service connections to these utilities are not shown on the plans. It shall be the responsibility of the Contractor to determine the exact location of all service connections. The Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing Work which could result in damage to such utilities. The Contractor shall immediately notify the City in writing of any utility discovered in a different position than shown on the Plans or which is not shown on the Plans.
- c. All water meters, water valves, fire hydrants, electrical utility vaults, telephone vaults, gas utility valves, and other subsurface structures shall be relocated or adjusted to final grade by the Contractor. Locations of existing utilities shown on the Plans are approximate and may not be complete. The Contractor shall be responsible for coordinating its Work with all utility companies during the construction of The Work.
- d. Notwithstanding the above, pursuant to Section 4215 of the Government Code, the City has the responsibility to identify, with reasonable accuracy, main or trunkline facilities on the plans and specifications. In the event that main or trunkline utility facilities are not identified with reasonable accuracy in the plans and specifications made a part of the invitation for bids, City shall assume the responsibility for their timely removal, relocation, or protection.
- e. Contractor, except in an emergency, shall contact the appropriate regional notification center, Southern California Underground Service Alert at 1-800-227-2600 at least two working days prior to commencing any excavation if the excavation will be performed in an area which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the City, and obtain an inquiry identification number from that notification center. No excavation shall be commenced or carried out by the Contractor unless such an inquiry identification

number has been assigned to the Contractor or any subcontractor of the Contractor and the City has been given the identification number by the Contractor.

ARTICLE 6. SCHEDULE

- a. **Estimated Schedule.** Within fourteen (14) days after the issuance of the Notice to Proceed, Contractor shall prepare a Project schedule and shall submit this to the Engineer for Approval. The receipt or Approval of any schedules by the Engineer or the City shall not in any way relieve the Contractor of its obligations under the Contract Documents. The Contractor is fully responsible to determine and provide for any and all staffing and resources at levels which allow for good quality and timely completion of the Project. Contractor's failure to incorporate all elements of Work required for the performance of the Contract or any inaccuracy in the schedule shall not excuse the Contractor from performing all Work required for a completed Project within the specified Contract time period. If the required schedule is not received by the time the first payment under the Contract is due, Contractor shall not be paid until the schedule is received, reviewed and accepted by the Engineer.
- b. **Schedule Contents.** The schedule shall allow enough time for inclement weather. The schedule shall indicate the beginning and completion dates of all phases of construction; critical path for all critical, sequential time related activities; and "float time" for all "slack" or "gaps" in the non-critical activities. The schedule shall clearly identify all staffing and other resources which in the Contractor's judgment are needed to complete the Project within the time specified for completion. Schedule duration shall match the Contract time. Schedules indicating early completion will be rejected.
- c. **Schedule Updates.** Contractor shall continuously update its construction schedule. Contractor shall submit an updated and accurate construction schedule to the Engineer whenever requested to do so by Engineer and with each progress payment request. The Engineer may withhold progress payments or other amounts due under the Contract Documents if Contractor fails to submit an updated and accurate construction schedule.

ARTICLE 7. SUBSTITUTIONS

- a. Pursuant to Public Contract Code Section 3400(b) the City may make a finding that is described in the invitation for bids that designates certain products, things, or services by specific brand or trade name.
- b. Unless specifically designated in the Contract Documents, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such Specifications shall be deemed to be used for the purpose of facilitating the description of the material, process or article desired and shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer for substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in the Contract Documents. However,

the City may have adopted certain uniform standards for certain materials, processes and articles.

- c. Contractor shall submit requests, together with substantiating data, for substitution of any “or equal” material, process or article no later than thirty-five (35) days after award of the Contract. To facilitate the construction schedule and sequencing, some requests may need to be submitted before thirty-five (35) days after award of Contract. Provisions regarding submission of “or equal” requests shall not in any way authorize an extension of time for performance of this Contract. If a proposed “or equal” substitution request is rejected, Contractor shall be responsible for providing the specified material, process or article. The burden of proof as to the equality of any material, process or article shall rest with the Contractor. The City has the complete and sole discretion to determine if a material, process or article is an “or equal” material, process or article that may be substituted.
- d. Data required to substantiate requests for substitutions of an “or equal” material, process or article data shall include a signed affidavit from the Contractor stating that, and describing how, the substituted “or equal” material, process or article is equivalent to that specified in every way except as listed on the affidavit. Substantiating data shall include any and all illustrations, specifications, and other relevant data including catalog information which describes the requested substituted “or equal” material, process or article, and substantiates that it is an “or equal” to the material, process or article. The substantiating data must also include information regarding the durability and lifecycle cost of the requested substituted “or equal” material, process or article. Failure to submit all the required substantiating data, including the signed affidavit, to the City in a timely fashion will result in the rejection of the proposed substitution.
- e. The Contractor shall bear all of the City’s costs associated with the review of substitution requests.
- f. The Contractor shall be responsible for all costs related to a substituted “or equal” material, process or article.
- g. Contractor is directed to the Special Conditions (if any) to review any findings made pursuant to Public Contract Code section 3400.

ARTICLE 8. SHOP DRAWINGS

- a. Contractor shall check and verify all field measurements and shall submit with such promptness as to provide adequate time for review and cause no delay in his own Work or in that of any other contractor, subcontractor, or worker on the Project, six (6) copies of all shop or setting drawings, calculations, schedules, and materials list, and all other provisions required by the Contract. Contractor shall sign all submittals affirming that submittals have been reviewed and approved by Contractor prior to submission to Engineer. Each signed submittal shall affirm that the submittal meets all the requirements

of the Contract Documents except as specifically and clearly noted and listed on the cover sheet of the submittal.

- b. Contractor shall make any corrections required by the Engineer, and file with the Engineer six (6) corrected copies each, and furnish such other copies as may be needed for completion of the Work. Engineer's approval of shop drawings shall not relieve Contractor from responsibility for deviations from the Contract Documents unless Contractor has, in writing, called Engineer's attention to such deviations at time of submission and has secured the Engineer's written Approval. Engineer's Approval of shop drawings shall not relieve Contractor from responsibility for errors in shop drawings.

ARTICLE 9. SUBMITTALS

- a. Contractor shall furnish to the Engineer for approval, prior to purchasing or commencing any Work, a log of all samples, material lists and certifications, mix designs, schedules, and other submittals, as required in the specifications. The log shall indicate whether samples will be provided in accordance with other provisions of this Contract.
- b. Contractor will provide samples and submittals, together with catalogs and supporting data required by the Engineer, to the Engineer within a reasonable time period to provide for adequate review and avoid delays in the Work.
- c. These requirements shall not authorize any extension of time for performance of this Contract. Engineer will check and approve such samples, but only for conformance with design concept of work and for compliance with information given in the Contract Documents. Work shall be in accordance with approved samples and submittals.

ARTICLE 10. MATERIALS

- a. Except as otherwise specifically stated in the Contract Documents, Contractor shall provide and pay for all materials, labor, tools, equipment, water, lights, power, transportation, superintendence, temporary constructions of every nature, and all other services and facilities of every nature whatsoever necessary to execute and complete this Contract within specified time.
- b. Unless otherwise specified, all materials shall be new and the best of their respective kinds and grades as noted and/or specified, and workmanship shall be of good quality.
- c. Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of The Work and shall be stored properly and protected as required by the Contract Documents. Contractor shall be entirely responsible for damage or loss by weather or other causes to materials or Work.

- d. No materials, supplies, or equipment for Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in the work and agrees upon completion of all work to deliver the Project, to the City free from any claims, liens, or charges.
- e. Materials shall be stored on the Project site in such manner so as not to interfere with any operations of the City or any independent contractor.

ARTICLE 11. CONTRACTOR'S SUPERVISION

Contractor shall continuously keep at the Project site, a competent and experienced full-time Project superintendent approved by the City. Superintendent must be able to proficiently speak, read and write in English. Contractor shall continuously provide efficient supervision of the Project.

ARTICLE 12. WORKERS

- a. Contractor shall at all times enforce strict discipline and good order among its employees. Contractor shall not employ on the Project any unfit person or any one not skilled in the Work assigned to him or her.
- b. Any person in the employ of the Contractor whom the City may deem incompetent or unfit shall be dismissed from The Work and shall not be employed on this Project except with the written Approval of the City.

ARTICLE 13. SUBCONTRACTORS

- a. Contractor agrees to bind every subcontractor to the terms of the Contract Documents as far as such terms are applicable to subcontractor's portion of The Work. Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by its subcontractors, as Contractor is for acts and omissions of persons directly employed by Contractor. Nothing contained in these Contract Documents shall create any contractual relationship between any subcontractor and the City.
- b. The City reserves the right to Approve all subcontractors. The City's Approval of any subcontractor under this Contract shall not in any way relieve Contractor of its obligations in the Contract Documents.
- c. Prior to substituting any subcontractor listed in the Bid Forms, Contractor must comply with the requirements of the Subletting and Subcontracting Fair Practices Act pursuant to California Public Contract Code section 4100 et seq.

ARTICLE 14. PERMITS AND LICENSES

Permits and licenses necessary for prosecution of The Work shall be secured and paid for by Contractor, unless otherwise specified in the Contract Documents.

- a. Contractor shall obtain and pay for all other permits and licenses required for The Work, including excavation permit and for plumbing, mechanical and electrical work and for operations in or over public streets or right of way under jurisdiction of public agencies other than the City.
- b. The Contractor shall arrange and pay for all off-site inspection of the Work related to permits and licenses, including certification, required by the specifications, drawings, or by governing authorities, except for such off-site inspections delineated as the City's responsibility pursuant to the Contract Documents.
- c. Before Acceptance of the Project, the Contractor shall submit all licenses, permits, certificates of inspection and required approvals to the City.

ARTICLE 15. UTILITY USAGE

- a. All temporary utilities, including but not limited to electricity, water, gas, and telephone, used on the Work shall be furnished and paid for by Contractor. Contractor shall Provide necessary temporary distribution systems, including meters, if necessary, from distribution points to points on The Work where the utility is needed. Upon completion of The Work, Contractor shall remove all temporary distribution systems.
- b. Contractor shall provide necessary and adequate utilities and pay all costs for water, electricity, gas, oil, and sewer charges required for completion of the Project.
- c. All permanent meters Installed shall be listed in the Contractor's name until Project Acceptance.
- d. If the Contract is for construction in existing facilities, Contractor may, with prior written Approval of the City, use the City's existing utilities by compensating the City for utilities used by Contractor.

ARTICLE 16. INSPECTION FEES FOR PERMANENT UTILITIES

All inspection fees and other municipal charges for permanent utilities including, but not limited to, sewer, electrical, phone, gas, water, and irrigation shall be paid for by the City. Contractor shall be responsible for arranging the payment of such fees, but inspection fees and other municipal fees relating to permanent utilities shall be paid by the City. Contractor may either request reimbursement from the City for such fees, or shall be responsible for arranging and coordination with City for the payment of such fees.

ARTICLE 17. TRENCHES

- a. Trenches Five Feet or More in Depth. The Contractor shall submit to the City, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches five feet or more in depth. If the plan varies from shoring system standards, the plan shall be prepared by a registered civil or structural engineer. The plan shall not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations.
- b. Excavations Deeper than Four Feet. If work under this Contract involves digging trenches or other excavation that extends deeper than four feet below the surface, Contractor shall promptly, and before the following conditions are disturbed, notify the City, in writing, of any:
 - 1) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
 - 2) Subsurface or latent physical conditions at the site differing from those indicated.
 - 3) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

The City shall promptly investigate the conditions, and if it finds that the conditions do so materially differ, or do involve hazardous waste, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of The Work, shall issue a change order under the procedures described in the Contract Documents.

In the event that a dispute arises between the City and the Contractor as to whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of The Work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the parties.

ARTICLE 18. DIVERSION OF RECYCLABLE WASTE MATERIALS

In compliance with the applicable City's waste reduction and recycling efforts, Contractor shall divert all Recyclable Waste Materials to appropriate recycling centers. Contractor will be required to submit weight tickets and written proof of diversion with its monthly progress

payment requests. Contractor shall complete and execute any certification forms required by City or other applicable agencies to document Contractor's compliance with these diversion requirements. All costs incurred for these waste diversion efforts shall be the responsibility of the Contractor.

ARTICLE 19. REMOVAL OF HAZARDOUS MATERIALS

Should Contractor encounter material reasonably believed to be polychlorinated biphenyl (PCB) or other toxic wastes and hazardous materials which have not been rendered harmless at the Project site, the Contractor shall immediately stop work at the affected Project site and shall report the condition to the City in writing. The City shall contract for any services required to directly remove and/or abate PCBs and other toxic wastes and hazardous materials, if required by the Project site(s), and shall not require the Contractor to subcontract for such services. The Work in the affected area shall not thereafter be resumed except by written agreement of the City and Contractor.

ARTICLE 20. SANITARY FACILITIES

Contractor shall provide sanitary temporary toilet buildings for the use of all workers. All toilets shall comply with local codes and ordinances. Toilets shall be kept supplied with toilet paper and shall have workable door fasteners. Toilets shall be serviced no less than once weekly and shall be present in a quantity of not less than 1 per 20 workers as required by CAL-OSHA regulation. The toilets shall be maintained in a sanitary condition at all times. Use of toilet facilities in The Work under construction shall not be permitted. Any other Sanitary Facilities required by CAL-OSHA shall be the responsibility of the Contractor.

ARTICLE 21. AIR POLLUTION CONTROL

Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

Without limiting the foregoing, Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the South Coast Air Quality Management District (SCAQMD) and/or California Air Resources Board (CARB). Although the SCAQMD and CARB limits and requirements are more broad, Contractor shall specifically be aware of their application to "portable equipment", which definition is considered by SCAQMD and CARB to include any item of equipment with a fuel-powered engine. Contractor shall indemnify City against any fines or penalties imposed by SCAQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in Article 50.

Contractor shall comply, and shall ensure all subcontractors comply, with all applicable requirements of the most current version of the regulations imposed by CARB including, without limitation, all applicable terms of Title 13, California Code of Regulations Division 3, Chapter 9 and all pending amendments (“Regulation”).

Throughout the Project, and for three (3) years thereafter, Contractor shall make available for inspection and copying any and all documents or information associated with Contractor’s and its subcontractors’ fleets including, without limitation, the Certificates of Reported Compliance (“CRCs”), fuel/refueling records, maintenance records, emissions records, and any other information the Contractor is required to produce, keep or maintain pursuant to the Regulation upon two (2) calendar days’ notice from the City.

Contractor shall be solely liable for any and all costs associated with compliance with the Regulation as well as for any and all penalties, fines, damages, or costs associated with any and all violations, or failures to comply with the Regulation. Contractor shall defend, indemnify and hold harmless the City, its officials, officers, employees and authorized volunteers free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Regulation.

ARTICLE 22. COMPLIANCE WITH STATE STORM WATER PERMIT

- a. Contractor shall be required to comply with all conditions of the State Water Resources Control Board (“State Water Board”) National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity (“Permit”) for all construction activity which results in the disturbance of in excess of one acre of total land area or which is part of a larger common area of development or sale. Contractor shall be responsible for filing the Notice of Intent and for obtaining the Permit. Contractor shall be solely responsible for preparing and implementing a Storm Water Pollution Prevention Plan (“SWPPP”) prior to initiating Work. In bidding on this Contract, it shall be Contractor’s responsibility to evaluate the cost of procuring the Permit and preparing the SWPPP as well as complying with the SWPPP and any necessary revision to the SWPPP. Contractor shall comply with all requirements of the State Water Resources Control Board. Contractor shall include all costs of compliance with specified requirements in the Contract amount.
- b. Contractor shall be responsible for procuring, implementing and complying with the provisions of the Permit and the SWPPP, including the standard provisions, monitoring and reporting requirements as required by the Permit. Contractor shall provide copies of all reports and monitoring information to the Engineer.
- c. Contractor shall comply with the lawful requirements of any applicable municipality, the City, drainage district, and other local agencies regarding discharges of storm water to separate storm drain system or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.

- d. Storm, surface, nuisance, or other waters may be encountered at various times during construction of The Work. Therefore, the Contractor, by submitting a Bid, hereby acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.
- e. Failure to comply with the Permit is in violation of federal and state law. Contractor hereby agrees to indemnify and hold harmless City, its officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, losses or liabilities of any kind or nature which City, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the Permit arising out of or in connection with the Project, except for liability resulting from the sole established negligence, willful misconduct or active negligence of the City, its officials, officers, agents, employees or authorized volunteers. City may seek damages from Contractor for delay in completing the Contract in accordance with the Contract Documents, caused by Contractor's failure to comply with the Permit.

ARTICLE 23. CLEANING UP

- a. Contractor at all times shall keep premises free from debris such as waste, rubbish, and excess materials and equipment. Contractor shall not store debris under, in, or about the premises. Upon completion of Work, Contractor shall clean the interior and exterior of the building or improvement including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected so surfaces are free from foreign material or discoloration. Contractor shall clean and polish all glass, plumbing fixtures, and finish hardware and similar finish surfaces and equipment and contractor shall also remove temporary fencing, barricades, planking and construction toilet and similar temporary facilities from site. Contractor shall also clean all buildings, asphalt and concrete areas to the degree necessary to remove oil, grease, fuel, or other stains caused by Contractor operations or equipment.
- b. Contractor shall fully clean up the site at the completion of The Work. If the Contractor fails to immediately clean up at the completion of The Work, the City may do so and the cost of such clean up shall be charged back to the Contractor.

ARTICLE 24. LAYOUT AND FIELD ENGINEERING

All field engineering required for laying out The Work and establishing grades for earthwork operations shall be furnished by the Contractor at its expense. Layout shall be done by a registered civil engineer Approved by the Engineer. Any required "as-built" drawings of the Work shall be prepared by the registered civil engineer.

ARTICLE 25. EXCESSIVE NOISE

- a. The Contractor shall use only such equipment on the work and in such state of repair so that the emission of sound therefrom is within the noise tolerance level of that equipment as established by CAL-OSHA.
- b. The Contractor shall comply with the most restrictive of the following: (1) local sound control and noise level rules, regulations and ordinances and (2) the requirements contained in these Contract Documents, including hours of operation requirements. No internal combustion engine shall be operated on the Project without a muffler of the type recommended by the manufacturer. Should any muffler or other control device sustain damage or be determined to be ineffective or defective, the Contractor shall promptly remove the equipment and shall not return said equipment to the job until the device is repaired or replaced. Said noise and vibration level requirements shall apply to all equipment on the job or related to the job, including but not limited to, trucks, transit mixers or transit equipment that may or may not be owned by the Contractor.

ARTICLE 26. TESTS AND INSPECTIONS

- a. If the Contract Documents, the Engineer, or any instructions, laws, ordinances, or public authority require any part of The Work to be tested or Approved, Contractor shall provide the Engineer at least two (2) working days' notice of its readiness for observation or inspection. If inspection is by a public authority other than the City, Contractor shall promptly inform the City of the date fixed for such inspection. Required certificates of inspection (or similar) shall be secured by Contractor. Costs for City testing and City inspection shall be paid by the City. Costs of tests for Work found not to be in compliance shall be paid by the Contractor.
- b. If any Work is done or covered up without the required testing or approval, the Contractor shall uncover or deconstruct the Work, and the Work shall be redone after completion of the testing at the Contractor's cost in compliance with the Contract Documents.
- c. Where inspection and testing are to be conducted by an independent laboratory or agency, materials or samples of materials to be inspected or tested shall be selected by such laboratory or agency, or by the City, and not by Contractor. All tests or inspections of materials shall be made in accordance with the commonly recognized standards of national organizations.
- d. In advance of manufacture of materials to be supplied by Contractor which must be tested or inspected, Contractor shall notify the City so that the City may arrange for testing at the source of supply. Any materials which have not satisfactorily passed such testing and inspection shall not be incorporated into The Work.

- e. If the manufacture of materials to be inspected or tested will occur in a plant or location outside the geographic limits of City, the Contractor shall pay for any excessive or unusual costs associated with such testing or inspection, including but not limited to excessive travel time, standby time and required lodging.
- f. Reexamination of Work may be ordered by the City. If so ordered, Work must be uncovered or deconstructed by Contractor. If Work is found to be in accordance with the Contract Documents, the City shall pay the costs of reexamination and reconstruction. If such work is found not to be in accordance with the Contract Documents, Contractor shall pay all costs.

ARTICLE 27. PROTECTION OF WORK AND PROPERTY

- a. The Contractor shall be responsible for all damages to persons or property that occur as a result of The Work. Contractor shall be responsible for the proper care and protection of all materials delivered and Work performed until completion and final Acceptance by the City. All Work shall be solely at the Contractor's risk. Contractor shall adequately protect adjacent property from settlement or loss of lateral support as necessary. Contractor shall comply with all applicable safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the Project site where Work is being performed. Contractor shall erect and properly maintain at all times, as required by field conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created in the course of construction.
- b. In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization from the Engineer, is hereby permitted to act to prevent such threatened loss or injury; and Contractor shall so act, without appeal, if so authorized or instructed by the Engineer or the City. Any compensation claimed by Contractor on account of emergency work shall be determined by and agreed upon by the City and the Contractor.
- c. Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions.
- d. Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, and other adjoining property and structures, and to avoid damage thereto, and Contractor shall repair any damage thereto caused by The Work operations. Contractor shall:
 - 1) Enclose the working area with a substantial barricade, and arrange work to cause minimum amount of inconvenience and danger to the public.

- 2) Provide substantial barricades around any shrubs or trees indicated to be preserved.
- 3) Deliver materials to the Project site over a route designated by the Engineer.
- 4) Provide any and all dust control required and follow the Applicable air quality regulations as appropriate. If the Contractor does not comply, the City shall have the immediate authority to provide dust control and deduct the cost from payments to the Contractor.
- 5) Confine Contractor's apparatus, the storage of materials, and the operations of its workers to limits required by law, ordinances, permits, or directions of the Engineer. Contractor shall not unreasonably encumber the Project site with its materials.
- 6) Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved civil engineer or land surveyor, at no cost to the City.
- 7) Ensure that existing facilities, fences and other structures are all adequately protected and that, upon completion of all Work, all facilities that may have been damaged are restored to a condition acceptable to the City.
- 8) Preserve and protect from injury all buildings, pole lines and all direction, warning and mileage signs that have been placed within the right-of-way.
- 9) At the completion of work each day, leave the Project site in a clean, safe condition.
- 10) Comply with any stage construction and traffic handling plans. Access to residences and businesses shall be maintained at all times.

These precautionary measures will apply continuously and not be limited to normal working hours. Full compensation for the Work involved in the preservation of life, safety and property as above specified shall be considered as included in the prices paid for the various contract items of Work, and no additional allowance will be made therefor.

- e. Should damage to persons or property occur as a result of The Work, Contractor shall be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. The City shall be entitled to inspect and copy any such documentation, video, or photographs.

ARTICLE 28. CONTRACTORS MEANS AND METHODS

Contractor is solely responsible for the means and methods utilized to Perform The Work. In no case shall the Contractor's means and methods deviate from commonly used industry standards.

ARTICLE 29. INSPECTOR'S FIELD OFFICE – LEFT INTENTIONALLY BLANK

ARTICLE 30. AUTHORIZED REPRESENTATIVES

The City shall designate representatives, who shall have the right to be present at the Project site at all times. The City may designate an inspector who shall have the right to observe all of the Contractor's Work. The inspector is not authorized to make changes in the Contract Documents. The inspector shall not be responsible for the Contractor's failure to carry out The Work in accordance with the Contract Documents. Contractor shall provide safe and proper facilities for such access.

ARTICLE 31. HOURS OF WORK

- a. Eight (8) hours of work shall constitute a legal day's work. The Contractor and each subcontractor shall forfeit, as penalty to the City, twenty-five dollars (\$25) for each worker employed in the execution of Work by the Contractor or any subcontractor for each day during which such worker is required or permitted to work more than eight (8) hours in any one day and forty (40) hours in any week in violation of the provisions of the Labor Code, and in particular, Section 1810 to Section 1815, except as provided in Labor Code Section 1815.
- b. Work shall be accomplished on a regularly scheduled eight (8) hour per day work shift basis, Monday through Friday, between the hours of 7:00 a.m. and 5:00 p.m.
- c. It shall be unlawful for any person to operate, permit, use, or cause to operate any of the following at the Project site, other than between the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, with no Work allowed on City-observed holidays, unless otherwise Approved by the Engineer:
 - 1) Powered Vehicles
 - 2) Construction Equipment
 - 3) Loading and Unloading Vehicles
 - 4) Domestic Power Tool.

ARTICLE 32. PAYROLL RECORDS

- a. Pursuant to Labor Code Section 1776, the Contractor and each subcontractor shall maintain weekly certified payroll records showing the name, address, social security

number, work classification, straight time and overtime hours paid each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed in connection with the work. Contractor shall certify under penalty of perjury that records maintained and submitted by Contractor are true and accurate. Contractor shall also require subcontractor(s) to certify weekly payroll records under penalty of perjury.

- b. The payroll records described herein shall be certified and submitted by the Contractor at a time designated by the City. The Contractor shall also provide the following:
 - 1) A certified copy of the employee's payroll records shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
 - 2) A certified copy of all payroll records described herein shall be made available for inspection or furnished upon request of the Department of Industrial Relations ("DIR").
- c. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement ("DLSE") of the DIR or shall contain the same information as the forms provided by the DLSE.
- d. Any copy of records made available for inspection and furnished upon request to the public shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of the Contractor or any subcontractor shall not be marked or obliterated.
- e. In the event of noncompliance with the requirements of this Section, the Contractor or Subcontractor shall have ten (10) days in which to comply subsequent to receipt of written notice specifying any item or actions necessary to ensure compliance with this section. Should noncompliance still be evident after such ten (10) day period, the Contractor shall, as a penalty to the City, forfeit one hundred dollars (\$100) for each day, or portion thereof, for each worker until strict compliance is effectuated. Upon the request of the DIR, such penalties shall be withheld from contract payments.

ARTICLE 33. PREVAILING RATES OF WAGES

- a. The Contractor is aware of the prevailing wage requirements of Chapter 1 (beginning at Section 1720 et seq.) of Part 7 of Division 2 of the California Labor Code, as well as Title 8, Section 16000 et seq. of the California Code of Regulations ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since this Project involves an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Contractor and its subcontractors shall fully comply with the Prevailing Wage Laws for their

employees and any others to whom such laws are applicable. Contractor and its subcontractors shall also be responsible for any and all violations and fines imposed on them pursuant to the Prevailing Wage Laws.

- b. Pursuant to SB 854, which amended the Prevailing Wage Laws, this Contract is subject to compliance monitoring and enforcement by the DIR. Beginning April 1, 2015, no contractor or subcontractor may be awarded this Contract unless registered with the DIR pursuant to Labor Code section 1725.5. The City will report all necessary contracts to the DIR as required by the Prevailing Wage Laws.
- c. It is most efficient for the Contractor to obtain a copy of the prevailing rates of per diem wages in effect at the commencement of this Agreement from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov/dlsr/. In the alternative, the Contractor may obtain a copy of the prevailing rates of per diem wages from the City. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to perform work on the Project available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the Project site.
- d. Contractor shall defend, indemnify and hold the City, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or allege failure to comply with the Prevailing Wage Laws.
- e. The Contractor and each subcontractor shall forfeit as a penalty to the City not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the stipulated prevailing wage rate for any work done by him, or by any subcontract under him, in violation of the provisions of the Labor Code. The difference between such stipulated prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.
- f. Contractor shall post, at appropriate conspicuous points on the Project site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

ARTICLE 34. EMPLOYMENT OF APPRENTICES

The Contractor's attention is directed to the provisions of Sections 1777.5, 1777.6, and 1777.7 of the Labor Code concerning employment of apprentices by the Contractor or any subcontractor. The Contractor shall obtain a certificate of apprenticeship before employing any apprentice pursuant to Section 1777.5, 1777.6, and 1777.7 of the Labor Code. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, the Administrator of Apprenticeships, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

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GENERAL CONDITIONS

ARTICLE 35. NONDISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY/EMPLOYMENT ELIGIBILITY

Pursuant to Labor Code Section 1735 and other applicable provisions of law, the Contractor and its subcontractors shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap on this Project. The Contractor will take affirmative action to insure that employees are treated during employment or training without regard to their race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap.

Employment Eligibility; Contractor. By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time. Such requirements and restrictions include, but are not limited to, examination and retention of documentation confirming the identity and immigration status of each employee of the Contractor. Contractor also verifies that it has not committed a violation of any such law within the five (5) years immediately preceding the date of execution of this Contract, and shall not violate any such law at any time during the term of the Contract. Contractor shall avoid any violation of any such law during the term of this Contract by participating in an electronic verification of work authorization program operated by the United States Department of Homeland Security, by participating in an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, or by some other legally acceptable method. Contractor shall maintain records of each such verification, and shall make them available to the City or its representatives for inspection and copy at any time during normal business hours. The City shall not be responsible for any costs or expenses related to Contractor's compliance with the requirements provided for in Section 3.16 or any of its sub-sections.

Employment Eligibility; Subcontractors, Sub-subcontractors and Consultants. To the same extent and under the same conditions as Contractor, Contractor shall require all of its subcontractors, sub-subcontractors and consultants performing any work relating to the Project or this Contract to make the same verifications and comply with all requirements and restrictions provided for in Section 3.16.1.

Employment Eligibility; Failure to Comply. Each person executing this Contract on behalf of Contractor verifies that they are a duly authorized officer of Contractor, and understands that any of the following shall be grounds for the City to terminate the Contract for cause: (1) failure of Contractor or its subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for in Sections 3.16.1 or 3.16.2; (2) any misrepresentation or material omission concerning compliance with such requirements (including in those verifications provided to the Contractor under Section 3.16.2); or (3) failure to immediately remove from the Project any person found not to be in compliance with such requirements.

ARTICLE 36. LABOR/EMPLOYMENT SAFETY

The Contractor shall maintain emergency first aid treatment for his employees which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 et seq.), and California Code of Regulations, Title 8, Industrial Relations Division 1, Department of Industrial Relations, Chapter 4.

ARTICLE 37. WORKERS' COMPENSATION INSURANCE

The Contractor shall Provide, during the life of this Contract, workers' compensation insurance for all of the employees engaged in Work under this Contract, on or at the Project site, and, in case any of sublet Work, the Contractor shall require the subcontractor similarly to provide workers' compensation insurance for all the latter's employees as prescribed by State law. Any class of employee or employees not covered by a subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in work under this Contract, on or at the Project site, is not protected under the Workers' Compensation Statutes, the Contractor shall provide or shall cause a subcontractor to provide, adequate insurance coverage for the protection of such employees not otherwise protected. The Contractor is required to secure payment of compensation to his employees in accordance with the provisions of Section 3700 of the Labor Code. The Contractor shall file with the City certificates of his insurance protecting workers. Company or companies providing insurance coverage shall be acceptable to the City, if in the form and coverage as set forth in the Contract Documents.

ARTICLE 38. EMPLOYER'S LIABILITY INSURANCE

Contractor shall provide during the life of this Contract, Employer's Liability Insurance, including Occupational Disease, in the amount of, at least, one million dollars (\$1,000,000.00) per person per accident. Contractor shall provide City with a certificate of Employer's Liability Insurance. Such insurance shall comply with the provisions of the Contract Documents. The policy shall be endorsed, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement and contain a Waiver of Subrogation in favor of the City.

ARTICLE 39. COMMERCIAL GENERAL LIABILITY INSURANCE

- a. Contractor shall procure and maintain during the life of this Contract and for such other period as may be required herein, at its sole expense, occurrence version Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, products/completed operations if applicable, personal and advertising injury – which may arise from or out of Contractor's operations, use, and management of the Project site, or the performance of its obligations hereunder. Policy limits shall not be less than \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

- b. Such policy shall comply with all the requirements of this Article. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Contractor from liability in excess of such coverage, nor shall it limit Contractor's indemnification obligations to the City, and shall not preclude the City from taking such other actions available to the City under other provisions of the Contract Documents or law.
- c. Contractor shall make certain that any and all subcontractors hired by Contractor are insured in accordance with this Contract. If any subcontractor's coverage does not comply with the foregoing provisions, Contractor shall indemnify and hold the City harmless from any damage, loss, cost, or expense, including attorneys' fees, incurred by the City as a result thereof.
- d. All general liability policies provided pursuant to the provisions of this Article shall comply with the provisions of the Contract Documents.
- e. All general liability policies shall be written to apply to all bodily injury, including death, property damage, personal injury, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, under-ground excavation, removal of lateral support, and other covered loss, however occasioned, occurring during the policy term, and shall specifically insure the performance by Contractor of that part of the indemnification contained in these General Conditions, relating to liability for injury to or death of persons and damage to property. If the coverage contains one or more aggregate limits, a minimum of 50% of any such aggregate limit must remain available at all times; if over 50% of any aggregate limit has been paid or reserved, the City may require additional coverage to be purchased by Contractor to restore the required limits. Contractor may combine primary, umbrella, and as broad as possible excess liability coverage to achieve the total limits indicated above. Any umbrella or excess liability policy shall include the additional insured endorsement described in the Contract Documents.
- f. Such insurance shall comply with the provisions of Article 42 below.

ARTICLE 40. AUTOMOBILE LIABILITY INSURANCE

Contractor shall take out and maintain at all times during the term of this occurrence version Contract Automobile Liability Insurance in the amount of, at least, one million dollars (\$1,000,000). Such insurance shall provide coverage for bodily injury and property damage including coverage for non-owned and hired vehicles, in a form and with insurance companies acceptable to the City. Such insurance shall comply with the provisions of Article 42 below.

ARTICLE 41. INSTALLATION FLOATER INSURANCE

- a. Installation Floater for the completed value of the project with no coinsurance penalty provisions. City shall be named as loss payee as their interest may appear. The property installation floater shall provide for the improvement, remodel, modification, alteration, conversion or adjustment to existing buildings, structures, processes, machinery and equipment; and shall provide property damage coverage for any building, structure, machinery or equipment damaged, impaired, broken or destroyed during the performance of the Work, including during transit, installation and testing at the City's site.
- b. Provide insurance coverage on completed value form, all-risk or special causes of loss coverage.
 - 1) Insurance policies shall be so conditioned as to cover the performance of any extra work performed under the Contract.
 - 2) Coverage shall include all materials stored on site and in transit.
 - 3) Coverage shall include Contractor's tools and equipment.
- c. Such insurance shall comply with the provisions of the Contract Documents.

ARTICLE 42. FORM AND PROOF OF CARRIAGE OF INSURANCE

- a. Insurance is to be placed with insurers which are satisfactory to the City and which meet either of the following criteria : (1) an insurer with a current A.M. Best's rating no less than A:VII and licensed as an admitted insurance carrier in California; or (2) an insurer with a current A.M. Best's rating no less than A:X and authorized to issue the required policies in California. Insurance deductibles or self-insured retentions must be declared by the Contractor and approved by the City.
- b. Contractor shall cause its insurance carrier(s) to furnish the City with either 1) a properly executed original Certificates(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein, or 2) if requested to do so in writing by the City Risk Manager, provide original Certified copies of policies including all Endorsements and all attachments thereto, showing such insurance is in full force and effect. The City, its Directors and officers, employees, agents or representatives are named as Additional Insureds and Provide a Waiver of Subrogation in favor of those parties. Further, said Certificates(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that shall provide no less than thirty (30) days written notice be given to the City prior to any material modification or cancellation of such insurance, provided that if a thirty (30) days' notice of cancellation endorsement is not available, Contractor shall notify City of this unavailability in writing and shall forward any notice of cancellation to the City within two (2) business days from receipt by Contractor. In the event of a material modification or cancellation of coverage, the City may terminate

or Stop Work pursuant to the Contract Documents, unless the City receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverages set forth herein and the insurance required herein is in full force and effect. Contractor shall not take possession, or use the Project site, or commence operations under this Agreement until the City has been furnished original Certificate(s) of Insurance and certified original copies of Endorsements or policies of insurance including all Endorsements and any and all other attachments as required in this Section. The original Endorsements for each policy and the Certificate of Insurance shall be signed by an individual authorized by the insurance carrier to do so on its behalf.

- c. It is understood and agreed to by the parties hereto and the insurance company(s), that the Certificate(s) of Insurance and policies shall so covenant and shall be construed as primary, and the City's insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.
- d. The City reserves the right to adjust the monetary limits of insurance coverage's during the term of this Contract including any extension thereof-if in the City's reasonable judgment, the amount or type of insurance carried by the Contractor becomes inadequate.
- e. Contractor shall pass down the insurance obligations contained herein to all tiers of sub-contractors working under this Contract.

ARTICLE 43. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- a. **Time for Completion/Liquidated Damages.** Work shall be commenced within ten (10) days of the date stated in the City's Notice to Proceed and shall be completed by Contractor in the time specified in the Contract Documents. The City is under no obligation to consider early completion of the Project; and the Contract completion date shall not be amended by the City's receipt or acceptance of the Contractor's proposed earlier completion date. Furthermore, Contractor shall not, under any circumstances, receive additional compensation from the City (including but not limited to indirect, general, administrative or other forms of overhead costs) for the period between the time of earlier completion proposed by the Contractor and the Contract completion date. If The Work is not completed as stated in the Contract Documents, it is understood that the City will suffer damage. In accordance with Government Code section 53069.85, being impractical and infeasible to determine the amount of actual damage, it is agreed that Contractor shall pay to the City as fixed and liquidated damages, and not as a penalty, the sum stipulated in the Contract for each day of delay until The Work is fully completed. Contractor and its surety shall be liable for any liquidated damages. Any money due or to become due the Contractor may be retained to cover liquidated damages.

- b. **Inclement Weather.** Contractor shall abide the Engineer's determination of what constitutes inclement weather. Time extensions for inclement weather shall only be granted when the Work stopped during inclement weather is on the critical path of the Project schedule.
- c. **Extension of Time.** Contractor shall not be charged liquidated damages because of any delays in completion of The Work due to unforeseeable causes beyond the control and without the fault or negligence of Contractor (or its subcontractors or suppliers). Contractor shall within five (5) Days of identifying any such delay notify the City in writing of causes of delay. The City shall ascertain the facts and extent of delay and grant extension of time for completing The Work when, in its judgment, the facts justify such an extension. Time extensions to the Project shall be requested by the Contractor as they occur and without delay. No delay claims shall be permitted unless the event or occurrence delays the completion of the Project beyond the Contract completion date.
- d. **No Damages for Reasonable Delay.** The City's liability to Contractor for delays for which the City is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall the City be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs. Damages caused by unreasonable City delay, including delays caused by items that are the responsibility of the City pursuant to Government Code section 4215, shall be based on actual costs only, no proportions or formulas shall be used to calculate any delay damages.

ARTICLE 44. COST BREAKDOWN AND PERIODIC ESTIMATES

Contractor shall furnish on forms Approved by the City:

- a. Within ten (10) Days of award of the Contract a detailed estimate giving a complete breakdown of the Contract price;
- b. A monthly itemized estimate of Work done for the purpose of making progress payments. In order for the City to consider and evaluate each progress payment application, the Contractor shall submit a detailed measurement of Work performed and a progress estimate of the value thereof before the tenth (10th) Day of the following month.
- c. Contractor shall submit, with each of its payment requests, an adjusted list of actual quantities, verified by the Engineer, for unit price items listed, if any, in the Bid Form.
- d. Following the City's Acceptance of the Work, the Contractor shall submit to the City a written statement of the final quantities of unit price items for inclusion in the final payment request.
- e. The City shall have the right to adjust any estimate of quantity and to subsequently correct any error made in any estimate for payment.

Contractor shall certify under penalty of perjury, that all cost breakdowns and periodic estimates accurately reflect the Work on the Project.

ARTICLE 45. MOBILIZATION

- a. When a bid item is included in the Bid Form for mobilization, the costs of Work in advance of construction operations and not directly attributable to any specific bid item will be included in the progress estimate (“Initial Mobilization”). When no bid item is provided for “Initial Mobilization,” payment for such costs will be deemed to be included in the other items of The Work.
- b. Payment for Initial Mobilization based on the lump sum provided in the Bid Form, which shall constitute full compensation for all such Work. No payment for Initial Mobilization will be made until all of the listed items have been completed to the satisfaction of the Engineer. The scope of the Work included under Initial Mobilization shall include, but shall not be limited to, the following principal items:
 - 1. Obtaining and paying for all bonds, insurance, and permits.
 - 2. Moving on to the Project site of all Contractor’s plant and equipment required for first month’s operations.
 - 3. Installing temporary construction power, wiring, and lighting facilities.
 - 4. Establishing fire protection system.
 - 5. Developing and installing a construction water supply.
 - 6. Providing and maintaining the field office trailers for the Contractor and the Engineer, complete, with all specified furnishings and utility services including telephones, telephone appurtenances, computer and printer, and copying machine.
 - 7. Providing on-site communication facilities for the Owner and the Engineer, including telephones, radio pagers, and fax machines.
 - 8. Providing on-site sanitary facilities and potable water facilities as specified per Cal-OSHA and these Contract Documents.
 - 9. Furnishing, installing, and maintaining all storage buildings or sheds required for temporary storage of products, equipment, or materials that have not yet been installed in the Work. All such storage shall meet manufacturer’s specified storage requirements, and the specific provisions of the specifications, including temperature and humidity control, if recommended by the manufacturer, and for all security.
 - 10. Arranging for and erection of Contractor’s work and storage yard.

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11. Posting all OSHA required notices and establishment of safety programs per Cal-OSHA.
12. Full-time presence of Contractor's superintendent at the job site as required herein.
13. Submittal of Construction Schedule as required by the Contract Documents.

ARTICLE 46. PAYMENTS

- a. The City shall make monthly progress payments following receipt of undisputed and properly submitted payment requests. Contractor shall be paid a sum equal to ninety-five percent (95%) of the value of Work performed up to the last day of the previous month, less the aggregate of previous payments.
- b. The Contractor shall, after the full completion of The Work, submit a final payment application. All prior progress estimates shall be subject to correction in the final estimate and payment.
- c. Unless otherwise required by law, the final payment of five percent (5%) of the value of the Work, if unencumbered, shall be paid no later than sixty (60) Days after the date of recordation of the Notice of Completion.
- d. Acceptance by Contractor of the final payment shall constitute a waiver of all claims against the City arising from this Contract.
- e. Payments to the Contractor shall not be construed to be an acceptance of any defective work or improper materials, or to relieve the Contractor of its obligations under the Contract Documents.
- f. The Contractor shall submit with each payment request the Contractor's conditional waiver of lien for the entire amount covered by such payment request, as well as a valid unconditional waiver of lien from the Contractor and all subcontractors and materialmen for all work and materials included in any prior invoices. Waivers of lien shall be in the forms prescribed by California Civil Code Section 3262. Prior to final payment by the City, the Contractor shall submit a final waiver of lien for the Contractor's work, together with releases of lien from any subcontractor or materialmen.

ARTICLE 47. PAYMENTS WITHHELD AND BACKCHARGES

In addition to amounts which the City may retain under other provisions of the Contract Documents the City may withhold payments due to Contractor as may be necessary to cover:

- a. Stop Notice Claims.
- b. Defective work not remedied.

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- c. Failure of Contractor to make proper payments to its subcontractors or suppliers.
- d. Completion of the Contract if there exists a reasonable doubt that the work can be completed for balance then unpaid.
- e. Damage to another contractor or third party.
- f. Amounts which may be due the City for claims against Contractor.
- g. Failure of Contractor to keep the record (“as-built”) drawings up to date.
- h. Failure to provide updates on the construction schedule.
- i. Site clean up.
- j. Failure of the Contractor to comply with requirements of the Contract Documents.
- k. Failure of the Contractor to return in good working order construction meters and potable water backflow prevention devices.
- l. Liquated damages.
- m. Legally permitted penalties.

Upon completion of the Contract, the City will reduce the final Contract amount to reflect costs charged to the Contractor, backcharges or payments withheld pursuant to the Contract Documents.

ARTICLE 48. CHANGES AND EXTRA WORK

a. Change Order Work.

- 1) The City, without invalidating the Contract, may order changes in the Work consisting of additions, deletions or other revisions, the Contract amount and Contract time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including any adjustment in the Contract amount or the Contract time, and the full and final settlement of all costs (direct, indirect and overhead) related to the Work authorized by the Change Order.
- 2) All claims for additional compensation to the Contractor shall be presented in writing before the expense is incurred and will be adjusted as provided herein. No work shall be allowed to lag pending such adjustment, but shall be promptly executed as directed, even if a dispute arises. No claim will be considered after

the work in question has been done unless a written contract change order has been issued or a timely written notice of claim has been made by Contractor. Contractor shall not be entitled to claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease or omission of any item or portion of Work to be done. Whenever any change is made as provided for herein, such change shall be considered and treated as though originally included in the Contract, and shall be subject to all terms, conditions and provisions of the original Contract.

- 3) Owner Initiated Change. The Contractor must submit a complete cost proposal, including any change in the Contract time, within seven (7) Days after receipt of a scope of a proposed change order, unless the City requests that proposals be submitted in less than seven (7) Days.
- 4) Contractor Initiated Change. The Contractor must give written notice of a proposed change order required for compliance with the Contract Documents within seven (7) Days of discovery of the facts giving rise to the proposed change order.
- 5) Whenever possible, any changes to the Contract amount shall be in a lump sum mutually agreed to by the Contractor and the City.
- 6) Price quotations from the Contractor shall be accompanied by sufficiently detailed supporting documentation to permit verification by the City.
- 7) If the Contractor fails to submit the cost proposal within the seven (7) Day period (or as requested), the City has the right to order the Contractor in writing to commence the work immediately on a force account basis and/or issue a lump sum change to the contract price in accordance with the City's estimate of cost. If the change is issued based on the City estimate, the Contractor will waive its right to dispute the action unless within fifteen (15) Days following completion of the added/deleted work, the Contractor presents written proof that the City's estimate was in error.
- 8) Estimates for lump sum quotations and accounting for cost-plus-percentage work shall be limited to direct expenditures necessitated specifically by the subject extra work, and shall be segregated as follows:
 - (a) Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft or type of worker at the time the extra work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessment or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the extra work cost will not be

permitted unless the contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

- (b) Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available in the quantities involved, plus sales tax, freight and delivery. Materials cost shall be based upon supplier or manufacturer's invoice. If invoices or other satisfactory evidence of cost are not furnished within fifteen (15) Days of delivery, then the Engineer shall determine the materials cost, at its sole discretion.
- (c) Tool and Equipment Use. No payment will be made for the use of small tools, tools which have a replacement value of \$1,000 or less. Regardless of ownership, the rates to be used in determining equipment use costs shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, at the time the work is performed.
- (d) Overhead, Profit and Other Charges. The mark-up for overhead (including supervision) and profit on work added to the Contract shall be according to the following:
 - i. "Net Cost of the Work" is defined as consisting of costs of labor, materials and tools and equipment only excluding markup.
 - ii. The costs of applicable insurance and bond premium will be reimbursed to the Contractor and subcontractors at a rate of one percent (1%) of the Net Cost of the Work.
 - iii. For Work performed by the Contractor's forces the added cost for overhead and profit shall not exceed fifteen (15%) percent of the Net Cost of the Work.
 - iv. For Work performed by a subcontractor, the added cost for overhead and profit shall not exceed fifteen (15%) percent of the Net Cost of the Work.
 - v. A markup of ten percent (10% on the first \$5,000 of the subcontracted portion of the Extra Work and a markup of five percent (5%) on work added in excess of \$5,000 of the subcontracted portion of the Extra Work may be added by the Contractor.
 - vi. No additional markup will be allowed for lower tier subcontractors.

- 9) For added or deducted Work by subcontractors, the Contractor shall furnish to the City the subcontractor's signed detailed estimate of the cost of labor, material and equipment, including the subcontractor markup for overhead and profit. The same requirement shall apply to sub-subcontractors.
- 10) For added or deducted work furnished by a vendor or supplier, the Contractor shall furnish to the City a detailed estimate or quotation of the cost to the Contractor, signed by such vendor or supplier.
- 11) Any change in The Work involving both additions and deletions shall indicate a net total cost, including subcontracts and materials. Allowance for overhead and profit, as specified herein, shall be applied if the net total cost is an extra; overhead and profit allowances shall not be applied if the net total cost is a credit. The estimated cost of deductions shall be based on labor and material prices on the date the Contract was executed.
- 12) Contractor shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the change order for work. No claims shall be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. The Contractor may not change or modify the City's change order form in an attempt to reserve additional rights.
- 13) If the City disagrees with the proposal submitted by Contractor, it will notify the Contractor and the City will provide its opinion of the appropriate price and/or time extension. If the Contractor agrees with the City, a change order will be issued by the City. If no agreement can be reached, the City shall have the right to issue a unilateral change order setting forth its determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. Such determination shall become final and binding if the Contractor fails to submit a claim in writing to the City within fifteen (15) Days of the issuance of the unilateral change order, disputing the terms of the unilateral change order.
- 14) No dispute, disagreement or failure of the parties to reach agreement on the terms of the change order shall relieve the Contractor from the obligation to proceed with performance of the work, including extra work, promptly and expeditiously.
- 15) Any alterations, extensions of time, extra work or any other changes may be made without securing consent of the Contractor's surety or sureties.

ARTICLE 49. OCCUPANCY

The City reserves the right to occupy or utilize any portion of The Work at any time before completion, and such occupancy or use shall not constitute Acceptance of any part of Work

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covered by this Contract. This use shall not relieve the Contractor of its responsibilities under the Contract.

ARTICLE 50. INDEMNIFICATION

Contractor shall defend (with counsel of City's choosing), indemnify and hold the City, its officials, officers, agents, employees, and representatives free and harmless from any and all claims, demands, causes of action, costs, expenses, liabilities, losses, damages or injuries, in law or equity, regardless of whether the allegations are false, fraudulent, or groundless, to property or persons, including wrongful death, to the extent arising out of or incident to any acts, omissions or willful misconduct of Contractor, its officials, officers, employees, agents, consultants and contractors arising out of or in connection with the performance of the Work or this Contract, including claims made by subcontractors for nonpayment, including without limitation the payment of all consequential damages and attorneys' fees and other related costs and expenses. Contractor shall defend, at Contractor's own cost, expense and risk, with counsel of City's choosing, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against City, its officials, officers, agents, employees and representatives. To the extent of its liability, Contractor shall pay and satisfy any judgment, award or decree that may be rendered against City, its officials, officers, employees, agents, employees and representatives, in any such suit, action or other legal proceeding. Contractor shall reimburse City, its officials, officers, agents, employees and representatives for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. The only limitations on this provision shall be those imposed by Civil Code Section 2782.

ARTICLE 51. RECORD ("AS BUILT") DRAWINGS

- a. Contractor shall prepare and maintain a complete set of record drawings (herein referred to as "as-builts") and shall require each trade to prepare its own as-builts. The as-builts must show the entire site for each major trade, including but not limited to water, sewer, electrical, data, telephone, cable, fire alarm, gas and plumbing. Contractor shall mark the as-builts to show the actual installation where the installation varies from the Work as originally shown. Contractor shall mark whichever drawings are most capable of showing conditions fully and where shop drawings are used, Contractor must record a cross-reference at the corresponding location on the contract drawings. Contractor shall give particular attention to concealed elements that would be difficult to measure and record at a later date. Contractor shall use colors to distinguish variations in separate categories of The Work.
- b. Contractor shall note related change order numbers where applicable. Contractor shall organize as-builts into manageable sets, bound with durable paper cover sheets and shall print suitable title, dates and other identification on the cover of each set. Contractor to also provide an electronic version of the as-builts. The suitability of the as-builts will be determined by the Engineer.

ARTICLE 52. RESOLUTION OF CONSTRUCTION CLAIMS

- a. In accordance with Public Contract Code Sections 20104 *et seq.* and other applicable law, public works claims of \$375,000 or less which arise between the Contractor and the City shall be resolved under the following the statutory procedure unless the City has elected to resolve the dispute pursuant to Public Contract Code Section 10240 *et seq.*
- b. **All Claims:** All claims shall be submitted in writing and accompanied by substantiating documentation. Claims must be filed on or before the date of final payment unless other notice requirements are provided in the contract. "Claim" means a separate demand by the claimant for (1) a time extension, (2) payment of money or damages arising from work done by or on behalf of the claimant and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled, or (3) an amount the payment of which is disputed by the City.
- c. **Claims Under \$50,000.** The City shall respond in writing to the claim within 45 days of receipt of the claim, or, the City may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the City may have. If additional information is needed thereafter, it shall be provided upon mutual agreement of the City and the claimant. The City's written response shall be submitted 15 days after receiving the additional documentation, or within the same period of time taken by the claimant to produce the additional information, whichever is greater.
- d. **Claims over \$50,000 but less than or equal to \$375,000.** The City shall respond in writing within 60 days of receipt, or, may request in writing within 30 days of receipt of the claim, any additional documents supporting the claim or relating to defenses or claims the City may have against the claimant. If additional information is needed thereafter, it shall be provided pursuant to mutual agreement between the City and the claimant. The City's response shall be submitted within 30 days after receipt of the further documents, or within the same period of time taken by the claimant to produce the additional information or documents, whichever is greater. The Contractor shall make these records and documents available at all reasonable times, without any direct charge.
- e. The Contractor will submit the claim justification in the following format:
 - 1) Summary of claim merit and price, and Contract clause pursuant to which the claim is made.
 - 2) List of documents relating to claim
 - (a) Specifications
 - (b) Drawings

- (c) Clarifications (Requests for Information)
 - (d) Schedules
 - (e) Other
- 3) Chronology of events and correspondence
- 4) Analysis of claim merit
- 5) Analysis of claim cost
- 6) Analysis of time impact analysis in CPM format
- 7) Cover letter and certification of validity of the claim
- f. If the claimant disputes the City's response, or if the City fails to respond within the statutory time period(s), the claimant may so notify the City within 15 days of the receipt of the response or the failure to respond, and demand an informal conference to meet and confer for settlement. Upon such demand, the City shall schedule a meet and confer conference within 30 Days.
- g. If following the meet and confer conference, the claim or any portion thereof remains in dispute, the claimant may file a claim pursuant to Government Code 900 et seq. and Government Code 910 et seq. For purposes of those provisions, the time within which a claim must be filed shall be tolled from the time the claimant submits the written claim until the time the claim is denied, including any time utilized for the meet and confer conference.
- h. Submission of a claim, properly certified, with all required supporting documentation, and written rejection or denial of all or part of the claim by City, is a condition precedent to any action, proceeding, litigation, suit, general conditions claim, or demand for arbitration by Contractor.
- i. **PCC Section 9204 - Claims submitted between 01-01-17 and 01-01-2027.** Notwithstanding anything else to the contrary stated in the Contract Documents, all claims, regardless of dollar amount, submitted between January 1, 2017 and January 1, 2027 shall be governed by Public Contract Code Section 9204 and this sub-section (i). The following provisions and procedures shall apply:
 - 1) "Claim" shall have the meaning provided for in Public Contract Code Section 9204.
 - 2) Sub-sections (a) through (d) and (f) above shall be inapplicable.

- 3) Contractor shall submit each claim in writing and in compliance with sub-section (e) above. Contractor must include reasonable documentation to support each claim.
- 4) The City shall respond in writing within 45 days of receipt and shall identify what portions of the claim are disputed and undisputed. The City and Contractor may mutually agree to extend the 45 day response time.
- 5) If the City fails to respond to a claim or if Contractor disagrees with the City's response, Contractor may submit a written demand for an informal meet and confer conference with the City to settle the issues in dispute. The demand must be sent via registered or certified mail. Upon receipt, the City shall schedule the conference within 30 days.
- 6) Within 10 business days following the informal meet and confer conference, the City shall submit to Contractor a written statement describing any issues remaining in dispute. The issues remaining in dispute shall be submitted to non-binding mediation. If the City and Contractor mutually agree on a mediator, each party shall pay equal portions of all associated costs. If the City and Contractor cannot agree on a mediator, each party shall select a mediator (paying all costs associated with their selected mediator), and those mediators shall select a qualified neutral third party to mediate the disputed issues. The City and Contractor shall pay equal portions of all associated costs of such third party mediator.
- 7) For any issues that remain in dispute following mediation, sub-sections (g) and (h) above shall apply.
- 8) Any undisputed portions of a claim shall be paid within 60 days of the day on which they became undisputed.
- 9) Unless otherwise agreed by the City and Contractor, any mediation conducted hereunder shall excuse any further obligation under Public Contract Code Section 20104.4 to mediate after litigation has commenced.
- 10) This sub-section (i) shall be automatically extended if legislation is lawfully passed which extends the terms of Public Contract Code Section 9204 beyond January 1, 2027.

ARTICLE 53. CITY'S RIGHT TO TERMINATE CONTRACT

- a. **Termination for Cause:** The City may, without prejudice to any other right or remedy, serve written notice upon Contractor of its intention to terminate this Contract if the Contractor: (i) refuses or fails to prosecute The Work or any part thereof with such diligence as will ensure its completion within the time required; (ii) fails to complete The

Work within the required time; (iii) should file a bankruptcy petition or be adjudged a bankrupt; (iv) should make a general assignment for the benefit of its creditors; (v) should have a receiver appointed; (vi) should persistently or repeatedly refuse or fail to supply enough properly skilled workers or proper materials to complete the work; (vii) should fail to make prompt payment to subcontractors or for material or labor; (viii) persistently disregard laws, ordinances, other requirements or instructions of the City; or (ix) should violate any of the provisions of the Contract Documents.

The notice of intent to terminate shall contain the reasons for such intention to terminate. Unless within ten (10) Days after the service of such notice, such condition shall cease or satisfactory arrangements (acceptable to the City) for the required correction are made, this Contract shall be terminated. In such case, Contractor shall not be entitled to receive any further payment until the Project has been finished. The City may take over and complete The Work by any method it may deem appropriate. Contractor and its surety shall be liable to the City for any excess costs or other damages incurred by the City to complete the Project. If the City takes over The Work, the City may, without liability for so doing, take possession of and utilize in completing The Work such materials, appliances, plant, and other property belonging to the Contractor as may be on the Project site.

- b. **Termination For Convenience:** The City may terminate performance of The Work in whole or, in part, if the City determines that a termination is in the City's interest.

The Contractor shall terminate all or any part of The Work upon delivery to the Contractor of a Notice of Termination specifying that the termination is for the convenience of the City, the extent of termination, and the effective date of such termination.

After receipt of Notice of Termination, and except as directed by the City, the Contractor shall, regardless of any delay in determining or adjusting any amounts due under this Termination for Convenience clause, immediately proceed with the following obligations:

- 1) Stop Work as specified in the Notice.
- 2) Complete any Work specified in the Notice of Termination in a least cost/shortest time manner while still maintaining the quality called for under the Contract Documents.
- 3) Leave the property upon which the Contractor was working and upon which the facility (or facilities) forming the basis of the Contract Documents is situated in a safe and sanitary manner such that it does not pose any threat to the public health or safety.

- 4) Terminate all subcontracts to the extent that they relate to the portions of The Work terminated.
 - 5) Place no further subcontracts or orders, except as necessary to complete the remaining portion of The Work.
 - 6) Submit to the City, within ten (10) Days from the effective date of the Notice of Termination, all of the documentation called for by the Contract Documents to substantiate all costs incurred by the Contractor for labor, materials and equipment through the Effective Date of the Notice of Termination. Any documentation substantiating costs incurred by the Contractor solely as a result of the City's exercise of its right to terminate this Contract pursuant to this clause, which costs the Contractor is authorized under the Contract Documents to incur, shall: (i) be submitted to and received by the City no later than thirty (30) Days after the Effective Date of the Notice of Termination; (ii) describe the costs incurred with particularity; and (iii) be conspicuously identified as "Termination Costs Occasioned by the City's Termination for Convenience."
 - 7) These provisions are in addition to and not in limitation of any other rights or remedies available to the City.
- c. Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, the City may immediately order Contractor to cease Work on the Project until such safety or liability issues are addressed to the satisfaction of the City or the Contract is terminated.

ARTICLE 54. WARRANTY AND GUARANTEE

- a. Contractor warrants that all materials and equipment furnished under this Contract shall be new unless otherwise specified in the Contract Documents; and that all Work conforms to the Contract Document requirements and is free of any defect whether performed by the Contractor or any subcontractor or supplier.
- b. Unless otherwise stated, all warranty periods shall begin upon the filing of the Notice of Completion. Unless otherwise stated, the warranty period shall be for one year.
- c. The Contractor shall remedy at its expense any damage to City-owned or controlled real or personal property.
- d. Contractor shall furnish the City with all warranty and guarantee documents prior to final Acceptance of the Project by the City.

- e. The City shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. The Contractor shall within ten (10) Days after being notified commence and perform with due diligence all necessary Work. If the Contractor fails to promptly remedy any defect, or damage; the county shall have the right to replace, repair, or otherwise remedy the defect, or damage at the Contractor's expense.
- f. In the event of any emergency constituting an immediate hazard to health, safety, property, or licensees, when caused by Work of the Contractor not in accordance with the Contract requirements, the City may undertake at Contractor's expense, and without prior notice, all Work necessary to correct such condition.
- g. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for Work performed and Materials furnished under this Contract, the Contractor shall:
 - 1) Obtain for City all warranties that would be given in normal commercial practice;
 - 2) Require all warranties to be executed, in writing, for the benefit of the City; and
 - 3) Enforce all warranties for the benefit of the City, unless otherwise directed in writing by the City.

This Article shall not limit the City's rights under this Contract or with respect to latent defects, gross mistakes, or fraud. The City specifically reserves all rights related to defective work, including but not limited to the defect claims pursuant to California Code of Civil Procedure Section 337.15.

ARTICLE 55. DOCUMENT RETENTION & EXAMINATION

- a. In accordance with Government Code Section 8546.7, records of both the City and the Contractor shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment.
- b. Contractor shall make available to the City any of the Contractor's other documents related to the Project immediately upon request of the City.
- c. In addition to the State Auditor rights above, the City shall have the right to examine and audit all books, estimates, records, contracts, documents, bid documents, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to the City, for a period of four (4) years after final payment.

ARTICLE 56. SOILS INVESTIGATIONS

When a soils investigation report for the Project site is available, such report shall not be a part of the Contract Documents. Any information obtained from such report as to subsurface soil condition, or to elevations of existing grades or elevations of underlying rock, is approximate only and is not guaranteed. Contractor acknowledges that any soils investigation report (including any borings) was prepared for purposes of design only and Contractor is required to examine the site before submitting its bid and must make whatever tests it deems appropriate to determine the underground condition of the soil.

ARTICLE 57. SEPARATE CONTRACTS

- a. The City reserves the right to let other contracts in connection with this Work or on the Project site. Contractor shall permit other contractors reasonable access and storage of their materials and execution of their work and shall properly connect and coordinate its Work with theirs.
- b. To ensure proper execution of its subsequent Work, Contractor shall immediately inspect work already in place and shall at once report to the Engineer any problems with the work in place or discrepancies with the Contract Documents.
- c. Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by the City in prosecution of the Project to the end that Contractor may perform this Contract in the light of such other contracts, if any. Nothing herein contained shall be interpreted as granting to Contractor exclusive occupancy at site of the Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project. If simultaneous execution of any contract for the Project is likely to cause interference with performance of some other contract or contracts, the Engineer shall decide which Contractor shall cease Work temporarily and which contractor shall continue or whether work can be coordinated so that contractors may proceed simultaneously. The City shall not be responsible for any damages suffered or for extra costs incurred by Contractor resulting directly or indirectly from award, performance, or attempted performance of any other contract or contracts on the Project site.

ARTICLE 58. NOTICE AND SERVICE THEREOF

All notices shall be in writing and either served by personal delivery or mailed to the other party as designated in the Bid Forms. Written notice to the Contractor shall be addressed to Contractor's principal place of business unless Contractor designates another address in writing for service of notice. Notice to City shall be addressed to the City as designated in the Notice Inviting Bids unless City designates another address in writing for service of notice. Notice shall be effective upon receipt or five (5) Days after being sent by first class mail, whichever is earlier. Notice given by facsimile shall not be effective unless acknowledged in writing by the receiving party.

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GENERAL CONDITIONS

ARTICLE 59. NOTICE OF THIRD PARTY CLAIMS

Pursuant to Public Contract Code Section 9201, the City shall provide Contractor with timely notification of the receipt of any third-party claim relating to the Contract.

ARTICLE 60. STATE LICENSE BOARD NOTICE.

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

ARTICLE 61. INTEGRATION

- a. Oral Modifications Ineffective. No oral order, objection, direction, claim or notice by any party or person shall affect or modify any of the terms or obligations contained in the Contract Documents.
- b. Contract Documents Represent Entire Contract. The Contract Documents represent the entire agreement of the City and Contractor.

ARTICLE 62. ASSIGNMENT/CORONA UTILITY AUTHORITY

Contractor shall not assign, transfer, convey, sublet, or otherwise dispose of this Contract or any part thereof including any claims, without prior written consent of the City. Any assignment without the written consent of the City shall be void. Any assignment of money due or to become due under this Contract shall be subject to a prior lien for services rendered or Material supplied for performance of Work called for under the Contract Documents in favor of all persons, firms, or corporations rendering such services or supplying such Materials to the extent that claims are filed pursuant to the Civil Code, the Code of Civil Procedure or the Government Code.

Contractor understands that the City has entered into a Water Enterprise Management Agreement and a Wastewater Enterprise Management Agreement, both dated as of February 6, 2002, with the Corona Utility Authority ("CUA") for the maintenance, management and operation of those utility systems (collectively, the "CUA Management Agreements"). To the extent that this Contract is deemed to be a "material contract" under either of the CUA Management Agreements, the following provisions shall apply: (1) City enters into this Contract on behalf of the CUA and subject to the terms of the applicable CUA Management Agreement(s); and (2) Contractor has no right to terminate this Contract, either with or without cause, based upon the existence or non-existence of either or both of the CUA Management Agreements. Therefore, if an applicable CUA Management Agreement expires or terminates for any reason, Contractor

shall remain fully obligated to perform under this Contract on behalf of the CUA or another third party contracted by the CUA for the maintenance, management and operation of the applicable utility system.

ARTICLE 63. CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY

Should a change be contemplated in the name or nature of the Contractor's legal entity, the Contractor shall first notify the City in order that proper steps may be taken to have the change reflected on the Contract.

ARTICLE 64. ASSIGNMENT OF ANTITRUST ACTIONS

Pursuant to Section 7103.5 of the Public Contract Code, in entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor or subcontractor offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (chapter 2 (commencing with Section 16700) of part 2 of division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to this Contract or any subcontract. This assignment shall be made and become effective at the time the City makes final payment to the Contractor, without further acknowledgment by the parties.

ARTICLE 65. PROHIBITED INTERESTS

No City official or representative who is authorized in such capacity and on behalf of the City to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the project, shall be or become directly or indirectly interested financially in the Contract.

ARTICLE 66. LAWS AND REGULATIONS

- a. Contractor shall give all notices and comply with all federal, state and local laws, ordinances, rules and regulations bearing on conduct of work as indicated and specified by their terms. References to specific laws, rules or regulations in this Contract are for reference purposes only, and shall not limit or affect the applicability of provisions not specifically mentioned. If Contractor observes that drawings and specifications are at variance therewith, he shall promptly notify the Engineer in writing and any necessary changes shall be adjusted as provided for in this Contract for changes in work. If Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Engineer, he shall bear all costs arising therefrom.

- b. Contractor shall be responsible for familiarity with the Americans with Disabilities Act ("ADA") (42 U.S.C. § 12101 et seq.). The Work will be performed in compliance with ADA laws, rules and regulations. Contractor shall comply with the Historic Building Code, including, but not limited to, as it relates to the ADA, whenever applicable.
- c. Contractor acknowledges and understands that, pursuant to Public Contract Code Section 20676, sellers of "mined material" must be on an approved list of sellers published pursuant to Public Resources Code Section 2717(b) in order to supply mined material for this Contract.

ARTICLE 67. PATENT FEES OR ROYALTIES.

The Contractor shall include in its bid amount the patent fees or royalties on any patented article or process furnished or used in the Work. Contractor shall assume all liability and responsibility arising from the use of any patented, or allegedly patented, materials, equipment, devices or processes used in or incorporated with The Work, and shall defend, indemnify and hold harmless the City, its officials, officers, agents, employees and representatives from and against any and all liabilities, demands, claims, damages, losses, costs and expenses, of whatsoever kind or nature, arising from such use.

ARTICLE 68. OWNERSHIP OF DRAWING

All Contract Documents furnished by the City are City property. They are not to be used by Contractor or any subcontractor on other work nor shall Contractor claim any right to such documents. With exception of one complete set of Contract Documents, all documents shall be returned to the City on request at completion of The Work.

ARTICLE 69. NOTICE OF TAXABLE POSSESSORY INTEREST

In accordance with Revenue and Taxation Code Section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Contractor will be responsible.

ARTICLE 70. PERSONAL PROTECTION EQUIPMENT

The City requires personal protective equipment, including but not limited to hard hats, yellow or orange reflective safety vests, eye protection, long trousers and closed-toe shoes, be worn at all times by the Contractor, all subcontractors, sub-subcontractors, vendors or suppliers for the work performed at the jobsite, and Contractor shall be responsible for actively enforcing the requirement for the protection of all its workers. This requirement shall be in addition to any current safety practices as required by federal, state and local laws, ordinances, rules and regulations.

SPECIAL CONDITIONS

1. Design Consultant's Technical Documents:

The Design Consultant's Technical Documents entitled Section 00 01 10 through Section 40 90 10 are hereby incorporated into the Contract Documents as a "Reference Document" as described in Article 2(b) of the General Conditions. As stated in the General Conditions, all Contract Documents are intended to be complementary and fully cooperative, however, in the event of any conflict, the documents shall be interpreted in the order of precedence set forth in Article 2(b).

2. Contractor shall comply with the City's franchise agreement with Waste Management Company of the Inland Empire for the removal of all construction waste and rubbish generated by the Project.

3. The City has made the following findings as they relate to need for the use of specific material(s), product(s), thing(s), and/or service(s) that must be utilized for the Project:

Resolution No. 2022-046, PCC 3400 Exclusive Standard Specifications for Potable Water, Water Reclamation and Reclaimed Water Facilities, attached hereto and incorporated herein as Appendix A.

TECHNICAL SPECIFICATIONS

**"THE FOLLOWING TECHNICAL SPECIFICATIONS ARE INCORPORATED
HEREIN BY REFERENCE AS IF SET FORTH IN THEIR ENTIRETY:**

1. City of Corona Temescal Desalter Facility, Desalter Surge Anticipator Project dated November 2023 Prepared by Dudek.”

PLANS AND DRAWINGS

"THE FOLLOWING PLANS AND DRAWINGS ARE INCORPORATED HEREIN BY REFERENCE AS IF SET FORTH IN THEIR ENTIRETY:

- 2. Desalter Surge Anticipator Improvements, Sheets G-1 through I-2 (19 sheets), prepared by Dudek."**

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CITY OF CORONA
FINANCE DEPARTMENT – PURCHASING DIVISION

May 30, 2024

SUBJECT: Notice Inviting Bids, NIB 24-080CA

ADDENDUM 3
DESALTER SURGE ANTICIPATOR IMPROVEMENTS

This Addendum No. 3 to the subject Notice Inviting Bids (NIB) replaces one specification section and extends the bid due date and time.

All provisions of and attachments to this Addendum No. 3 are hereby incorporated by reference into the subject NIB. Contractors shall account for all provisions pursuant to this Addendum No. 3 in submitting their bids. Each contractor shall acknowledge receipt of this Addendum in their bid.

1. Bid & Contract Documents:

Notice Inviting Bids, Notice Inviting Bids, page 1, paragraph 1, as amended by Addendum 2, is hereby deleted in its entirety and replaced with the following:

The City of Corona Utilities Department (“City”) will receive sealed bids for the **Desalter Surge Anticipator Improvements Project, NIB 24-080CA** through the City’s PlanetBids electronic bidding system no later than **2:00 p.m., June 5, 2024**. Bids submitted after this time will not be accepted by the electronic bidding system. At said time it will be bidder’s responsibility to log into the PlanetBids system for the City of Corona to view the apparent low bidder for the project. Bids shall be valid for 90 calendar days after the bid opening date. Bids must be submitted on the City’s Bid Forms.

2. Technical Specifications:

Specification Section 01 22 00 Unit Prices is hereby deleted in its entirety and replaced with Revised Specification Section 01 22 00 Unit Prices attached hereto.

*Carol Appelt*_____

Carol Appelt
Lead Purchasing Specialist
City of Corona
Finance Department | Purchasing Division
400 South Vicentia Ave., Suite 320
Corona, CA 92882
Office: 951-279-3620 • Email: carolyn.appelt@coronaca.gov

REVISED
SECTION 01 22 00
UNIT PRICES

PART 1 - GENERAL

1.01 Description

- A. Measurement and payment for Bid Items listed in proposal shall be based upon use of lump sum or unit price method.
1. Extra Work or changes in Work shall be accomplished as provided in Special Provisions.
- B. Payment for Work in each Section of these Contract Documents shall be included as part of lump sum or unit price bid amount for which such Work is appurtenant.
1. No additional payment will be made for Work described in any Section for which no express bid item is provided.

1.02 Related Work

- A. Bid Proposal Form
B. General Conditions
C. Section 01 10 00: Summary of Work and Sequence of Construction
D. Section 01 29 73: Schedule of Values
E. Section 31 05 50: Protecting Existing Utilities

1.03 Submittals

- A. Furnish the following submittals.

SUBMITTAL	DESCRIPTION	
MONTHLY INVOICING		
Partial Payment Requests	Review and return payment request template prepared by City. Review and return monthly partial payment requests prepared by City's Representative.	.
Monthly Progress Estimate Backup Information	Submit upon request supporting documents required for preparation of monthly progress estimates, including, but not limited to: 1. Invoices and receipts from equipment and materials suppliers 2. Invoices from subcontractors 3. Updated schedules 4. Updated as-built drawings 5. Labor compliance records	
CLOSEOUT SUBMITTALS		
Final Payment Request	Submit typewritten Payment Requests in 8½"x11" paper AIA format accepted by City	
	Submit upon request supporting documents required for preparation of final payment, including, but not limited to: 1. Invoices and receipts for equipment and materials 2. Updated as-built drawings 3. Labor compliance records 4. Grant or loan funding required documents 5. Lien waivers from all preliminary liens received by City 6. Release of Stop Notice(s)	

PART 2 - MATERIALS

2.01 General (Measurement)

- A. Measurement for unit price quantities will be based upon appropriate Bid Item in proposal.

1. Actual quantity of measurement shall be as constructed by Contractor in place in conformance with Plans and Specifications.

2.02 Linear Measurements

- A. Pressure pipe and other horizontal Work will be measured in horizontal plane along centerline of Work, through tees, bends, fittings and valves, within limits of Work shown in Contract Documents.

2.03 Area Measurements

- A. Measurement for Bid Items involving area units will be based on horizontal-plane or vertical-plane surface areas measured in units shown in bid schedule.
- B. In event of dispute, areas will be computed based on theoretical areas obtained from digital models, Autocad or Cogo prepared using best field surveys and record drawings available.
- C. For convenience, City may use "approximate areas" for payment based on 1 of the following procedures:
 1. Planimeter measurements using record drawings.
 2. Accepted mathematical formulas for circle or polygon areas.
- D. Measurements of paving or flatwork areas will measure area enclosed by exterior perimeter of measured surface.
 1. Areas of pads, drainage features, pipe penetrations, and bollards will be included within area measured for payment when surrounded by measured surface on ≥ 3 sides or $\geq 270^\circ$ of arc measured from centers of circles.
- E. Measurements of wall, floor, and roof areas will measure area enclosed by exterior perimeter of measured surface.
 1. Areas of pipe penetrations will be included within area being measured for payment when surrounded by measured surface on ≥ 3 sides or $\geq 270^\circ$ of arc measured from centers of circles.

2.04 Volume Measurements

- A. Measurement for Bid Items involving volume units will be based upon volume measured in units shown in bid schedule.
 1. Gallons shall be US gallons.
- B. In event of dispute, payment volumes will be computed based on theoretical volumes obtained from digital models prepared using best field surveys and record drawings available.
- C. For convenience, City may use "approximate volumes" for payment based on 1 of the following procedures:
 1. Average end area volumes computed as product of average area of vertical or horizontal sections and intervening horizontal or vertical dimension.
 2. Accepted mathematical formulas for cylinder, cone, sphere, polyhedron or prism volumes.
 3. Analog volumes based on measured weights of delivered materials divided by densities shown in submittals or, in absence of submittal densities, values commonly accepted.
- D. In absence of City-prepared survey and digital terrain model, Contractor may, at their expense, retain licensed surveyor to prepare surveys and sealed calculations of theoretical volumes obtained from digital terrain models.

1. In such case, Contractor's surveyor's computed volumes shall govern over "approximate volumes" but shall not supersede similar surveys and digital terrain models prepared at City's expense by licensed surveyor.

2.05 [Not Used]Unit Measurements

- A. Measurement for Bid Items involving units of item will be based upon quantity of units counted as indicated in Bid Item.

2.06 Payment of Unit Price Items

- A. Payment for unit price Bid Items will be based upon amount shown in bid schedule multiplied by total installed quantity measurement of item.

2.07 Lump Sum Measurement

- A. Measurement for lump sum Bid Items will be considered as complete project or portion of project constituting a unit.
 1. Items to be included in lump sum Bid Items shall be as specified in proposal Bid Item and/or Standard or Special Provisions and as indicated on accepted Schedule of Values.

2.08 Payment Procedures

- A. City's Representative will prepare monthly progress estimate and submit progress estimate on 15th day of each month.
- B. Payment will be made within 30 days after receipt of satisfactory progress estimates.
- C. Payment will be based on amounts shown in bid schedule with percent completion based on:
 1. Measured quantities of Work installed for unit price items.
 2. Percent completed computed based on City-accepted schedule of values for lump sum items.
- D. Schedule of Completed Values shall be tabular listing of Work Items from City-accepted Schedule of Values.
 1. Schedule of Completed Values shall show for each Item of Work the Item Number; Description; Item Value; % and Value Complete for previous period; % and Value complete for current period; Value of Stored Materials (if any); and Total Billing Value.
 2. List each issued Field Order and Change Order on Schedule of Completed Values as a separate Item.
 3. Attach Schedule(s) of Completed Values to each Invoice presented for payment.
- E. City will prepare pay requests.

or

- F. Present pay request in tabular format showing:

LUMP SUM BID ITEMS						
ITEM		ORIGINAL CONTRACT AMOUNT	TOTAL PREVIOUS BILLING	CURRENT BILLING	TOTAL BILLED TO DATE	% COMPLETE
Bid Item No.	Work Item Description	Lump Sum Bid Amount	Value	Value	Value	%
UNIT PRICE BID ITEMS						
ITEM		ORIGINAL CONTRACT AMOUNT	TOTAL PREVIOUS BILLING	CURRENT BILLING	TOTAL BILLED TO DATE	% COMPLETE

Bid Item No.	Work Item Description	Quantity	Unit	Unit Price	Bid Amount	Quantity	Value	Quantity	Value	Quantity	Value	%
TOTAL CONTRACT												
		ORIGINAL CONTRACT AMOUNT				TOTAL PREVIOUS BILLING		CURRENT BILLING		TOTAL BILLED TO DATE		% COMPLETE
		Total Contract Amount				Value		Value		Value		%

- G. Payment shall be full compensation for furnishing supervision, planning, design, design engineering fees, labor and services, operations, transportation, materials, equipment, tools, supplies, incidentals and appurtenances required for construction of Work item, complete, functional, tested, and in place in accordance with Contract Documents, including costs of permits and cost of compliance with regulations of public agencies having jurisdiction.
- H. No payment will be made for materials wasted or disposed of in manner not called for under Contract.
1. This includes rejected material not unloaded from vehicles, material rejected after placement, and material placed outside Work limits shown.
 2. No compensation will be allowed for disposing of rejected or excess material.
- I. Whenever Work is performed by City at Contractor's request, cost thereof will be charged against Contractor, and may be deducted from amounts due or becoming due from City.
- J. If immediate action is required to prevent injury, death, or property damage, and precautions which are Contractor's responsibility have not been taken and are not reasonably expected to be taken, City may, after reasonable attempt to notify Contractor, cause such precautions to be taken and will backcharge cost thereof against Contractor, or may deduct such cost from amounts due or becoming due from City.
1. City action or inaction under such circumstances shall not be construed as relieving Contractor or their Surety from liability.
- K. Payment shall not relieve Contractor from their obligations under Contract, nor shall such payment be construed as acceptance of Work.
1. Payment shall not be construed as transfer of ownership of equipment or material to City.
 2. Responsibility of ownership shall remain with Contractor who shall be obligated to store fully or partially completed Work for which payment has been made, or replace materials or equipment required to be provided under Contract which may be damaged, lost, stolen or degraded prior to acceptance of Work.
- L. Warrantee or guarantee periods shall not be affected by time of payment.
- M. If, within time fixed by law, a properly executed notice to stop payment is filed with City, due to Contractor's failure to pay for labor or materials used in Work, money due for such labor or materials will be withheld from payment to Contractor in accordance with applicable laws.
- N. Partial payments made after Contract completion date will reflect amounts withheld for Liquidated Damages.
1. Such partial payments made to Contractor, or their Sureties, will not constitute waiver of City's Liquidated Damages.
- O. Partial payments may be made for materials and equipment delivered to jobsite or City's yard or warehouse, inventoried upon delivery, suitably and safely stored within secure storage area at Work site.

1. Requests for payment of materials and equipment delivered to jobsite or City's yard or warehouse shall be accompanied by copies of invoices, bills of lading, delivery receipts, or other suitable documentation showing proof of delivery and cost.
 2. If requested by City's Representative, provide additional data as may be reasonably required to support submitted Invoice.
- P. Unless City has agreed in writing to partial payment for material and equipment, Contractor shall pay storage, financing, and other costs associated with ordering, receiving, and storing materials and equipment until materials and equipment can be incorporated into Work.
- Q. If Work on Saturdays, Sundays, legal holidays, or outside of specified work hours is requested by Contractor and approved by City's Representative, Contractor shall pay to City additional costs borne by City beyond those costs typically required for Work within City-accepted work schedule.
1. Such costs may include, but not be limited to overtime and additional inspection costs.
 2. Exceptions to this requirement include special work schedules described in Contract Documents at time of bidding, negotiated change orders, work schedules required by permits or regulatory agencies, and schedule changes for City's convenience.

2.09 Payment for Installing Pre-Purchased Materials and Equipment

- A. City has selectively pre-purchased specific critical and long lead time items for use on this Project.
1. Payment for installing City-furnished materials and equipment will be based upon amounts shown in Bid Schedule and shall be full compensation for supervision, planning, design, design engineering fees, labor and services, operations, transportation, tools, supplies, incidentals and appurtenances required for construction of unit of Work complete in place in accordance with Contract Documents, including costs of permits and cost of compliance with regulations of public agencies having jurisdiction.
 2. Include Contractor's cost for coordinating delivery, storage, and installation in appropriate Bid Item or items within Bid Schedule.

2.10 Payment for Pre-Selected Materials and Equipment

- A. City has selectively pre-negotiated pricing for specific critical and long lead time items pre-selected for use on this Project.
1. Payment for pre-selected, pre-negotiated materials and equipment include will be made at stipulated allowance price shown in Bid Schedule for said materials and equipment and shall be full compensation for furnishing pre-negotiated equipment to jobsite.
 2. Include Contractor's cost for coordinating procurement, delivery, storage, and installation in appropriate Bid Item or items within Bid Schedule.

2.11 Work Not Listed in Bid Schedule

- A. Include costs for related Work and appurtenances required and/or implied by Permits and Contract Documents but not listed as a separate Bid Item under appropriate Bid Item or items within Bid Schedule.

2.12 Protecting Existing Utilities

- A. No Bid Item is provided for Work described in Section 31 05 50 protecting existing utilities.
- B. Payment for locating, potholing, exposing, and protecting existing utilities will be included in price bid for Work items for which such Work is appurtenant.

- C. Payment for abandoning or removing existing utilities will be included in price bid for Work items for which such Work is appurtenant.
- D. Utility Protection or Relocation by Contractor as Shown in Contract Documents: When work on a utility is shown within Contract Documents to be done by Contractor, but is not included as a separate bid item, Contractor shall make arrangements and coordinate with utility owner regarding schedule for performance of Work.
1. Include costs for such Work in unit prices or lump sum amounts bid for various Contract items.
 2. Submit proposed method of relocation or protecting utility for review.
 3. Review by City will not relieve Contractor of any responsibility.
- E. Utility Relocation by Contractor for Contractor's Convenience: Temporary relocation or alteration of any utility, desired by Contractor solely for their convenience in performance of Work, to a position or condition other than that provided for on Contract Documents shall be Contractor's own responsibility.
1. Make arrangements with utility or property owners regarding such Work.
 2. Repair, replacement or relocation of buried utilities shall be completed at Contractor's expense by either Utility's forces, or by contractor accepted by Utility in writing and properly licensed to perform Work.
 3. Costs of such Work for Contractor's convenience shall be absorbed in unit prices or lump sum amounts bid for various Contract items at no additional cost to City.
- F. Utility Relocations by City: When Contract Documents indicate a utility is to be relocated, altered, or reconstructed by forces other than Contractor, City will conduct negotiations in respect to such work and work will be done at no cost to Contractor.
1. No additional compensation will be given for delays or inconvenience by others to finish their Work on schedule due to unforeseen difficulties.
- G. Unknown Utility Installation by Others During Contract Work: If utility is disclosed or installed subsequent to award of Contract, and utility is not shown on Contract Documents, with reasonable accuracy, and said utility is found to occupy space required to be occupied by Work, City's Representative will determine whether utility requires location, relocation, removal, repair of damages, alteration, support or protection.
1. City will determine method and manner of accomplishing such Work and may order Contractor to do so pursuant to Change Order issued by City.
 2. Perform Work in accordance with Contract Documents provided or accepted by City and in accordance with the following:
 - a. Where undisclosed utilities are discovered and located by Contractor when performing this Contract, immediately notify City in writing.
 - b. When said utility is found to occupy space required to be occupied by part of permanent Works to be constructed under Contract or parallel to permanent works and within vertical planes on each side at distance away equal to maximum allowable trench width measured in plane 12" above top of pipe, exclusive of branches or other facilities, as specified in Contract Documents, or to be within specified excavation pay lines (when such are specified in Contract Documents); City shall arrange for relocation or alteration of said utility or require Contractor to do same.
 - c. Utilities found to cross excavation, but not intercepting permanent Work to be constructed or interfering with construction shall be maintained in place at Contractor's expense.
 - d. Utilities which interfere with construction technique in use shall be protected or

relocated.

- e. When said utility is more or less parallel with, and any portion of it does not lie within vertical planes specified herein above, or does not lie within excavation pay lines (when such are specified or shown on Contract Documents), advise City thereof, and in cooperation with utility owner, provide and place necessary support for proper protection to guarantee continuous and safe operation of utility.
- f. Maintain continuous sanitary sewer service.
- g. Should existing sanitary sewer or maintenance hole extend within proposed excavation, submit method of construction or support for acceptance by City, and assume all responsibilities therefor.
- h. Costs for such Work shall be borne by Contractor.
- i. If Work is done by others, provide time and working space for protection and relocation as required.
- j. City will compensate Contractor for their direct costs of locating, relocating, removal, repair, support or protecting undisclosed utilities, together with cost of equipment used for Work necessarily idled during such Work.
- k. Contractor will be granted extension of time for completion of Contract equal to time determined by City, to be reasonably necessary to perform the Extra Work, and City will not assess liquidated damages against Contractor for delay in completing Work when such delay was caused by City's failure of City to provide for removal or relocation of such utility facilities.
- l. Contractor will not be entitled to extra compensation or extension of time when Extra Work is required to repair damage to undisclosed utilities caused by failure of Contractor to exercise reasonable care.
- m. Contractor will not be entitled to compensation for indirect or consequential costs or damages incurred as a result of Extra Work required.
- n. When directed or accepted by City, changes in line or grade of structure being built may be made to avoid utilities.
- o. Additional costs because of such changes will be paid for by Change Order as Extra Work.

2.13 Payment for Testing

- A. Party responsible for payment for testing is identified in individual sections of Contract Documents under tests required.
 - 1. Where Specifications are silent regarding responsible party paying for tests, costs of first tests will be paid by City.
- B. If testing or inspection indicates failure of material or procedure to meet Contract Document requirements, City will back-charge Contractor for retesting and re-inspection costs incurred by testing or inspection agency of City's choice.
 - 1. Such charges will be deducted from progress payments due Contractor.
- C. Additional tests and inspections not specified herein but requested by City will be paid for by City, unless result of such tests and inspections are found to not comply with Contract Documents, in which case City will pay costs for initial testing as well as retesting and re-inspection and back-charge Contractor for retesting and re-inspection.
- D. Costs for additional tests or inspections required because of change in materials being provided or change of source or supply shall be paid by Contractor direct to testing laboratory.

- E. Cost of testing which is required solely for convenience of Contractor in his scheduling and performance of Work shall be borne by Contractor.
- F. Contractor shall pay costs for correcting deficiencies.

2.14 Changes in Quantities Initiated by City

- A. City may change Contract Documents or character and quantity of Work provided total arithmetic dollar value of all changes, both additive and deductive, $\leq 25\%$ of Contract Price.
 - 1. Changes in allowance Bid Items with stipulated prices will not be considered to contribute toward this total.
- B. Should it become necessary to exceed this limitation, change shall be documented by written Supplemental Agreement between Contractor and City unless both parties agree to proceed under Change Order.
- C. Changes ordered in Work items which do not substantially change character of Work from that shown in Contract Documents, will be accompanied by proportional adjustment in payment to reflect quantity changes using unit prices bid, provided Bid quantity does not change by $>25\%$.
- D. Where Bid quantities under a Bid Item are limited to 2 or 3 integral units (eg. 2 valves) the 25% figure above shall be revised upward (to 50% or 34% respectively) to permit addition or deletion 1 integral unit without changing Bid price.
- E. Payment for quantities $>125\%$ of quantities (or appropriate percentage for 2- or 3-unit Bid Items) will be made at mutually agreed rate lower than Bid amount since Contractor's fixed costs shall be deemed to have been recovered through payment for Bid quantity at Contract unit price.
- F. Payment for quantities $<75\%$ (or appropriate percentage for 2- or 3-unit Bid Items) will only be adjusted by mutual agreement if Contractor requests so in writing.
 - 1. In no case will payment be less than Contractor is entitled to under original Bid prices nor more than payment due for 75% (or appropriate percentage for 2- or 3-unit Bid Items) of Bid quantity at Contract Unit Price.
- G. If mutual agreement cannot be reached, City may direct Contractor to proceed on basis of Extra Work as covered in General Provisions.
- H. Should a Bid Item be eliminated in its entirety, payment will be made to Contractor for actual out-of-pocket costs incurred in connection with eliminated item prior to written notification from City of deletion of Bid Item.
 - 1. Where applicable, Contractor will also be reimbursed for out-of-pocket shipping costs and Manufacturer's restocking fees.
- I. If materials have been ordered prior to date of written notification of deletion of Bid Item and order cannot be cancelled, Contractor will be paid for actual cost of ordered item and ordered material shall become City's property.
- J. In no case shall expenses such as bonding costs expressly covered under other Bid Items be double-charged to City.

2.15 Reduction in Payment for Deficient Concrete Work

- A. Payment for concrete failing to meet compressive strength requirements specified, but accepted at City's discretion, shall be reduced as follows.
- B. If additional test cylinders are available, Contractor may furnish cylinders to City up to 42 days after placement to allow concrete to obtain additional strength which will be credited as 28-day compressive strength for payment purposes.

- C. City may at their sole discretion accept other standard test methods proposed by Contractor to verify concrete strength.
- D. If tests verify compressive strength exceeds specified 28-day compressive strength after 42 days, no penalty will be deducted.
 - 1. If compressive strength $\geq 95\%$ of specified strength but $< 100\%$ of specified strength, \$10 per cubic yard of concrete will be deducted.
 - 2. If compressive strength $\geq 85\%$ of specified strength, but $< 95\%$ of specified strength, \$15 per cubic yard of concrete will be deducted.
 - 3. If compressive strength $< 85\%$ of specified strength, remove concrete and replace at no expense to City.

2.16 Reduction in Payment for Deficient Water Pipelines

- A. Payment for water or recycled water pipelines failing to meet pressure test requirements, but accepted at City's discretion, shall be reduced by amount equal to City's current wholesale cost of water times excess leakage per hour at test pressure times 240,000 hours.

PART 3 - EXECUTION

3.01 Scope

- A. This section defines Bid Items listed in Bid schedule and describes measurement and payment provisions for each item.

3.02 Specification Sections with No Bid Item

- A. Where specification sections are included but no pay item(s) are expressly set forth for Work within those sections, include costs of Work described within those sections under bid items for Work for which the Work within those specification sections is appurtenant.
- B. Payment for obtaining and complying with permits during construction, including NPDES permits, excavation permits, disposal permits, licenses, inspection fees, and Federal, State and local taxes will be included in prices bid for Work for which such costs are appurtenant.
- C. Payment for shoring and bracing will be included in price bid in bid item for shoring and bracing.
- D. Payment for confined space entry procedures and safety provisions shall be included in lump-sum bid item for Confined Space Entry and other safety requirements.
- E. If environmental procedures require Contractor to stop Work for > 8 hours that were scheduled for Work, Contractor will be reimbursed under Change Order for standby or remobilization costs.
- F. Include costs of temporary facilities and controls under Bid Items for Work for which temporary facilities and controls is required.
- G. Payment for water furnished by Contractor for construction use will be included in price bid for items to which it is appurtenant.
 - 1. Payment under these items will include full compensation for furnishing labor, products, tools and equipment and doing work necessary to develop sufficient water supply and furnishing necessary equipment for applying water as specified.
- H. Payment for sanitary facilities will be included in price bid for "Mobilization/Demobilization" / major Work items for which mobilization and demobilization are required.

- I. Payment for power furnished by Contractor for construction use will be included in price bid for items to which it is appurtenant.
 - 1. Payment under these items will include full compensation for furnishing labor, products, tools, and equipment and doing work necessary to obtain and distribute power for construction purposes.
- J. Payment for other temporary utilities furnished by Contractor for construction use will be included in price bid for items to which it is appurtenant.
 - 1. Payment under these items will include full compensation for furnishing labor, products, tools, and equipment and doing work necessary to obtain and distribute power for construction purposes.
- K. Payment for providing construction aids to be furnished by Contractor in support of construction activities will be included in price bid for items to which it is appurtenant.
 - 1. Payment under these items will include full compensation for furnishing labor, products, tools, and equipment and doing work necessary to obtain, distribute, and use temporary utilities for construction purposes.
- L. Payment for dust control, including dust palliatives and water supply and application will be included in price bid for Work items for which dust control during construction is required.
- M. Payment for costs arising from fire or prevention of fire will be included in price bid for items of work for which fire protection during construction is needed.
- N. Payment for noise control facilities will be included in price bid for items of Work where noise control facilities are required during construction.
- O. Payment for providing site security will be included in price bid for items to which it is appurtenant.
 - 1. Payment under these items will include full compensation for furnishing labor, products, tools, and equipment and doing work necessary to comply with site security requirements.

3.03 Bid Item 1 – Section 01 71 13 Mobilization/Demobilization

- A. Amount bid for Mobilization/Demobilization shall not exceed 8.0% of Contractor's Bid total.
 - 1. Amounts bid in excess of stipulated 8.0% cap will not be paid until project completion.
- B. Work to be paid for under mobilization shall include:
 - 1. Providing bonds and insurance.
 - 2. Arranging for and establishing storage yard and staging area.
 - 3. Possessing OSHA required notices and establishing safety programs.
 - 4. Obtaining required permits.
 - 5. Printing requisite number of sets of Contract Documents using files available on Planet Bids.
 - 6. Submitting initial submittals and project schedule.
 - 7. Verifying field conditions and electrical requirements
 - 8. Locating existing utilities.
 - 9. Conforming with Mitigated Negative Declaration requirements for which bid items are not expressly provided.
 - 10. Providing preconstruction photos.
 - 11. Performing required testing.

12. Moving operations onto site.
 13. Removing and reinstalling existing site facilities as required.
 14. Providing temporary facilities.
 15. Providing site maintenance and cleanup.
 16. Conforming to General Provisions and Special and Supplementary Conditions.
- C. Work to be paid for under demobilization shall include:
1. Regrading ground surfaces to restore preconstruction grades.
 2. Reconstructing berms, fences, walls, structures and improvements.
 3. Repairing damage to pavement, flatwork, landscaping and irrigation.
 4. Removing splatter, grease, stains, fingerprints, dust, labels and other laitance from finished Work.
 5. Repairing improvements damaged by Contractor's operations.
 6. Cleaning slabs, paving and ground surfaces.
 7. Restoring damaged finishes and nameplates.
 8. Removing temporary facilities, utilities, and structures.
 9. Legally disposing of waste.
- D. Work to be paid for under this item shall also include payment for demobilization, removal of temporary facilities, cleanup of construction site, providing record drawings, well completion report, operation and maintenance manuals, and warranties, complete in place.
- E. Payment for verification of field dimensions and utility locations will be included in price bid for items of Work which may require relocation or refitting if field dimensions differ from those shown on plans.
- F. Payment for Bid Item 1 Mobilization and Demobilization shall be made according to the following schedule upon acceptance from City:
1. Upon completion of mobilization, 50% of amount bid for this item (or 50% of stipulated 8.0% cap, whichever is less, will be made to Contractor with first progress payment.
 2. Once total amount of progress payments earned to date exceeds 50% of original contract amount, payment to 75% of amount bid for this item (or 75% of stipulated 8.0% cap, whichever is less, will be paid to Contractor as part of next monthly partial payment estimate of total amount earned to date.
 3. Remainder will be paid as part of final contract payment upon project completion.

3.04 Bid Item 02 – Section 01 74 00, 01 75 00, 01 77 00 – Startup, Testing, Disinfection, Cleanup and Commissioning

- A. Payment for this bid item will be made at the contact lump sum price, complete, in accordance with the Contract Documents, and as directed by the City.
- B. No measurement will be made for this lump sum Bid Item.
- C. Bid item shall include full compensation for furnishing and mobilizing all necessary labor, equipment, materials, tools and incidentals, and performing all the work involved, including testing, startup and disinfection of new mechanical piping and equipment, cleanup of the site and commissioning of the new construction.

3.05 Bid Item 03 – Section 01 73 00, 02 41 14, 31 23 00 – Trenching, Backfill, Compaction and Pavement Restoration

- A. Work shall be paid by the cubic yard for this lump sum Bid Item.

- B. Bid item shall include furnishing and mobilizing all necessary labor, equipment, and materials necessary for performing all work involved with trenching, shoring, backfill and compaction for the new discharge piping per plans.
- C. Any additional refill material shall be quantified by the Engineer.

3.06 Bid Item 04 – Section 03 15 00, 03 36 00 – Structural Concrete Demolition and Repair

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include concrete coring and repair, installing concrete dispersion pad and thrust block and installing epoxy anchor blocks.

3.07 Bid Item 05 – Section 33 11 15, 33 05 38 – Mechanical Stainless-Steel Pipe, Fittings and Supports

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include new stainless-steel piping of size, class and type shown on plans, control of surface waters, piping, fittings, spools, joints, couplings, dismantling joints, welds, bolts, flanges, gaskets, hangers, supports, brackets, saddles, identification labels and signage, incidental valves and all other materials/equipment required to furnish the surge relief piping.

3.08 Bid Item 06 – Section 33 12 97 – Rupture Disc Assemblies

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include all necessary labor, equipment and materials necessary to assemble and install the rupture disc assemblies in locations outlined by the plans including, rupture discs, rupture disc holders, and burst disc indicators.

3.09 Bid Item 07 – Section 33 12 14, 33 12 46 – 12” Butterfly Valves and Electric Actuator Assemblies (MOV) for Surge Relief Discharge Assembly

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include all necessary labor, equipment, and materials necessary to assemble and install the Electric Actuator Assemblies (MOV) and their accompanying 12” Butterfly Valves in locations outlined by the plans.

3.10 Bid Item 08 – Section 33 12 24, 33 12 99 – 4” Butterfly Valves and Fail-Safe Actuator Assemblies for Permeate Dump Assemblies

- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include all necessary labor, equipment and materials necessary to assemble and install the Fail-Safe Actuators and their accompanying 4” Butterfly Valves in locations outlined by the plans. Fail-Safe Actuator shall be RCS, Model SURE25 or approved equal.

3.11 Bid Item 09 – Section 40 67 16, 40 90 10 – NEMA Electrical Control Panels and Boxes

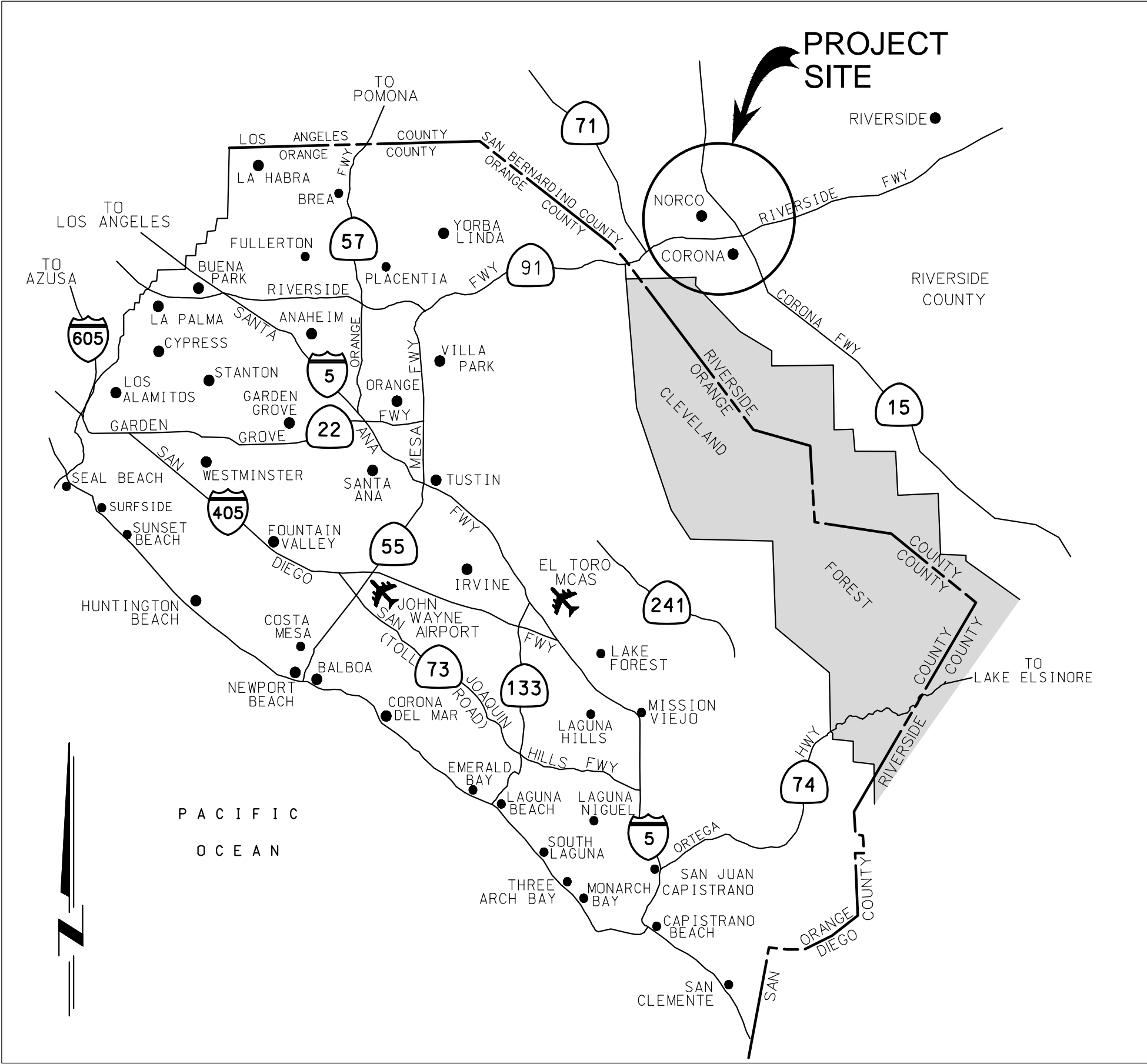
- A. No measurement will be made for this lump sum Bid Item.
- B. Work to be paid for under this item shall include the delivery, installation and testing of NEMA Electrical Control Panels and Boxes (including alarm panels and MOV panels) as shown on Contract Drawings, installation of new City furnished SCADA panels and associated wiring, along with any other work associated with connecting these panels and boxes to their respective equipment as indicated on the Contract Drawings to provide a fully operational system.

3.12 Bid Item 10 – Section 26 05 10, 26 27 26 – Misc. Electrical

- A. No measurement will be made for this lump sum Bid Item.
- B. Payment for this Bid Item will be made at the lump sum price, complete, in accordance with the Contract Documents, and as directed by the District.
- C. Bid Item shall include, but not limited to, all miscellaneous electrical work including new conduit, wiring, SCADA communication/signal equipment and all other electrical work as shown on the Contract Documents. This bid item shall also include the furnishing of all delivery, installation and testing of the equipment required and all other work necessary to complete the work described in the Contract Documents.

END OF SECTION

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VICINITY MAP
N.T.S.

THE CITY OF
CORONA, CALIFORNIA
UTILITIES DEPARTMENT
**DESALTER SURGE
ANTICIPATOR IMPROVEMENTS**

CIP NUMBER : ***77020572***

NOVEMBER 2023



CITY COUNCIL

TONY DADDARIO, MAYOR

TOM RICHINS, VICE MAYOR

JACQUE CASILLAS

WES SPEAKE

JIM STEINER

CITY MANAGER

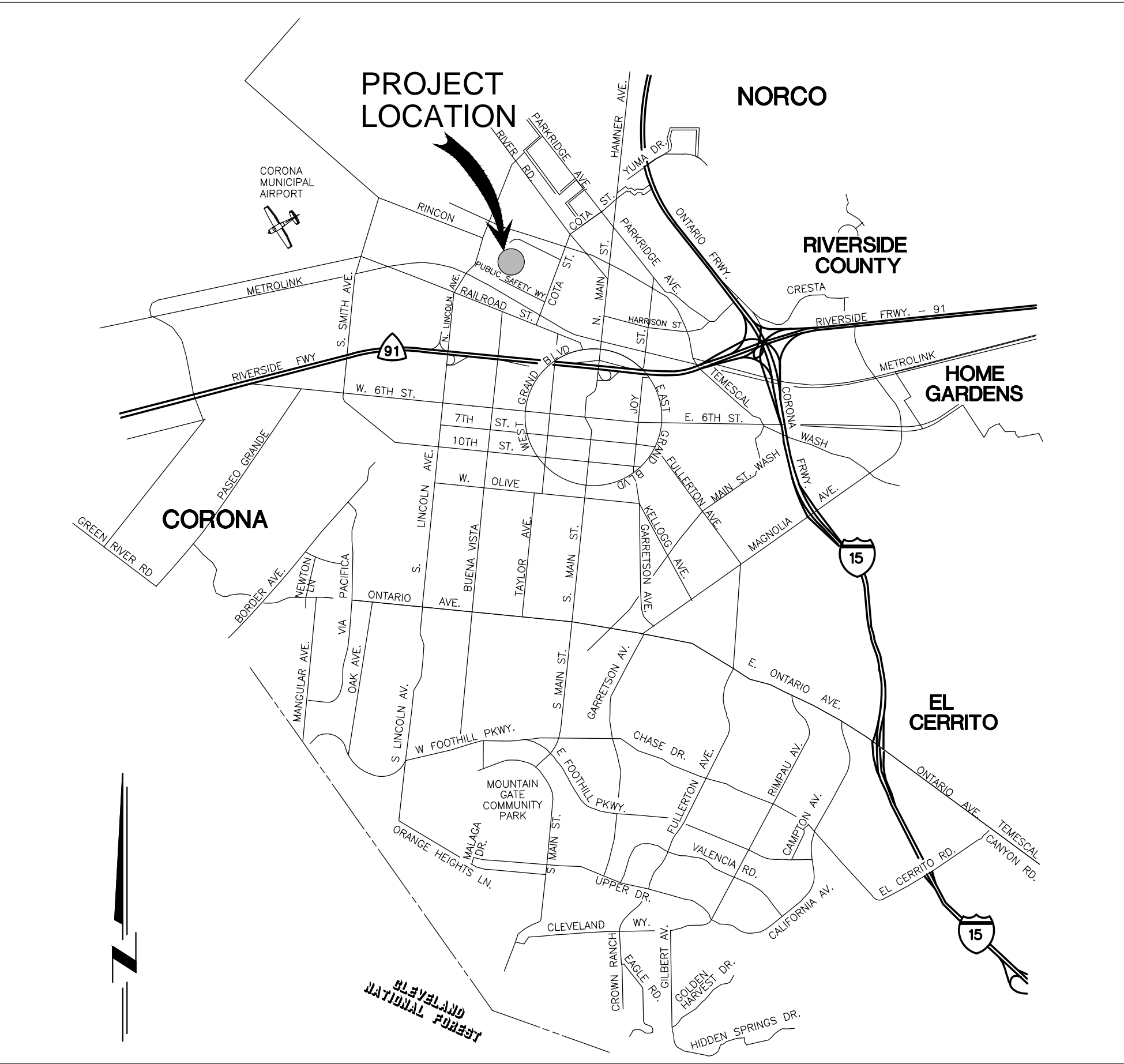
JACOB ELLIS

CITY TREASURER

CHAD WILLARDSON

DRAWING INDEX

SHEET NO.	DWG NO.	DESCRIPTION
1	G-1	TITLE SHEET, VICINITY MAP, LOCATION MAP AND DRAWING INDEX
2	G-2	GENERAL ABBREVIATIONS, SYMBOLS AND NOTES
3	G-3	GENERAL SITE PLAN
4	M-1	PIPE GALLERY PLAN
5	M-2	PIPE GALLERY SECTION VIEWS
6	MD-1	DETAILS - 1
7	MD-2	PERMEATE DUMP VALVE ASSEMBLY IMPROVEMENT PLAN
8	S-1	STRUCTURAL GENERAL NOTES - 1
9	S-2	STRUCTURAL GENERAL NOTES - 2
10	S-3	STRUCTURAL PLAN AND SECTIONS
11	S-4	STRUCTURAL DETAILS
12	E-1	ELECTRICAL SYMBOLS AND ABBREVIATIONS
13	E-2	DESALTER BUILDING AND ELECTRICAL PLAN
14	E-3	ELECTRICAL EQUIPMENT LAYOUT
15	E-4	SCHEMATIC WIRING DIAGRAM
16	E-5	NEW CONTROL PANEL WIRING DIAGRAM 1
17	E-6	NEW CONTROL PANEL WIRING DIAGRAM 2
18	E-7	INSTRUMENTATION P&ID SYMBOLS TAG NAMES & NOTES
19	E-8	PROCESS AND INSTRUMENTATION DIAGRAM



LOCATION MAP
N.T.S.

PROJECT ADDRESS

755 PUBLIC SAFETY WAY
CORONA, CA 92880



CALL: TOLL FREE
1-800
227-2600

TWO WORKING DAYS BEFORE YOU DIG

DUDEK
605 Third Street Encinitas, CA 92024
760.942.5147 Fax 760.942.4508



CITY OF CORONA
400 SOUTH VICENTIA AVENUE
CORONA, CALIFORNIA 92882

Designed by HM Drawn by HM Checked by BL
PLANS PREPARED UNDER SUPERVISION OF BRANDON C. LACAP
Date 11/13/23 R.C.E. No. 87211

Reference Plans for
these Improvements

Date By REVISIONS

App'd

BENCH MARK

Scale

Approved By: Kenny Nguyen
P.E. 11/27/2023
R.C.E. No. 66036

Approved By: Savat Khamphou
P.E. 11/27/2023
R.C.E. No. 62019

CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
TITLE SHEET, VICINITY MAP, LOCATION
MAP AND DRAWING INDEX

Drawing No.
G-1
Sh 1 of 19



GENERAL NOTES

1. **PROJECT DOCUMENTS:** ALL WORK SHALL BE DONE IN CONFORMANCE WITH (IN ORDER OF PRECEDENCE) THESE PLANS, THE CONTRACT SPECIFICATIONS, THE TECHNICAL SPECIFICATIONS, PRE-APPROVED EQUIPMENT SUBMITTALS, THE CALIFORNIA BUILDING CODE, LATEST EDITION, THE CALIFORNIA FIRE CODE, LATEST EDITION, AND, WHERE APPLICABLE, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), LATEST EDITION.
2. **APPLICABLE LAWS:** CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE GOVERNMENTAL AND LOCAL LAWS, REGULATIONS, AND ORDINANCES WITH REGARD TO TRAFFIC SAFETY, WORK HOURS, OPERATING HOURS, NOISE AND AIR POLLUTION, AND SANITARY CONDITIONS.
3. **PERMITS:** CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR COMPLETION OF THE WORK.
4. **DIMENSIONS AND ELEVATIONS:** LOCATION, DIMENSION, SIZE AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK OF THIS CONTRACT SHALL BE CONFIRMED BY FIELD MEASUREMENTS.
5. **SAFETY:**

A. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT IS NOT LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF THIS WORK, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE CITY OR THE ENGINEER.

B. CONTRACTOR SHALL COMPLY WITH THE REGULATIONS OF THE "GENERAL CONSTRUCTION SAFETY ORDERS" AND "TRENCH CONSTRUCTION SAFETY ORDERS", STATE OF CALIFORNIA, DEPARTMENT OF INDUSTRIAL RELATIONS, DIVISION OF OCCUPATIONAL HEALTH AND SAFETY (CAL-OSHA). CONTRACTOR SHALL PRESENT EVIDENCE OF COMPLIANCE INCLUDING PERMITS FOR TRENCHING OVER FIVE FEET IN DEPTH TO THE CITY PRIOR TO CONSTRUCTION.

C. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF LOCAL, CITY, STATE AND FEDERAL REGULATIONS CONCERNING CONFINED SPACE ENTRY.
6. **PRESERVING MONUMENTS AND BENCHMARKS:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONUMENTATION AND/OR BENCHMARKS DISTURBED OR DESTROYED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTATION BY A LICENSED SURVEYOR OR REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING IN THE STATE OF CALIFORNIA. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE SHALL BE FILED AS REQUIRED BY THE LAND SURVEYOR'S ACT.
7. **JOB-SITE CONDITIONS:**

A. UPON COMPLETION OF EACH DAY'S WORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LEAVING THE WORK AREA SECURE AND FREE OF HAZARDS. THE CONTRACTOR SHALL PROVIDE NECESSARY TEMPORARY SIGNS, WARNING DEVICES, AND BARRICADES. TEMPORARY ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROCESSES DURING NON-CONSTRUCTION HOURS.

B. THE EXISTING FACILITY MUST REMAIN IN OPERATION FOR THE DURATION OF THE WORK. THE CONTRACTOR SHALL COORDINATE ALL ON-SITE ACTIVITIES WITH THE CITY'S OPERATIONS STAFF. ACCESS SHALL BE PROVIDED FOR OPERATIONS AND MAINTENANCE PURPOSES. CONTRACTOR SHALL REFER TO SPECIFICATION SECTION 01 10 04 FOR MAINTENANCE OF PLANT OPERATION.

C. ALL WORK IN THIS PROJECT REQUIRING PARTIAL OR COMPLETE SHUTDOWN OF THE PLANT OR PLANT SYSTEMS SHALL BE COORDINATED WITH THE OWNER PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL EXECUTE WORK IN ACCORDANCE WITH SPECIFICATION SECTION 01 10 01 FOR WORK SEQUENCE.

D. THE CONTRACTOR SHALL PROTECT ALL EXPOSED AREAS OF THE SITE DURING THE CONSTRUCTION PERIOD AGAINST DAMAGE. ANY AND ALL SITE DAMAGE FROM THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AS DIRECTED BY THE CITY.

E. ALL MATERIAL WHICH IS NOT SUITABLE FOR USE ON THIS PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR (UNLESS NOTED OTHERWISE) AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A MANNER AND AT A LOCATION ACCEPTABLE TO ALL COGNIZANT AGENCIES AT CONTRACTOR'S OWN COST.

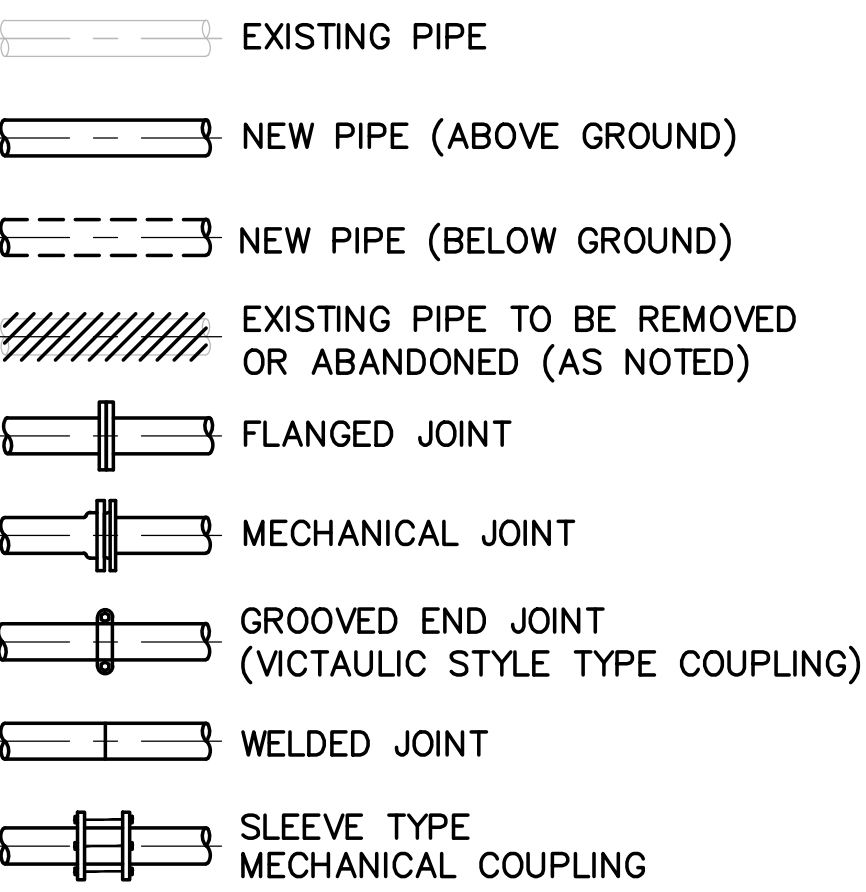
F. CONTRACTOR SHALL MAINTAIN ACCESS ON ALL PAVED AND UNPAVED ROADS. THE CONTRACTOR SHALL REPLACE IN KIND AND TO NEW CONDITION, TO THE SATISFACTION OF THE OWNER AND ANY AGENCY HAVING JURISDICTION THEREOF, ALL CONCRETE, PAVING, STRUCTURES, SYSTEMS, INSTRUMENTATION, EQUIPMENT, OR OTHER SITE IMPROVEMENTS CUT, REMOVED, OR DAMAGED IN CONJUNCTION WITH THIS PROJECT.

- G. EQUIPMENT DELIVERED TO THE SITE WILL BE PROTECTED BY THE CONTRACTOR FROM DAMAGE OR CONTAMINATION PRIOR TO INSTALLATION.
- H. ACCESS WALKWAYS AND ROADS TO ALL FIRE APPARATUS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- I. STANDARD DETAILS SHALL BE USED TO PERFORM THE WORK SHOWN IN THE BID DOCUMENTS WHETHER OR NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS.
- J. CONTRACTOR SHALL BE RESPONSIBLE FOR PIPE SUPPORT DESIGN FOR PERMANENT PIPING LESS THAN 12".
- K. CONTRACTOR SHALL SUPPLY ALL PIPES, FLANGES, COUPLINGS, AND RESTRAINTS AS SHOWN IN CONTRACT DRAWINGS. CONTRACTOR SHALL SUPPLY NUTS, BOLTS, GASKETS, PIPE INSULATION, VALVES, AND INSTRUMENTATION FOR PIPES.
- L. PRIOR TO TAKING ANY WATER FROM A CITY FIRE HYDRANT, THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE PUBLIC WORKS DEPARTMENT TO OBTAIN A FIRE HYDRANT WATER METER TO BE USED AT APPROVED LOCATIONS ONLY. CONTRACTOR IS REQUIRED TO PROVIDE A CERTIFIED BACKFLOW DEVICE AND PROVIDE CERTIFICATION TO THE INSPECTOR.
- M. CONTRACTOR SHALL NOT OPERATE ANY MAIN LINE WATER VALVE OR HYDRANT VALVE.

GENERAL ABBREVIATIONS

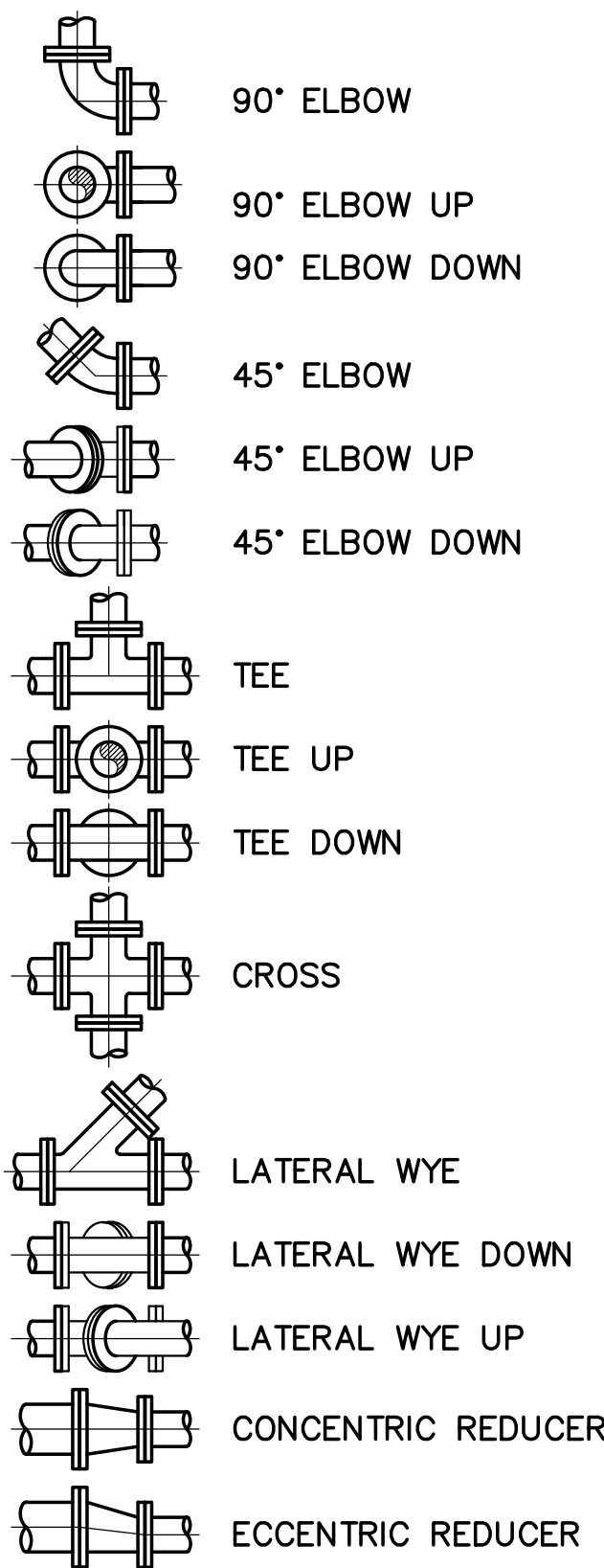
A	AIR
ABND	ABANDONED
ADF	AVERAGE DAILY FLOW
AFF	ABOVE FINISH FLOOR
APROX	APPROXIMATE
BFV	BUTTERFLY VALVE
BOT	BOTTOM
BRKT	BRAKET
BV	BALL VALVE
CI	CAST IRON
CL/CL	CENTER LINE
CLR	CLEAR
CONC	CONCRETE
CONT	CONTINUOUS
CY	CUBIC YARD
D	DRAIN
DIAI	DIAMETER
DEG	DEGREE
DEMO	DEMOLITION
DN	DOWN
DTL	DETAIL
DWG(S)	DRAWING(S)
EL	ELEVATION
ELEC	ELECTRICAL
EQP	EQUIPMENT
EX (E)	EXISTING
FG	FINISH GRADE
FLG	FLANGE
FRP	FIBERGLAS REINFORCED PLASTIC
FT	FEET
FUT (F)	FUTURE
GPM	GALLONS PER MINUTE
GR	GROUND
H	HIGH
HB	HOSE BIBB
IE	INVERT ELEVATION
IN	INCH
INV	INVERT
LBS	POUNDS
LCP	LOCAL CONTROL PANEL
MAX	MAXIMUM
MFR	MANUFACTURER
MG	MILLION GALLONS/SAY
MGD	MILLION GALLONS PER DAY
MIN	MINIMUM
MO	MOTOR OPERATED
MTD	MOUNTED
N/A	NOT AVAILABLE
NO	NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
PE	PLAIN END
PH	POT HOLE
PVC	POLYVINYL CHLORIDE
SCFM	STANDARD CUBIC FEET PER MINUTE
SCH	SCHEDULE
SPEC	SPECIFICATION
SS, SST	STAINLESS STEEL
STL	STEEL
STRUC	STRUCTURAL
THRD	THREADED
TOC	TOP OF CONCRETE
TYP	TYPICAL
UNKN	UNKNOWN
W	WIDTH
W/	WITH
WL	WATER LEVEL
WS	WATER SURFACE

PIPING SYMBOLS



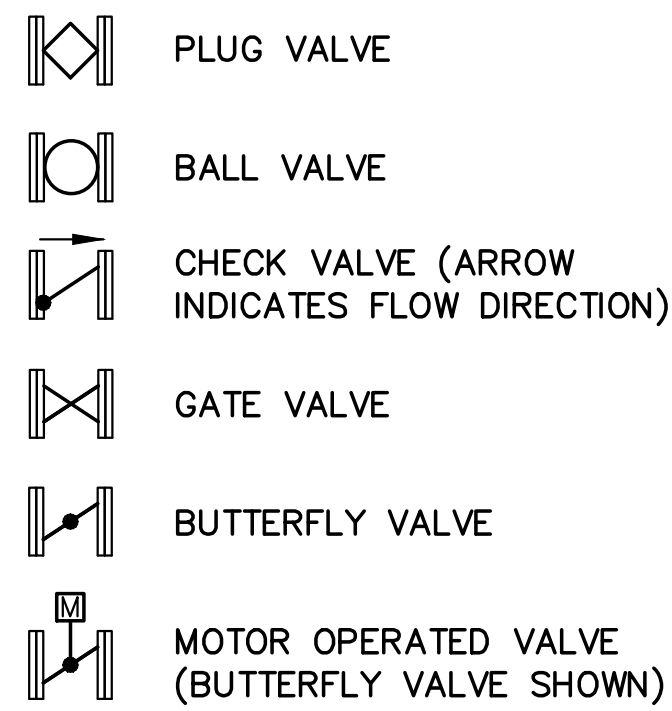
FITTING SYMBOLS

FITTINGS SHOWN WITH FLANGED JOINTS

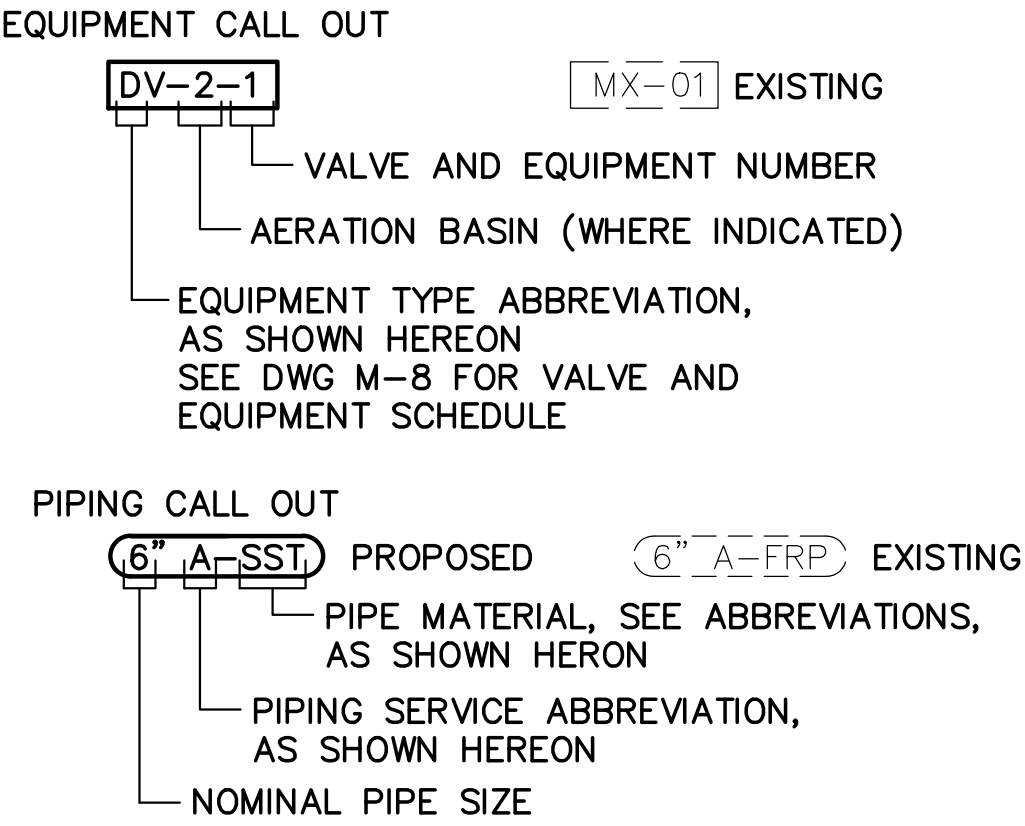


VALVE SYMBOLS

VALVES SHOWN WITH FLANGED JOINTS

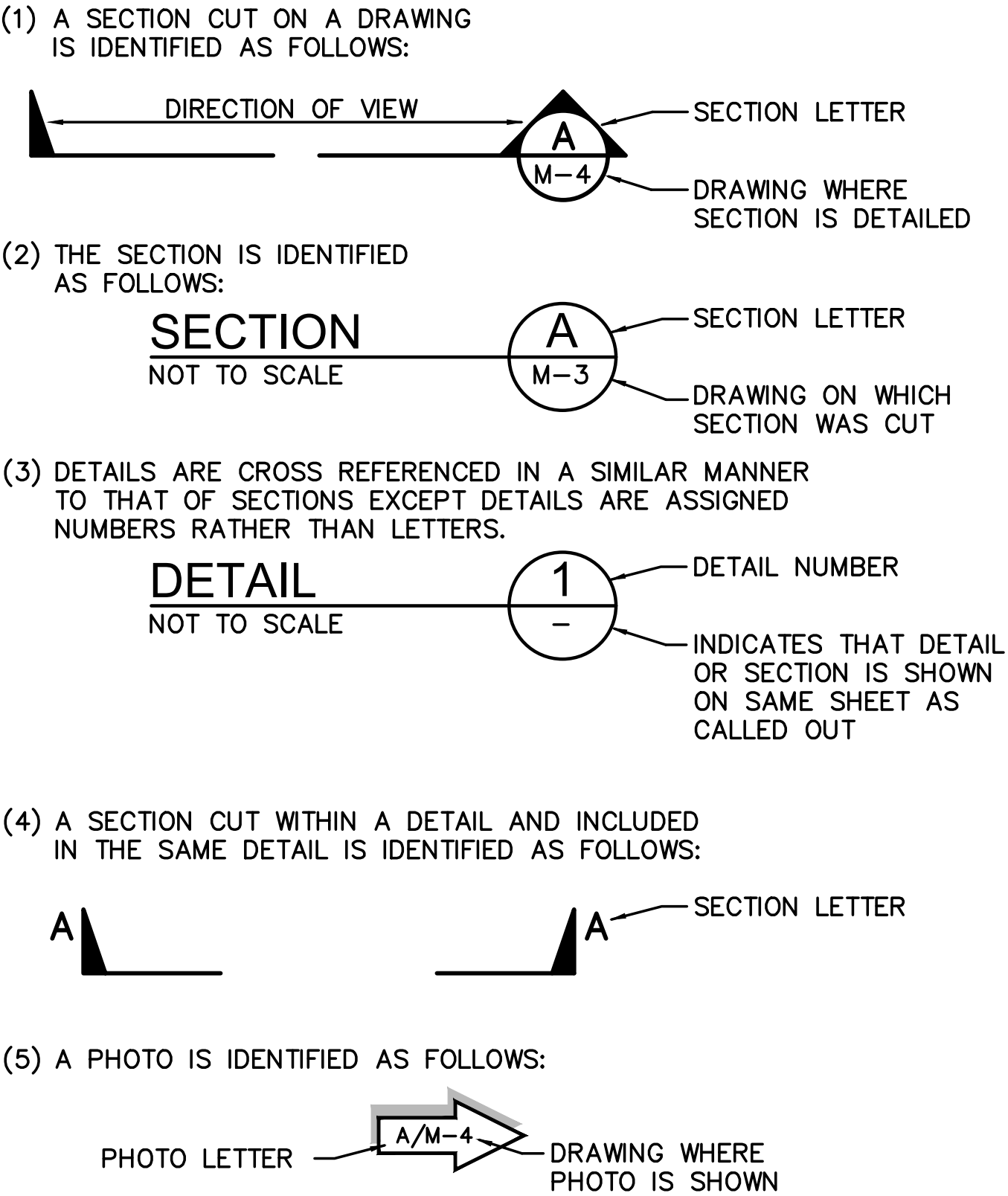


PIPE AND EQUIPMENT DESIGNATION



CHANGE IN PIPING MATERIAL

CROSS REFERENCING SYSTEM



EQUIPMENT ABBREVIATIONS

BFV	BUTTERFLY VALVE
FLG	FLANGE
PE	PLAIN END
PVC	POLYVINYL CHLORIDE
RCS	
RD	RUPTURE DISC
SCH	SCHEDULE
SQR	
SST	STAINLESS STEEL

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CITY OF CORONA

400 SOUTH VICENTIA AVENUE
CORONA, CALIFORNIA 92882

Designed by HM	Drawn by HM	Checked by BL
PLANS PREPARED UNDER SUPERVISION OF BRANDON C. LACAP		
Date 11/13/23	R.C.E.	No. 87211

Reference Plans for these Improvements	Date	By	REVISIONS	App'd

BENCH MARK

Scale

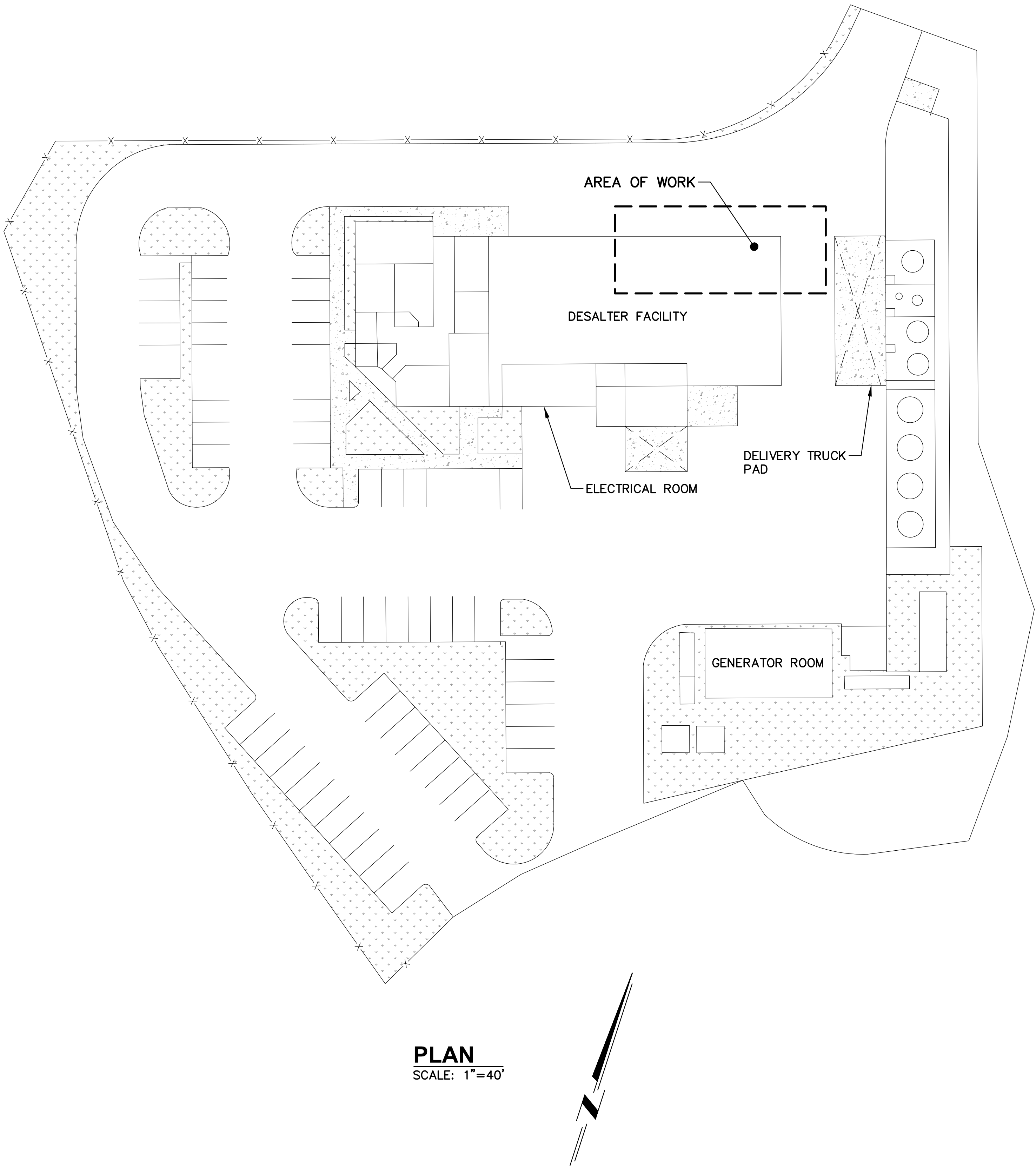
CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS

GENERAL ABBREVIATIONS, SYMBOLS AND NOTES

Drawing No. G-2
Sh 2 of 19



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LEGEND:

- AREA OF WORK
- STAGING AREA

NOTES:

- COORDINATE THE WORK TO AVOID ANY INTERFERENCE WITH NORMAL OPERATIONS OF PLANT EQUIPMENT, PROCESSES AND CONCURRENT CONSTRUCTION PROJECT.
REFER TO SPECIFICATION SECTIONS:
01 10 01 SEQUENCE OF CONSTRUCTION AND
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- CONTRACTOR SHALL COORDINATE WITH CITY OPERATIONS STAFF TO DETERMINE LAYDOWN AND STORAGE AREA(S) TO BE USED DURING CONSTRUCTION PRIOR TO THE START OF ANY WORK.

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983, ZONE 6 DATUM, BASED LOCALLY ON A LINE BETWEEN CITY OF CORONA GPS MONUMENTS 3015 AND 3017 BEING N14°05'39"W.

BENCHMARK:

CITY OF CORONA BENCHMARK # C-101.
DESCRIPTION: A 2-1/2" BRASS DISK STAMPED "C-101" SE IN THE TOP OF CURB. LOCATED 5' SOUTH OF THE B.C.R. OF THE SOUTHWESTERLY CURB RETURN OF THE INTERSECTION OF RINCON ST. AND SMITH AVE.
ELEVATION: 544.93

PLAN
SCALE: 1"=40'

GRAPHIC SCALE
0 40' 80'
SCALE: 1" = 40'

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760.942.5147 Fax 760.942.4508

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BENCH MARK
Scale

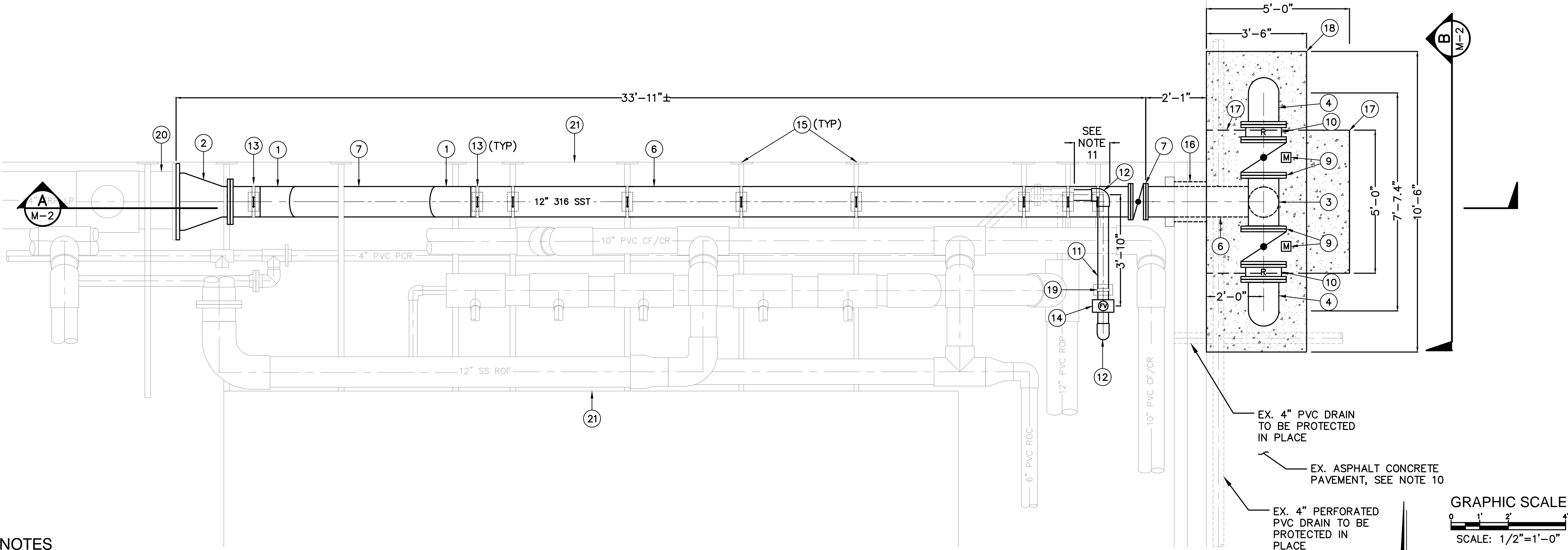
CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
GENERAL SITE PLAN

Drawing No. G-3
Sh 3 of 19



36"x24" ORIGINAL SCALE IN INCHES

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GENERAL NOTES

- 1.ALL STAINLESS STEEL PIPE, BENDS, TEES, AND FITTINGS SHALL BE TYPE 316 STAINLESS STEEL (SCHEDULE 10) AND SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 33 11 15 UNLESS OTHERWISE INDICATED.
- 2.ALL PVC PIPE AND FITTINGS SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 33 11 33.
- 3.ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH DIVISION 3 – CONCRETE OF THE PROJECT SPECIFICATIONS.
- 4.PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING PIPING TO BE CONNECTED TO NEW PIPING.
- 5.ALL PIPING WITHIN PIPE GALLEY NOT PERTAINING TO THE PROJECT SHALL BE PROTECTED IN PLACE
- 6.CONTRACTOR SHALL COORDINATE WITH THE CITY OF CORONA A TIME AND DATE TO SHUT DOWN THE DESALTER FACILITY FOR CONSTRUCTION PURPOSES
- 7.COORDINATE THE WORK TO AVOID ANY INTERFERENCE WITH NORMAL OPERATIONS OF PLANT EQUIPMENT, PROCESSES AND CONCURRENT CONSTRUCTION PROJECT.
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- 9.CONTRACTOR SHALL COORDINATE WITH CITY OPERATIONS STAFF TO DETERMINE LAYDOWN AND STORAGE AREA(S) TO BE USED DURING CONSTRUCTION PRIOR TO THE START OF ANY WORK.
- 10.CONTRACTOR RESPONSIBLE TO REPAIR OR REPLACE ALL EXISTING ASPHALT CONCRETE PAVEMENT THAT IS DAMAGED DUE TO CONSTRUCTION. ALL ASPHALT CONCRETE TO BE REPAIRED IN-KIND SHALL BE REPLACED PER CITY OF CORONA STANDARD PLAN NUMBER 106.
- 11.DEMOLISH EXISTING 4" BUTTERFLY VALVE, ASSOCIATED FAIL-SAFE ACTUATOR, AND ASSOCIATED DISCHARGE PIPING; REPLACE WITH NEW REALIGNED 4" PVC (SCH 80) PIPING AND RELOCATED 4" PERMEATE DUMP VALVE ASSEMBLY AS SHOWN.
- 12.PROVIDE INSULATING FLANGE KITS ON ALL 12" BUTTERFLY VALVES

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Designed by HM	Drawn by HM	Checked by BL
PLANS PREPARED UNDER SUPERVISION OF BRANDON LACAP		
Date 11/13/23	R.C.E.	No. 87211

Reference Plans for these Improvements	Date	By	REVISIONS	App'd

BENCH MARK
Scale

CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
PIPE GALLERY PLAN

Drawing No. M-1
Sh 4 of 19



PLAN

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

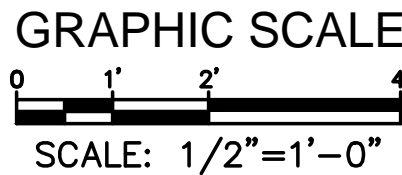
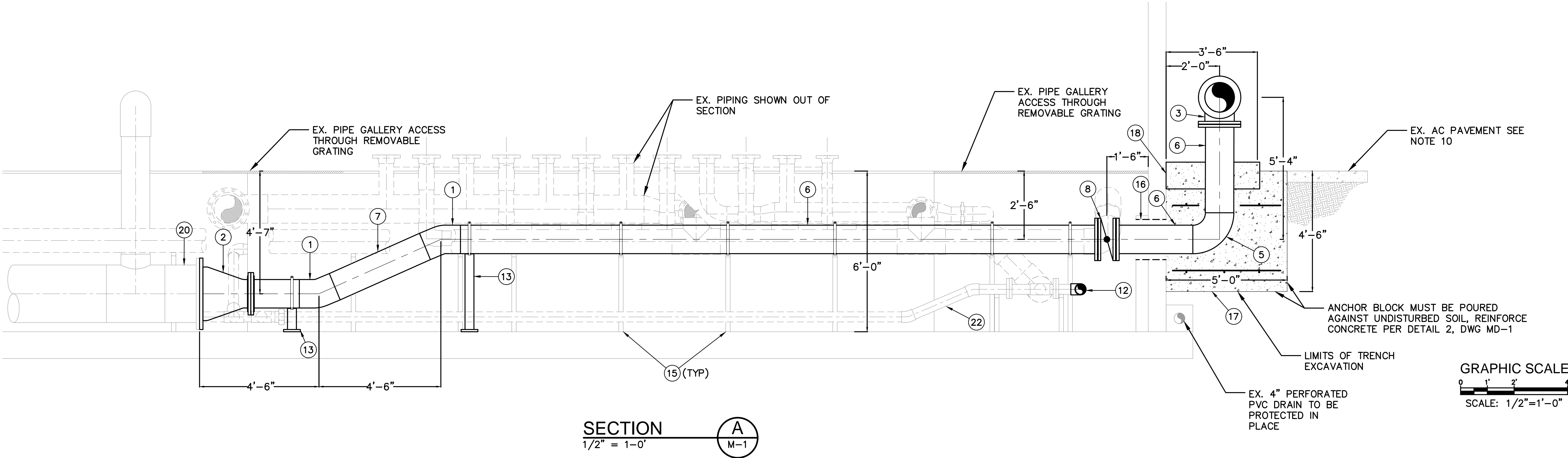
CONSTRUCTION LEGEND

- ① 12" SST SCH 10 22.5° ELBOW, PE X PE
- ② 24" X 12" SST SCH 10 REDUCER, FLG X FLG
- ③ 12" X 12" SST SCH 10 TEE, FLG X FLG
- ④ 12" SST SCH 10 90° ELBOW, FLG X FLG
- ⑤ 12" SST SCH 10 90° ELBOW, PE X PE
- ⑥ 12" SST SCH 10 PIPE, FLG X PE
- ⑦ 12" SST SCH 10 PIPE, PE X PE
- ⑧ 12" BUTTERFLY VALVE, FLG X FLG, PER SPECIFICATION SECTION 33 12 14, SEE NOTE 12.
- ⑨ 12" MOTOR OPERATED BUTTERFLY VALVE, FLG X FLG, PER SPECIFICATION SECTION 33 12 14 AND SECTION 33 12 46. ACTUATOR SHALL BE AUMA SQR 12.2 OR APPROVED EQUAL. SEE NOTE 12.
- ⑩ 12" RUPTURE DISC ASSEMBLY, CONTINENTAL OR APPROVED EQUAL FLG X FLG
- ⑪ 4" PVC PIPE, SCH 80
- ⑫ 4" PVC 90° ELBOW, SCH 80
- ⑬ PIPE SUPPORT TYPE II PER DTL 1 ON DWG MD-1
- ⑭ RCS SURE25 ACTUATOR AND TYPE 61 ELASTOMER SEATED BUTTERFLY VALVE
- ⑮ EX. PIPE SUPPORTS
- ⑯ CONCRETE WALL PENETRATION PER DTL 4 ON DWG MD-1
- ⑰ CONCRETE ANCHOR BLOCK, CLASS 3 CONCRETE, SEE SPECIFICATION SECTION 03 30 00
- ⑱ CONCRETE DISPERSION PAD A' X B' CONCRETE DISPERSION PAD, SEE STRUCTURAL DRAWINGS FOR DETAILS

- ⑲ PIPE SUPPORT TYPE I PER DTL 1 ON DWG MD-1
- ⑳ EX. 24" FRP SUCTION HEADER TO BE CONNECTED TO
- ㉑ EX. PIPE GALLERY WALL
- ㉒ EX. 4" PVC PIPE SCH 80
- ㉓ PIPE SUPPORT TYPE III PER DTL 1 ON DWG MD-1

GRAPHIC SCALE
0 1' 2' 4'
SCALE: 1/2"=1'-0"

36"x24" ORIGINAL SCALE IN INCHES



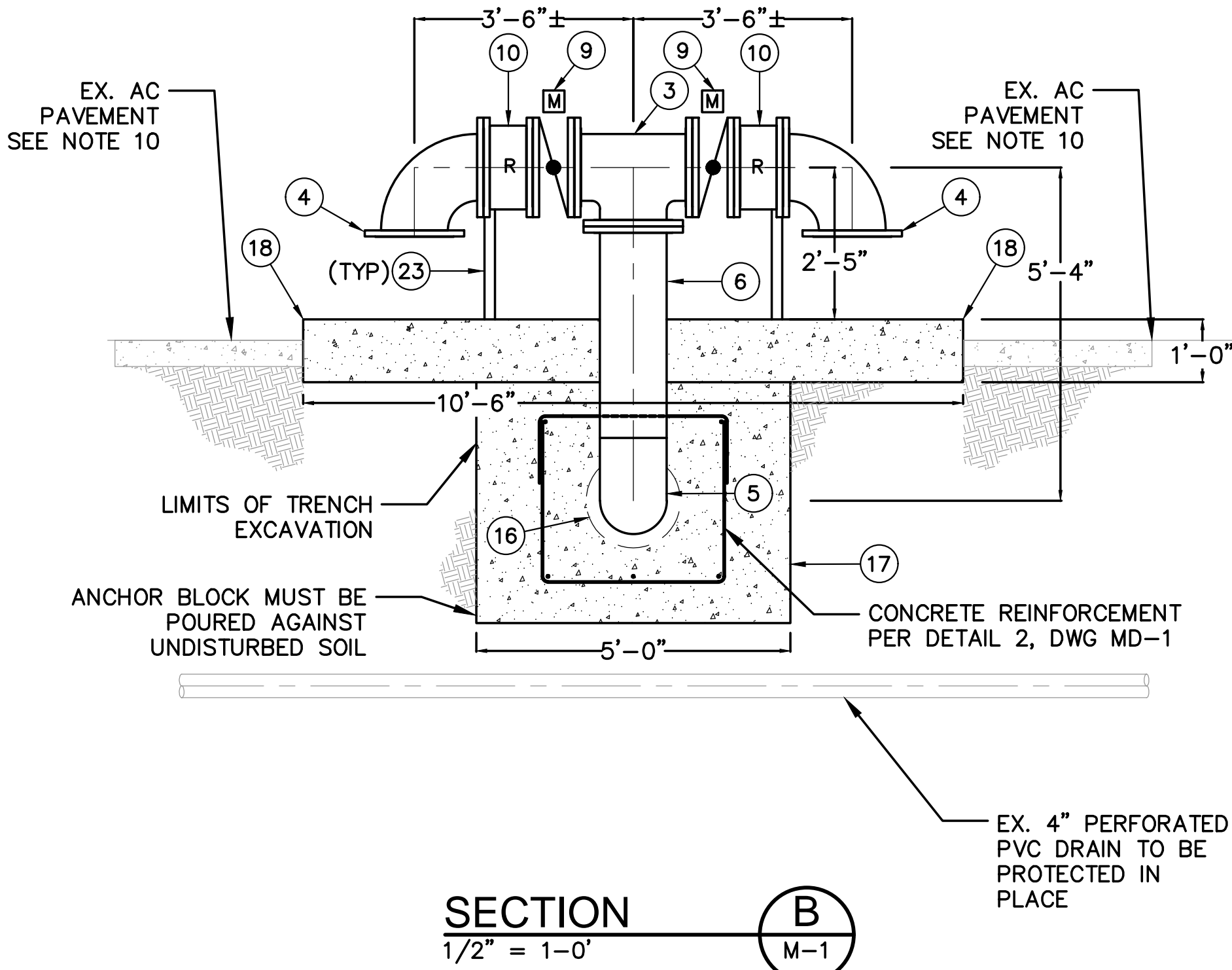
GENERAL NOTES

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- DEMOLISH EXISTING 4" BUTTERFLY VALVE, ASSOCIATED FAIL-SAFE ACTUATOR, AND ASSOCIATED DISCHARGE PIPING; REPLACE WITH NEW REALIGNED 4" PVC (SCH 80) PIPING AND RELOCATED 4" PERMEATE DUMP VALVE ASSEMBLY AS SHOWN.
- PROVIDE INSULATING FLANGE KITS ON ALL 12" BUTTERFLY VALVES

CONSTRUCTION LEGEND

- 12" SST SCH 10 22.5° ELBOW, PE X PE
- 24" X 12" SST SCH 10 REDUCER, FLG X FLG
- 12" X 12" SST SCH 10 TEE, FLG X FLG
- 12" SST SCH 10 90° ELBOW, FLG X FLG
- 12" SST SCH 10 90° ELBOW, PE X PE
- 12" SST SCH 10 PIPE, FLG X PE
- 12" SST SCH 10 PIPE, PE X PE
- 12" BUTTERFLY VALVE, FLG X FLG, PER SPECIFICATION SECTION 33 12 14, SEE NOTE 12.
- 12" MOTOR OPERATED BUTTERFLY VALVE, FLG X FLG, PER SPECIFICATION SECTION 33 12 14 AND SECTION 33 12 46. ACTUATOR SHALL BE AUMA SQR 12.2 OR APPROVED EQUAL. SEE NOTE 12.
- 12" RUPTURE DISC ASSEMBLY, CONTINENTAL OR APPROVED EQUAL FLG X FLG
- 4" PVC PIPE, SCH 80
- 4" PVC 90° ELBOW, SCH 80
- PIPE SUPPORT TYPE II PER DTL 1 ON DWG MD-1
- RCS SURE25 ACTUATOR AND TYPE 61 ELASTOMER SEATED BUTTERFLY VALVE
- EX. PIPE SUPPORTS
- CONCRETE WALL PENETRATION PER DTL 4 ON DWG MD-1
- CONCRETE ANCHOR BLOCK, CLASS 3 CONCRETE, SEE SPECIFICATION SECTION 03 30 00
- CONCRETE DISPERSION PAD A' X B' CONCRETE DISPERSION PAD, SEE STRUCTURAL DRAWINGS FOR DETAILS

- PIPE SUPPORT TYPE I PER DTL 1 ON DWG MD-1
- EX. 24" FRP SUCTION HEADER TO BE CONNECTED TO
- EX. PIPE GALLERY WALL
- EX. 4" PVC PIPE SCH 80
- PIPE SUPPORT TYPE III PER DTL 1 ON DWG MD-1



Designed by HM Drawn by HM Checked by BL
PLANS PREPARED UNDER SUPERVISION OF BRANDON LACAP
Date 11/13/23 R.C.E. No. 87211

Reference Plans for these Improvements

Date By REVISIONS

BENCH MARK
Scale
App'd

CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
PIPE GALLERY SECTION VIEWS

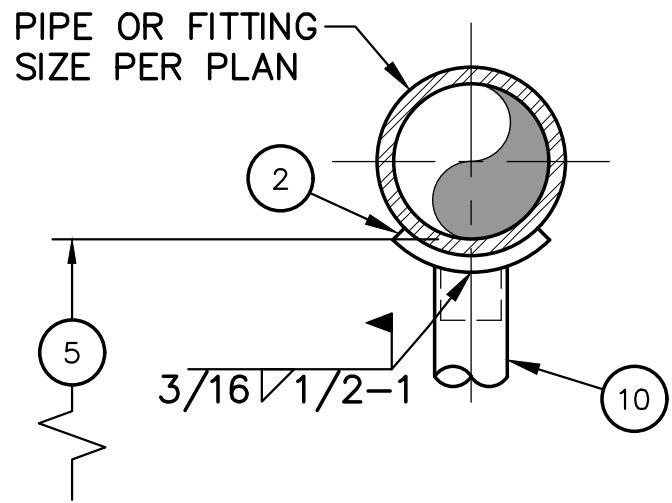
Drawing No. M-2
Sh 5 of 19



PIPE SIZE (INCHES)	A (INCHES)	B* (INCHES)	C (INCHES)	D (INCHES)	E* (INCHES)	
					MIN.	MAX.
2-1/2	2-1/2	3-1/2	7-1/2	1-1/2	8	13
3	2-1/2	3-3/4	7-1/2	1-1/2	8-1/2	13-1/4
3-1/2	2-1/2	4	7-1/2	1-1/2	8-1/2	13-1/2
4	3	4-1/4	9	2-1/2	9-1/4	14
5	3	4-7/8	9	2-1/2	10	14-3/4
6	3	4-7/8	9	2-1/2	10-1/2	15-1/4
8	3	6-7/8	9	2-1/2	11-3/4	16-1/2
10	3	8-1/2	9	2-1/2	13-1/2	18-1/4
12	3	9-15/16	9	2-1/2	15	19-3/4
14	4	10-15/16	11	3	16-1/4	20-3/4
16	4	12-3/8	11	3	17-3/4	22-1/4
18	6	13-7/8	13-1/2	3-1/2	19-1/2	24
20	6	15-3/8	13-1/2	3-1/2	21	25-1/2
24	6	17-15/16	13-1/2	4	23-3/4	28-1/4

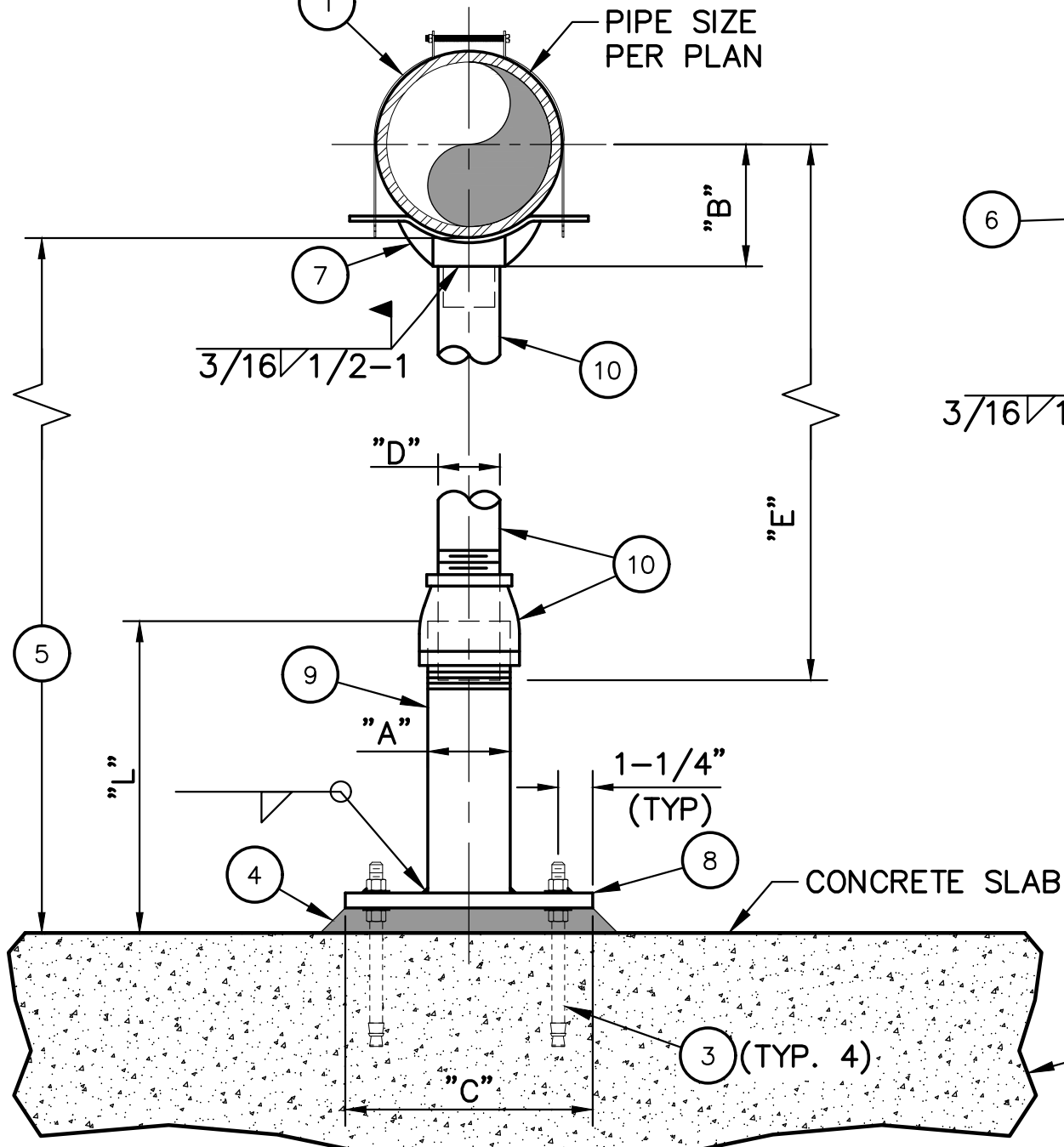
*DIMENSIONS GIVEN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO INSTALLATION.

TYPE I



1. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO PURCHASE AND FABRICATION
2. WHERE NON-ADJUSTABLE PIPE SUPPORTS ARE SPECIFIED, PROVIDED NON-ADJUSTABLE STANCHION (TOLCO FIG 316 OR APPROVED EQUAL), AND DELETE ITEM 10 ABOVE. CONTRACTOR TO DETERMINE DIMENSION "L" IN FIELD.
3. PIPE SUPPORT, PIPE STRAP, ANCHOR BOLTS, AND ALL HARDWARE SHALL BE TYPE 316 STAINLESS STEEL

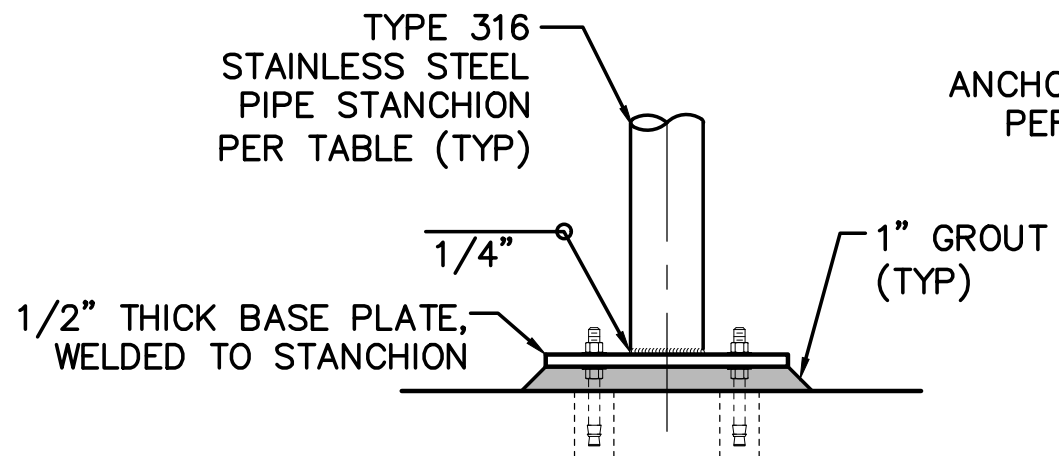
TYPE II



ADJUSTABLE PIPE SUPPORT DETAIL

SCALE: NONE

1
VAR



ELEVATION

PLAN

NOMINAL PIPE SIZE	STEEL PIPE SIZE	ANCHOR BOLT	BASE PLATE
4"	3"	1/2"	8"x8"
6"	3"	1/2"	8"x8"
12"	3"	3/4"	8"x8"

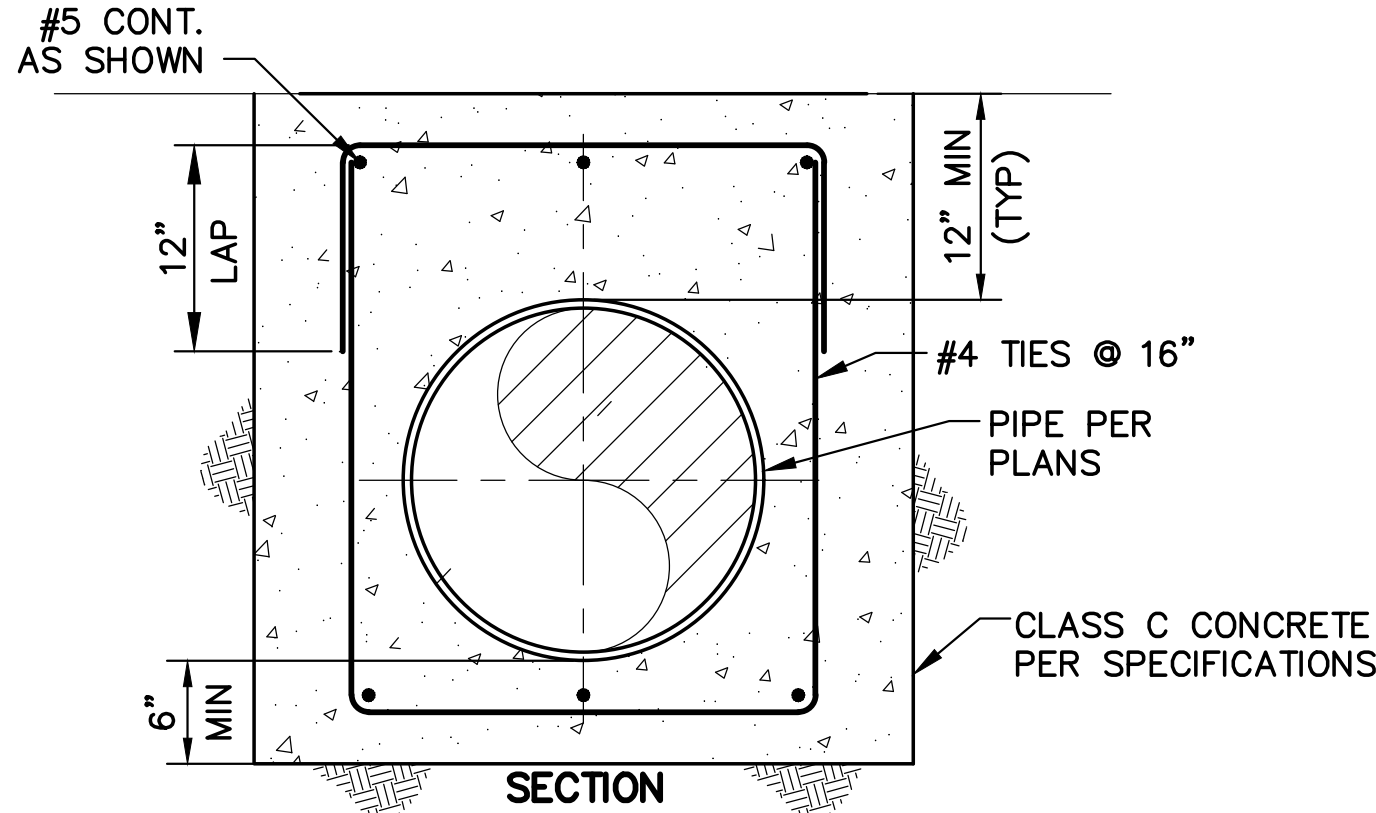
BASE PLATE DETAIL

SCALE: NONE

3
M-2

LEGEND

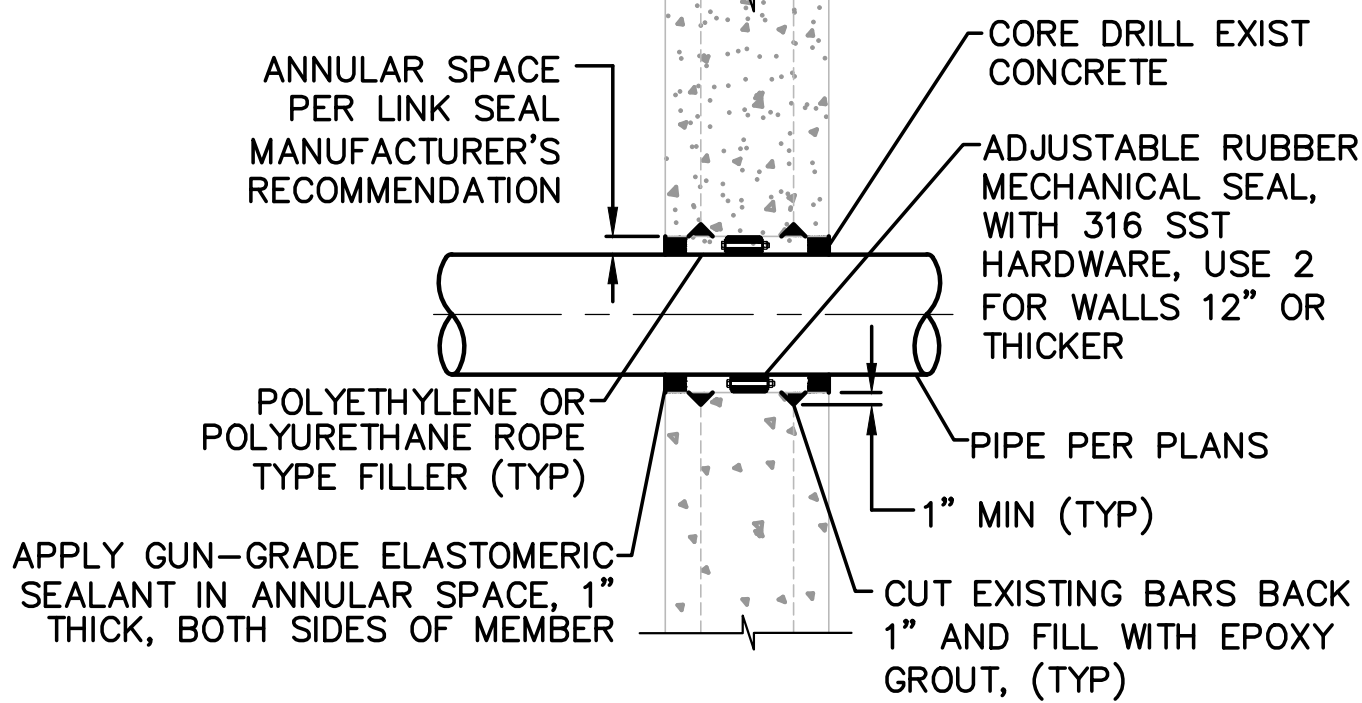
- 1 TYPE 316 SST PIPE CLAMP, NUTS AND WASHER (SIZE PER PIPE SIZE)
- 2 PIPE SADDLE SUPPORT (TOLCO FIG 317, GRINNEL FIG 258, OR APPROVED EQUAL)
- 3 5/8" SST EPOXY ADHESIVE ANCHOR WITH STAINLESS STEEL LEVELING NUT AND WASHER, 5-1/2" MINIMUM EMBED (TYP)
- 4 1-1/2" MINIMUM NON-SHRINK GROUT
- 5 HEIGHT TO BE DETERMINED IN FIELD
- 6 FLANGE SUPPORT (TOLCO FIG 314) OR APPROVED EQUAL
- 7 PIPE SADDLE WITH STEEL YOKE (TOLCO FIG 318, GRINNELL FIG 259, OR APPROVED EQUAL)
- 8 3/8" THICK STEEL PLATE, SIZE PER TABLE
- 9 THREADED PIPE STAND (TOLCO FIG 316T OR APPROVED EQUAL), SIZE PER TABLE, SEE NOTES
- 10 THREADED PIPE WITH ADJUSTER (TOLCO FIG 319 OR APPROVED EQUAL), SIZE PER TABLE, SEE NOTES



CONCRETE PIPE ENCASEMENT

SCALE: NONE

2
M-2



PIPE PENETRATION DETAIL

SCALE: NONE

4
M-2

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PAVED CONDITION UNPAVED CONDITION

AC OR PCC PAVEMENT

AGGREGATE BASE

PIPE WARNING TAPE, SEE NOTE 5.

DOUBLE-WRAP 8-MIL POLYETHYLENE ENCASEMENT. SEE NOTE 6.

SAND BACKFILL (SEE 30 OR BETTER)

FOUNDATION REFILL MATERIAL FOR UNSTABLE SOIL CONDITION SEE NOTE 3.

2"x4"x10"

PIPE DIA. "D" MAXIMUM "X" MINIMUM "Y"

PIPE DIA. "D"	MAXIMUM "X"	MINIMUM "Y"
4"-6"	8"	6"
8"-21"	12"	8"
24"-48"	330+4"	12"
>48"	20"	12"

D = OUTSIDE DIAMETER OF PIPE BELL

NOTES:

1. CONSTRUCT TRENCH ZONE AND PAVEMENT SECTION PER STD. DWG. 150 OR GOVERNING AGENCY REQUIREMENTS IF OUTSIDE CITY OF CORONA.
2. WHERE CONTRACTOR FAILS TO MAINTAIN PROPER TRENCH WIDTH LIMITS, SPECIAL BACKFILL SUCH AS ONE-SACK SLURRY AND BEDDING WILL BE REQUIRED BY THE DWP GENERAL MANAGER OR DESIGNEE.
3. IF UNSTABLE SOIL IS ENCOUNTERED, THE DWP GENERAL MANAGER OR DESIGNEE WILL DETERMINE OVER-EXCAVATION DEPTH AND FOUNDATION RE-FILL MATERIAL REQUIREMENTS.
4. PROVIDE HAND EXCAVATED "BELL HOLE" FOR EACH PIPE JOINT SO THE WEIGHT OF PIPE DOES NOT BEAR ON THE BELL. RE-FILL AND HAND-TAMP EACH "BELL HOLE" PRIOR TO COMPLETING THE PLACEMENT OF PIPE BEDDING.
5. INSTALL BLUE 6-INCH WIDE PIPE WARNING TAPE LABELED POTABLE WATER ABOVE POTABLE WATER PIPE. INSTALL PURPLE 6-INCH WIDE PIPE WARNING TAPE LABELED RECLAIMED WATER ABOVE RECLAIMED WATER PIPE.
6. BLUE POLYETHYLENE ENCASEMENT FOR POTABLE WATER PIPING. PURPLE POLYETHYLENE ENCASEMENT FOR RECLAIMED WATER PIPING.

POTABLE AND RECLAIMED WATER PIPE BEDDING AND TRENCH DETAILS

NO.	REVISION	DATE	APPROVED:	DATE	CITY OF CORONA
1	WOP	12/28/18	Brandon C. Lacap	1/7/2019	STD 406
			Thomas E. McNamee	1/7/2019	
			Thomas E. McNamee		

FILE: \\V:\01\Engineering\Corona, City of\15173 Desalter Surge Anticipator Improvements\6 - CAD\15173 SH06 MD-1.dwg



DESIGN BASIS :

1. APPLICABLE CODES:

2022 CBC
ASCE 7-16

CALIFORNIA BUILDING CODE
MINIMUM DESIGN LOADS FOR
BUILDINGS AND OTHER
STRUCTURES
2. DEAD LOADS:

STRUCTURAL MEMBERS

AS CALCULATED
3. LIVE LOADS:

FLOOR

100 PSF
4. WIND DESIGN DATA:

ULTIMATE WIND SPEED
BASIC WIND SPEED
RISK CATEGORY
EXPOSURE

V_{ult} = 102 MPH
 V_{asd} = 79 MPH
III
C
5. EARTHQUAKE DESIGN DATA:

SITE CLASS
SEISMIC DESIGN CATEGORY
RISK CATEGORY
SEISMIC IMPORTANCE FACTOR
COMPONENT IMPORTANCE FACTOR
SPECTRAL PARAMETER

D - DEFAULT
E
III
 I_e = 1.25
 I_p = 1.50
 S_a = 1.932 g
 F_a = 1.2
 S_{ws} = 2.318 g
 S_{Ds} = 1.546 g

S_1 = 0.732 g
 F_v = 1.7
 S_{M1} = 1.244 g
 S_{D1} = 0.830 g

6. BUILDING/STRUCTURE DESIGN PARAMETERS:

A. OTHER NONSTRUCTURAL PIPE SUPPORTS:
NONSTRUCTURAL COMPONENT TYPE
ANALYSIS PROCEDURE
RESPONSE MODIFICATION FACTOR
COMPONENT AMPLIFICATION FACTOR
OVERSTRENGTH FACTOR
COMPONENT SEISMIC DESIGN FORCE

HIGH-DEFORMABILITY PIPING
ASCE 7-16 CH. 13
 R_p = 4.5
 α_p = 2.5
 α_o = 2.0
 F_p = 0.696Wp
- SHOP DRAWINGS/SUBMITTALS :
1. PRIOR TO FABRICATION SUBMIT AS A MINIMUM THE FOLLOWING SHOP SUBMITTALS TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW AND COMMENT:

a. STRUCTURAL STEEL

b. WELDING PROCEDURES

c. MIX DESIGN FOR:

I. CONCRETE

d. REINFORCING BAR LAYOUT FOR:

I. CONCRETE

2. STEEL REINFORCING LISTS, QUANTITIES AND LENGTHS OF ALL MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE COMPLIANCE WITH THE PLANS. THE ENGINEER WILL NOT REVIEW THESE ITEMS.

3. REVIEW OF SHOP DRAWINGS BY THE STRUCTURAL ENGINEER IS FOR THE PURPOSE OF GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. ALL ERRORS IN DETAILING, FABRICATION, AND FOR CORRECT FITTING OF ALL STRUCTURAL MEMBERS INCLUDING COORDINATION WITH OTHER TRADES SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER DO NOT CONSTITUTE CHANGE ORDERS. ANY PROPOSED CHANGES MUST BE SUBMITTED IN A LETTER OR DETAIL TO THE ARCHITECT/ENGINEER FOR APPROVAL.

4. TWO SETS OF SHOP DRAWINGS SHALL BE SUBMITTED AT LEAST TWO WEEKS PRIOR TO THE SCHEDULED FABRICATION DATE. ONE SET CLEARLY MARKED WITH ANY COMMENTS WILL BE RETURNED TO THE CONTRACTOR AND THE OTHER SET WILL BE RETAINED FOR OUR OFFICE RECORDS. ANY ADDITIONAL COPIES REQUIRED FOR DISTRIBUTION MUST BE MADE BY THE CONTRACTOR FROM THE MARKED SET.

5. REPRODUCTION OF THESE STRUCTURAL DRAWINGS IS PROHIBITED FOR THE PURPOSE OF PREPARING SHOP DRAWINGS. SUBCONTRACTOR/FABRICATOR IS TO PROVIDE INDEPENDENTLY CREATED DRAWINGS BASED ON THE INFORMATION SHOWN IN THE CONTRACT DOCUMENTS.
- GENERAL NOTES :
1. THE PROJECT SPECIFICATIONS SHALL BE PART OF THE CONTRACT DOCUMENTS.

2. THE STRUCTURAL DRAWINGS ARE TO BE USED IN CONJUNCTION WITH MECHANICAL AND ELECTRICAL DRAWINGS. NO PORTION OF STRUCTURAL RELATED WORK, INCLUDING SHOP DRAWING DEVELOPMENT, SHALL BE PERFORMED WITHOUT CONSIDERING REQUIREMENTS OF CONTRACT DOCUMENTS IN THEIR ENTIRETY.

3. DETAILS AND SCHEDULES INDICATED AS "TYPICAL" MAY NOT BE SPECIFICALLY REFERENCED ON DRAWINGS. DETERMINE WHERE EACH TYPICAL DETAIL OR SCHEDULE APPLIES BEFORE PROCEEDING WITH WORK. IF CONDITIONS ARE FOUND WHICH ARE NOT SPECIFICALLY DETAILED AND NO TYPICAL DETAIL OR SCHEDULE APPLIES PROMPTLY NOTIFY THE STRUCTURAL ENGINEER.

4. OPENINGS, POCKETS, CORE DRILLING, ETC. SHALL NOT BE PLACED IN STRUCTURAL WALLS, SLABS, AND MEMBERS UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER OF RECORD WHEN DRAWINGS BY OTHERS INDICATE OPENINGS, POCKETS, CORE DRILLING, ETC., NOT INDICATED ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN STRUCTURAL MEMBERS.

5. THE CONTRACTOR SHALL REVIEW EXISTING CONDITIONS ON THE SITE PRIOR TO STARTING WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING WORK. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES PRIOR TO PROCEEDING.

6. UNLESS NOTED OR SHOWN OTHERWISE, ALL PHASES OF WORK ARE TO CONFORM TO THE MINIMUM STANDARDS OF THE CALIFORNIA BUILDING CODE (LATEST EDITION), AND ANY ASTM SPECIFICATIONS ON WHICH THESE STANDARDS ARE BASED. WHERE CONFLICT BETWEEN BUILDING CODES AND SPECIFICATIONS OCCUR, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.

7. ALL ASTM DESIGNATIONS REFERRED TO ON THESE DRAWINGS SHALL BE THE LATEST ADOPTED OR REVISED SPECIFICATION, AS OF THE DATE OF THESE DRAWINGS.

8. ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS. DRAWINGS SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.

9. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

10. THE STRUCTURAL DRAWINGS SHOW ONLY THE BASIC STRUCTURAL REQUIREMENTS. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR NON-STRUCTURAL ITEMS, SUCH AS:

A. SIZE AND LOCATION OF ALL OPENINGS.

B. SIZE AND LOCATION OF ALL CONCRETE CURBS, WALKS, ROOF AND FLOOR DRAINS, SLOPES, DEPRESSED SLAB AREAS, ETC.

C. FLOOR, ROOF AND WALL FINISHES.

E. DIMENSIONS WHICH ARE NOT SHOWN ON STRUCTURAL DRAWINGS.

11. THE STRUCTURAL CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE NOTED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION.

12. NEITHER THE GOVERNING JURISDICTION NOR THE STRUCTURAL ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS. SITE OBSERVATION VISITS BY THE STRUCTURAL ENGINEER OF RECORD SHALL NOT INCLUDE INSPECTION OF THE ABOVE SAFETY ITEMS.

13. SATISFACTORY EXECUTION OF CONSTRUCTION IS DEPENDENT UPON CONFORMANCE WITH THE INTENT OF THESE DRAWINGS. THE GOVERNING JURISDICTION OR CONTRACTOR SHALL RETAIN A CALIFORNIA LICENSED CIVIL OR STRUCTURAL ENGINEER DURING CONSTRUCTION TO OBSERVE THE CONSTRUCTION AND STATE THAT THE STRUCTURE HAS BEEN BUILT IN GENERAL CONFORMANCE WITH THE INTENT OF THESE DRAWINGS.

14. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOF. LOAD SHALL NOT EXCEED DESIGN LIVE LOAD FOR EACH PARTICULAR LEVEL. WHEN WEIGHT OF MATERIALS OR EQUIPMENT MAY EXCEED DESIGN LOAD, STRUCTURAL SYSTEMS SHALL BE SHORED.

15. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK. THE DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.

16. REFER DISCREPANCIES BETWEEN GENERAL NOTES AND SPECIFICATIONS TO CONSTRUCTION MANAGER FOR RESOLUTION. IN EVENT OF CONFLICT, IT WILL BE ASSUMED BIDS WERE PREPARED BASED ON INFORMATION SHOWN IN SPECIFICATIONS.
- ABBREVIATIONS :
- | | | | |
|-----------|---|------------|-----------------------------|
| & | AND | JT | JOINT |
| @ | AT | KIPS | KILOPOUNDS (1,000 POUNDS) |
| C | CENTER LINE | KO | KNOCK OUT |
| PL | PLATE, PROPERTY LINE | LB | POUND |
| AB | ANCHOR BOLT | LB | LAG BOLT |
| ADJ | ADJACENT | LF | LINEAR FOOT |
| AFF | ABOVE FINISH FLOOR | LG | LONG |
| AL/ALUM | ALUMINUM | LL | LIVE LOAD |
| ARCH | ARCHITECTURAL | LLH | LONG LEG HORIZONTAL |
| BD | BOARD | LLV | LONG LEG VERTICAL |
| BD | BAR DIAMETER | LS | LAG SCREW |
| BLDG | BUILDING | LT | LIGHT |
| BLK | BLOCK | MAS | MASONRY |
| BLKG | BLOCKING | MAT | MATERIAL |
| BLW | BELOW | MAX | MAXIMUM |
| BM | BEAM | MB | MACHINE BOLT |
| BN | BOUNDARY NAIL | MECH | MECHANICAL |
| (B)OR BOT | BOTTOM | MEZZ | MEZZANINE |
| BRG | BEARING | MIN | MINIMUM |
| BS | BOTH SIDES | MH | MANHOLE |
| BTWN | BETWEEN | MANUF | MANUFACTURER |
| CB | CARRIAGE BOLT | MTL | METAL |
| CBC | CALIFORNIA BUILDING CODE | (N) | NEW |
| CF | CUBIC FOOT | NS | NEAR SIDE |
| CHAM | CHAMFER | NIC | NOT IN CONTRACT |
| CI | CAST-IRON | NOM | NOMINAL |
| CIP | CAST-IN-PLACE | NTS | NOT TO SCALE |
| CJ | CONSTRUCTION JOINT | OC | ON CENTER |
| CJP | COMPLETE JOINT PENETRATION | OD | OUTSIDE DIAMETER |
| CLS | CEILING | OH | OPPOSITE HAND |
| CLK | CAULK | OPNG | OPENING |
| CLKG | CAULKING | OPP | OPPOSITE |
| CLR | CLEAR | OWJ | OPEN WEB JOIST |
| CMU | CONCRETE MASONRY UNIT | PC | PRECAST |
| CNTR | CENTER | PERP | PERPENDICULAR |
| COL | COLUMN | PL | PLATE |
| CONC | CONCRETE | PLYWD | PLYWOOD |
| CONN | CONNECTION | PNL | PANEL |
| CONT | CONTINUOUS | PREFAB | PREFABRICATED |
| CSK | COUNTERSINK | PSF | POUNDS PER SQUARE FOOT |
| C | PENNY | PSI | POUNDS PER SQUARE INCHES |
| DBL | DOUBLE | PT | POINT |
| DEP | DEPRESSED | PT | PRESSURE TREATED |
| DET | DETAIL | PVC | POLYVINYL CHLORIDE |
| DF | DOUGLAS FIR | RAD | RADIUS |
| DFL | DOUGLAS FIR/LARCH | RD | ROOF DRAIN |
| DIA | DIAMETER | REF | REFERENCE |
| DIAG | DIAGONAL | REINF | REINFORCED / REINFORCING |
| DIM | DIMENSION | REQD | REQUIRED |
| DL | DEAD LOAD | REV | REVISION |
| DN | DOWN | RF | ROOF |
| DIV | DIVISION | RFTR | RAFTER |
| DR | DOOR | RH | ROOF HATCH |
| DWG | DRAWING | RM | ROOM |
| DWL | DOWEL | RO | ROUGH OPENING |
| (E) | EXISTING | RS | ROUGH SAWN |
| EA | EACH | SCHED | SCHEDULE |
| EF | EACH FACE | SECT | SECTION |
| EFJ | EXPANSION JOINT | SF | SQUARE FOOT |
| ELEV | ELEVATION | SHT | SHEET |
| EMBED | ELEVATOR | SHTG | SHEATHING |
| EN | EDGE NAIL | SIM | SIMILAR |
| EQ | EQUAL | SMS | SHEET METAL SCREW |
| EQUIP | EQUIPMENT | SOG | SLAB ON GRADE |
| ES | EACH SIDE | SPEC | SPECIFICATION |
| EW | EACH WAY | SQ | SQUARE |
| EXP | EXPANSION | SS | STAINLESS STEEL |
| EXT | EXTERIOR | SST | STAINLESS STEEL |
| FD | FLOOR DRAIN | STGR | STAGGERED |
| FDN | FOUNDATION | STD | STANDARD |
| FIN | FINISH FLOOR | STIFF | STIFFENER |
| FLR | FLOOR | STL | STEEL |
| FN | FIELD NAIL | STRUCT | STRUCTURAL |
| FO | FACE OF | STS | SELF TAPPING SCREW |
| FRMG | FRAMING | SYM | SYMMETRICAL |
| FS | FAR SIDE | SYS | SYSTEM |
| FT | FEET / FOOT | T&B | TOP AND BOTTOM |
| FTG | FOOTING | T&G | TONGUE AND GROOVE |
| GA | GALUCE | TEMP | TEMPORARY |
| GALV | GALVANIZED | THK | THICK |
| GL | GALVANIZED IRON | THKND | THICKENED |
| GLB | GLU-LAMINATED BEAM | THRU | THROUGH |
| GRD | GRADE | TL | TOTAL LOAD |
| GYP | GYPNUM | TSG | TAPERED STEEL GIRDER |
| HD | HOLDOWN | TYP | TYPICAL |
| HDR | HEADER | UFC | UNIFIED FACILITIES CRITERIA |
| HGR | HANGER | UON | UNLESS OTHERWISE NOTED |
| HORIZ | HORIZONTAL | VERT OR(V) | VERTICAL |
| HSD | HARD | V.I.F | VERIFY IN FIELD |
| HSB | HIGH STRENGTH BOLT | W/ | WITH |
| HT | HEIGHT | W/O | WITHOUT |
| HVAC | HEATING, VENTILATION, & AIRCONDITIONING | WCJ | WALL CONTROL JOINT |
| IBC | INTERNATIONAL BUILDING CODE | WD | WOOD |
| IN | INCH | WIN | WINDOW |
| INSP | INSPECTION / INSPECTOR | WP | WATERPROOF / WORK POINT |
| INT | INTERIOR | WPJ | WEAKENED PLANE JOINT |
| JST | JOIST | WT | WEIGHT |
| | | WWF | WELDED WIRE FABRIC |
| | | WWM | WELDED WIRE MESH |
- SYMBOLS :
-
- STRUCTURAL OBSERVATION :
1. PER CBC CHAPTER 17 SECTION 1704.6, THE OWNER SHALL EMPLOY A LICENSED ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, OR HIS DESIGNATED ENGINEER OR ARCHITECT TO MAKE SITE VISITS TO OBSERVE GENERAL COMPLIANCE WITH THE APPROVED STRUCTURAL PLANS, SPECIFICATIONS AND CHANGE ORDERS. THE ENGINEER OR ARCHITECT SHALL SUBMIT A STATEMENT IN WRITING TO THE BUILDING OFFICIAL STATING THAT THE SITE VISIT HAS BEEN MADE AND THAT ANY DEFICIENCIES NOTED HAVE BEEN CORRECTED. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE INSPECTIONS REQUIRED BY SECTIONS 110, 1704, 1705, OR OTHER SECTIONS OF THE CODE.THE CONTRACTOR SHALL NOTIFY THE ENGINEER 72 HOURS PRIOR TO THE COMPLETION OF ANY WORK THAT REQUIRES OBSERVATIONS. STRUCTURAL OBSERVATIONS ARE REQUIRED FOR THE FOLLOWING WORK PERFORMED BY THE CONTRACTOR:

a. 50% OF FOUNDATION REINFORCEMENT.

b. 50% OF STRUCTURAL STEEL FRAMING.

c. 50% OF CONCRETE REPAIRS
- TEMPORARY WORK AND SITE SAFETY :
1. THE STRUCTURAL DRAWINGS SHOW THE REQUIREMENTS FOR THE COMPLETED STRUCTURE ONLY. TEMPORARY WORKS REQUIRED TO COMPLETE THE CONSTRUCTION PROCESS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE DESIGN OR FIELD VERIFICATION OF TEMPORARY AND ANCILLARY WORK.

2. THE RESPONSIBILITY FOR SAFETY IN AND AROUND THE JOBSITE SHALL BEAR ON THE CONTRACTOR. PROPER AND SAFE METHODS OF CONSTRUCTION SHALL BE EMPLOYED AT ALL TIMES INCLUDING THE STABILIZING OF INCOMPLETE STRUCTURES, FORMWORK, SHORING, RESHORING, FRAMEWORK, PLATFORMS, SCAFFOLDING, BARRIERS, WALKWAYS, ETC. AND INCLUDING CONTROL OF THE INTENSITY, DURATION AND LOCATION OF CONSTRUCTION LOADS.

3. THE RESPONSIBILITY FOR THE DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING, UNDERPINNING, AND SHORING REQUIRED TO SAFELY RETAIN ALL GRADES AND STRUCTURES SHALL BEAR ON THE CONTRACTOR.

4. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON A STRUCTURE. LOADS SHALL NOT EXCEED THE DESIGN LIVE LOAD INDICATED. WHERE THE STRUCTURE HAS NOT ATTAINED FINAL DESIGN STRENGTH, ADEQUATE SHORING AND / OR BRACING SHALL BE INSTALLED.
- UNDERGROUND SERVICE ALERT

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760.942.5147 Fax 760.942.4508
- CITY OF CORONA**

400 SOUTH VICENTIA AVENUE
CORONA, CALIFORNIA 92882
- Designed by
MS

Drawn by
AM

Checked by
DI

PLANS PREPARED UNDER SUPERVISION OF
GUY KELSEY

Date 11/13/23 R.S.E. No. 2092
- Reference Plans for
these Improvements

Date By

REVISIONS

App'd
- BENCH MARK

Scale
- CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
- STRUCTURAL GENERAL NOTES - 1
- Drawing No.
S-1
- Sh 8 of 19
-
- 36"x24" ORIGINAL SCALE IN INCHES 0 1 2
- 11/13/2023 3:09 PM
- Z:\Shared\CAD\110 - Dudek\37 - City of Corona Surge Anticipator Improvements\Final\DETAIL\15173 S-1

FOUNDATION :

1. SOIL PARAMETERS SHALL BE PER THE MINIMUM REQUIREMENTS OF CHAPTER 18 OF THE CALIFORNIA BUILDING CODE (CBC).
2. CONTRACTOR SHALL VERIFY SOIL SUBGRADE PROPERTIES ARE EQUAL OR BETTER THAN THE PRESUMPTIVE PROPERTIES PRESCRIBED BY CBC.
3. SOIL REMOVAL, BACKFILLING, AND RECOMPACTION SHALL BE PERFORMED UNDER THE GOVERNING JURISDICTION'S SUPERVISION AND INSPECTION.
4. TYPE OF FOOTING:

A. SHALLOW FOOTING SYSTEM—MINIMUM EMBEDMENT 18" BELOW LOWEST ADJACENT GRADE.

DESIGN SOIL PRESSURE:

FOOTING TYPE	STATIC BEARING PRESSURE
SPREAD FOOTING	1,500 PSF UON

ALLOWABLE BEARING CAPACITIES MAY BE INCREASED BY ONE-THIRD WHEN CONSIDERING LOADS OF SHORT DURATION SUCH AS WIND OR SEISMIC FORCES.

5. COEFFICIENT OF SLIDING FRICTION SHALL BE 0.25.
6. FOOTING ELEVATIONS SHALL BE LOCATED SUCH THAT THEIR BEARING IS A MINIMUM HORIZONTAL DISTANCE OF 7 FEET FROM THE DAYLIGHT OF AN ADJACENT SLOPE OR AS RECOMMENDED WITHIN THE GEOTECHNICAL REPORT
7. FOUNDATION EXCAVATIONS, FILLING, AND COMPACTION ARE TO BE OBSERVED BY AND DEEMED ACCEPTABLE TO THE GOVERNING JURISDICTION PRIOR TO PLACEMENT OF REINFORCING STEEL OR CONCRETE.
8. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED.
9. SLAB BASE AND COMPACTION TO BE IN ACCORDANCE WITH CBC MINIMUM REQUIREMENTS.
10. NO PIPES OR DUCTS SHALL BE PLACED IN SLABS OR WALLS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
11. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
12. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF UTILITY SERVICE IN AREAS TO BE EXCAVATED BEFORE BEGINNING EXCAVATION. EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING. DAMAGE CAUSED AS A RESULT OF FAILING TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
13. THE CONTRACTOR SHALL PROVIDE FOR DESIGN, APPROVALS, PERMITS, INSTALLATION AND MONITORING OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED TO SAFELY RETAIN TEMPORARY EXCAVATIONS.

CONCRETE :

1. CONCRETE CONSTRUCTION SHALL CONFORM TO CHAPTER 19 OF THE CALIFORNIA BUILDING CODE, ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (LATEST EDITIONS), EXCEPT AS MODIFIED BY THE SUPPLEMENTAL AND ACI 350 " CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES" CONTAINED HEREIN OR SHOWN ON THE DRAWINGS.
2. CONCRETE MIX DESIGNS SHALL BE PER SPECIFICATION SECTION 03 30 00 CAST-IN-PLACE CONCRETE AND SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS "GREENBOOK" CONCRETE MIX DESIGNS.
3. ALL STRUCTURAL CONCRETE UON SHALL BE NORMAL WEIGHT CLASS A2 CONCRETE (GREENBOOK 658—BME—4500P) WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI AT 28 DAYS AND A MAXIMUM WATER TO CEMENT RATIO OF 0.45.
4. THE MAXIMUM SIZE AGGREGATE IN FOUNDATION AND MASS CONCRETE WORK SHALL BE 1 INCH. THE MAXIMUM SIZE AGGREGATE IN SLABS ON GRADE, WALLS, AND ALL OTHER CONCRETE SHALL BE 3/4". PEA GRAVEL SHALL NOT BE USED FOR STRUCTURAL CONCRETE, UON.
5. CEMENT SHALL CONFORM TO ASTM C150, TYPE II/V, LOW ALKALI. AGGREGATES FOR NORMAL WEIGHT SHALL CONFORM TO ASTM C33.
6. ADMIXTURES AND COLORS (EXCEPT AS NOTED HEREIN) SHALL NOT BE USED UNLESS SUBSTANTIATING DATA IS SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD.
7. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY. THE MIX DESIGNS SHALL CONFORM TO CBC CHAPTER 19 UNLESS OTHERWISE NOTED.
8. NON-STRUCTURAL STEEL EMBEDDED IN CONCRETE SHALL BE GALVANIZED OR PAINTED. ALL DAMAGED GALVANIZED AREAS SHALL BE REPAIRED PRIOR TO EMBEDMENT.
9. READY MIXED CONCRETE SHALL CONFORM TO ASTM C94.
10. PLACEMENT OF CONCRETE SHALL CONFORM TO ACI 304. CLEAN AND ROUGHEN TO 1/4" AMPLITUDE FOR ALL CONCRETE SURFACES AGAINST WHICH CONCRETE IS TO BE PLACED.
11. ALL EXPOSED CONCRETE SHALL HAVE A SMOOTH FORM FINISH USING B-B PLYFORM, CLASS I, EXT-APA PLYWOOD.
12. ALL SLABS SHALL HAVE A TROWEL FINISH EXCEPT AS NOTED ON THE DRAWINGS.
13. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
14. IF THE CONTRACTOR REQUESTS TO MAKE ANY CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON THESE DRAWINGS, THEY SHALL SUBMIT DETAILS OF CHANGES TO THE DISTRICT'S REPRESENTATIVE OF RECORD FOR REVIEW BEFORE STARTING WORK.
15. NO BRICK OR POROUS MATERIAL SHALL BE USED TO SUPPORT FOUNDATION STEEL OFF THE GROUND.
16. PROVIDE 3/4 INCH CHAMFER ON ALL EXPOSED CONCRETE CORNERS, UON.
17. SLEEVE PIPING OPENINGS IN SLABS WITH NON-CORROSIVE SLEEVE BEFORE PLACING CONCRETE AND BEND REINFORCING AROUND SLEEVES.
18. ALL REINFORCING BARS SHALL BE PROVIDED WITH THE FOLLOWING CONCRETE MINIMUM COVER:

FOOTINGS CAST AGAINST EARTH	3"
FORMED CONCRETE EXPOSED TO EARTH, WEATHER OR LIQUID	2"
BEAMS AND GIRDERS	2"
WALLS	2"
COLUMN TIES	2"
SLABS (#11 AND SMALLER)	2"
19. CONCRETE CURING: TYPICALLY REQUIRED A MINIMUM OF 10 DAYS.

REINFORCING STEEL :

1. ALL REINFORCING STEEL SHALL BE PLACED IN CONFORMANCE WITH THE CBC, AND THE "MANUAL OF STANDARD PRACTICE" BY THE CRSI OR AS MODIFIED BY THE CONSTRUCTION DOCUMENTS.
2. REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING STANDARDS:

DEFORMED BARS	ASTM A615 GR 60
WELDED REINFORCEMENT	ASTM A706
3. STEEL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE TO MAINTAIN THEIR EXACT POSITION BEFORE AND DURING PLACEMENT OF THE CONCRETE. BARS IN BEAMS AND SLABS SHALL BE SUPPORTED ON WELL-CURED CONCRETE BLOCKS OR APPROVED PLASTIC TIPPED METAL CHAIRS, AS SPECIFIED BY CRSI MANUAL OF STANDARD PRACTICE, MSP-1. WIRE FABRIC IN SLABS SHALL BE SECURELY FASTENED TO SUPPORTING DEVICES TO MAINTAIN THEIR POSITION DURING CONCRETE PLACEMENT.
4. NO WELDING OF REINF. ALLOWED UNLESS APPROVED BY ENGINEER WHERE WELDING OF REINFORCING BARS ARE APPROVED BY THE ENGINEER, BARS SHALL BE A706 AND WELDING SHALL BE DONE BY AWS CERTIFIED WELDERS USING THE SMAW PROCESS AND E80XX ELECTRODES. WELDING PROCEDURE SHALL BE QUALIFIED PER THE REQUIREMENTS OF THE "STRUCTURAL WELDING CODE – REINFORCING STEEL", AWS D1.4, LATEST EDITION.
5. DETAILS OF REINFORCEMENT SHALL COMPLY WITH ACI 318, CHAPTER 25 (LATEST EDITION).
6. ALL REINFORCING BAR BENDS SHALL BE MADE COLD, UNLESS OTHERWISE PERMITTED BY THE BUILDING OFFICIAL.
7. DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE LAPPED WITH THE SAME GRADE, SIZE, SPACING AND NUMBER AS THE VERTICAL REINFORCEMENT.
8. REINFORCING SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS USING MINIMUM LENGTHS CORRESPONDING TO A CONCRETE COMPRESSIVE STRENGTH OF 4,000 PSI.
9. SLAB ON GRADE REINFORCING SHALL BE POSITIONED AT MID-DEPTH, UNLESS OTHERWISE NOTED.
10. PIPING AND CONDUIT SHALL BE SO FABRICATED AND INSTALLED THAT CUTTING, BENDING, OR DISPLACEMENT OF REINFORCEMENT FROM ITS PROPER LOCATION WILL NOT BE REQUIRED PER ACI 318 SECTION 6.3.12.
11. MINIMUM CLEAR DISTANCES BETWEEN REINFORCING STEEL, INCLUDING SPLICED REINFORCEMENT, SHALL BE 1" OR 1 BAR DIAMETER, WHICHEVER IS GREATER. MINIMUM CLEAR DISTANCE AT COLUMNS SHALL BE 1 ½" OR 1 ½ BAR DIAMETERS, WHICHEVER IS GREATER.
12. ALL REINFORCEMENT SHALL BE CENTERED ON MEMBER UNLESS OTHERWISE INDICATED.

ADHESIVE ANCHORS AND DOWELS :

1. ADHESIVE ANCHORS AND DOWELS INSTALLED INTO CONCRETE SHALL BE AS INDICATED BELOW, UNLESS OTHERWISE NOTED. INSTALLATION SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL CODE COUNCIL (ICC) REPORT AND MANUFACTURER'S RECOMMENDATIONS.

CONCRETE:	HILTI HIT HY 200-R V3	(ICC ESR-4878)
	SIMPSON SET-XP	(ICC ESR-2508)
	OR APPROVED EQUAL	
2. ANCHOR ROD SHALL BE ASTM F593 TYPE 316 STAINLESS, UON. NUTS AND WASHERS SHALL COMPLY WITH ASTM A193.
3. CONTRACTOR SHALL PROVIDE ISOLATION AT CONTACT BETWEEN ALL DISSIMILAR METALS.
4. ANCHORS INSTALLERS SHALL BE TRAINED BY A QUALIFIED REPRESENTATIVE OF THE ADHESIVE MANUFACTURER ON THE PROPER PROCEDURES AND TECHNIQUES FOR INSTALLATION.
5. PROVIDE ANCHORS WITH THE TYPE, DIAMETER, AND MINIMUM EMBEDMENT DEPTH AS NOTED ON THE DRAWINGS. SUBSTITUTIONS ARE NOT ALLOWED WITHOUT APPROVAL FROM THE STRUCTURAL ENGINEER.
6. THE DIAMETER AND DRILLING METHOD OF THE HOLES ARE PER THE MANUFACTURER'S RECOMMENDATIONS. PRIOR TO INSTALLING ANCHORS OR DOWELS, WIRE BRUSH HOLES TO REMOVE RESIDUE, BLOW OUT WITH OIL-FREE COMPRESSED AIR, AND ALLOW HOLE TO DRY. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH ADHESIVE ANCHORS.
7. REMOVE GREASE, OIL, RUST, AND OTHER LAITANCE FROM RODS AND DOWELS PRIOR TO INSTALLATION.
8. WHEN INSTALLING ANCHORS IN EXISTING REINFORCED CONCRETE OR MASONRY, LOCATE AND AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS.
9. HOLES DRILLED FOR ANCHORS THAT DO NOT SET PROPERLY OR IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT.

STRUCTURAL STEEL :

1. FABRICATION AND ERECTION TO CONFORM TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) LATEST EDITION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BUILDINGS" AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" EXCEPT AS OTHERWISE SHOWN OR SPECIFIED.
2. AMERICAN WELDING SOCIETY (AWS) CERTIFIED WELDERS SHALL BE USED FOR ALL WELDING. WELDING TO BE PERFORMED IN AISC CERTIFIED FABRICATOR SHOP OR EQUAL. ALL WELDING TO CONFORM TO THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE AWS D1.1.
3. MATERIALS:

ROLLED SHAPES	
WIDE FLANGES	A992
ANGLES/CHANNELS	A36
PLATES	
BEAM/COVER SIDE PLATES	A572 Gr. 50
COLUMN CONTINUITY PLATES	A572 Gr. 50
COLUMN BASE PLATES	A572 Gr. 50
OTHER UON	A36
RECTANGULAR HSS	A500 Gr. B46
ROUND HSS	A500 Gr. B42
STEEL PIPE	A53 Gr. B
HIGH STRENGTH BOLTS	A325
MACHINE BOLTS	A307
ANCHOR BOLTS	F1554 Gr. 55 (UON)
4. ALL STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED UON.
5. CONNECTED MEMBERS SHALL BEAR ONLY UPON UNTHREADED PORTIONS OF BOLTS.
6. BURNING OF HOLES IS NOT ALLOWED.
7. SPECIAL INSPECTION SHALL CONFORM TO CALIFORNIA BUILDING CODE (CBC) REQUIREMENTS (CHAPTER 17).
8. THE STRUCTURAL STEEL FABRICATOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.
9. BOLT HOLES SHALL BE 1/16" LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT USED, UNLESS NOTED OTHERWISE.
10. ALL STRUCTURAL STEEL SURFACES TO BE ENCASED IN CONCRETE OR MASONRY SHALL BE LEFT UNPAINTED.
11. STRUCTURAL STEEL SHALL BE DELIVERED TO THE JOB SITE FREE OF EXCESSIVE RUST, MILL SCALE, GREASE, ETC.
12. OPENING SHALL NOT BE PLACED IN STEEL MEMBERS UNLESS SPECIFICALLY DETAILED.
13. CONTRACTOR SHALL PROVIDE ISOLATION AT CONTACT BETWEEN ALL DISSIMILAR METALS.

WELDING :

1. ALL WELDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE AMERICAN WELDING SOCIETY CODE D1.1. (LATEST EDITION).
2. ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS.
3. ALL WELDS SHALL HAVE A WELD CONTROLLED SEQUENCE AND TECHNIQUE IN ORDER TO MINIMIZE SHRINKAGE, STRESSES AND DISTORTION.
4. ALL ELECTRODES FILLER MATERIAL SHALL BE A MINIMUM OF E70XX.
5. WELDING OF METAL DECK AND LIGHT GAUGE METAL FRAMING SHALL BE DONE BY CERTIFIED LIGHT GAUGE WELDERS IN ACCORDANCE WITH AWS SPECIFICATIONS FOR WELDING SHEET STEEL IN STRUCTURES, AWS D1.3.
6. UNLESS A LARGER SIZE FILLET WELD IS INDICATED, PROVIDE MINIMUM SIZE WELD PER AISC SPECIFICATION, SECTION J2 AND TABLE J2.4.
7. WELD LENGTHS INDICATED ON PLANS ARE THE MINIMUM NET EFFECTIVE LENGTH REQUIRED. WHERE LENGTH OF WELD IS NOT SPECIFIED, IT SHALL BE FULL LENGTH OF JOINT.

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760.942.5147 Fax 760.942.4508



CITY OF CORONA
400 SOUTH VICENTIA AVENUE
CORONA, CALIFORNIA 92882

Designed by	Drawn by	Checked by
MS	AM	DI
PLANS PREPARED UNDER SUPERVISION OF		
GUY KELSEY		
Date 11/13/23	R.S.E.	No. 2092

Reference Plans for these Improvements	Date	By	REVISIONS	App'd

BENCH MARK
Scale

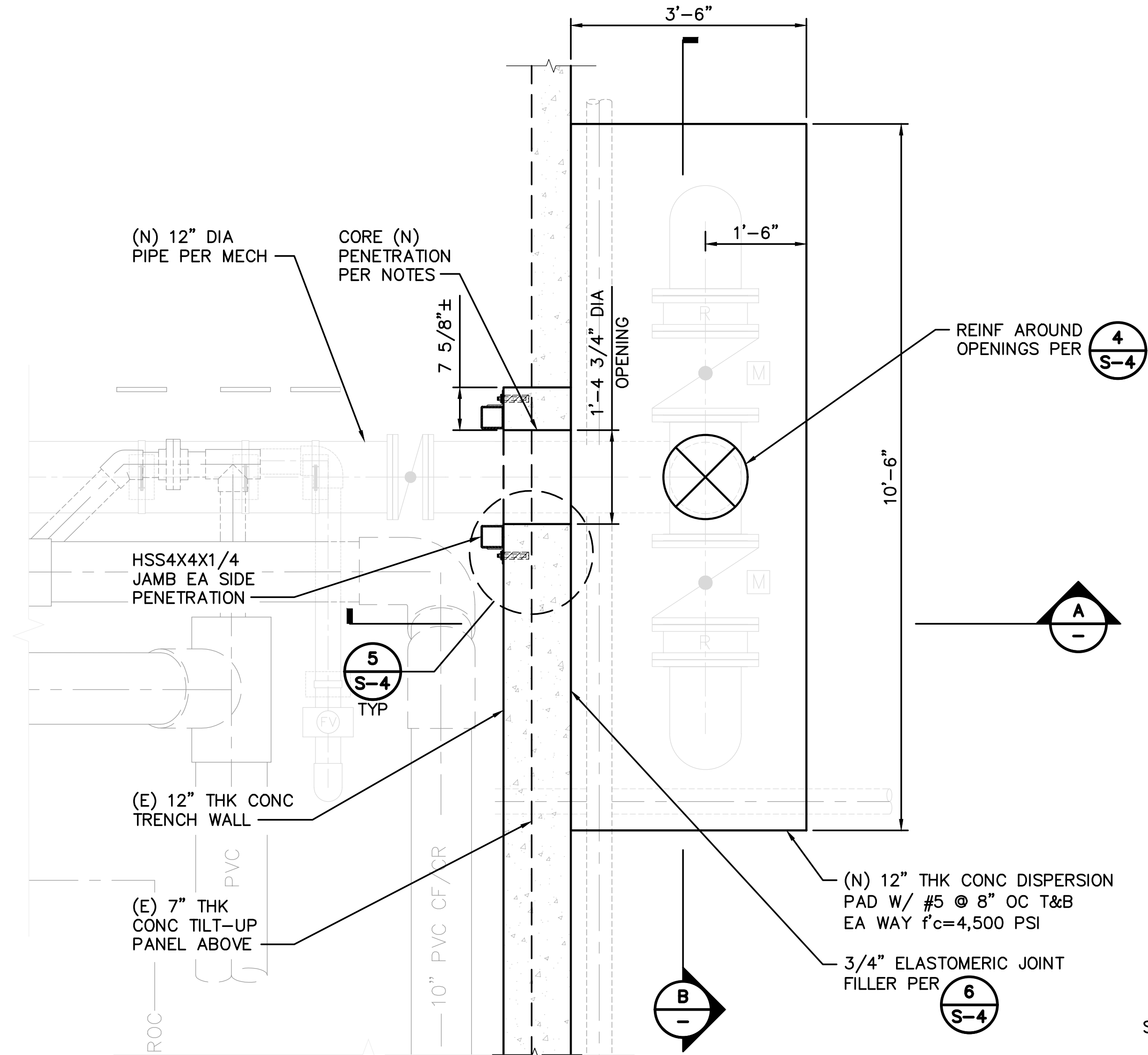
CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS

STRUCTURAL GENERAL NOTES - 2

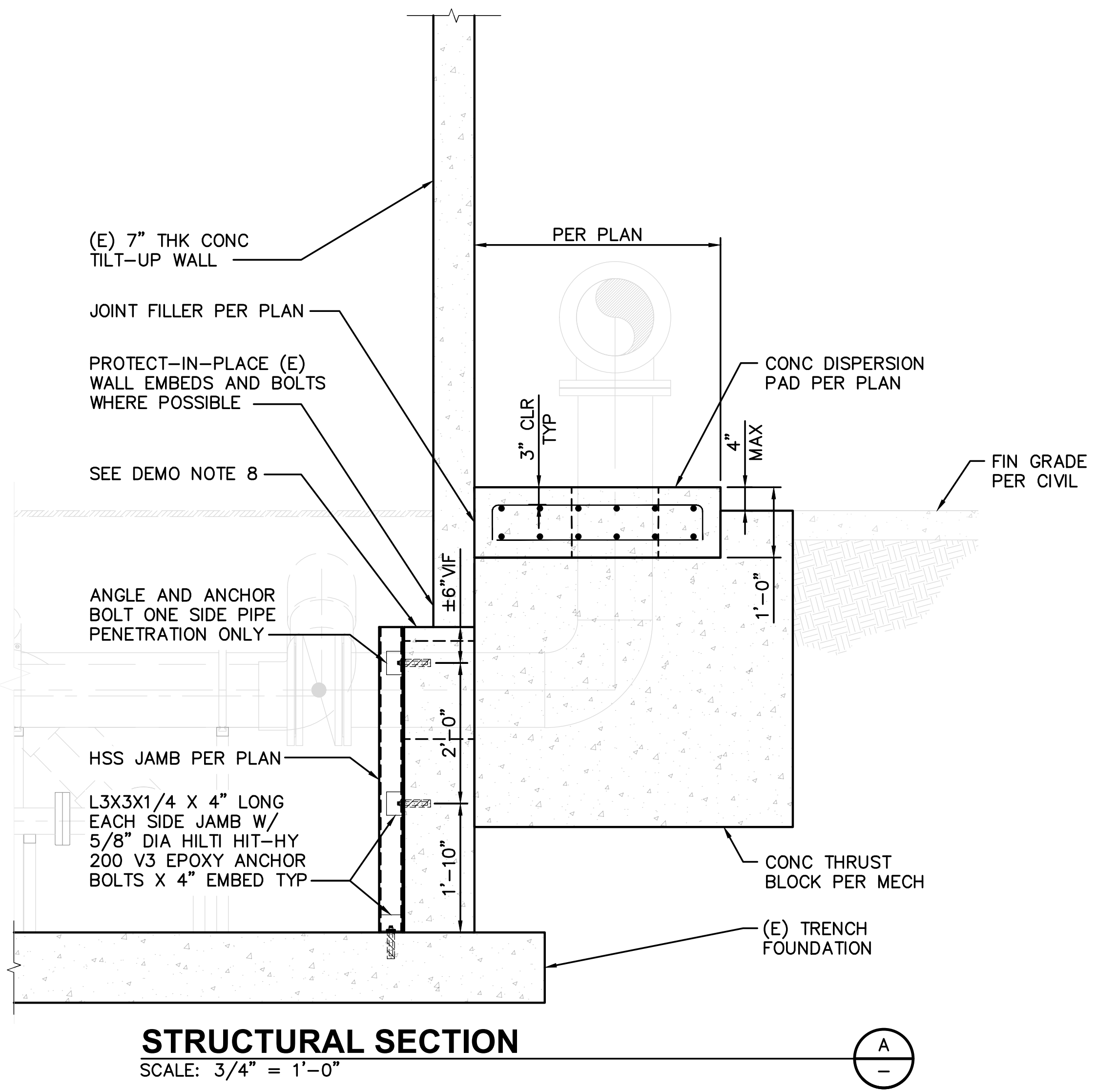
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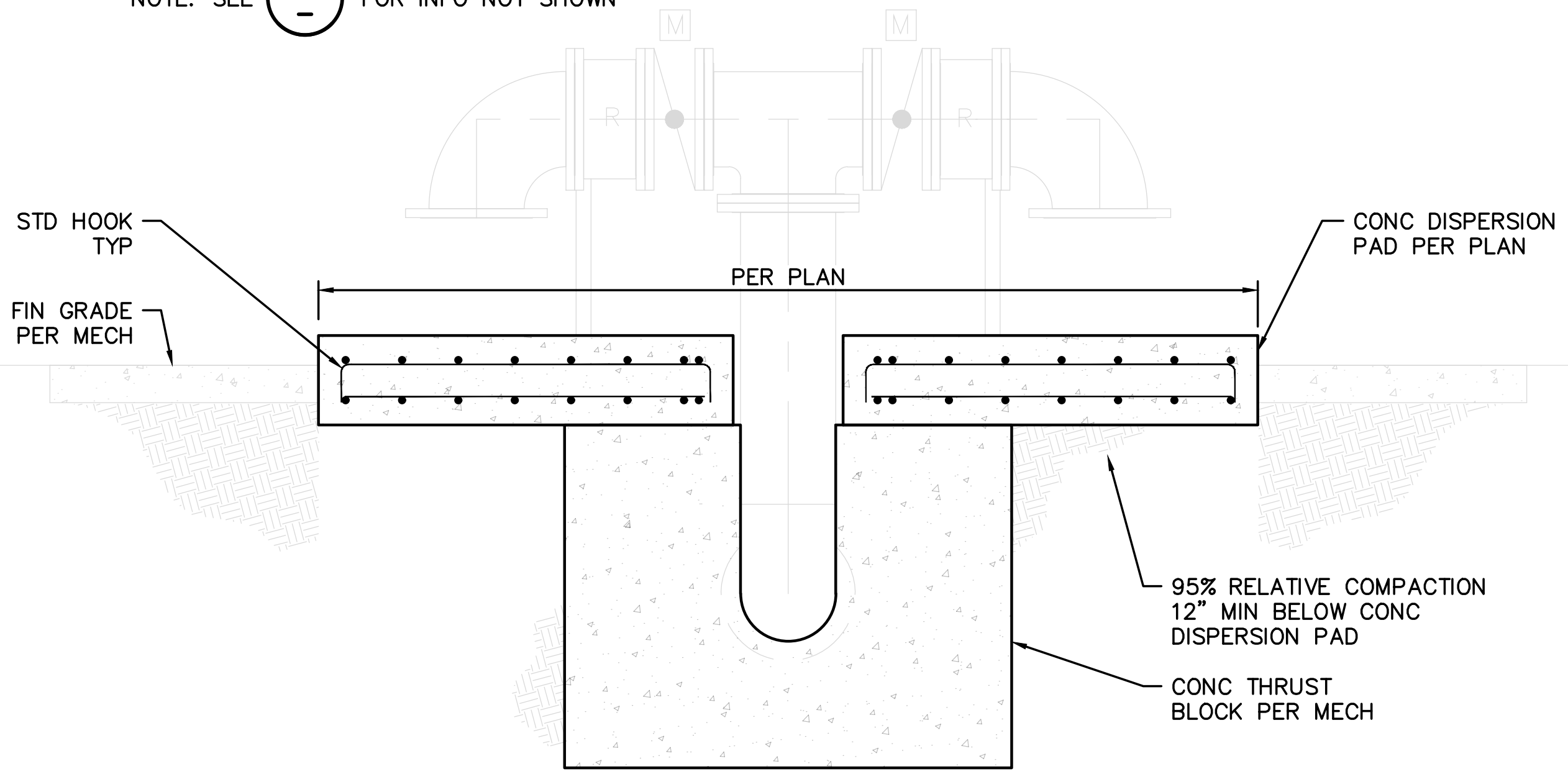


STRUCTURAL FOUNDATION PLAN
SCALE: 3/4" = 1'-0"



STRUCTURAL SECTION
SCALE: 3/4" = 1'-0"

NOTE: SEE A FOR INFO NOT SHOWN



STRUCTURAL SECTION
SCALE: 3/4" = 1'-0"

DEMOLITION NOTES :

1. THE RESPONSIBILITY FOR NECESSARY SHORING OR BRACING OF THE EXISTING STRUCTURE DURING DEMOLITION AND PROCEDURES SHALL BEAR ON THE CONTRACTOR.
2. DEVIATIONS FROM EXISTING CONDITIONS AS INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE RESOLVED WITH THE ENGINEER PRIOR TO PROCEEDING WITH DEMOLITION WORK.
3. RESPONSIBILITY FOR COORDINATION OF DEMOLITION WORK WITH THE GOVERNING JURISDICTION SHALL BEAR ON THE CONTRACTOR.
4. ELEMENTS THAT WILL NOT BE DEMOLISHED SHALL BE PROTECTED FROM DAMAGE.
5. THESE DRAWINGS DO NOT INDICATE THE PHASING OF ALL DEMOLITION. THE RESPONSIBILITY FOR THE SCHEDULING AND COORDINATION OF THE WORK SHALL BEAR ON THE CONTRACTOR. WORK SHALL BE COORDINATED TO LEAST IMPACT THE NEIGHBORING COMMUNITY. CONTRACTOR SHALL SUBMIT A WORK PLAN FOR APPROVAL TO THE GOVERNING JURISDICTION PRIOR TO START.
6. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. CONTRACTOR SHALL COMPLY WITH ALL DISPOSAL AND RECYCLING REQUIREMENTS.
8. WHERE REMAINING CONCRETE IS LESS THAN 3 INCHES THICK, SAWCUT AND REMOVE CONCRETE TO BOTTOM OF TILT-UP CONC WALL PANEL. MINIMIZE EXTENTS OF SAWCUT WHERE POSSIBLE. NOTIFY THE STRUCTURAL ENGINEER PRIOR TO SAWCUTTING FOR APPROVAL OF PROPOSED SAWCUT EXTENTS.

STRUCTURAL NOTES :

1. FOR STRUCTURAL GENERAL NOTES, DESIGN CRITERIA AND ABBREVIATIONS REFERENCE S-1 AND S-2. FOR TYPICAL STRUCTURAL DETAILS SEE SHEET S-4.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS SHOWN ON THESE DRAWINGS PER MECHANICAL.
3. COORDINATE THE WORK OF ALL TRADES WITH THE STRUCTURAL REQUIREMENTS INDICATED. REFER TO MECHANICAL DRAWINGS.
4. FOR SIZE AND LOCATION OF WALL OPENINGS, SLAB OPENINGS AND OTHER REQUIREMENTS NOT INDICATED REFER TO MECHANICAL DRAWINGS.
5. FOR ITEMS EMBEDDED INTO CONCRETE SLABS AND WALLS NOT INDICATED, REFER TO MECHANICAL DRAWINGS.
6. CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS, DIMENSIONS AND EXISTING MEMBER SIZING PRIOR TO DEMOLITION OR CONSTRUCTION.

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Designed by MS	Drawn by AM	Checked by DI
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BENCH MARK
Scale

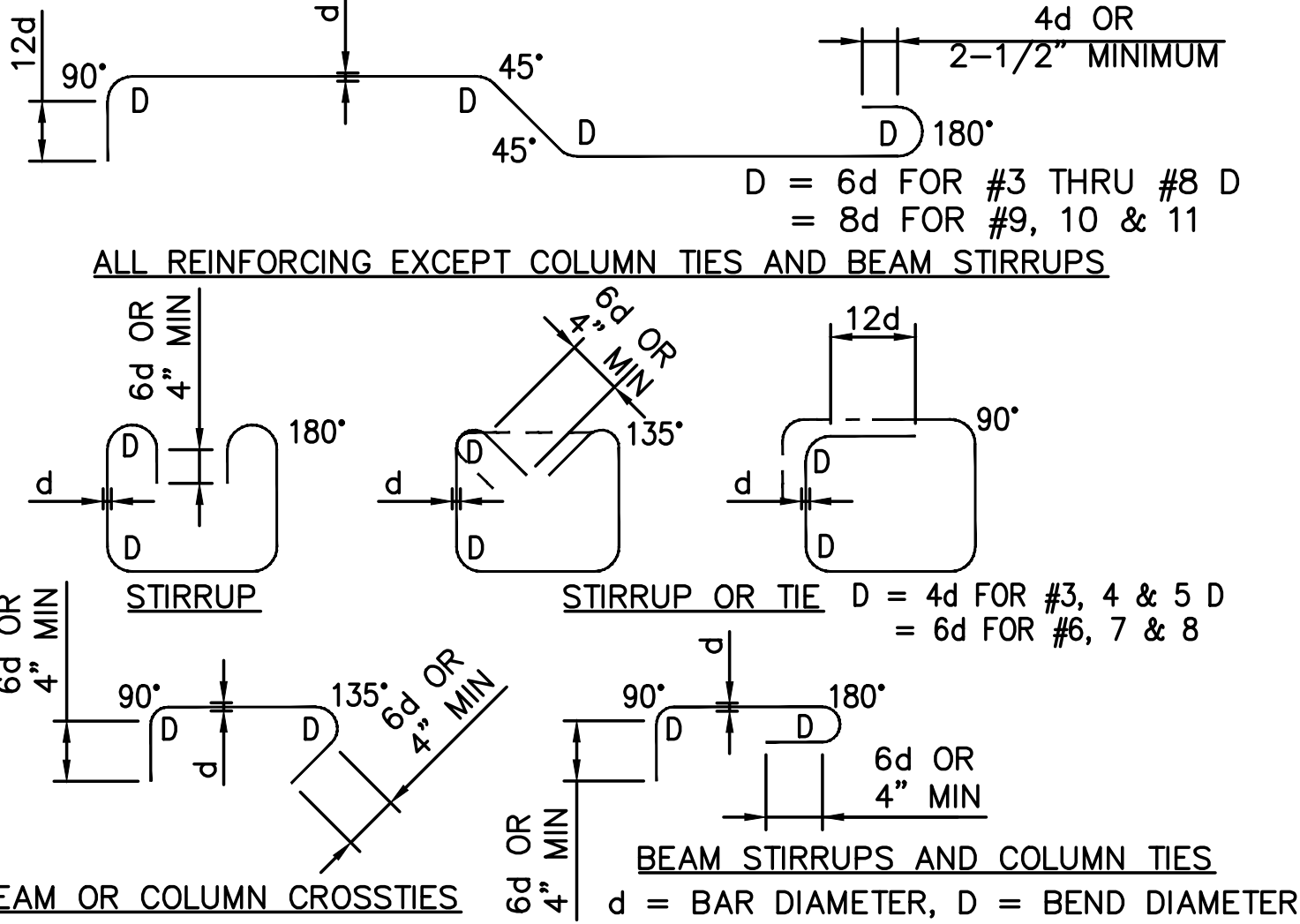
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STRUCTURAL PLANS AND SECTIONS

Drawing No.
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36"x24" ORIGINAL SCALE IN INCHES 0 1 2

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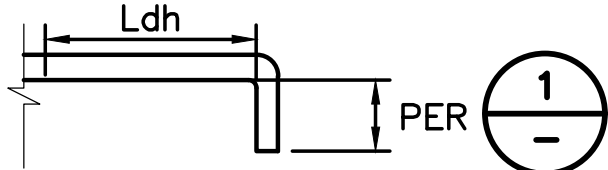
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TYPICAL REINFORCING LAP SPLICE AND EMBEDMENT LENGTH SCHEDULE

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NOTES:

- SPLICE AND EMBEDMENT LENGTHS ARE IN INCHES. SPLICE SHALL BE CLASS "B" UON.
- 0.80 SPLICE LENGTH MAY BE USED IF NOT MORE THAN 1/2" OF THE BARS ARE LAP SPLICED WITHIN A REQUIRED LAP LENGTH.
- TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" CONC. BELOW, OTHER BARS ARE BOTTOM OR VERTICAL BARS.
- WHERE REQUIRED EMBEDMENT CANNOT BE OBTAINED WITH STRAIGHT BARS, PROVIDE 180° OR 90° HOOK EQUAL TO LENGTH BELOW.
- SCHEDULE IS FOR GRADE 60 BARS.
- SCHEDULE IS FOR NORMAL WEIGHT CONCRETE. INCREASE SCHEDULE VALUE BY 1.33 FOR LIGHTWEIGHT CONCRETE.
- CLEAR SPACING BETWEEN BARS BEING DEVELOPED SHALL BE GREATER THAN 2db AND CONC COVER GREATER THAN db.
- SPLICE LENGTH FOR BARS OF DIFFERENT SIZE SHALL BE LARGER OF DEVELOPMENT LENGTH OF LARGER BAR AND SPLICE LENGTH OF SMALLER BAR.
- LINEAR INTERPOLATION FOR INTERMEDIATE CONCRETE STRENGTHS SHALL BE PERMITTED.

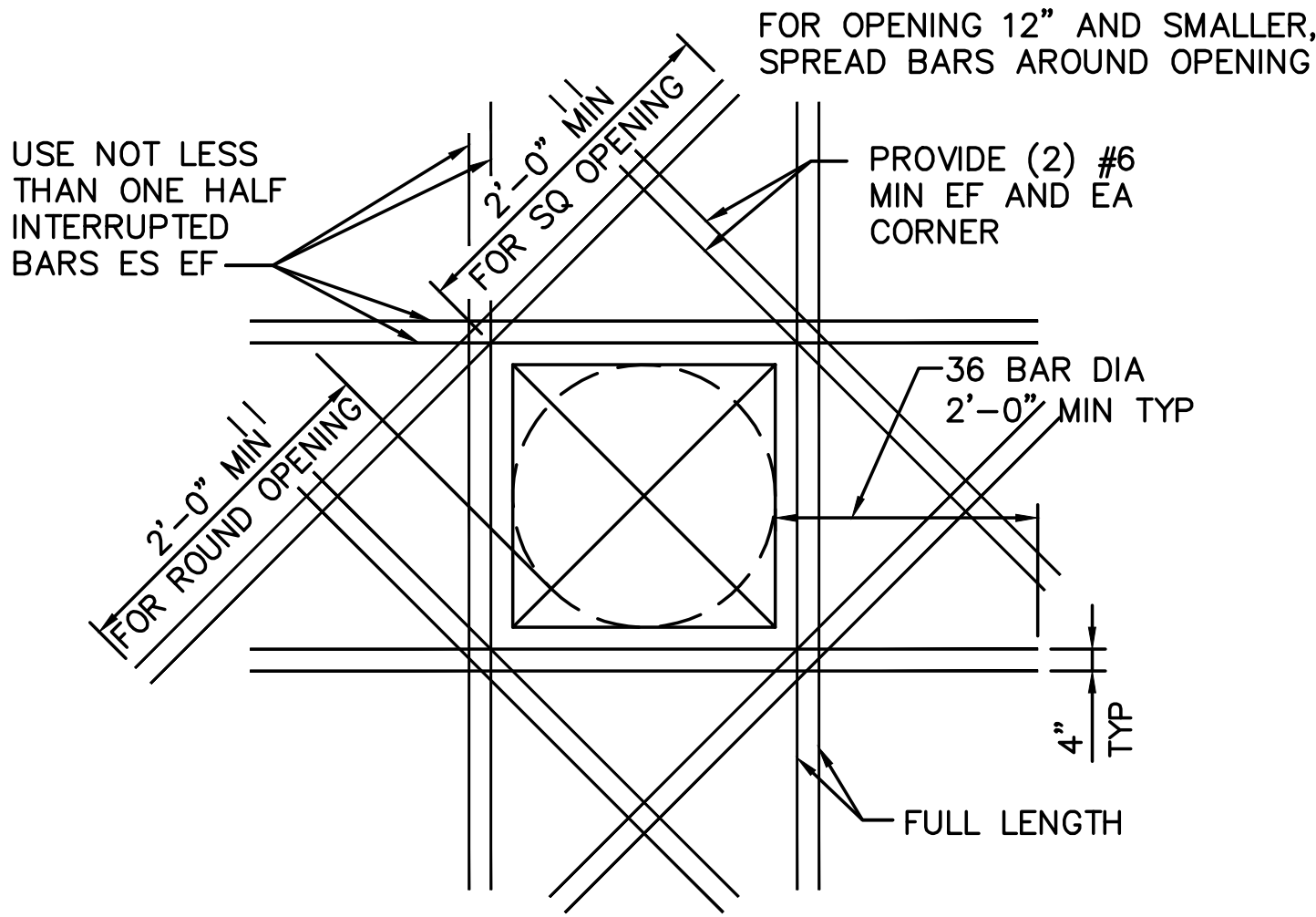
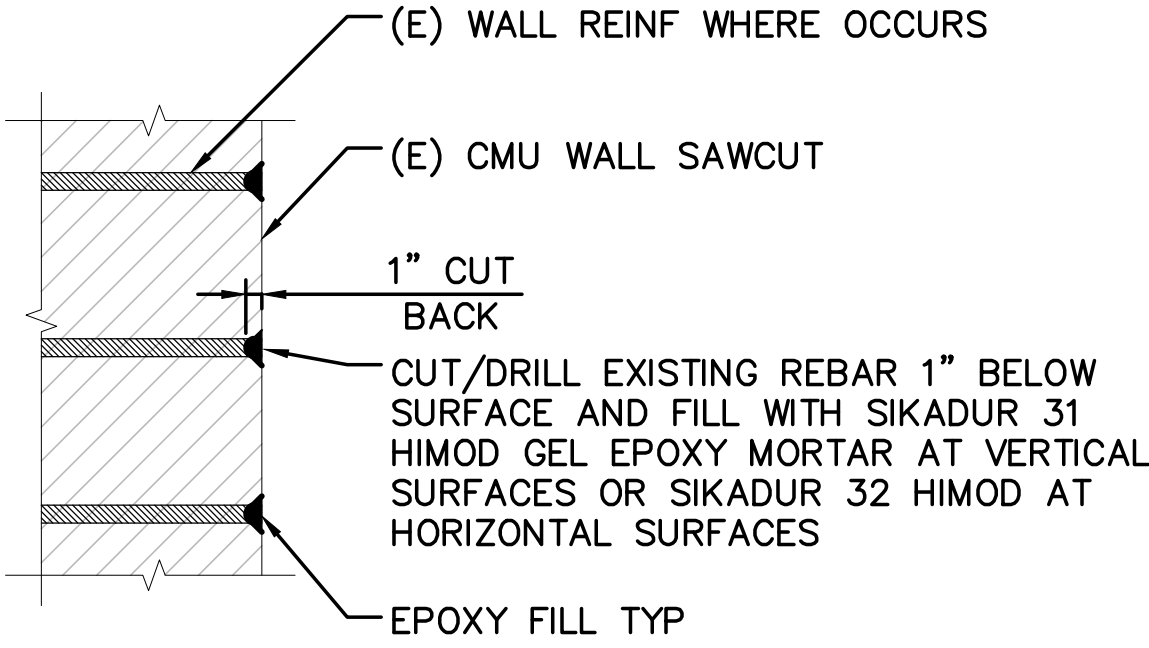


TYP REINF LAP SPLICE AND EMBED LENGTH
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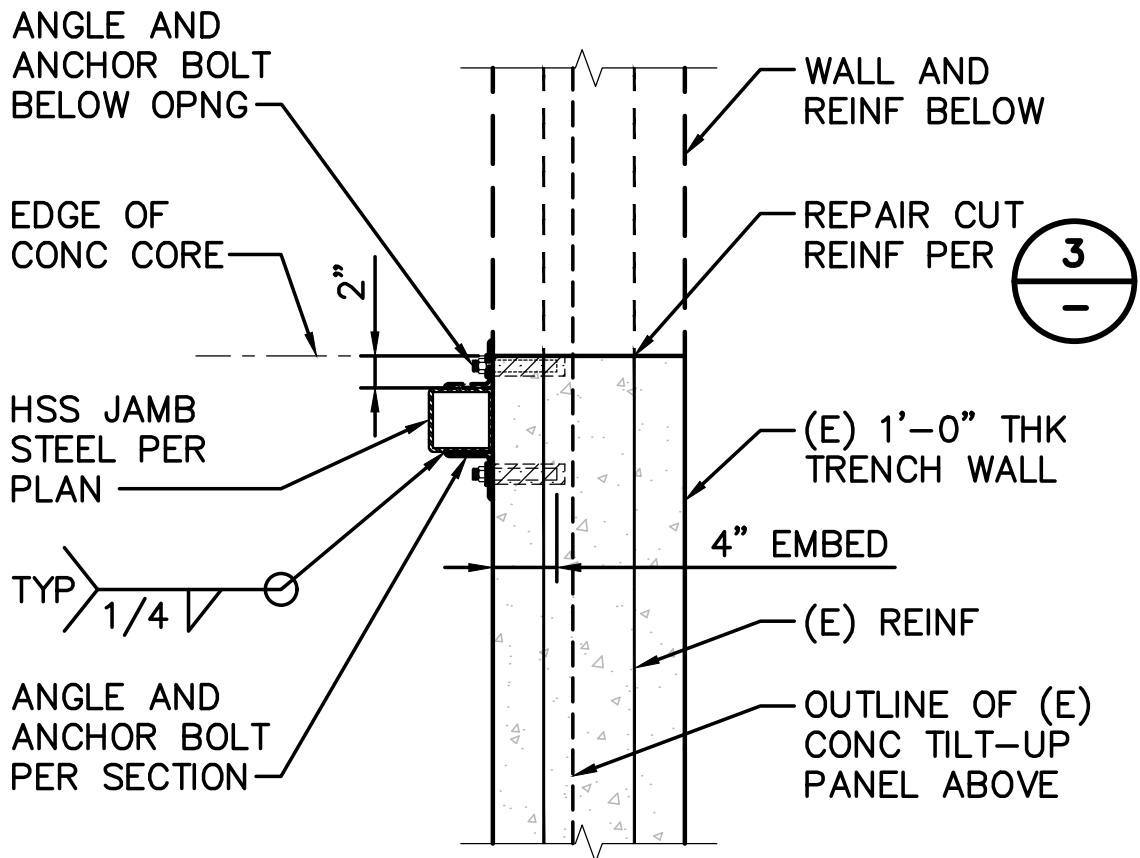
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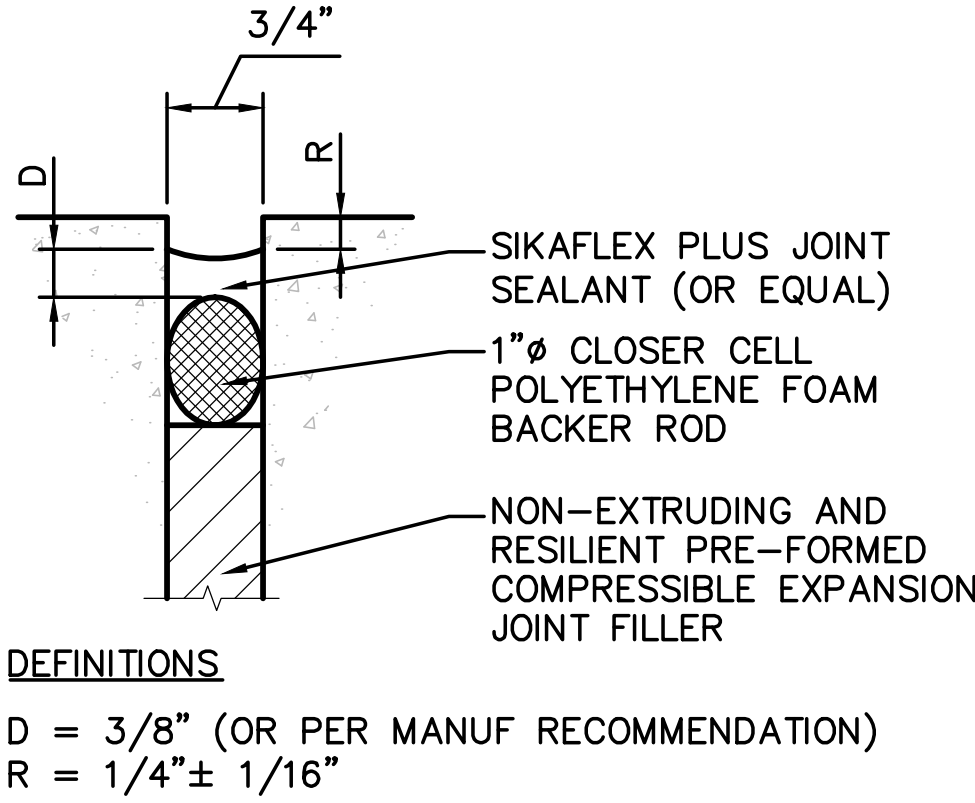
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OPENING JAMB STEEL ANCHORAGE
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SLAB EXPANSION JOINT
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6
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Designed by MS Drawn by AM Checked by DI
PLANS PREPARED UNDER SUPERVISION OF GUY KELSEY
Date 11/13/23 R.S.E. No. 2022

Reference Plans for these Improvements
Date By REVISIONS App'd

BENCH MARK
Scale

CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
STRUCTURAL DETAILS

Drawing No. S-4
Sh 11 of 19



36"x24" ORIGINAL SCALE IN INCHES 0 1 2

GENERAL		RACEWAYS		ABBREVIATIONS	
<div><div><div><div><div></div><div>A3</div></div><div><div></div><div>E101</div></div></div><div>IDENTIFICATION NUMBER BASED ON SHEET GRID COORDINATES</div><div>SHEET DETAIL APPEARS (ILLUSTRATED) ON.</div></div><div><div>TITLE</div><div>SCALE: 1/4" = 1'-0"</div></div><div><div><div><div>3</div><div>NEW WORK KEY NOTE</div></div><div><div>1</div><div>DEMOLITION KEY NOTE</div></div></div><div><div><div><div></div><div>A4</div><div>E504</div></div><div>CROSS SECTION DETAIL REFERENCE</div></div></div></div></div>		<div><div><div><div></div><div></div></div><div>CONDUIT EXPOSED</div></div><div><div><div><div></div><div></div></div><div>NEW ELECTRICAL UNDERGROUND DUCT BANK</div></div></div><div><div><div><div></div><div></div></div><div>FLEXIBLE CONDUIT</div></div></div><div><div><div><div></div><div></div></div><div>CONDUIT TERMINATED AND CAPPED</div></div></div><div><div><div><div><div>CP-01</div><div></div></div><div><div></div><div>P-X.X</div></div></div><div>CONDUIT HOMERUN WITH CONDUIT TAG. TEXT INDICATES ELECTRICAL PANEL DESIGNATION AND CIRCUIT NUMBERS. CONDUITS SHALL CONTAIN ONE GROUND WIRE SIZED PER C.E.C. TABLE 250-95.</div></div></div><div><div><div><div><div>CP-01</div><div></div></div><div><div></div><div></div></div></div><div>CONDUIT HOMERUN. TEXT INDICATES ELECTRICAL PANEL DESIGNATION AND CIRCUIT NUMBERS. CONDUITS SHALL CONTAIN ONE GROUND WIRE SIZED PER C.E.C. TABLE 250-95.</div></div></div><div><div><div><div></div><div></div></div><div>HASH MARKS ON CONDUIT RUNS INDICATE NUMBER OF #12 CURRENT CARRYING CONDUCTORS CONTAINED THEREIN. TWO #12 AND ONE #12 GROUND WIRE ARE INDICATED WHEN HASH MARKS ARE NOT SHOWN. NUMERALS ADJACENT TO HASH MARKS ON CONDUIT RUNS INDICATE SIZE OF CONDUCTORS IN LIEU OF #12. ALL CONDUITS SHALL CONTAIN ONE GROUND WIRE SIZED PER C.E.C. TABLE 250-95, BUT NOT SMALLER THAN #12. FOR EXAMPLE:</div></div></div><div><div><div><div><div></div><div>2#12, 3/4C.</div></div><div><div></div><div>3#12, 3/4C.</div></div><div><div></div><div>4#12, 3/4C.</div></div></div><div><div><div><div></div><div>5#12, 3/4C.</div></div><div><div></div><div>6#12, 3/4C.</div></div><div><div></div><div>7#12, 3/4C.</div></div></div></div></div></div></div>		<div><div><div>A</div><div>ADA</div><div>AC</div><div>AF</div><div>AFF</div><div>AIC</div><div>AL</div><div>AMI</div><div>AS</div><div>ATS</div><div>BATT</div><div>BDI</div><div>C</div><div>CKT</div><div>CSFM</div><div>CO</div><div>CR</div><div>CU</div><div>C(X)</div><div>DP</div><div>DWG</div><div>E</div><div>ELEC</div><div>ER</div><div>EX</div><div>EXP</div><div>FA</div><div>FLUOR</div><div>FFL</div><div>FUTURE</div><div>FVR</div><div>FVNR</div><div>GALV</div><div>GFCI</div><div>GND, G</div><div>HOA</div><div>HP</div><div>HI</div><div>HTR</div><div>HPS</div><div>HT</div><div>HUM</div><div>HV</div><div>ICS</div><div>IND</div><div>INST</div><div>INSUL</div><div>NT</div><div>ISO</div><div>MIL</div><div>KV</div><div>KW</div><div>K</div><div>KVA</div><div>LD</div><div>LLS</div><div>LS</div><div>LSH</div><div>LTG</div><div>LV</div></div><div><div>AMPERE</div><div>AMERICAN DISABILITIES ACT</div><div>ALTERNATING CURRENT</div><div>AMP FRAME</div><div>ABOVE FINISHED FLOOR</div><div>ASYMMETRICAL INTERRUPTING CURRENT</div><div>ALUMINUM</div><div>ADVANCED METERING INFRASTRUCTURE</div><div>AMP SWITCH</div><div>AUTOMATIC TRANSFER SWITCH</div><div>BATTERY PACK</div><div>BURST DICS INDICATOR</div><div>CONDUIT</div><div>CIRCUIT</div><div>CALIF. STATE FIRE MARSHALL</div><div>CONDUIT ONLY</div><div>CONTROL RELAY</div><div>COPPER</div><div>CONTROL CONDUIT #</div><div>POWER DISTRIBUTION PANEL</div><div>DRAWING</div><div>EXISTING TO REMAIN</div><div>ELECTRICAL</div><div>EXISTING TO BE REMOVED</div><div>EXISTING TO BE DEMOLISHED</div><div>EXPLOSION PROOF</div><div>FIRE ALARM</div><div>FLUORESCENT</div><div>FROM THE FINISHED FLOOR</div><div>PROVISION FOR FUTURE</div><div>FULL VOLTAGE REVERSING</div><div>FULL VOLTAGE NON-REVERSING</div><div>GALVANIZED</div><div>GROUND FAULT CIRCUIT INTERRUPTER</div><div>GROUND</div><div>HAND-OFF-AUTO SWITCH</div><div>HORSEPOWER</div><div>HIGH</div><div>HEATER</div><div>HIGH PRESSURE SODIUM</div><div>HEIGHT</div><div>HUMIDITY</div><div>HIGH VOLTAGE</div><div>SEAL IN CONTACT</div><div>INDICATION</div><div>INSTANTANEOUS</div><div>INSULATING</div><div>INTERRUPTING</div><div>ISOLATION</div><div>THOUSAND CIRCULAR MILS</div><div>KILOVOLTS</div><div>KILOWATT</div><div>THOUSAND</div><div>KILOVOLT-AMPERE</div><div>LEAK DETECTION PANEL</div><div>LOW LEVEL SWITCH</div><div>LIMIT SWITCH</div><div>LIMIT SWITCH HIGH</div><div>LIGHTING</div></div><div><div>MCA</div><div>MCC</div><div>MCM</div><div>MFR</div><div>MIN</div><div>MTD</div><div>MOCPP</div><div>MOV</div><div>MPC</div><div>MSH</div><div>N</div><div>NC</div><div>NIC</div><div>NO</div><div>NO.</div><div>NP</div><div>NTS</div><div>NFP</div><div>NFPA</div><div>NEC</div><div>PCP</div><div>PCV</div><div>P(X)</div><div>POC</div><div>PLC</div><div>RGS</div><div>RTU</div><div>RVS</div><div>SHT</div><div>SLG</div><div>SPD</div><div>SW</div><div>SWBD</div><div>SYM</div><div>SP</div><div>SS</div><div>T</div><div>TEMP</div><div>TMR</div><div>TSP</div><div>TYP</div><div>TXMR</div><div>UL</div><div>UNO</div><div>V</div><div>W</div><div>WP</div><div>W/</div><div>XFMR</div><div>X/R</div><div>3P</div></div><div><div>LOW VOLTAGE</div><div>MINIMUM CIRCUIT AMPS</div><div>MOTOR CONTROL CENTER</div><div>THOUSAND CIR MILS</div><div>MANUFACTURER</div><div>MINIMUM</div><div>MOUNTED</div><div>MAXIMUM OVERCURRENT PROTECTION DEVICE</div><div>MOTOR OPERATION VALVE</div><div>MINI POWER CENTER</div><div>MOISTURE SWITCH</div><div>NORTH</div><div>NORMALLY CLOSED</div><div>NOT IN CONTRACT</div><div>NORMALLY OPEN</div><div>NUMBER</div><div>NAME PLATE</div><div>NOT TO SCALE</div><div>NATIONAL FIRE PROTECTION</div><div>NATIONAL FIRE PROTECTION ASSOCIATION</div><div>NATIONAL ELECTRIC CODE</div><div>PUMP CONTROL PANEL</div><div>PUMP CONTROL VALVE</div><div>POWER CONDUIT #</div><div>POINT OF CONNECTION</div><div>PROGRAMMABLE LOGIC CONTROLLER</div><div>RIGID GALV STEEL</div><div>REMOTE TERMINAL UNIT</div><div>REDUCED VOLTAGE STARTER</div><div>SHEET</div><div>AVAILABLE SINGLE LINE TO GROUND RMS SYMETRICAL FAULT</div><div>SURGE PROTECTION DEVICE</div><div>SWITCH</div><div>SWITCHBOARD</div><div>SYMMETRICAL S</div><div>URGE PROTECTION</div><div>STAINLESS STEEL</div><div>TRANSFORMER</div><div>TEMPERATURE</div><div>TIMER</div><div>TWISTED SHIELD PAIR</div><div>TYPICAL</div><div>TRANSMITTER</div><div>UNDERWRITER'S LABORATORY</div><div>UNLESS NOTED OTHERWISE</div><div>VOLTAGE</div><div>WIRE</div><div>WEATHERPROOF</div><div>WITH</div><div>TRANSFORMER</div><div>REACTANCE TO RESISTANCE RATIO AVAILABLE THREE PHASE</div><div>RMS SYMMETRICAL FAULT</div></div></div>	
POWER		CONTROLS			
<div><div><div><div><div></div><div>+48"</div></div><div>INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR</div></div></div><div><div><div><div></div><div>PH ORØ</div></div><div>PHASE</div></div></div><div><div><div><div></div><div>HP</div></div><div>MOTOR CONNECTION WITH HP NOTED</div></div></div><div><div><div><div></div><div></div></div><div>NON-FUSED SAFETY DISCONNECT SWITCH. SHALL NOT BE MTD. MORE THAN 48" AFF UON</div></div></div><div><div><div><div></div><div>Q Q</div></div><div>JUNCTION BOX CONTAINS CONTROL CONDUCTORS</div></div></div><div><div><div><div></div><div>J</div></div><div>JUNCTION BOX CONTAINS POWER CONDUCTORS</div></div></div><div><div><div><div></div><div>Q</div></div><div>JUNCTION BOX CONTAINS POWER AND CONTROL CONDUCTORS</div></div></div><div><div><div><div></div><div></div></div><div>DISTRIBUTION PANEL, CONTROL PANEL OR SWITCHBOARD</div></div></div><div><div><div><div></div><div>T</div></div><div>TRANSFORMER, FLOOR MOUNTED TYPE (PLAN VIEW)</div></div></div><div><div><div><div></div><div></div></div><div>POWER TRANSFORMER (DIAGRAMS)</div></div></div><div><div><div><div></div><div></div></div><div>EARTH GROUND</div></div></div><div><div><div><div></div><div></div></div><div>CABLE TAP</div></div></div><div><div><div><div></div><div>▷</div></div><div>DELTA</div></div></div><div><div><div><div></div><div>Y</div></div><div>WYE</div></div></div><div><div><div><div></div><div>100A 3P</div></div><div>CIRCUIT BREAKER WITH # OF POLES AND AMP RATE INDICATED</div></div></div><div><div><div><div></div><div>100A 3P</div></div><div>CIRCUIT BREAKER WITH SHUNT TRIP, # OF POLES AND AMP RATE INDICATED</div></div></div><div><div><div><div><div></div><div>3P</div></div><div><div></div><div>100AS</div></div><div><div></div><div>60AF</div></div><div><div></div><div>RK5</div></div></div><div><div>SWITCH AND FUSE DESIGNATION</div><div>NUMBER OF POLES</div><div>SWITCH SIZE</div><div>FUSE SIZE</div><div>FUSE CLASS</div></div></div></div></div>		<div><div><div><div><div></div><div>CR1</div><div>12,123</div></div><div>10</div></div><div>CONTROL RELAY NUMBER 1 12,123;REFERENCE N.O. AT LINE 12 AND N.C. AT LINE 123</div></div></div> <div><div><div><div></div><div></div></div><div>NORMALLY OPEN CONTACT (FORM A) 10: REFERENCE RELAY AT LINE 10</div></div></div> <div><div><div><div></div><div></div></div><div>NORMALLY CLOSED CONTACT (FORM B)</div></div></div> <div><div><div><div><div></div><div>CR1</div></div><div>10</div></div><div>SINGLE POLE DOUBLE THROW (FORM C) CR1: REFERENCE RELAY</div></div></div> <div><div><div><div></div><div>15</div></div><div>FUSE, NUMBER INDICATED AMPERES</div></div></div> <div><div><div><div></div><div></div></div><div>PUSH TO TEST INDICATOR LIGHT (G: GREEN, R: RED, A: AMBER, Y: YELLOW, W: WHITE)</div></div></div> <div><div><div><div></div><div>G</div></div><div>INDICATOR LIGHT (G: GREEN, R: RED, A: AMBER, Y: YELLOW, W: WHITE)</div></div></div> <div><div><div><div></div><div>01</div></div><div>CONTROL PANEL / RTU TERMINAL BLOCK, # INDICATED TERMINAL NUMBER</div></div></div> <div><div><div><div></div><div>01</div></div><div>MCC TERMINAL BLOCK, # INDICATED TERMINAL NUMBER</div></div></div> <div><div><div><div></div><div>02</div></div><div>INDICATES TERMINAL ON DEVICE, # INDICATED TERMINAL NUMBER</div></div></div> <div><div><div><div></div><div>D</div></div><div>DEVICE MOUNTED ON DOOR OF CONTROL PANEL</div></div></div> <div><div><div><div></div><div>T</div></div><div>DEVICE MOUNTED ON TOP OF CONTROL PANEL</div></div></div> <div><div><div><div></div><div>S</div></div><div>DEVICE MOUNTED ON SIDE OF CONTROL PANEL</div></div></div> <div><div><div><div></div><div>F</div></div><div>DEVICE FIELD MOUNTED</div></div></div> <div><div><div><div></div><div></div></div><div>THERMAL SWITCH</div></div></div> <div><div><div><div></div><div></div></div><div>FLOAT OR FLOODED SWITCH</div></div></div> <div><div><div><div></div><div></div></div><div>FUSE SWITCH</div></div></div> <div><div><div><div></div><div>INT</div></div><div>INTRUSION SWITCH / LIMIT SWITCH</div></div></div>			

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SAN DIEGO, CA 92131
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CITY OF CORONA

400 SOUTH VICENTIA AVENUE
CORONA, CALIFORNIA 92882

Designed by	Drawn by	Checked by
PLANS PREPARED UNDER SUPERVISION OF BRANDON LACAP Date 11/13/23 R.C.E. No. 27211		

Reference Plans for these Improvements		Date	By	REVISIONS	App'd

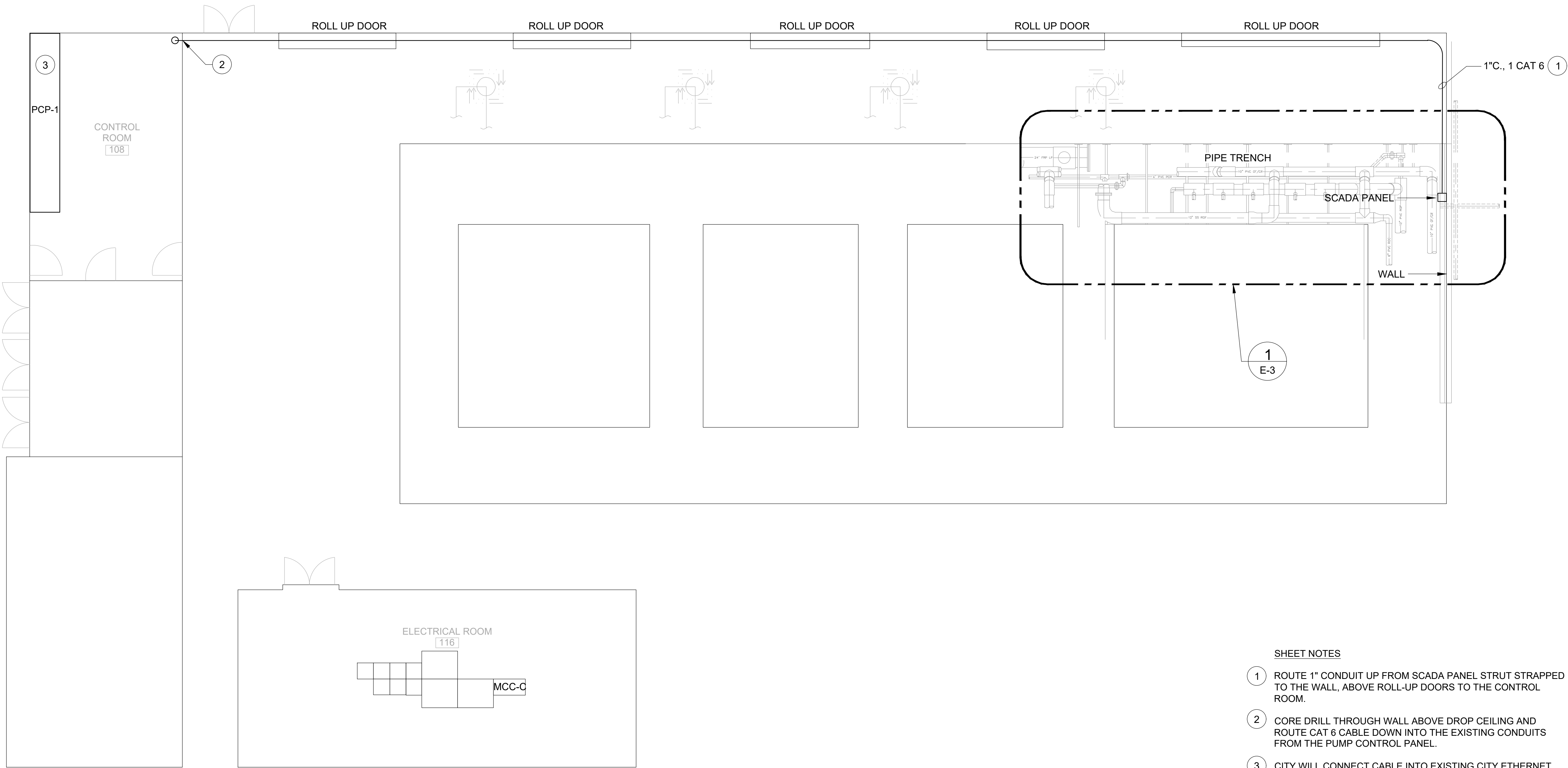
BENCH MARK
Scale

CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS

ELECTRICAL SYMBOLS & ABBREVIATIONS

Drawing No. E-1
Sh 12 of 19

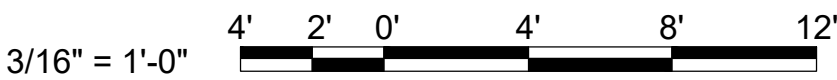
36"x24" ORIGINAL SCALE IN INCHES 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36



SHEET NOTES

- 1 ROUTE 1" CONDUIT UP FROM SCADA PANEL STRUT STRAPPED TO THE WALL, ABOVE ROLL-UP DOORS TO THE CONTROL ROOM.
- 2 CORE DRILL THROUGH WALL ABOVE DROP CEILING AND ROUTE CAT 6 CABLE DOWN INTO THE EXISTING CONDUITS FROM THE PUMP CONTROL PANEL.
- 3 CITY WILL CONNECT CABLE INTO EXISTING CITY ETHERNET SWITCH AT PUMP CONTROL PANEL.

1
E-2 DESALTER BUILDING ELECTRICAL PLAN



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BRANDON LACAP
Date 11/13/23 R.C.E. No. 27211

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these Improvements

Date By

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BENCH MARK

Scale

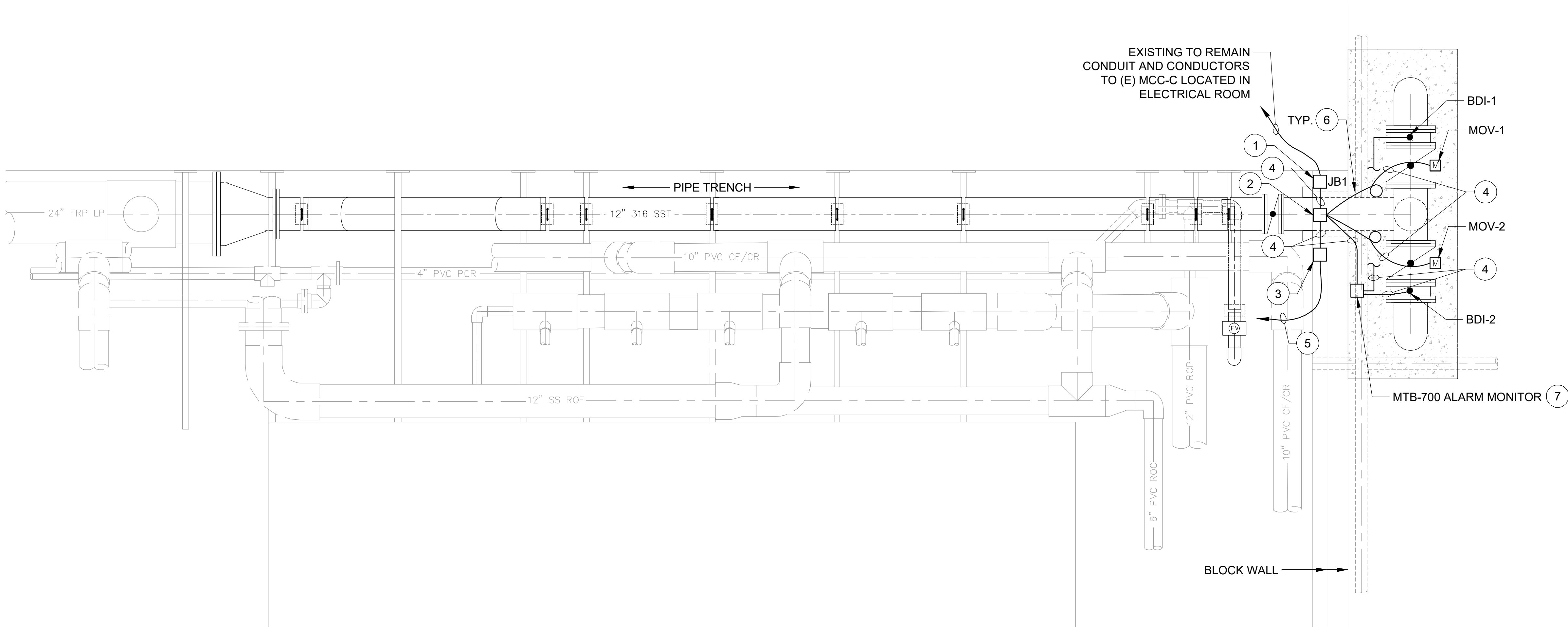
CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
DESALTER BUILDING ELECTRICAL PLAN

Drawing No.
E-2
Sh 13 of 19

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- SHEET NOTES
- ALL EQUIPMENT SHOWN ON THIS SHEET IS NEW U.N.O.
 - PROVIDE JUNCTION BOXES, CONDUIT SUPPORTS AND FLEXIBLE CONDUITS AS REQUIRED TO ROUTE CONDUIT TO DESTINATIONS.



- SHEET NOTES
- EXISTING JUNCTION BOX "GE PILOT SKID" MOUNTED ON WALL. REPLACE WITH NAME TAG 'JB1'
 - PROVIDE NEMA 1 18"L x 16"W x 8"D WALL MOUNTED MOV CONTROL PANEL. FOR WIRING DIAGRAM, SEE

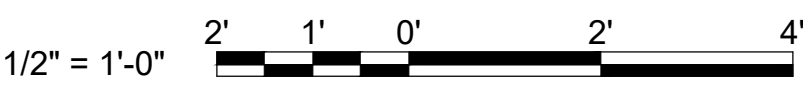
1	1
E-5	E-6
 - SCADA PANEL PROVIDED BY CITY. CONTRACTOR TO PROVIDE AND INSTALL FIELD WIRING.
 - PROVIDE CONDUIT, CONDUCTORS PER SINGLE LINE DIAGRAM.
 - PROVIDE 1"C. WITH A CAT 6, ROUTE CONDUIT ON SURFACE TO CONTROL ROOM. FOR CONTINUATION, SEE

1
E-2
 - PROVIDE CONDUIT WALL PENETRATION AS REQUIRED.
 - PROVIDE NEMA 4X WALL MOUNTED ALARM MONITOR. SEE

1
E-5

1
E-3

 ELECTRICAL EQUIPMENT LAYOUT



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Reference Plans for these Improvements		Date	By	REVISIONS	App'd

BENCH MARK
Scale

CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
ELECTRICAL EQUIPMENT LAYOUT

Drawing No. E-3
Sh 14 of 19

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REGISTERED PROFESSIONAL ENGINEER
BRANDON S. FLORES
Exp. 9/24
ELECTRICAL
STATE OF CALIFORNIA

SHEET NOTES

- ALL EQUIPMENT IS NEW UNO.
- CONTRACTOR TO PROVIDE ALL FIELD WIRING.

KEYNOTES

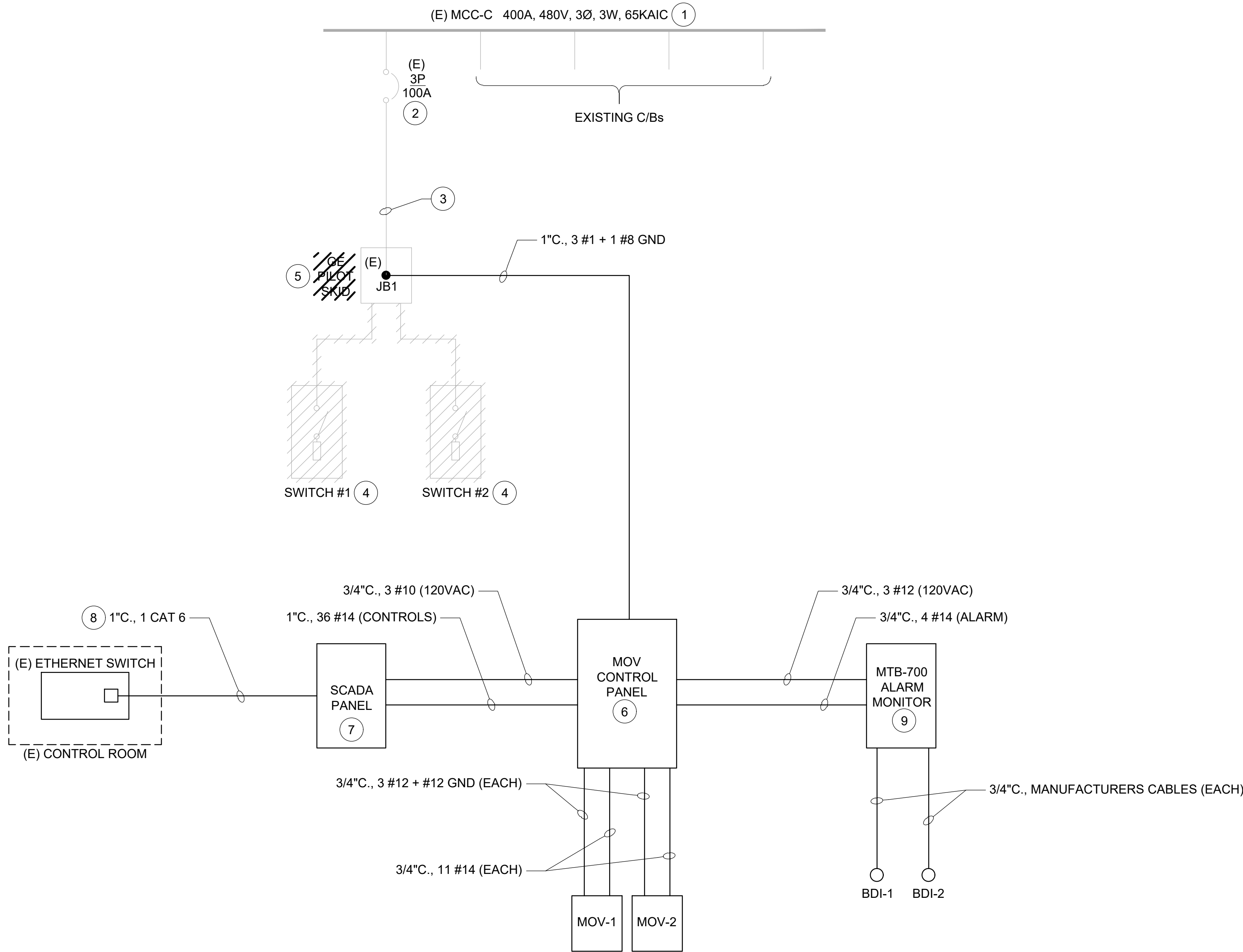
- (E) MCC-C TO REMAIN.
- GE PILOT SKID BUCKET AND COMPONENTS TO REMAIN, REPLACE BUCKET LABEL TO "MOV CONTROL PANEL".
- EXISTING CONDUIT AND CONDUCTOR TO REAMIN.
- DISCONNECT AND REMOVE DISCONNECT SWITCH #1, DISCONNECT #2, ALL CONDUITS AND CONDUCTORS TO JB GE PILOT SKID.
- REPLACE THE "GE PILOT SKID" LABEL TO "JB1". PROVIDE SPLICES TO CONNECT TO MOV CONTROL PANEL.
- PROVIDE MOV CONTROL PANEL. SEE

1
E-5

1
E-6
- SCADA PANEL PROVIDED BY CITY.
- CONDUIT ROUTED ON WALL TO CONTROL ROOM. SEE

1
E-2
- PROVIDE NEMA 4X WALL MOUNTED ALARM MONITOR. SEE

1
E-5



1 SCHEMATIC WIRING DIAGRAM
E-4



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Reference Plans for these Improvements _____
Date By REVISIONS App'd

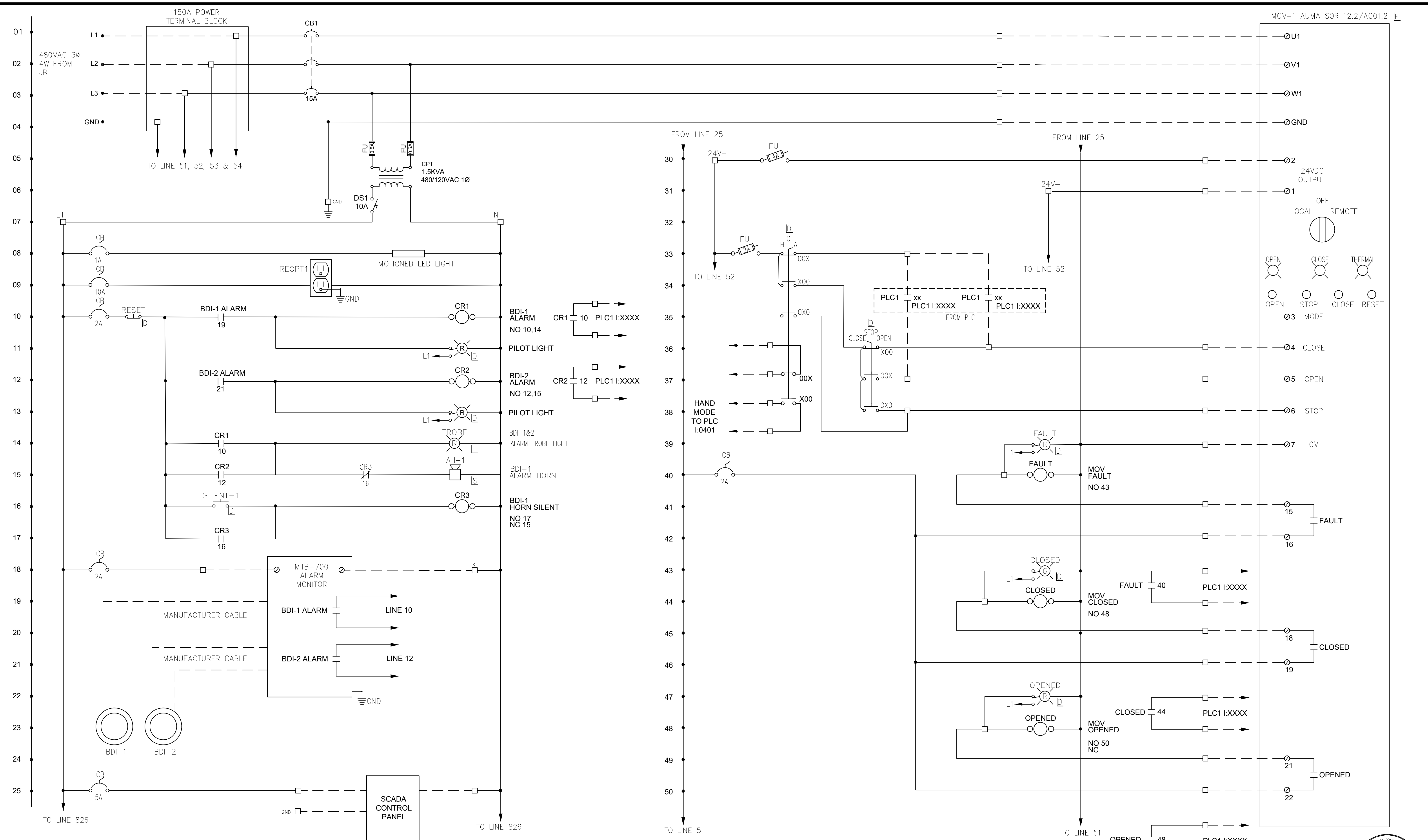
BENCH MARK _____
Scale _____

CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
SCHEMATIC WIRING DIAGRAM

Drawing No. E-4
Sh 15 of 19

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1
E-5
NEW CONTROL PANEL WIRING DIAGRAM 1

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BRANDON LACAP
Date 11/13/23 R.C.E. No. 87211

Reference Plans for these Improvements	Date	By	REVISIONS	App'd

BENCH MARK
Scale

CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
NEW CONTROL PANEL WIRING DIAGRAM 1

Drawing No.
E-5
Sh 16 of 19

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36"x24" ORIGINAL SCALE IN INCHES 0



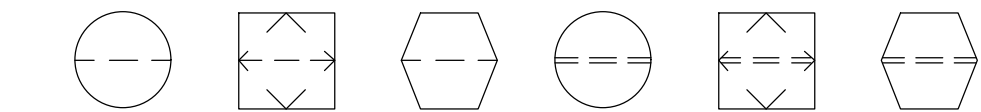
Sh 17 of 19

INSTRUMENT TAG IDENTIFICATION

	PRIMARY LOCATION (b)NORMALLY ACCESSIBLE TO OPERATOR	FIELD MOUNT	AUXILIARY LOCATION (b)NORMALLY ACCESSIBLE TO OPERATOR
DISCRETE INSTRUMENTS	LCP		LCP
SHARED DISPLAY, SHARED CONTROL	LCP		LCP
COMPUTER FUNCTION	LCP		LCP
PROGRAMMABLE LOGIC CONTROL	LCP		LCP

(a) DESIGNATIONS SUCH AS 100 (LOCAL CONTROL BOARD NO. 100), 200 (LOCAL CONTROL BOARD NO.200), ETC., ARE USED WHEN NECESSARY TO SPECIFY INSTRUMENT OR FUNCTION LOCATION.

(b) NORMALLY INACCESSIBLE OR BEHIND-THE-PANEL DEVICES OR FUNCTIONS ARE DEPICTED BY USING THE SAME SYMBOLS BUT WITH DASHED HORIZONTAL BARS, I.E.



SINGLE INSTRUMENT OR OTHER COMPONENT HAVING MULTIPLE FUNCTIONS

(XXX) SOFTWARE OR LOGIC RESIDENT IN DISTRIBUTED CONTROL SYSTEM (DCS) AT PROGRAMMABLE LOGIC CONTROLLER (PLC) XXX. SEE ASSOCIATED LOGIC DIAGRAMS.

(XXX) PANEL MOUNTED PILOT LIGHT WITH PANEL NUMBER DESIGNATION(i.e. XXX = 100, 200, ETC.).

INSTRUMENT PANEL MOUNTED WITH COMPUTING OR CONVERTING FUNCTION

CONVERT E - VOLTAGE I - CURRENT P - PNEUMATIC A - ANALOG B - BINARY H - HYDRAULIC O - ELECTROMAGNETIC, SONIC R - RESISTANCE (ELECT.) D - DIGITAL PF - PULSE FREQUENCY

COMPUTE SUMMING AVERAGING SUBTRACTOR RATIO MULTIPLYING DIFFERENCE DIVIDING HIGH SELECTING ROOT EXTRACTION LOW SELECTING PROPORTIONAL INTEGRAL DERIVATIVE

(XXX) DESIGNATIONS OF CONTROL FUNCTIONS ASSOCIATED INSTRUMENT OR OTHER COMPONENTS.

AC - AUTO/CLOSE AHC - AUTO/HOLD/CLOSE AM - AUTO/MANUAL DEV - DEVIATION E-STOP - EMERGENCY STOP HOA - HAND/OFF/AUTO HOR - HAND/OFF/REMOTE LOS - LOCKOUT STOP LR - LOCAL/REMOTE MOA - MANUAL/OFF/AUTO OC - OPEN/CLOSE OO - ON/OFF OCA - OPEN/CLOSE/AUTO OSC - OPEN/STOP/CLOSE OOR - OUT OF RANGE POT - POTENTIOMETER RST - RESET RL - RAISE/LOWER RSL - RAISE/STOP/LOWER SD - SHUTDOWN SEL - SELECT SP - SET POINT SR - START/RESET S/S - STOP/START WA - WARNING ALARM

ISA FUNCTION IDENTIFICATION TABLE				
	FIRST-LETTER		SUCCEEDING-LETTERS	
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION
A	ANALYSIS		ALARM	
B	BURNER, COMBUSTION, BATTERY			
C	CONDUCTIVITY			CONTROL, COMMAND, CLOSE
D	DENSITY	DIFFERENTIAL, DISPLACE		
E	VOLTAGE		SENSOR (PRIMARY ELEMENT)	EQUIPMENT
F	FLOW RATE	RATIO (FRACTION)	FAIL	
G	GAGE		GLASS, VIEWING DEVICE	
H	HAND			HIGH
I	CURRENT (ELECTRICAL)		INDICATE	
J	POWER	SCAN		
K	TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION
L	LEVEL		LIGHT	LOW
M	MOTOR, MOISTURE	MOMENTARY	MONITOR	MIDDLE, INTERMEDIATE
N	TORQUE		ISOLATE	ISOLATOR
O	OPERATOR		OPERATION	OPEN
P	PRESSURE, VACUUM, PRINTER	PRINTER	POINT (TEST) CONNECTION	
Q	QUANTITY	INTEGRATE, TOTALIZE		
R	RADIO, RADIATION, HEATER		RECORD	RECEIPT
S	SPEED, FREQUENCY, SOLENOID	SENSOR		SWITCH
T	TEMPERATURE			TRANSMIT
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION
V	VIBRATION, MECHANICAL ANALYSIS		VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE		WELL	
X	RUN	X AXIS		COMPUTE, CONVERT
Y	EVENT, STATE OR PRESENCE	Y AXIS		RELAY, DRIVER, ACTUATOR,
Z	POSITION, DIMENSION	Z AXIS		CONTROL ELEMENT

TYPICAL: FORMAT TIC-1 - INSTRUMENT IDENTIFICATION OR TAG NUMBER TIC - FUNCTIONAL IDENTIFICATION T - FIRST-LETTER IC - SUCCEEDING-LETTER(S) 1 - LOOP NUMBER

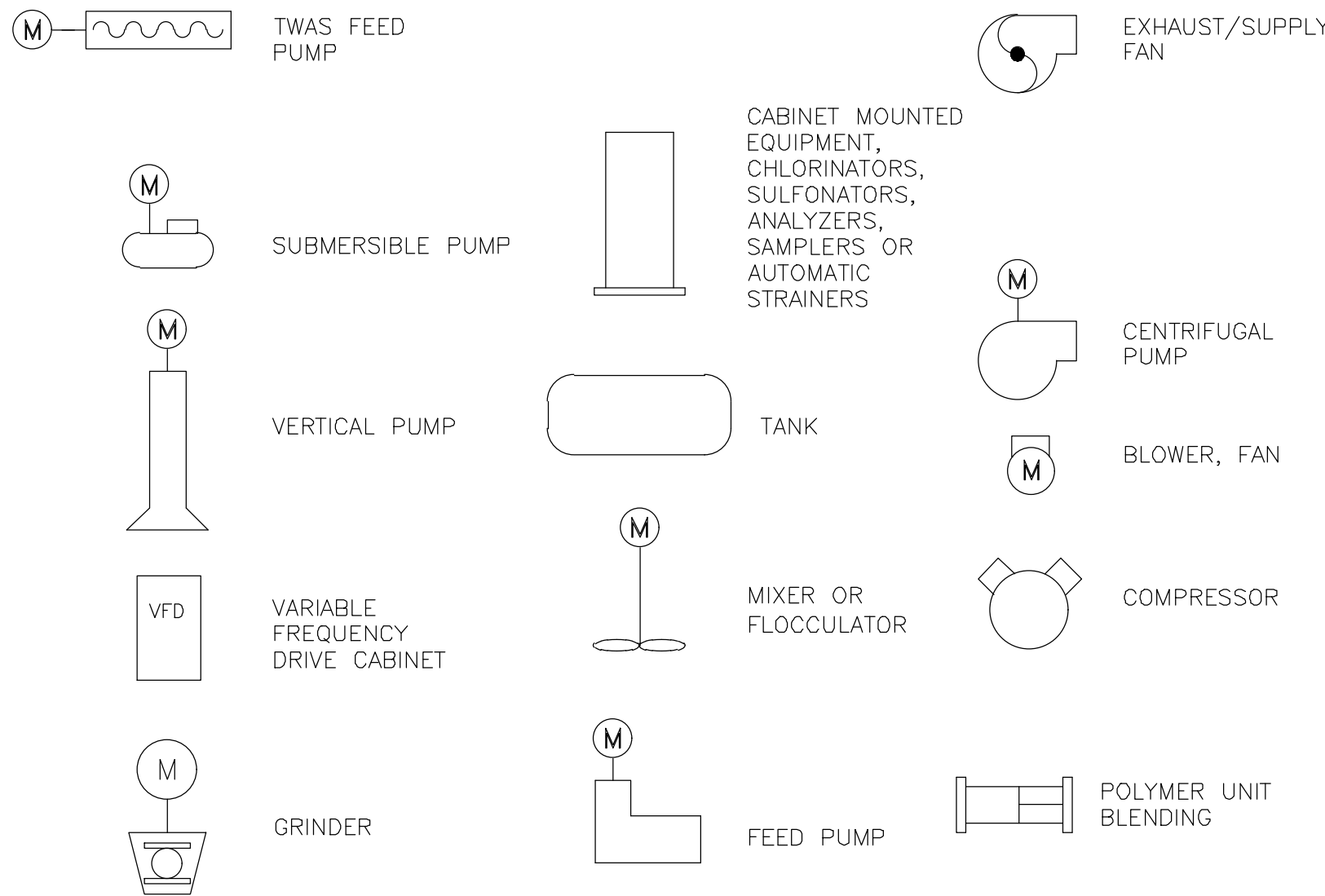
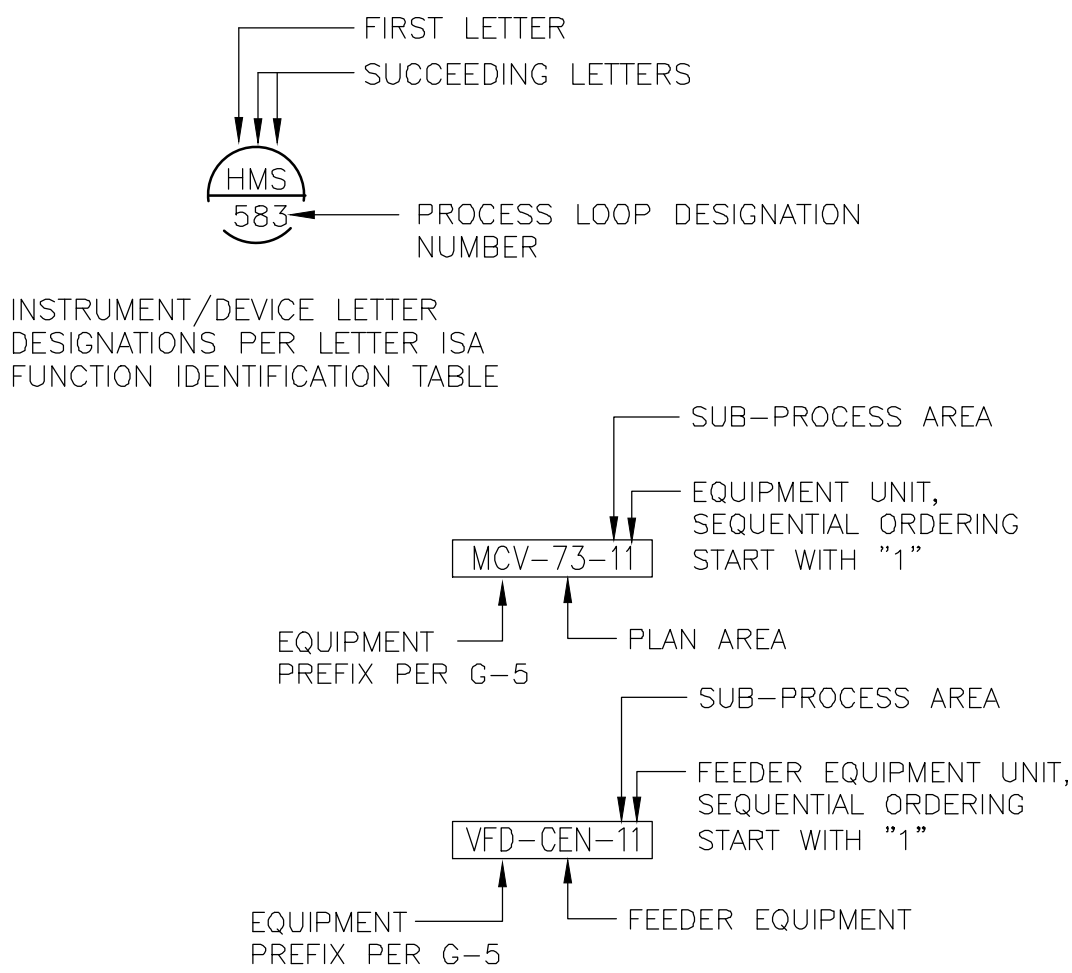
EXPANDED: FORMAT 10-PAH-1A - TAG NUMBER 10 - OPTIONAL PREFIX A - OPTIONAL SUFFIX

HARDWIRED INTERLOCK LOGIC HARDWIRED INTERLOCK LOGIC IS EXTENDED FOR MORE I/O ETHERNET SWITCH ETHERNET SWITCH #1

INPUT/OUTPUT INTERFACE SYMBOLS

= DIGITAL OUTPUT = ANALOG OUTPUT = DIGITAL INPUT = ANALOG INPUT

INSTRUMENT/DEVICE TAG NAME DESIGNATIONS



LINE SYMBOLS

PRIMARY PROCESS LINE SECONDARY PROCESS LINE INSTRUMENT OR CONNECTION TO PROCESS ELECTRIC I/O DIGITAL SIGNAL ELECTRICAL POWER WITH VOLTAGE INDICATED 480V : 3Ø 480VAC ; 120V : 1Ø 120VAC ELECTRIC I/O ANALOG SIGNAL (4-20 ma, 1-5 Vdc, etc.) ELECTRIC PULSE FREQUENCY SIGNAL (0-100 CYCLE/SEC., 0-150 PULSE/MIN., etc.) ELECTRIC PULSE DURATION SIGNAL (15 SEC., 3/12 SEC = 0 %, etc.) PNEUMATIC SYMBOL HYDRAULIC SYMBOL CAPILLARY TUBE ELECTROMAGNETIC OR SONIC SIGNAL (1) INTERNAL SYSTEM LINK (SOFTWARE OR DATA LINK) MECHANICAL LINK CONNECTING LINES FIELD INSTRUMENT/DEVICE

(1) ELECTROMAGNETIC PHENOMENA INCLUDE HEAT, RADIO WAVES, NUCLEAR RADIATION, AND LIGHT.

GENERAL NOTES

- ADDITIONAL INSTRUMENTATION AND CONTROL SYMBOLS MAY BE USED AS REQUIRED. SYMBOLS AND NOMENCLATURE ARE BASED ON ISA STANDARDS S5.1, S5.2, S5.4.
- SEE ASSOCIATED ELECTRICAL AND MECHANICAL SYMBOL SHEETS FOR ADDITIONAL SYMBOLS AND ABBREVIATIONS.
- FOR PIPE SIZES, MATERIAL, AS WELL AS DETAILS OF METER COUPLING AND OTHER MECHANICAL EQUIPMENT (E.G. VALVE, PUMP ETC.) SEE PROCESS AND INSTRUMENTATION DIAGRAMS, MECHANICAL DRAWINGS AND SPECIFICATIONS.
- POWER SUPPLIES FOR LOOPS OR SYSTEMS SHALL BE FURNISHED BY THE INSTRUMENTATION MANUFACTURER TO MEET THE PARTICULAR CHARACTERISTICS (E.G. VOLTAGE AND CURRENT REQUIREMENTS) OF COMPONENTS IN EACH LOOP OR SYSTEM.
- THOSE ITEMS IDENTIFIED BY AN ASTERISK SHALL BE PROVIDED BY THE SYSTEM PROCESS EQUIPMENT SUPPLIER.

MECHANICAL EQUIPMENT SYMBOLS

SYMBOLS

GATE VALVE THREE WAY VALVE PLUG VALVE BALL VALVE BUTTERFLY VALVE CHECK VALVE FLAPPER CHECK VALVE NEEDLE VALVE BALANCING VALVE GLOBE VALVE AIR RELEASE VALVE SURGE ANTICIPATOR VALVE PRESSURE REDUCING VALVE BACK PRESSURE REGULATING VALVE VALVE WITH DIAPHRAGM OPERATOR SOLENOID VALVE VALVE WITH MOTOR OPERATOR VALVE WITH PISTON OPERATOR VALVE WITH PRESSURE BALANCED OPERATOR QUICK COUPLER

DEVICE SYMBOLS

ROTOMETER THERMOMETER MANUAL SAMPLER INJECTOR FILTER DRAIN MANUAL AIR VENT BLIND FLANGE CAP OR PLUG STRAINER WATER SURFACE ELEVATION ULTRA SONIC LEVEL SENSOR CAPACITANCE LEVEL PROBE PRESSURE INDICATING TRANSMITTER PROPELLER FLOW METER REDUCER OR INCREASER SLUICE GATE SLIDE GATE (NORMALLY OPEN) SLIDE GATE (NORMALLY CLOSED) FLAP GATE STOP GATE CHEMICAL DIFFUSER PULSATION DAMPER STATIC MIXER PULSATION DAMPENER CALIBRATION CHAMBER FLOW METER

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Date _____ By _____
REVISIONS _____
App'd _____

BENCH MARK _____
Scale _____

CITY OF CORONA-DESALTER SURGE ANTICIPATOR IMPROVEMENTS
INSTRUMENTATION P&ID SYMBOLS TAG NAMES & NOTES

Drawing No. I-1
Sh 18 of 19

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