

# City of San Diego

**CONTRACTOR'S NAME:** Whillock Contracting Inc  
**ADDRESS:** PO Box 2322, La Mesa, CA 91943  
**TELEPHONE NO.:** 619-579-0700 **FAX NO.:** \_\_\_\_\_  
**CITY CONTACT:** Brittany Friedenreich, Senior Contract Specialist, Email: [BFriedenreic@sandiego.gov](mailto:BFriedenreic@sandiego.gov)  
Phone No. (619) 533-3104  
L. Marshall / A. Parra / R. Ellis

## BIDDING DOCUMENTS



**FOR**

## JERABEK PARK IMPROVEMENTS

**BID NO.:** K-23-2139-DBB-3  
**SAP NO. (WBS/IO/CC):** S-20007  
**CLIENT DEPARTMENT:** 1714  
**COUNCIL DISTRICT:** 5  
**PROJECT TYPE:** GA

**THIS CONTRACT WILL BE SUBJECT TO THE FOLLOWING:**

- THE CITY'S SUBCONTRACTING PARTICIPATION REQUIREMENTS FOR SLBE PROGRAM
- PREVAILING WAGE RATES: STATE  FEDERAL
- APPRENTICESHIP

**BID DUE DATE:**

**2:00 PM**  
**FEBRUARY 2, 2023**

**CITY OF SAN DIEGO'S ELECTRONIC BIDDING SITE, PLANETBIDS**

<http://www.sandiego.gov/cip/bidopps/index.shtml>

**ENGINEER OF WORK**


The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Architect:

  
\_\_\_\_\_  
1) Registered Architect

12/23/2022  
Date

Seal:



  
\_\_\_\_\_  
2) For City Engineer

12/21/2022  
Date

Seal:



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## REQUIRED DOCUMENTS SCHEDULE DURING BIDDING AND AWARDING

The Bidder's attention is directed to the City's Municipal Code §22.0807(e), (3)-(5) for important information regarding grounds for debarment for failure to submit required documentation.

The specified Equal Opportunity Contracting Program (EOCP) forms are available for download from the City's web site at:

<http://www.sandiego.gov/eoc/forms/index.shtml>

ITEM	DOCUMENT TO BE SUBMITTED	WHEN DUE	FROM
1.	Bid Bond (PDF via PlanetBids)	At Time of Bid	ALL BIDDERS
2.	Contractors Certification of Pending Actions	At Time of Bid	ALL BIDDERS
3.	List of Subcontractors for Alternate Items	At Time of Bid	ALL BIDDERS
4.	Mandatory Disclosure of Business Interests	At Time of Bid	ALL BIDDERS
5.	Debarment and Suspension Certification for Prime Contractors	At Time of Bid	ALL BIDDERS
6.	Debarment and Suspension Certification for Subcontractors, Suppliers & Mfgers	At Time of Bid	ALL BIDDERS
7.	Bid Bond (Original)	By 5 PM 1 working day after bid opening	ALL BIDDERS
8.	SLBE Good Faith Effort Documentation	By 5 PM 3 working days after bid opening	ALL BIDDERS
9.	Form AA60 – List of Work Made Available	By 5 PM 3 working days after bid opening with Good Faith Effort (GFE) documentation	ALL BIDDERS
10.	If the Contractor is a Joint Venture: <ul style="list-style-type: none"> <li>• Joint Venture Agreement</li> <li>• Joint Venture License</li> </ul>	Within 10 working days of receipt by bidder of contract forms	AWARDED BIDDER
11.	Payment & Performance Bond; Certificates of Insurance & Endorsements; and Signed Contract Agreement Page	Within 10 working days of receipt by bidder of contract forms and NOI	AWARDED BIDDER
12.	Listing of "Other Than First Tier" Subcontractors	Within 10 working days of receipt by bidder of contract forms	AWARDED BIDDER

## NOTICE INVITING BIDS

1. **SUMMARY OF WORK:** This is the City of San Diego's (City) solicitation process to acquire Construction services for **Jerabek Park Improvements**. For additional information refer to Attachment A.
2. **FULL AND OPEN COMPETITION:** This solicitation is subject to full and open competition and may be bid by Contractors on the City's approved Prequalified Contractors List. For information regarding the Contractors Prequalified list visit the City's web site: <http://www.sandiego.gov>.
3. **ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is **\$6,010,000**.
4. **BID DUE DATE AND TIME ARE: FEBRUARY 2, 2023 AT 2:00 PM.**
5. **PREVAILING WAGE RATES APPLY TO THIS CONTRACT:** Refer to Attachment D.
6. **LICENSE REQUIREMENT:** To be eligible for award of this contract, Prime contractor must possess the following licensing classification: **A**.
7. **SUBCONTRACTING PARTICIPATION PERCENTAGES:** Subcontracting participation percentages apply to this contract.
  - 7.1. The City has incorporated **mandatory** SLBE-ELBE subcontractor participation percentages to enhance competition and maximize subcontracting opportunities. For the purpose of achieving the mandatory subcontractor participation percentages, a recommended breakdown of the SLBE and ELBE subcontractor participation percentages based upon certified SLBE and ELBE firms has also been provided to achieve the mandatory subcontractor participation percentages:

1. SLBE participation	<b>8.9%</b>
2. ELBE participation	<b>12.3%</b>
3. Total mandatory participation	<b>21.2%</b>
  - 7.2. The Bid may be declared non-responsive if the Bidder fails to meet the following requirements:
    - 7.2.1. Include SLBE-ELBE certified subcontractors at the overall mandatory participation percentage identified in this document; OR
    - 7.2.2. Submit Good Faith Effort (GFE) documentation, saved in searchable Portable Document Format (PDF), demonstrating the Bidder made a good faith effort to conduct outreach to and include SLBE-ELBE Subcontractors as required in this solicitation by 5 PM 3 Working Days after the Bid opening if the overall mandatory participation percentage is not met.

**All submittals in searchable PDF shall be submitted electronically within the prescribed time identified in the contract documents via PlanetBids by invitation to the point of contact named in the bid provided by the Contract Specialist to all bidders.**

**8. AWARD PROCESS:**

- 8.1.** The Award of this contract is contingent upon the Contractor's compliance with all conditions of Award as stated within these documents and within the Notice of Intent to Award.
- 8.2.** Upon acceptance of bids and determination of the apparent low bidder, the City will prepare the contract documents for execution within approximately 21 days of the date of the bid opening. The City will then award the contract upon receipt of properly signed Contract, bonds, and insurance documents.
- 8.3.** This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form by the City Attorney's Office.
- 8.4.** The low Bid will be determined by the Base Bid plus all the Alternates.
- 8.5.** Once the low bid has been determined, the City may, at its sole discretion, award the contract for the Base Bid alone or for the Base Bid plus one or more Alternates.

**9. SUBMISSION OF QUESTIONS:**

- 9.1.** The Director (or Designee) of the Purchasing & Contracting Department is the officer responsible for opening, examining, and evaluating the competitive Bids submitted to the City for the acquisition, construction and completion of any public improvement except when otherwise set forth in these documents. Any questions related to this solicitation shall be submitted to:  
  
[BFriendenreic@sandiego.gov](mailto:BFriendenreic@sandiego.gov)
- 9.2.** Questions received less than 14 days prior to the date for opening of Bids may not be considered.
- 9.3.** Questions or clarifications deemed by the City to be material shall be answered via issuance of an addendum and posted to the City's online bidding service.
- 9.4.** Only questions answered by formal written addenda shall be binding. Oral and other interpretations or clarifications shall be without legal effect. It is the Bidder's responsibility to be informed of any addenda that have been issued and to include all such information in its Bid.

**10. ADDITIVE/DEDUCTIVE ALTERNATES:**

- 10.1.** The additive/deductive alternates have been established to allow the City to compare the cost of specific portions of the Work with the Project's budget and enable the City to make a decision whether to incorporate these portions prior to award. The award will be established as described in the Bid. The City reserves the right to award the Contract for the Base Bid only or for the Base Bid plus one or more Alternates.

## INSTRUCTIONS TO BIDDERS

### 1. PREQUALIFICATION OF CONTRACTORS:

- 1.1. Contractors submitting a Bid must be pre-qualified for the total amount proposed, including all alternate items, prior to the date of submittal. Bids from contractors who have not been pre-qualified as applicable and Bids that exceed the maximum dollar amount at which contractors are pre-qualified may be deemed **non-responsive** and ineligible for award.
- 1.2. The completed application must be submitted online no later than 2 weeks prior to the bid opening.
- 1.3. **Joint Venture Bidders Cumulative Maximum Bidding Capacity:** For projects with an engineer's estimate of \$30,000,000 or greater, Joint Ventures submitting bids may be deemed responsive and eligible for award if the cumulative maximum bidding capacity of the individual Joint Venture entities is equal to or greater than the total amount proposed.
  - 1.3.1. Each of the entities of the Joint Venture must have been previously prequalified at a minimum of \$15,000,000.
  - 1.3.2. Bids submitted with a total amount proposed of less than \$30,000,000 are not eligible for Cumulative Maximum Bidding Capacity prequalification. To be eligible for award in this scenario, the Joint Venture itself or at least one of the Joint Venture entities must have been prequalified for the total amount proposed.
  - 1.3.3. Bids submitted by Joint Ventures with a total amount proposed of \$30,000,000 or greater on a project with an engineer's estimate of less than \$30,000,000 are not eligible for Cumulative Maximum Bidding Capacity prequalification.
  - 1.3.4. The Joint Venture designated as the Apparent Low Bidder shall provide evidence of its corporate existence and furnish good and approved bonds in the name of the Joint Venture within 14 Calendar Days of receipt by the Bidder of a form of contract for execution.
- 1.4. Complete information and links to the on-line prequalification application are available at:  
  
<http://www.sandiego.gov/cip/bidopps/prequalification>
- 1.5. Due to the City's responsibility to protect the confidentiality of the contractors' information, City staff will not be able to provide information regarding contractors' prequalification status over the telephone. Contractors may access real-time information about their prequalification status via their vendor profile on [PlanetBids](#).



2. **ELECTRONIC FORMAT RECEIPT AND OPENING OF BIDS:** Bids will be received in electronic format (eBids) EXCLUSIVELY at the City of San Diego's electronic bidding (eBidding) site, at: <http://www.sandiego.gov/cip/bidopps/index.shtml> and are due by the date, and time shown on the cover of this solicitation.
- 2.1. **BIDDERS MUST BE PRE-REGISTERED** with the City's bidding system and possess a system-assigned Digital ID in order to submit an electronic bid.
- 2.2. The City's bidding system will automatically track information submitted to the site including IP addresses, browsers being used and the URLs from which information was submitted. In addition, the City's bidding system will keep a history of every login instance including the time of login, and other information about the user's computer configuration such as the operating system, browser type, version, and more. Because of these security features, Contractors who disable their browsers' cookies will not be able to log in and use the City's bidding system.
- 2.3. The City's electronic bidding system is responsible for bid tabulations. Upon the bidder's or proposer's entry of their bid, the system will ensure that all required fields are entered. **The system will not accept a bid for which any required information is missing.** This includes all necessary pricing, subcontractor listing(s) and any other essential documentation and supporting materials and forms requested or contained in these solicitation documents.
- 2.4. **BIDS REMAIN SEALED UNTIL BID DEADLINE.** eBids are transmitted into the City's bidding system via hypertext transfer protocol secure (https) mechanism using SSL 128-256 bit security certificates issued from Verisign/Thawte which encrypts data being transferred from client to server. Bids submitted prior to the "Bid Due Date and Time" are not available for review by anyone other than the submitter who has until the "Bid Due Date and Time" to change, rescind or retrieve its proposal should it desire to do so.
- 2.5. **BIDS MUST BE SUBMITTED BY BID DUE DATE AND TIME.** Once the bid deadline is reached, no further submissions are accepted into the system. Once the Bid Due Date and Time has lapsed, bidders, proposers, the general public, and City staff are able to immediately see the results on line. City staff may then begin reviewing the submissions for responsiveness, EOCB compliance and other issues. The City may require any Bidder to furnish statement of experience, financial responsibility, technical ability, equipment, and references.
- 2.6. **RECAPITULATION OF THE WORK.** Bids shall not contain any recapitulation of the Work. Conditional Bids may be rejected as being non-responsive. Alternative proposals will not be considered unless called for.

**2.7. BIDS MAY BE WITHDRAWN** by the Bidder only up to the bid due date and time.

**2.7.1. Important Note:** Submission of the electronic bid into the system may not be instantaneous. Due to the speed and capabilities of the user's internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the bidder's submission to upload and be received by the City's eBidding system. It is the bidder's sole responsibility to ensure their bids are received on time by the City's eBidding system. The City of San Diego is not responsible for bids that do not arrive by the required date and time.

**2.8. ACCESSIBILITY AND AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE:** To request a copy of this solicitation in an alternative format, contact the Purchasing & Contracting Department, Public Works Division Contract Specialist listed on the cover of this solicitation at least five (5) working days prior to the Bid/Proposal due date to ensure availability.

**3. ELECTRONIC BID SUBMISSIONS CARRY FULL FORCE AND EFFECT:**

**3.1.** The bidder, by submitting its electronic bid, acknowledges that doing so carries the same force and full legal effect as a paper submission with a longhand (wet) signature.

**3.2.** By submitting an electronic bid, the bidder certifies that the bidder has thoroughly examined and understands the entire Contract Documents (which consist of the plans and specifications, drawings, forms, affidavits and the solicitation documents), and that by submitting the eBid as its bid proposal, the bidder acknowledges, agrees to and is bound by the entire Contract Documents, including any addenda issued thereto, and incorporated by reference in the Contract Documents.

**3.3.** The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certification, forms and affidavits submitted as part of this bid are true and correct.

**3.4.** The Bidder agrees to the construction of the project as described in Attachment "A-Scope of Work" for the City of San Diego, in accordance with the requirements set forth herein for the electronically submitted prices. The Bidder guarantees the Contract Price for a period of 120 days from the date of Bid opening. The duration of the Contract Price guarantee shall be extended by the number of days required for the City to obtain all items necessary to fulfill all conditions precedent.

**4. BIDS ARE PUBLIC RECORDS:** Upon receipt by the City, Bids shall become public records subject to public disclosure. It is the responsibility of the respondent to clearly identify any confidential, proprietary, trade secret or otherwise legally privileged information contained within the Bid. General references to sections of the California Public Records Act (PRA) will not suffice. If the Contractor does not provide applicable case law that clearly establishes that the requested information is exempt from the disclosure requirements of the PRA, the City

shall be free to release the information when required in accordance with the PRA, pursuant to any other applicable law, or by order of any court or government agency, and the Contractor will hold the City harmless for release of this information.

**5. CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM:**

**5.1.** **Prior** to the Award of the Contract or Task Order, you and your Subcontractors and Suppliers must register with the City’s web-based vendor registration and bid management system. For additional information go to:

<http://www.sandiego.gov/purchasing/bids-contracts/vendorreg>

**5.2.** The City may not award the contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified in the Notice of Intent to Award letter, the City reserves the right to rescind the Notice of Award / Intent to Award and to make the award to the next responsive and responsible bidder / proposer.

**6. JOINT VENTURE CONTRACTORS:** Provide a copy of the Joint Venture agreement and the Joint Venture license to the City within 14 Calendar Days after receiving the Contract forms.

**7. INSURANCE REQUIREMENTS:**

**7.1.** All certificates of insurance and endorsements required by the contract are to be provided upon issuance of the City’s Notice of Intent to Award letter.

**7.2.** Refer to sections 5-4, “INSURANCE” of the Supplementary Special Provisions (SSP) for the insurance requirements which must be met.

**8. REFERENCE STANDARDS:** Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards:

Title	Edition	Document Number
Standard Specifications for Public Works Construction (“The GREENBOOK”) <a href="http://www.greenbookspecs.org/">http://www.greenbookspecs.org/</a>	2021	ECPI010122-01
City of San Diego Standard Specifications for Public Works Construction (“The WHITEBOOK”)* <a href="https://www.sandiego.gov/ecp/edocref/greenbook">https://www.sandiego.gov/ecp/edocref/greenbook</a>	2021	ECPI010122-02
City of San Diego Standard Drawings* <a href="https://www.sandiego.gov/ecp/edocref/standarddraw">https://www.sandiego.gov/ecp/edocref/standarddraw</a>	2021	ECPI010122-03
Citywide Computer Aided Design and Drafting (CADD) Standards <a href="https://www.sandiego.gov/ecp/edocref/drawings">https://www.sandiego.gov/ecp/edocref/drawings</a>	2018	PWPI010119-04
California Department of Transportation (CALTRANS) Standard Specifications <a href="https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications">https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications</a>	2018	PWPI030119-05

Title	Edition	Document Number
CALTRANS Standard Plans <a href="https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications">https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications</a>	2018	PWPI030119-06
California Manual on Uniform Traffic Control Devices Revision 6 (CA MUTCD Rev 6) <a href="https://dot.ca.gov/programs/safety-programs/camutcd/camutcd-files">https://dot.ca.gov/programs/safety-programs/camutcd/camutcd-files</a>	2014	PWPI060121-10
<p><b>NOTE:</b> *Available online under Engineering Documents and References at: <a href="https://www.sandiego.gov/ecp/edocref/">https://www.sandiego.gov/ecp/edocref/</a></p> <p>*Electronic updates to the Standard Drawings may also be found in the link above</p>		

9. **CITY'S RESPONSES AND ADDENDA:** The City, at its discretion, may respond to any or all questions submitted in writing via the City's eBidding web site in the **form of an addendum**. No other responses to questions, oral or written shall be of any force or effect with respect to this solicitation. The changes to the Contract Documents through addenda are made effective as though originally issued with the Bid. The Bidders shall acknowledge the receipt of Addenda at the time of bid submission.
10. **CITY'S RIGHTS RESERVED:** The City reserves the right to cancel the Notice Inviting Bids at any time, and further reserves the right to reject submitted Bids, without giving any reason for such action, at its sole discretion and without liability. Costs incurred by the Bidder(s) as a result of preparing Bids under the Notice Inviting Bids shall be the sole responsibility of each bidder. The Notice Inviting Bids creates or imposes no obligation upon the City to enter a contract.
11. **CONTRACT PRICING:** This solicitation is for a Lump Sum contract with Unit Price provisions as set forth herein. The Bidder agrees to perform construction services for the City of San Diego in accordance with these contract documents for the prices listed below. The Bidder further agrees to guarantee the Contract Price for a period of 120 days from the date of Bid opening. The duration of the Contract Price guarantee may be extended, by mutual consent of the parties, by the number of days required for the City to obtain all items necessary to fulfill all contractual conditions.
12. **SUBCONTRACTOR INFORMATION:**
- 12.1. **LISTING OF SUBCONTRACTORS.** In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act" of the California Public Contract Code, the Bidder shall provide the **NAME** and **ADDRESS** of each Subcontractor who will perform work, labor, render services or who specially fabricates and installs a portion [type] of the work or improvement, in an amount in excess of 0.5% of the Contractor's total Bid. The Bidder shall also state within the description, whether the subcontractor is a **CONSTRUCTOR, CONSULTANT** or **SUPPLIER**. The Bidder shall state the **DIR REGISTRATION NUMBER** for all subcontractors and shall further state within the description, the **PORTION** of the work which will be performed by each subcontractor under this Contract. The Contractor shall list only one Subcontractor for each portion of the Work. The **DOLLAR VALUE** of the total Bid to be performed shall be stated for all subcontractors listed. Failure to comply with this requirement

may result in the Bid being rejected as **non-responsive** and ineligible for award. The Bidder's attention is directed to the Special Provisions – Section 3-2, “Self-Performance”, which stipulates the percent of the Work to be performed with the Bidders' own forces. The Bidder shall list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which Bidders are seeking recognition towards achieving any mandatory, voluntary (or both) subcontracting participation goals.

Additionally, pursuant to California Senate Bill 96 and in accordance with the requirements of Labor Code sections 1771.1 and 1725.5, by submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the California Department of Industrial Relations (DIR). **The Bidder shall provide the name, address, license number, DIR registration number of any Subcontractor – regardless of tier** - who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement pursuant to the contract.

**12.2. LISTING OF SUPPLIERS.** Any Bidder seeking the recognition of Suppliers of equipment, materials, or supplies obtained from third party Suppliers towards achieving any mandatory or voluntary (or both) subcontracting participation goals shall provide, at a minimum, the **NAME, LOCATION (CITY), DIR REGISTRATION NUMBER** and the **DOLLAR VALUE** of each supplier. The Bidder will be credited up to 60% of the amount to be paid to the Suppliers for materials and supplies unless vendor manufactures or substantially alters materials and supplies, in which case, 100% will be credited. The Bidder is to indicate within the description whether the listed firm is a supplier or manufacturer. If no indication is provided, the listed firm will be credited at 60% of the listed dollar value for purposes of calculating the Subcontractor Participation Percentage.

**12.3. LISTING OF SUBCONTRACTORS OR SUPPLIERS FOR ALTERNATES.** For subcontractors or suppliers to be used on alternate items, bidder shall use the provided “Subcontractors For Alternates” form and shall indicate for each alternate subcontract whether it is an additive or deductive alternate; the subcontractor's name, location, phone number, email address, CA license number, and DIR registration number; whether the subcontractor is a designer, constructor or supplier; the type of work the subcontractor will be performing; and the dollar value of the subcontract for that alternate item. Failure to comply with this requirement may result in the bid being rejected as nonresponsive and ineligible for award.

**13. SUBMITTAL OF “OR EQUAL” ITEMS:** See Section 4-6, “Trade Names” in The WHITEBOOK and as amended in the SSP.

**14. AWARD:**

**14.1.** The Award of this contract is contingent upon the Contractor's compliance with all conditions precedent to Award.

- 14.2.** Upon acceptance of a Bid, the City will prepare contract documents for execution within approximately 21 days of the date of the Bid opening and award the Contract approximately within 7 days of receipt of properly executed Contract, bonds, and insurance documents.
- 14.3.** This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form the City Attorney's Office.
- 15. SUBCONTRACT LIMITATIONS:** The Bidder's attention is directed to Standard Specifications for Public Works Construction, Section 3-2, "SELF-PERFORMANCE" in The GREENBOOK and as amended in the SSP which requires the Contractor to self-perform not less than the specified amount. Failure to comply with this requirement shall render the bid **non-responsive** and ineligible for award.
- 16. AVAILABILITY OF PLANS AND SPECIFICATIONS:** Contract Documents may be obtained by visiting the City's website: <http://www.sandiego.gov/cip/>. Plans and Specifications for this contract are also available for review in the office of the City Clerk or Purchasing & Contracting Department, Public Works Division.
- 17. ONLY ONE BID PER CONTRACTOR SHALL BE ACCEPTED:** No person, firm, or corporation shall be allowed to make, file, or be interested in more than one (1) Bid for the same work unless alternate Bids are called for. A person, firm or corporation who has submitted a sub-proposal to a Bidder, or who has quoted prices on materials to a Bidder, is not hereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or from submitting a Bid in its own behalf. Any Bidder who submits more than one bid will result in the rejection of all bids submitted.
- 18. SAN DIEGO BUSINESS TAX CERTIFICATE:** The Contractor and Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, First floor and submit to the Contract Specialist upon request or as specified in the Contract Documents. Tax Identification numbers for both the Bidder and the listed Subcontractors must be submitted on the City provided forms within these documents.
- 19. BIDDER'S GUARANTEE OF GOOD FAITH (BID SECURITY) FOR DESIGN-BID-BUILD CONTRACTS:**
- 19.1.** For bids \$250,000 and above, bidders shall submit Bid Security at bid time. Bid Security shall be in one of the following forms: a cashier's check, or a properly certified check upon some responsible bank; or an approved corporate surety bond payable to the City of San Diego for an amount of not less than 10% of the total bid amount.
- 19.2.** This check or bond, and the monies represented thereby, will be held by the City as a guarantee that the Bidder, if awarded the contract, will in good faith enter into the contract and furnish the required final performance and payment bonds.

- 19.3.** The Bidder agrees that in the event of the Bidder's failure to execute this contract and provide the required final bonds, the money represented by the cashier's or certified check will remain the property of the City; and the Surety agrees that it will pay to the City the damages, not exceeding the sum of 10% of the amount of the Bid, that the City may suffer as a result of such failure.
- 19.4.** At the time of bid submission, bidders must upload and submit an electronic PDF copy of the aforementioned bid security. Whether in the form of a cashier's check, a properly certified check or an approved corporate surety bond payable to the City of San Diego, the bid security must be uploaded to the City's eBidding system. By 5PM, 1 working day after the bid opening date, all bidders must provide the City with the original bid security.
- 19.5.** Failure to submit the electronic version of the bid security at the time of bid submission AND failure to provide the original by 5 PM, 1 working day after the bid opening date shall cause the bid to be rejected and deemed **non-responsive**.

Original Bid Bond shall be submitted to:  
Purchasing & Contracting Department, Public Works Division  
1200 3rd Ave., Suite 200, MS 56P  
San Diego, California, 92101  
To the Attention of the Contract Specialist on the Front Page of this solicitation.

**20. AWARD OF CONTRACT OR REJECTION OF BIDS:**

- 20.1.** This contract may be awarded to the lowest responsible and reliable Bidder.
- 20.2.** Bidders shall complete ALL eBid forms as required by this solicitation. Incomplete eBids will not be accepted.
- 20.3.** The City reserves the right to reject any or all Bids, to waive any informality or technicality in Bids received, and to waive any requirements of these specifications as to bidding procedure.
- 20.4.** Bidders will not be released on account of their errors of judgment. Bidders may be released only upon receipt by the City within 3 Working Days of the bid opening, written notice from the Bidder which shows proof of honest, credible, clerical error of a material nature, free from fraud or fraudulent intent; and of evidence that reasonable care was observed in the preparation of the Bid.
- 20.5.** A bidder who is not selected for contract award may protest the award of a contract to another bidder by submitting a written protest in accordance with the San Diego Municipal Code.

- 20.6.** The City of San Diego will not discriminate in the award of contracts with regard to race, religion creed, color, national origin, ancestry, physical handicap, marital status, sex or age.
- 20.7.** Each Bid package properly signed as required by these specifications shall constitute a firm offer which may be accepted by the City within the time specified herein.
- 20.8.** The City reserves the right to evaluate all Bids and determine the lowest Bidder on the basis of the base bid and any proposed alternates or options as detailed herein.

**21. BID RESULTS:**

- 21.1.** The availability of the bids on the City's eBidding system shall constitute the public announcement of the apparent low bidder. In the event that the apparent low bidder is subsequently deemed non-responsive or non-responsible, a notation of such will be made on the eBidding system. The new ranking and apparent low bidder will be adjusted accordingly.
- 21.2.** To obtain the bid results, view the results on the City's web site, or request the results by U.S. mail and provide a self-addressed, stamped envelope. If requesting by mail, be sure to reference the bid name and number. The bid tabulations will be mailed to you upon their completion. The results will not be given over the telephone.

**22. THE CONTRACT:**

- 22.1.** The Bidder to whom award is made shall execute a written contract with the City of San Diego and furnish good and approved bonds and insurance certificates specified by the City within 14 days after receipt by Bidder of a form of contract for execution unless an extension of time is granted to the Bidder in writing.
- 22.2.** If the Bidder takes longer than 14 days to fulfill these requirements, then the additional time taken shall be added to the Bid guarantee. The Contract shall be made in the form adopted by the City, which includes the provision that no claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
- 22.3.** If the Bidder to whom the award is made fails to enter into the contract as herein provided, the award may be annulled and the Bidder's Guarantee of Good Faith will be subject to forfeiture. An award may be made to the next lowest responsible and reliable Bidder who shall fulfill every stipulation embraced herein as if it were the party to whom the first award was made.



- 22.4.** Pursuant to the San Diego City Charter section 94, the City may only award a public works contract to the lowest responsible and reliable Bidder. The City will require the Apparent Low Bidder to (i) submit information to determine the Bidder's responsibility and reliability, (ii) execute the Contract in form provided by the City, and (iii) furnish good and approved bonds and insurance certificates specified by the City within 14 Days, unless otherwise approved by the City, in writing after the Bidder receives notification from the City, designating the Bidder as the Apparent Low Bidder and formally requesting the above mentioned items.
- 22.5.** The award of the Contract is contingent upon the satisfactory completion of the above-mentioned items and becomes effective upon the signing of the Contract by the Mayor or designee and approval as to form by the City Attorney's Office. If the Apparent Low Bidder does not execute the Contract or submit required documents and information, the City may award the Contract to the next lowest responsible and reliable Bidder who shall fulfill every condition precedent to award. A corporation designated as the Apparent Low Bidder shall furnish evidence of its corporate existence and evidence that the officer signing the Contract and bond for the corporation is duly authorized to do so.
- 23. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK:** The Bidder shall examine carefully the Project Site, the Plans and Specifications, other materials as described in the Special Provisions, Section 3-9, "TECHNICAL STUDIES AND SUBSURFACE DATA", and the proposal forms (e.g., Bidding Documents). The submission of a Bid shall be conclusive evidence that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of work, the quantities of materials to be furnished, and as to the requirements of the Bidding Documents Proposal, Plans, and Specifications.
- 24. CITY STANDARD PROVISIONS:** This contract is subject to the following standard provisions. See The WHITEBOOK for details.
- 24.1.** The City of San Diego Resolution No. R-277952 adopted on May 20, 1991 for a Drug-Free Workplace.
- 24.2.** The City of San Diego Resolution No. R-282153 adopted on June 14, 1993 related to the Americans with Disabilities Act.
- 24.3.** The City of San Diego Municipal Code §22.3004 for Contractor Standards.
- 24.4.** The City of San Diego's Labor Compliance Program and the State of California Labor Code §§1771.5(b) and 1776.
- 24.5.** Sections 1777.5, 1777.6, and 1777.7 of the State of California Labor Code concerning the employment of apprentices by contractors and subcontractors performing public works contracts.

**24.6.** The City's Equal Benefits Ordinance (EBO), Chapter 2, Article 2, Division 43 of The San Diego Municipal Code (SDMC).

**24.7.** The City's Information Security Policy (ISP) as defined in the City's Administrative Regulation 90.63.

**25. PRE-AWARD ACTIVITIES:**

**25.1.** The contractor selected by the City to execute a contract for this Work shall submit the required documentation as specified herein and in the Notice of Intent to Award. Failure to provide the information as specified may result in the Bid being rejected as **non-responsive**.

**25.2.** The decision that bid is non-responsive for failure to provide the information required within the time specified shall be at the sole discretion of the City.

PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND

ORIGINAL

FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

Whillock Contracting Inc , a corporation, as principal, and  
Travelers Casualty and Surety Company of America , a corporation authorized to do  
business in the State of California, as Surety, hereby obligate themselves, their successors and assigns,  
jointly and severally, to The City of San Diego a municipal corporation in the sum of SIX MILLION  
SIXTY EIGHT THOUSAND THREE HUNDRED NINETY FOUR DOLLARS (\$6,068,394), for the faithful  
performance of the annexed contract, and in the sum of SIX MILLION SIXTY EIGHT THOUSAND  
THREE HUNDRED NINETY FOUR DOLLARS (\$6,068,394), for the benefit of laborers and materialmen  
designated below.

Conditions:

If the Principal shall faithfully perform the annexed contract with the City of San Diego,  
California, then the obligation herein with respect to a faithful performance shall be void; otherwise it  
shall remain in full force.

If the Principal shall promptly pay all persons, firms and corporations furnishing materials for  
or performing labor in the execution of this contract, and shall pay all amounts due under the  
California Unemployment Insurance Act then the obligation herein with respect to laborers and  
materialmen shall be void; otherwise it shall remain in full force.

The obligation herein with respect to laborers and materialmen shall inure to the benefit of  
all persons, firms and corporations entitled to file claims under the provisions of Article 2. Claimants,  
(iii) public works of improvement commencing with Civil Code Section 9100 of the Civil Code of the  
State of California.

Changes in the terms of the annexed contract or specifications accompanying same or  
referred to therein shall not affect the Surety's obligation on this bond, and the Surety hereby waives  
notice of same.

The Surety shall pay reasonable attorney's fees should suit be brought to enforce the  
provisions of this bond.

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

The Surety shall not utilize the Principal in completing the improvements and work specified  
in the Agreement in the event the City terminates the Principal for default.

PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND (continued)

THE CITY OF SAN DIEGO

APPROVED AS TO FORM

Mara W. Elliott, City Attorney

By: Berric Doringo

By: Dana Fairchild

Print Name: Berric Doringo  
Deputy Director  
Purchasing & Contracting Dept.

Print Name: Dana Fairchild  
Deputy City Attorney

Date: 4/19/2023

Date: 4/24/2023

CONTRACTOR

Whillock Contracting, Inc.

By: [Signature]

SURETY

Travelers Casualty and Surety Company of America

By: [Signature]  
Attorney-In-Fact

Print Name: Tory M Whillock, Secretary

Print Name: Jerry E Mosier Attorney-in-Fact

Date: March 3, 2023

Date: March 3, 2023

21688 Gateway Center Drive Diamond Bar, CA 91765

Local Address of Surety

(619) 749-1102

Local Phone Number of Surety

\$44,389.00

Premium

107732106

Bond Number



**Travelers Casualty and Surety Company of America  
Travelers Casualty and Surety Company  
St. Paul Fire and Marine Insurance Company**

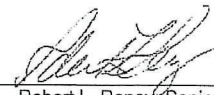
**POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **JERRY E MOSIER** of **SAN CARLOS**, California, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 21st day of April, 2021.

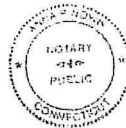


State of Connecticut  
City of Hartford ss.

By:   
Robert L. Raney, Senior Vice President

On this the 21st day of April, 2021, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.  
My Commission expires the 30th day of June, 2026



  
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

**RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

**FURTHER RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

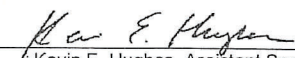
**FURTHER RESOLVED**, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

**FURTHER RESOLVED**, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 3rd day of March, 2023



  
Kevin E. Hughes, Assistant Secretary

*To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.  
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.*

## 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 San Diego )

On March 3, 2023 before me, Jessica James, Notary Public  
(insert name and title of the officer)

personally appeared Tory M Whillock and Jerry E Mosier,  
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)



## ATTACHMENTS

**ATTACHMENT A**  
**SCOPE OF WORK**



## SCOPE OF WORK

1. **SCOPE OF WORK:** This project provides for accessibility upgrades/replacement of site arrival point, accessible routes, stairways, picnic shade structure, comfort station/concession stand, drinking fountains, parking spaces, play areas and assembly areas, lighting and electrical services, landscape and irrigation, sewer and water services, as well as the addition of outdoor fitness areas.
  - 1.1. The Work shall be performed in accordance with:
    - 1.1.1. The Notice Inviting Bids and the Plans numbered **0100208-01-D** through **0100208-105-D**, inclusive.
2. **LOCATION OF WORK:** The location of the Work is as follows:

10150 Avenida Magnifica, San Diego, CA, 92131. See **Appendix E – Location Map**.
3. **CONTRACT TIME:** The Contract Time for completion of the Work, including the Plant Establishment Period, shall be **220 Working Days**.

**ATTACHMENT B**

**RESERVED**

**ATTACHMENT C**  
**EQUAL OPPORTUNITY CONTRACTING PROGRAM**

## EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

### SECTION A - GENERAL REQUIREMENTS

#### A. INTRODUCTION.

1. This document sets forth the following specifications:
  - a) The City's general EOCP requirements for all Construction Contracts.
  - b) Special Provisions for Contracts subject to SLBE and ELBE requirements only.
2. Additional requirements may apply for state or federally funded projects.
3. These requirements shall be included as Contract provisions for all Subcontracts.
4. The City specified forms, instructions, and guides are available for download from the EOCP's web site at: <http://www.sandiego.gov/eoc/forms/index.shtml>

#### B. GENERAL.

1. The City of San Diego promotes equal employment and subcontracting opportunities.
2. The City is committed to ensuring that taxpayer dollars spent on public Contracts are not paid to businesses that practice discrimination in employment or subcontracting.
3. The City encourages all companies seeking to do business with the City to share this commitment.

#### C. DEFINITIONS.

1. For the purpose of these requirements: Terms "Bid" and "Proposal", "Bidder" and "Proposer", "Subcontractor" and "Subconsultant", "Contractor" and "Consultant", "Contractor" and "Prime Contractor", "Consultant" and "Professional Service Provider", "Suppliers" and "Vendors", "Suppliers" and "Dealers", and "Suppliers" and "Manufacturers" may have been used interchangeably.
2. The following definitions apply:
  - a) **Emerging Business Enterprise (EBE)** - A for-profit business that is independently owned and operated; that is not a subsidiary or franchise of another business and whose gross annual receipts do not exceed the amount set by the City Manager and that meets all other criteria set forth in regulations implementing Municipal Code Chapter 2, Article 2, Division 36. The City Manager shall review the threshold amount for EBEs on an annual basis and adjust as necessary to reflect changes in the marketplace.
  - b) **Emerging Local Business Enterprise (ELBE)** - A Local Business Enterprise that is also an Emerging Business Enterprise.

- c) **Minority Business Enterprise (MBE)** - A certified business that is at least fifty-one percent (51%) owned by one or more minority individuals, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more minority individuals; and (2) whose daily business operations are managed and directed by one or more minorities owners. Minorities include the groups with the following ethnic origins: African, Asian Pacific, Asian Subcontinent, Hispanic, Native Alaskan, Native American, and Native Hawaiian.
- d) **Women Business Enterprise (WBE)** - A certified business that is at least fifty-one percent (51%) owned by a woman or women, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more women; and (2) whose daily business operations are managed and directed by one or more women owners.
- e) **Disadvantaged Business Enterprise (DBE)** - a certified business that is at least fifty-one percent (51%) owned by socially and economically disadvantaged individuals, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more socially and economically disadvantaged individuals; and (2) whose daily business operations are managed and directed by one or more socially and economically disadvantaged owners.
- f) **Disabled Veteran Business Enterprise (DVBE)** - A certified business that is at least fifty-one percent (51%) owned by one or more disabled veterans; and (2) business operations must be managed and controlled by one or more disabled veterans. Disabled Veteran is a veteran of the U.S. military, naval, or air service; the veteran must have a service-connected disability of at least 10% or more; and the veteran must reside in California.
- g) **Other Business Enterprise (OBE)** - Any business which does not otherwise qualify as a Minority, Woman, Disadvantaged, or Disabled Veteran Business Enterprise.
- h) **Small Business Enterprise (SBE)** - A for-profit business that is independently owned and operated; that is not a subsidiary or franchise of another business and whose gross annual receipts do not exceed the amount set by the City Manager and that meets all other criteria set forth in regulations implementing Municipal Code Chapter 2, Article 2, Division 36. The City Manager shall review the threshold amount for SBEs on an annual basis and adjust as necessary to reflect changes in the marketplace. A business certified as a Micro Business (MB) or a Disabled Veteran Business Enterprise (DVBE) by the State of California and that has provided proof of such certification to the City Manager shall be deemed to be an SBE.

- i) **Small Local Business Enterprise (SLBE)** - A Local Business Enterprise that is also a Small Business Enterprise.

**D. CITY'S EQUAL OPPORTUNITY COMMITMENT.**

**1. Nondiscrimination in Contracting Ordinance.**

- a) You, your Subcontractors, and Suppliers shall comply with the requirements of the City's Nondiscrimination in Contracting Ordinance, San Diego Municipal Code §§22.3501 through 22.3517.

You shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, or suppliers. You shall provide equal opportunity for Subcontractors to participate in subcontracting opportunities. You understand and agree that the violation of this clause shall be considered a material breach of the Contract and may result in Contract termination, debarment, or other sanctions.

You shall include the foregoing clause in all Contracts between you and your Subcontractors and Suppliers.

- b) **Disclosure of Discrimination Complaints.** As part of its Bid or Proposal, you shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against you in a legal or administrative proceeding alleging that you discriminated against your employees, Subcontractors, vendors, or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.
- c) Upon the City's request, You agree to provide to the City, within 60 Calendar Days, a truthful and complete list of the names of all Subcontractors and Suppliers that you have used in the past 5 years on any of your Contracts that were undertaken within the San Diego County, including the total dollar amount paid by you for each Subcontract or supply Contract.
- d) You further agree to fully cooperate in any investigation conducted by the City pursuant to the City's Nondiscrimination in Contracting Ordinance, Municipal Code §§22.3501 through 22.3517. You understand and agree that violation of this clause shall be considered a material breach of the Contract and may result in remedies being ordered against you up to and including contract termination, debarment, and other sanctions for the violation of the provisions of the Nondiscrimination in Contracting Ordinance. You further understand and agree that the procedures, remedies, and sanctions provided for in the Nondiscrimination in Contracting Ordinance apply only to violations of the Ordinance.

**E. EQUAL EMPLOYMENT OPPORTUNITY OUTREACH PROGRAM.**

1. You, your Subcontractors, and Suppliers shall comply with the City's Equal Employment Opportunity Outreach Program, San Diego Municipal Code §§22.2701 through 22.2707.

You shall not discriminate against any employee or applicant for employment on any basis prohibited by law. You shall provide equal opportunity in all employment practices. You shall ensure that your Subcontractors comply with this program. Nothing in this section shall be interpreted to hold you liable for any discriminatory practices of your Subcontractors.

You shall include the foregoing clause in all Contracts between you and your Subcontractors and Suppliers.

2. If the Contract is competitively solicited, the selected Bidder shall submit a Work Force Report (Form BB05) within 10 Working Days after receipt by the Bidder to the City for approval as specified in the Notice of Intent to Award letter.
3. The selected Bidder shall submit an Equal Employment Opportunity Plan if a Work Force Report is submitted and if the City determines that there are under-representations when compared to County Labor Force Availability data.
4. If the selected Bidder submits an Equal Employment Opportunity Plan, it shall include the following assurances:
  - a) You shall maintain a working environment free of discrimination, harassment, intimidation, and coercion at all Sites and in all facilities at which your employees are assigned to Work.
  - b) You shall review your EEO Policy annually with all on-Site supervisors involved in employment decisions.
  - c) You shall disseminate and review your EEO Policy with all employees at least once a year, post the policy statement and EEO posters on all company bulletin boards and job sites, and document every dissemination, review, and posting with a written record to identify the time, place, employees present, subject matter, and disposition of meetings.
  - d) You shall review, at least annually, all supervisors' adherence to and performance under the EEO Policy and maintain written documentation of these reviews.
  - e) You shall discuss your EEO Policy Statement with Subcontractors with whom you anticipate doing business, including the EEO Policy Statement in your Subcontracts, and provide such documentation to the City upon request.

- f) You shall document and maintain a record of all Bid solicitations and outreach efforts to and from Subcontractors, contractor associations, and other business associations.
- g) You shall disseminate your EEO Policy externally through various media, including the media of people of color and women, in advertisements to recruit. Maintain files documenting these efforts and provide copies of these advertisements to the City upon request.
- h) You shall disseminate your EEO Policy to union and community organizations.
- i) You shall provide immediate written notification to the City when any union referral process has impeded your efforts to maintain your EEO Policy.
- j) You shall maintain a current list of recruitment sources, including those outreaching to people of color and women, and provide written notification of employment opportunities to these recruitment sources with a record of the organizations' responses.
- k) You shall maintain a current file of names, addresses and phone numbers of each walk-in applicant, including people of color and women, and referrals from unions, recruitment sources, or community organizations with a description of the employment action taken.
- l) You shall encourage all present employees, including people of color and women employees, to recruit others.
- m) You shall maintain all employment selection process information with records of all tests and other selection criteria.
- n) You shall develop and maintain documentation for on-the-job training opportunities, participate in training programs, or both for all of your employees, including people of color and women, and establish apprenticeship, trainee, and upgrade programs relevant to your employment needs.
- o) You shall conduct, at least annually, an inventory and evaluation of all employees for promotional opportunities and encourage all employees to seek and prepare appropriately for such opportunities.
- p) You shall ensure that the company's working environment and activities are non-segregated except for providing separate or single-user toilets and necessary changing facilities to assure privacy between the sexes.

**F. SUBCONTRACTING.**

1. The City encourages all eligible business enterprises to participate in City contracts as a Contractor, Subcontractor, and joint venture partner with you, your Subcontractors, or your Suppliers. You are encouraged to take positive steps to diversify and expand your Subcontractor solicitation base and to offer



subcontracting opportunities to all eligible business firms including SLBEs, ELBEs, MBEs, WBEs, DBEs, DVBES, and OBEs.

2. For Subcontractor participation level requirements, see the Contract Documents where applicable.
3. For the purposes of achieving the mandatory Subcontractor participation percentages, City percentage calculations will not account for the following:
  - a) "Field Orders" and "City Contingency" Bid items.
  - b) Alternate Bid items.
  - c) Allowance Bid items designated as "EOC Type II".
4. Allowance Bid items designated as "EOC Type I" will be considered as part of the Base Bid and will be included in the percentage calculation.
5. Each joint venture partner shall be responsible for a clearly defined Scope of Work. In addition, an agreement shall be submitted and signed by all parties identifying the extent to which each joint venture partner shares in ownership, control, management, risk, and profits of the joint venture.

**G. LISTS OF SUBCONTRACTORS AND SUPPLIERS.**

1. You shall comply with the Subletting and Subcontracting Fair Practices Act, Public Contract Code §§4100 through 4113, inclusive.
2. You shall list all Subcontractors who will receive more than 0.5% of the total Bid amount or \$10,000, whichever is greater on the form provided in the Contract Documents (Subcontractors list).
3. The Subcontractors list shall include the Subcontractor's name, telephone number including area code, physical address, Scope of Work, the dollar amount of the proposed Subcontract, the California contractor license number, the Public Works contractor registration number issued pursuant to Section 1725.5 of the Labor Code, and the Subcontractor's certification status with the name of the certifying agency.
4. The listed Subcontractor shall be appropriately licensed pursuant to Contractor License Laws.
5. For Design-Build Contracts, refer to the RFQ and RFP for each Project or Task Order.

**H. SUBCONTRACTOR AND SUPPLIER SUBSTITUTIONS.**

1. Listed Subcontractors and Suppliers shall not be substituted without the Express authorization of the City or its duly authorized agent.
2. Request for Subcontractor or Supplier substitution shall be made in writing to Purchasing & Contracting Department, Public Works Division, Attention Contract Specialist, 1200 3rd Ave., Suite 200, MS 56P, San Diego, CA 92101 with a copy to the Engineer.

3. The request shall include a thorough explanation of the reason(s) for the substitution, including dollar amounts and a letter from each substituted Subcontractor or Supplier stating that they (the Subcontractors or Suppliers) release all interest in working on the Project and written confirmation from the new Subcontractor or Supplier stating that they agree to work on the Project along with the dollar value of the Work to be performed.
4. Written approval of the substitution request shall be received by you or from the City or its authorized officer prior to any unlisted Subcontractor or Supplier performing Work on the Project.
5. Substitution of Subcontractors and Suppliers without authorization shall subject you to those penalties set forth in Public Contract Code §4110.
6. Requests for Supplier substitution shall be made in writing at least 10 Days prior to the provision of materials, supplies, or services by the proposed Supplier and shall include proof of written notice to the originally listed Supplier of the proposed substitution.
7. A Contractor whose Bid is accepted shall not:
  - a) Substitute a person as Subcontractor or Supplier in place of the Subcontractor or Supplier listed in the original bid, except that the City, or its duly authorized officer, may consent to the substitution of another person as a Subcontractor or Supplier in any of the following situations:
    - i. When the Subcontractor or Supplier listed in the Bid, after having a reasonable opportunity to do so, fails or refuses to execute a written Contract for the scope of work specified in the subcontractor's bid and at the price specified in the subcontractor's bid, when that written contract, based upon the general terms, conditions, plans, and specifications for the project involved or the terms of the subcontractor's written bid, is presented to the subcontractor by the prime contractor.
    - ii. When the listed Subcontractor or Supplier becomes insolvent or the subject of an order for relief in bankruptcy.
    - iii. When the listed Subcontractor or Supplier fails or refuses to perform his or her subcontract.
    - iv. When the listed Subcontractor fails or refuses to meet bond requirements as set forth in Public Contract Code §4108.
    - v. When you demonstrate to the City or its duly authorized officer, subject to the provisions set forth in Public Contract Code §4107.5, that the name of the Subcontractor was listed as the result of an inadvertent clerical error.
    - vi. When the listed Subcontractor is not licensed pursuant to Contractor License Law.

- vii. When the City, or its duly authorized officer, determines that the Work performed by the listed Subcontractor or that the materials or supplies provided by the listed Supplier are substantially unsatisfactory and not in substantial accordance with the Plans and specifications or that the Subcontractor or Supplier is substantially delaying or disrupting the progress of the Work.
  - viii. When the listed Subcontractor is ineligible to work on a public works project pursuant to §§1777.1 or 1777.7 of the Labor Code.
  - ix. When the City or its duly authorized agent determines that the listed Subcontractor is not a responsible contractor.
- b) Permit a Contract to be voluntarily assigned or transferred or allow it to be performed by anyone other than the original Subcontractor, Supplier listed in the original Bid without the consent of the City, or its duly authorized officer.
  - c) Other than in the performance of "Change Orders" causing changes or deviations from the Contract, sublet or subcontract any portion of the Work, or contract for materials or supplies in excess of 0.5% of your total bid or \$10,000, whichever is greater, as to which his or her original Bid did not designate a Subcontractor or Supplier.
8. Following receipt of notice from you of the proposed substitution of a Subcontractor or Supplier, the listed Subcontractor or Supplier who has been so notified shall have 5 Working Days within which to submit written objections to the substitution to the Contract Specialist with a copy to the Engineer. Failure to file these written objections shall constitute the listed Subcontractor or Supplier's consent to the substitution. If written objections are filed, the City shall give notice in writing of at least 5 Working Days to the listed Subcontractor or Supplier of a hearing by the City on your request for substitution.

**I. PROMPT PAYMENT.**

- 1. You or your Subcontractors shall pay to any subcontractor, not later than 7 Calendar Days of receipt of each progress payment, unless otherwise agreed to in writing, the respective amounts allowed you on account of the Work performed by the Subcontractors, to the extent of each Subcontractor's interest therein. In cases of Subcontractor performance deficiencies, you shall make written notice of any withholding to the Subcontractor with a copy to the Contracts Specialist. Upon correction of the deficiency, you shall pay the Subcontractor the amount previously withheld within 14 Calendar Days after payment by the City.
- 2. Any violation of California Business and Professions Code, §7108.5 concerning prompt payment to Subcontractors shall subject the violating Contractor or

Subcontractor to the penalties, sanctions, and other remedies of that section. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to you or your Subcontractor in the event of a dispute involving late payment or nonpayment by the Prime Contractor, deficient subcontract performance, or noncompliance by a Subcontractor.

**J. PROMPT PAYMENT OF FUNDS WITHHELD TO SUBCONTRACTORS.**

1. The City will hold retention from you and will make prompt and regular incremental acceptances of portions, as determined by the Engineer, of the Work and pay retention to you based on these acceptances.
2. You or your Subcontractors shall return all monies withheld in retention from a Subcontractor within 30 Calendar Days after receiving payment for Work satisfactorily completed and accepted including incremental acceptances of portions of the Work by the City.
3. Federal law (49CFR26.29) requires that any delay or postponement of payment over 30 Calendar Days may take place only for good cause and with the City's prior written approval. Any violation of this provision by you or your Subcontractor shall subject you or your Subcontractor to the penalties, sanctions, and other remedies specified in §7108.5 of the Business and Professions Code.
4. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to you or your Subcontractor in the event of a dispute involving late payment or nonpayment by you, deficient subcontract performance, or noncompliance by a Subcontractor.

**K. CERTIFICATION.**

1. The City accepts certifications of DBE, DVBE, MBE, SMBE, SWBE, or WBE by any of the following certifying agencies:
  - a) Current certification by the State of California Department of Transportation (CALTRANS) as DBE, SMBE, or SWBE.
  - b) Current MBE, WBE, or DVBE certification from the California Public Utilities Commission.
  - c) DVBE certification is received from the State of California's Department of General Services, Office of Small and Minority Business.
  - d) Current certification by the City of Los Angeles as DBE, WBE, or MBE.
  - e) Subcontractors' valid proof of certification status (copies of MBE, WBE, DBE, or DVBE certifications) shall be submitted as required.

**L. CONTRACT RECORDS AND REPORTS.**

1. You shall maintain records of all subcontracts and invoices from your

Subcontractors and Suppliers for work on this project. Records shall show name, telephone number including area code, and business address of each Subcontractor, Supplier, and joint venture partner, and the total amount actually paid to each firm. Project relevant records, regardless of tier, may be periodically reviewed by the City.

2. You shall retain all records, books, papers, and documents pertinent to the Contract for a period of not less than 5 years after Notice of Completion and allow access to said records by the City's authorized representatives.
3. You shall submit the following reports using the City's web-based contract compliance (Prism® portal):
  - a. **Monthly Payment.** You shall submit Monthly Payment Reporting by the 10<sup>th</sup> day of the subsequent month. Incomplete and/or delinquent reporting may cause payment delays, non-payment of invoices, or both.
4. The records maintained under item 1, described above, shall be consolidated into a Final Summary Report, certified as correct by an authorized representative of the Contractor. The Final Summary Report shall include all subcontracting activities and be sent to the EOCP Program Manager prior to Acceptance. Failure to comply may result in assessment of liquidated damages or withholding of retention. The City will review and verify 100% of subcontract participation reported in the Final Summary Report prior to approval and release of final retention to you. In the event your Subcontractors are owed money for completed Work, the City may authorize payment to subcontractor via a joint check from the withheld retention.

## EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

### SECTION B - SLBE-ELBE SUBCONTRACTING REQUIREMENTS

**THESE SPECIAL PROVISIONS SUPPLEMENT THE POLICIES AND REQUIREMENTS ESTABLISHED BY THE CITY OF SAN DIEGO EQUAL OPPORTUNITY CONTRACTING PROGRAM SPECIFIED IN THE CITY'S GENERAL EOCP REQUIREMENTS.**

#### **A. GENERAL.**

1. It is the City's policy to encourage greater availability, capacity development, and contract participation by SLBE and ELBE firms in City contracts. This policy is, in part, intended to further the City's compelling interest to stimulate economic development through the support and empowerment of the local community, ensure that it is neither an active nor passive participant in marketplace discrimination, and promote equal opportunity for all segments of the contracting community.
2. The City is committed to maximizing subcontracting opportunities for all qualified and available firms.
3. This policy applies to City-funded construction contracts. Bidders shall be fully informed of this policy as set forth in these specifications. Mandatory or voluntary subcontracting percentages, Bid Discounts, and restricted competitions are specified in the Contract Documents.
4. You shall make subcontracting opportunities available to a broad base of qualified Subcontractors and shall achieve the minimum SLBE-ELBE Subcontractor participation identified for your project.
5. Failure to subcontract the specified minimum (mandatory) percentages of the Bid to qualified available SLBE-ELBE Subcontractors will cause a Bid to be rejected as non-responsive unless the Bidder has demonstrated compliance with the affirmative steps as specified in the City's document titled "Small Local Business (SLBE) Program, INSTRUCTIONS FOR BIDDERS COMPLETING THE GOOD FAITH EFFORT SUBMITTAL" and has submitted documentation showing that all required positive efforts were made prior to the Bid submittal due date. The required Good Faith Effort (GFE) documentation shall be submitted to the Contract Specialist. The instructions for completing the good faith effort submittal can be found on the City's website:  
<https://www.sandiego.gov/sites/default/files/legacy/eoc/pdf/slbeinst.pdf>
6. The current list of certified SLBE-ELBE firms and information for completing the GFE submittal can be found on the City's EOC Department website:  
<http://www.sandiego.gov/eoc/programs/slbe.shtml>
7. These requirements may be waived, at the City's sole discretion, on projects deemed inappropriate for subcontracting participation.

## B.

### DEFINITIONS.

1. The following definitions shall be used in conjunction with these specifications:

- a) **Bid Discount** – Additional inducements or enhancements in the bidding process that are designed to increase the chances for the selection of SLBE firms in competition with other firms.
- b) **Commercially Useful Function** – An SLBE-ELBE performs a commercially useful function when it is responsible for the execution of the Work and is carrying out its responsibilities by actually performing, managing, and supervising the Work involved. To perform a commercially useful function, the SLBE-ELBE shall also be responsible, with respect to materials and supplies used on the Contract, for negotiating price, determining quantity and quality, ordering the material, and installing (where applicable) and paying for the material itself.

To determine whether an SLBE-ELBE is performing a commercially useful function, an evaluation will be performed of the amount of Work subcontracted, normal industry practices, whether the amount the SLBE-ELBE firm is to be paid under the contract is commensurate with the Work it is actually performing and the SLBE-ELBE credit claimed for its performance of the Work, and other relevant factors. Specifically, an SLBE-ELBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of meaningful and useful SLBE-ELBE participation, when in similar transactions in which SLBE-ELBE firms do not participate, there is no such role performed.

- c) **Good Faith Efforts (GFE)** – Documentation of the Bidder's intent to comply with SLBE Program goals and procedures included in the City's SLBE Program, Instructions for Completing Good Faith Effort Submittal available from the City's EOCP website or the Contract Specialist.
- d) **Independently Owned, Managed, and Operated** – Ownership of a SLBE-ELBE firm shall be direct, independent, and by individuals only. Business firms that are owned by other businesses or by the principals or owners of other businesses that cannot themselves qualify under the SLBE-ELBE eligibility requirements shall not be eligible to participate in the Program. Moreover, the day-to-day management of the SLBE-ELBE firm shall be direct and independent of the influence of any other businesses that cannot themselves qualify under the SLBE-ELBE eligibility requirements.
- e) **Joint Venture** – An association of two or more persons or business entities that is formed for the single purpose of carrying out a single defined business enterprise for which purpose they combine their

capital, efforts, skills, knowledge, or property. Joint ventures shall be established by written agreement to qualify for this program.

- f) **Local Business Enterprise (“LBE”)** – A firm having a Principal Place of Business and a Significant Employment Presence in San Diego County, California that has been in operation for 12 consecutive months and a valid business tax certificate. This definition is subsumed within the definition of Small Local Business Enterprise.
- g) **Minor Construction Program** – A program developed for bidding exclusively among SLBE-ELBE Construction firms.
- h) **Principal Place of Business** – A location wherein a firm maintains a physical office and through which it obtains no less than 50% of its overall customers or sales dollars.
- i) **Protégé** – A firm that has been approved and is an active participant in the City’s Mentor-Protégé Program and that has signed the required program participation agreement and has been assigned a mentor.
- j) **Significant Employee Presence** – No less than 25% of a firm’s total number of employees are domiciled in San Diego County.

**C. SUBCONTRACTOR PARTICIPATION.**

- 1. For the purpose of satisfying subcontracting participation requirements, only 1<sup>st</sup> tier SLBE–ELBE Subcontractors will be recognized as participants in the Contract according to the following criteria:
  - a) For credit to be allowed toward a respective participation level, all listed SLBE-ELBE firms shall have been certified by the Bid due date.
  - b) The Subcontractor shall perform a commercially useful function for credit to be allowed toward subcontractor participation levels. The Subcontractor shall be required by you to be responsible for the execution of a distinct element of the Work and shall carry out its responsibility by actually performing and supervising its own workforce.
  - c) If the Bidder is seeking the recognition of materials, supplies, or both towards achieving any mandatory subcontracting participation level, the Bidder shall indicate on Form AA40 – Named Equipment/Material Supplier List with the Bid the following:
    - i. If the materials or supplies are obtained from a SLBE-ELBE manufacturer, the Bidder will receive 100% of the cost of the materials or supplies toward SLBE participation. For the purposes of counting SLBE-ELBE participation, a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the Contract and of the general character described by the specifications.



- ii. If the materials or supplies are obtained from a SLBE-ELBE supplier, the Bidder will receive 60% of the cost of the materials or supplies toward SLBE participation. For the purposes of counting SLBE-ELBE participation a Supplier is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a supplier, the firm shall be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A person may be a supplier in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business if the person both owns and operates distribution equipment for the products. Any supplementing of the suppliers' own distribution equipment shall be by a long-term lease agreement and shall not be on an ad hoc or contract-by-contract basis.
  - iii. If the materials or supplies are obtained from a SLBE-ELBE, which is neither a manufacturer nor a supplier, the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, fees or transportation charges for the delivery of materials or supplies required on a job site will be counted toward SLBE-ELBE participation, provided the fees are reasonable and not excessive as compared with fees customarily allowed for similar services. No portion of the cost of the materials and supplies themselves will be counted toward SLBE-ELBE participation.
- d) If the Bidder is seeking the recognition of SLBE-ELBE Trucking towards achieving any mandatory subcontracting participation level, the Bidder shall indicate it on Form AA35 – List of Subcontractors with the Bid. The following factors will be evaluated in determining the credit to be allowed toward the respective participation level:
- i. The SLBE-ELBE shall be responsible for the management and supervision of the entire trucking operation for which it is getting credit on a particular Contract and there shall not be a contrived arrangement for the purpose of counting SLBE-ELBE participation.
  - ii. The SLBE-ELBE shall itself own and operate at least 1 fully licensed, insured, and operational truck used on the Contract.

- iii. The SLBE-ELBE receives credit for the total value of the transportation services it provides on the Contract using trucks it owns, insures, and operates using drivers it employs.
- iv. The SLBE-ELBE may lease trucks from another SLBE-ELBE firm including an owner-operator who is certified as a SLBE-ELBE. The SLBE-ELBE who leases trucks from another SLBE-ELBE receives credit for the total value of the transportation services the lessee SLBE-ELBE provides on the contract.
- v. The SLBE-ELBE may also lease trucks from a non-SLBE-ELBE firm, including an owner-operator. The SLBE-ELBE who leases trucks from a non-SLBE-ELBE is entitled to credit for the total value of transportation services provided by non-SLBE-ELBE lessees not to exceed the value of transportation services provided by SLBE-ELBE owned trucks on the contract. Additional participation by non-SLBE-ELBE lessees receive credit only for the fee or commission it receives as a result of the lease arrangement.
- vi. A lease shall indicate that the SLBE-ELBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the SLBE-ELBE so long as the lease gives the SLBE-ELBE absolute priority for use of the leased truck.

**D. SLBE-ELBE SUBCONTRACTOR PARTICIPATION PERCENTAGES.**

1. Contracts valued at \$1,000,000 and above will be considered Major Public Works Contracts and will include a mandatory Subcontractor participation requirement for SLBE-ELBE firms.
  - a) The Bidder shall achieve the mandatory Subcontractor participation requirement or demonstrate GFE.
  - b) The Bidders shall indicate the participation on Forms AA35 - List of Subcontractors and AA40 - Named Equipment/Material Supplier List as applicable regardless of the dollar value.
  - c) An SLBE-ELBE Bidder may count its own participation toward achieving the mandatory goal as long as the SLBE-ELBE Bidder performs 51% of the Contract Price.
2. Contracts Valued over \$500,000 and under \$1,000,000 will also be considered Major Public Works Contracts and will include the mandatory subcontractor participation requirements described above and the following:
  - a) 5% bid discount for SLBE-ELBE firms.
  - b) Non-certified Contractor will receive 5% bid discount if they achieve the specified mandatory Subcontracting participations.

- c) Bid discounts shall not apply if the award will result in a total contract cost of \$50,000 in excess of the apparent lowest Bid.
  - d) In the event of a tie bid between a SLBE-ELBE Bidder and a non-SLBE-ELBE Bidder, the SLBE-ELBE Bidder will be awarded the Contract.
  - e) In the event of a tie bid between a discounted Bid and a non-discounted Bid, the discounted Bid will be awarded the Contract.
3. Contracts valued over \$250,000 up to \$500,000 will be considered Minor Public Works Contracts and will be awarded through a competitive Bid process open only to City certified SLBE-ELBE firms. If there are no bidders or no responsible bidders, the Contract will be made available to all Bidders and will be subject to requirements listed in items 1 and 2 for Major Public Works Contracts above.
  4. Contracts valued at \$250,000 and below will also be considered Minor Public Works Contracts and will be awarded through a competitive bid process open only to City certified ELBEs unless there are less than 2 firms available at which it will be awarded through a competitive process open only to the City certified SLBE-ELBE firms. If there are no bidders or no responsible bidders, the Contract will be made available to all Bidders and subject to requirements listed in items 1 and 2 for Major Public Works Contracts above.

**E. JOINT VENTURES.**

1. The City may allow for Joint Venture bid discounts on some Contracts. Contracts that allow for Joint Venture bid discounts will be designated in Bid documents. A firm that is bidding or competing for City Contracts may partner with a certified SLBE or ELBE to compete for Contracts as a Joint Venture.
2. A Joint Venture shall be between two entities with the same discipline or license as required by the City. Joint ventures will receive bid discounts depending on the SLBE or ELBE percentage of participation. To be eligible for a discount, a Joint Venture Agreement shall be approved by the City at the time of Bid submittal. The maximum allowable discount shall be 5%. The parties shall agree to enter in the relationship for the life of the projects.
3. Joint Venture shall submit a Joint Venture Management Plan, a Joint Venture Agreement, or both at least 2 weeks prior to the Bid due date. Copies of the Joint Venture applications are available upon request to the Contract Specialist. Each agreement or management plan shall include the following:
  - a) Detailed explanation of the financial contribution for each partner.
  - b) List of personnel and equipment used by each partner.
  - c) Detailed breakdown of the responsibilities of each partner.
  - d) Explanation of how the profits and losses will be distributed.
  - e) Description of the bonding capacity of each partner.
  - f) Management or incentive fees available for any one of the partners (if any).

4. Each Joint Venture partner shall perform a Commercially Useful Function. An SLBE or ELBE that relies on the resources and personnel of a non-SLBE or ELBE firm will not be deemed to perform a Commercially Useful Function.
5. Each Joint Venture partner shall possess licenses appropriate for the discipline for which a proposal is being submitted. If a Joint Venture is bidding on a single trade project, at the time of bid submittal, each Joint Venture partner shall possess the requisite specialty license for that trade bid.
6. The SLBE or ELBE partner shall clearly define the portion of the Work to be performed. This Work shall be of the similar type of Work the SLBE or ELBE partner performs in the normal course of its business. The Joint Venture Participation Form shall specify the Bid items to be performed by each individual Joint Venture partner. Lump sum Joint Venture participation shall not be acceptable.
7. Responsibilities of the SLBE or ELBE Joint Venture Partner:
  - a) The SLBE or ELBE partner shall share in the control, management responsibilities, risks and profits of the Joint Venture in proportion with the level of participation in the project.
  - b) The SLBE or ELBE partner shall perform Work that is commensurate with its experience.
  - c) The SLBE or ELBE partner shall use its own employees and equipment to perform its portion of the Work.
  - d) The Joint Venture as a whole shall perform Bid items that equal or exceed 50% of the Contract Price, excluding the cost of manufactured items, in order to be eligible for a Joint Venture discount.

**F. MAINTAINING PARTICIPATION LEVELS.**

1. Credit and preference points are earned based on the level of participation proposed prior to the award of the Contract. Once the Project begins you shall achieve and maintain the SLBE-ELBE participation levels for which credit and preference points were earned. You shall maintain the SLBE-ELBE percentages indicated at the Award of Contract and throughout the Contract Time.
2. If the City modifies the original Scope of Work, you shall make reasonable efforts to maintain the SLBE-ELBE participation for which creditor preference points were earned. If participation levels will be reduced, approval shall be received from the City prior to making changes.
3. You shall notify and obtain written approval from the City in advance of any reduction in subcontract scope, termination, or substitution for a designated SLBE-ELBE Subcontractor. Failure to do so shall constitute a material breach of the Contract.
4. If you fail to maintain the SLBE-ELBE participation listed at the time the Contract is awarded and have not received prior approval from the City, the

City may declare you in default and will be considered grounds for debarment under Chapter 2, Article 2, Division 8, of the San Diego Municipal Code.

**G. SUBCONTRACTING EFFORTS REVIEW AND EVALUATION.**

1. Documentation of your subcontracting efforts will be reviewed by EOC to verify that you made subcontracting opportunities available to a broad base of qualified Subcontractors, negotiated in good faith with interested Subcontractors, and did not reject any bid for unlawful discriminatory reasons. The EOC review is based on the federal “Six Good Faith Efforts” model.
2. The GFEs are required methods to ensure that all ELBE and SLBE firms have had the opportunity to compete for the City’s Public Works procurements. The Six Good Faith Efforts, also known as affirmative steps, attract and utilize ELBE and SLBE firms:
  - a) Ensure ELBE firms are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities.
  - b) Make information of forthcoming opportunities available to SLBE-ELBE firms and arrange time for Contracts and establish delivery schedules, where requirements permit, in a way that encourages and facilitates participation by SLBE-ELBE firms in the competitive process. This includes posting solicitations for Bids or proposals to SLBE-ELBE firms for a minimum of 10 Working Days before the Bid or Proposal due date.
  - c) Consider in the contracting process whether firms competing for large Contracts could subcontract with SLBE-ELBE firms.
  - d) Encourage contracting with a consortium of ELBE-SLBE firms when a Contract is too large for one of these firms to handle individually.
  - e) Use the services and assistance of the City’s EOC Office and the SLBE-ELBE Directory.
  - f) If you award subcontracts, require your Subcontractors to take the steps listed above.

**H. GOOD FAITH EFFORT DOCUMENTATION.**

1. If the specified SLBE-ELBE Subcontractor participation percentages are not met, you shall submit information necessary to establish that adequate GFEs were taken to meet the Contract Subcontractor participation percentages. See the City’s document titled “Small Local Business (SLBE) Program, INSTRUCTIONS FOR BIDDERS COMPLETING THE GOOD FAITH EFFORT SUBMITTAL.” The instructions for completing the good faith effort submittal can be found on the City’s website:

<https://www.sandiego.gov/sites/default/files/legacy/eoc/pdf/slbegfeinst.pdf>

**I. SUBCONTRACTOR SUBSTITUTION.**

1. Evidence of fraud or discrimination in the substitution of Subcontractors will result in sanctions including assessment of penalty fines, termination of Contract, or debarment. This section does not replace applicable California Public Contract Code.

**J. FALSIFICATION OF SUB-AGREEMENT AND FRAUD.**

1. Falsification or misrepresentation of a sub-agreement as to company name, Contract amount or actual Work performed by Subcontractors, or any falsification or fraud on the part your submission of documentation and forms pursuant to this program, will result in sanctions against you including assessment of penalty fines, termination of the Contract, or debarment. Instances of falsification or fraud which are indicative of an attempt by you to avoid subcontracting with certain categories of Subcontractors on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability shall be referred to the Equal Opportunity Contracting Program's Investigative Unit for possible violations of Article 2, Division 35 of the City Administrative Code, §§22.3501 et seq. (Nondiscrimination in Contracting).

**K. RESOURCES.**

1. The current list of certified SLBE-ELBE firms and information for completing the GFE submittal can be found on the City's EOC Department website:  
<http://www.sandiego.gov/eoc/programs/slbe.shtml>
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**ATTACHMENT D**  
**PREVAILING WAGE**

## PREVAILING WAGE

1. **PREVAILING WAGE RATES:** Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding \$25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding \$15,000, the Contractor and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below.
  - 1.1. **Compliance with Prevailing Wage Requirements.** Pursuant to sections 1720 through 1861 of the California Labor Code, the Contractor and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.
    - 1.1.1. Copies of such prevailing rate of per diem wages are on file at the City and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Contractor and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.
    - 1.1.2. The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.
  - 1.2. **Penalties for Violations.** Contractor and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed. This shall be in addition to any other applicable penalties allowed under Labor Code sections 1720 – 1861.



- 1.3. Payroll Records.** Contractor and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Contractor shall require its subcontractors to also comply with section 1776. Contractor and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Contractor is responsible for ensuring its subcontractors submit certified payroll records to the City.
- 1.3.1.** Contractor and their subcontractors shall also furnish records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required by Labor Code section 1771.4.
- 1.4. Apprentices.** Contractor and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Contractor is held responsible for the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.
- 1.5. Working Hours.** Contractor and their subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on contractors and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections 1810 through 1815.
- 1.6. Required Provisions for Subcontracts.** Contractor shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.
- 1.7. Labor Code Section 1861 Certification.** Contractor in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Contractor certifies that "I am aware of the provisions of Section 3700 of the California 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."
- 1.8. Labor Compliance Program.** The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Prevailing Wage Unit at 858-627-3200.

- 1.9. Contractor and Subcontractor Registration Requirements.** This project is subject to compliance monitoring and enforcement by the DIR. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid or proposal, subject to the requirements of section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.
- 1.9.1.** A Contractor's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.
- 1.9.2.** By submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Contractor shall provide proof of registration for themselves and all listed subcontractors to the City at the time of bid or proposal due date or upon request.
- 1.10. Stop Order.** For Contractor or its subcontractors engaging in the performance of any public work contract without having been registered in violation of Labor Code sections 1725.5 or 1771.1, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractors or unregistered subcontractor(s) on ALL public works until the unregistered contractor or unregistered subcontractor(s) is registered. Failure to observe a stop order is a misdemeanor.
- 1.11. List of all Subcontractors.** The Contractor shall provide the list of subcontractors (regardless of tier), along with their DIR registration numbers, utilized on this Contract prior to any work being performed; and the Contractor shall provide a complete list of all subcontractors with each invoice. Additionally, Contractor shall provide the City with a complete list of all subcontractors (regardless of tier) utilized on this contract within ten working days of the completion of the contract, along with their DIR registration numbers. The City shall withhold final payment to Construction Management Professional until at least thirty (30) days after this information is provided to the City.
- 1.12. Exemptions for Small Projects.** There are limited exemptions for installation, alteration, demolition, or repair work done on projects of \$25,000 or less. The Contractor shall still comply with Labor Code sections 1720 et. seq. The only recognized exemptions are listed below:

- 1.12.1.** Registration. The Contractor will not be required to register with the DIR for small projects. (Labor Code section 1771.1).
- 1.12.2.** Certified Payroll Records. The records required in Labor Code section 1776 shall be required to be kept and submitted to the City of San Diego, but will not be required to be submitted online with the DIR directly. The Contractor will need to keep those records for at least three years following the completion of the Contract. (Labor Code section 1771.4).
- 1.12.3.** List of all Subcontractors. The Contractor shall not be required to hire only registered subcontractors and is exempt from submitting the list of all subcontractors that is required in section 1.11 above. (Labor code section 1773.3).

**ATTACHMENT E**  
**SUPPLEMENTARY SPECIAL PROVISIONS**

## **SUPPLEMENTARY SPECIAL PROVISIONS**

The following Supplementary Special Provisions (SSP) modifies the following documents:

1. The **2021 Edition** of the Standard Specifications for Public Works Construction (The "GREENBOOK").
2. The **2021 Edition** of the City of San Diego Standard Specifications for Public Works Construction (The "WHITEBOOK"), including the following:
  - a) General Provisions (A) for all Construction Contracts.

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### **SECTION 1 – GENERAL, TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS**

- 1-2 TERMS AND DEFINITIONS.** To the "WHITEBOOK", item 55, "Normal Working Hours", ADD the following:

**Normal Working Hours** - Normal Working Hour core periods shall be **7:00 AM – 5:00 PM**, Monday through Friday, inclusive. Saturdays, Sundays, and City Holidays are excluded. Normal Working Hours on Roadways are defined as **8:30 AM - 3:30 PM**. Task Order Normal Working hours shall be defined in the Task or the Traffic Control Permits.

### **SECTION 2 - SCOPE OF THE WORK**

- 2-2 PERMITS, FEES, AND NOTICES.** To the "WHITEBOOK", ADD the following:

2. The City will obtain, at no cost to you, the following permits:
  - a) Pre-fabricated picnic shade structure
  - b) Pre-fabricated comfort station/concession stand

### **SECTION 3 – CONTROL OF THE WORK**

- 3-2 SELF-PERFORMANCE.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. You shall perform, with your own organization, Contract Work amounting to at least **50%** of the Base Bid.

**3-9 TECHNICAL STUDIES AND SUBSURFACE DATA.** To the "WHITEBOOK", ADD the following:

5. In preparation of the Contract Documents, the designer has relied upon the following reports of explorations and tests at the Work Site:
  - a) Report of Geotechnical Investigation Jerabek Park Improvements San Diego, California, Dated November 23, 2021 by Group Delta Consultants Inc.
6. The reports listed above are available for review at the following link:  
[https://drive.google.com/drive/folders/1A2c8zFt6xTcV\\_h4gEDWJTzCu300eRtB1](https://drive.google.com/drive/folders/1A2c8zFt6xTcV_h4gEDWJTzCu300eRtB1)

**3-10 SURVEYING.** To the "GREENBOOK" and "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

**3-10 SURVEYING (DESIGN-BID-BUILD).**

**3-10.1 General.**

1. You shall provide all required site layout and general grade checking work not specified in 3-10.2, "Survey Services Provided by City".
2. Notify the City, in writing, at least 2 Working Days prior to requesting survey services provided by the City.

**3-10.2 Survey Services Provided by City.**

1. Unless otherwise noted, monument perpetuation, including mark-outs, will be performed by the City. Coordination of these services will be your duty, through the Resident Engineer. If, at any time, an existing survey monument is, or will be, destroyed or disturbed during the course of construction you shall notify the Resident Engineer so that the monument is preserved or perpetuated in accordance with state law.
2. The following surveying services, as defined in Cal. Bus. & Prof. Code §8726, shall be provided by the City:
  - a) Locating or establishing a minimum of 4 project geodetic survey control points that provide horizontal and vertical reference values for site feature and structure layout reference locations.
  - b) Locating, establishing, or reestablishing project site boundary lines, survey monuments, right-of-way lines, or easement lines.
  - c) Locating or establishing building design structure locations (building corners or envelope limits) sufficient for structure construction.

**3-10.3 Payment.**

1. The payment for site layout and general grade checking Work, coordination, and preservation of all survey related marks shall be included in the Contract Price.

## SECTION 4 - CONTROL OF MATERIALS

**4-3.4 Specialty Inspection Paid for by the Contractor.** To the "WHITEBOOK", ADD the following:

2. The specialty inspections required are listed as follows:
  - a) Third Party Playground Safety Audit – IPEMA Certified (Play Area and Play Components)
  - b) Concrete work 3000 PSI or greater
  - c) Shade structure
  - d) Comfort Station & concession stand

**4-6 TRADE NAMES.** To the "WHITEBOOK", ADD the following:

11. You shall submit your list of proposed substitutions for an "equal" item **no later than 5 Working Days after the issuance of the Notice of Intent to Award** and on the City's Product Submittal Form available at:

<https://www.sandiego.gov/ecp/edocref/>

## SECTION 5 – LEGAL RELATIONS AND RESPONSIBILITIES

**5-4 INSURANCE.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

**5-4 INSURANCE.**

1. The insurance provisions herein shall not be construed to limit your indemnity and defense duties set forth in the Contract.

**5-4.1 Policies and Procedures.**

1. You shall procure the insurance described below, at your sole cost and expense, to provide coverage against claims for loss including injuries to persons or damage to property, which may arise out of or in connection with the performance of the Work by you, your agents, representatives, officers, employees or Subcontractors.
2. Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.
3. You shall maintain this insurance as required by this Contract and at all times thereafter when you are correcting, removing, or replacing Work in accordance with this Contract. Your duties under the Contract, including your indemnity obligations, are not limited to the insurance coverage required by this Contract.

4. If you maintain broader coverage or higher limits than the minimums shown below, City requires and shall be entitled to the broader coverage or the higher limits maintained by you. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to City.
5. Your payment for insurance shall be included in the Contract Price you bid. You are not entitled to any additional payment from the City to cover your insurance, unless the City specifically agrees to payment in writing. Do not begin any Work under this Contract or allow any Subcontractors to begin work, until you have provided, and the City has approved, all required insurance.
6. Policies of insurance shall provide that the City is entitled to 30 days advance written notice of cancellation or non-renewal of the policy or 10 days advance written notice for cancellation due to non-payment of premium. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew coverage and to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

**5-4.2 Types of Insurance.**

**5-4.2.1 General Liability Insurance.**

1. Commercial General Liability Insurance shall be written on the current version of the ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad.
2. The policy shall cover liability arising from premises and operations, XCU (explosions, underground, and collapse), independent contractors, products/completed operations, personal injury and advertising injury, bodily injury, property damage, and liability assumed under an insured’s contract (including the tort liability of another assumed in a business contract).
3. There shall be no endorsement or modification limiting the scope of coverage for either “insured vs. insured” claims or contractual liability. You shall maintain the same or equivalent insurance for at least 10 years following completion of the Work.
4. All costs of defense shall be outside the policy limits. Policy coverage shall be in liability limits of not less than the following:

<u>General Annual Aggregate Limit</u>	<u>Limits of Liability</u>
Other than Products/Completed Operations	\$10,000,000
Products/Completed Operations Aggregate Limit	\$10,000,000
Personal Injury Limit	\$5,000,000
Each Occurrence	\$5,000,000

**5-4.2.2 Commercial Automobile Liability Insurance.**

1. You shall provide a policy or policies of Commercial Automobile Liability Insurance written on the current version of the ISO form CA 00 01 12 90 or



later version or equivalent form providing coverage at least as broad in the amount of \$1,000,000 combined single limit per accident, covering bodily injury and property damage for owned, non-owned, and hired automobiles ("Any Auto").

2. All costs of defense shall be outside the limits of the policy.

#### **5-4.2.3 Workers' Compensation Insurance and Employers Liability Insurance.**

1. In accordance with the provisions of California Labor Code section 3700, you shall provide, at your expense, Workers' Compensation Insurance and Employers Liability Insurance to protect you against all claims under applicable state workers' compensation laws. The City, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by your failure to comply with this requirement.
2. Statutory Limits shall be provided for Workers' Compensation Insurance as required by the state of California, and Employer's Liability Insurance with limits of no less than \$1,000,000 per accident for bodily injury or disease.
3. By signing and returning the Contract, you certify that you are aware of the provisions of California's Workers' Compensation laws, including Labor Code section 3700, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance, and that you will comply with these provisions before commencing the Work.

#### **5-4.2.6 Contractors Builders Risk Property Insurance.**

1. You shall provide at your expense, and maintain until Final Acceptance of the Work, a Special Form Builders Risk Policy or Policies. This insurance shall be in an amount equal to the replacement cost of the completed Work (without deduction for depreciation) including the cost of excavations, grading, and filling. The policy or policies limits shall be 100 percent of the value of the Work under this Contract, plus 15 percent to cover administrative costs, design costs, and the costs of inspections and construction management.
2. Insured property shall include material or portions of the Work located away from the Site but intended for use at the Site and shall cover material or portions of the Work in transit. The policy or policies shall include as insured property scaffolding, falsework, and temporary buildings located at the Site. The policy or policies shall cover the cost of removing debris, including demolition.
3. The policy or policies shall provide that all proceeds shall be payable to the City as Trustee for the insured, and shall name the City, the Contractor, Subcontractors, and Suppliers of all tiers as named insured. The City, as Trustee, will collect, adjust, and receive all monies that become due and payable under the policy or policies, may compromise any and all claims, and will apply the proceeds of this insurance to the repair, reconstruction, or replacement of the Work.

4. Any deductible applicable to the insurance shall be identified in the policy or policies documents. The responsibility for paying the part of any loss not covered because of the deductibles shall be apportioned among the parties, except for the City, as follows: if there is more than one claimant for a single occurrence, then each claimant shall pay a pro-rata share of the per occurrence deductible based upon the percentage of their paid claim to the total paid for insured. The City shall be entitled to 100 percent of its loss. You shall pay the City any portion of the loss not covered because of a deductible; at the same time the proceeds of the insurance are paid to the City as Trustee.
5. Any insured, other than the City, making claim to which a deductible applies shall be responsible for 100 percent of the loss not insured because of the deductible.

**5-4.2.8 Architects and Engineers Professional Insurance (Errors and Omissions Insurance).**

1. For Contracts with required engineering services, including Design-Build and preparation of engineered Traffic Control Plans (TCP) by you, you shall keep or require all of your employees and Subcontractors, who provide professional engineering services under Contract, to provide to the City proof of Professional Liability coverage with a limit of no less than **\$1,000,000** per claim and **\$2,000,000** aggregate per policy period of one year.
2. You shall ensure the following:
  - a) The policy retroactive date is on or before the date of commencement of the Project.
  - b) The policy will be maintained in force for a period of three years after completion of the Project or termination of the Contract, whichever occurs last. You agree that, for the time period specified above, there will be no changes or endorsements to the policy that affect the specified coverage.
3. If professional engineering services are to be provided solely by the Subcontractor, you shall:
  - a) Certify this to the City in writing, and
  - b) Agree in writing to require the Subcontractor to procure Professional Liability coverage in accordance with the requirements set forth here.

**5-4.3 Rating Requirements.** Except for the State Compensation Insurance Fund, all insurance required by this Contract shall be carried only by responsible insurance companies with a rating of, or equivalent to, at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the state of California, and that have been approved by the City.

**5-4.3.1 Non-Admitted Carriers.** The City will accept insurance provided by non-admitted, “surplus lines” carriers only if the carrier is authorized to do business in the state of California and is included on the List of Approved Surplus Lines Insurers (LASLI list).

All policies of insurance carried by non-admitted carriers shall be subject to all of the requirements for policies of insurance provided by admitted carriers described in this Contract.

**5-4.4 Evidence of Insurance.** You shall furnish the City with original Certificates of Insurance, including all required amendatory endorsements (or copies of the applicable policy language effecting coverage required by this clause), prior to your commencement of Work under this Contract. In addition, The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

**5-4.5 Policy Endorsements.**

**5-4.5.1 Commercial General Liability Insurance.**

**5-4.5.1.1 Additional Insured.** To the fullest extent permitted by law and consistent with the limiting provisions set forth at California Civil Code section 2782, California Insurance Code section 11580.04, and any applicable successor statutes limiting indemnification of public agencies that bind the City, the policy or policies shall be endorsed to include as an Additional Insured the City and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of:

- i. Ongoing operations performed by you or on your behalf,
- ii. your products,
- iii. your work, e.g., your completed operations performed by you or on your behalf, or
- iv. premises owned, leased, controlled, or used by you.

**5-4.5.1.2 Primary and Non-Contributory Coverage.** The policy shall be endorsed to provide that the coverage with respect to operations, including the completed operations, if appropriate, of the Named Insured is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives. Further, it shall provide that any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

**5-4.5.1.3 Project General Aggregate Limit.** The policy or policies shall be endorsed to provide a Designated Construction Project General Aggregate Limit that will apply only to the Work. Only claims payments which arise from the Work shall reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit shall be in addition to the aggregate limit provided for the products-completed operations hazard.

**5-4.5.2 Workers' Compensation Insurance and Employers Liability Insurance.**

**5-4.5.2.1 Waiver of Subrogation.** The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from Work performed by the Named Insured for the City.

**5-4.5.5 Builders Risk Endorsements.**

**5-4.5.5.1 Waiver of Subrogation.** The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City, and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and that arise from Work performed by the Named Insured for the City.

**5-4.5.5.2 Builders Risk – Partial Utilization.** If the City desires to occupy or use a portion or portions of the Work prior to Acceptance,, the City will notify you, and you shall immediately notify your Builder's Risk insurer and obtain an endorsement that the policy or policies shall not be cancelled or lapse on account of any use or occupancy. You shall obtain the endorsement prior to the City's occupation and use.

**5-4.6 Deductibles and Self-Insured Retentions.** You shall disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided. The City may require you to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City.

**5-4.7 Reservation of Rights.** The City reserves the right, from time to time, to review your insurance coverage, limits, deductibles, and self-insured retentions to determine if they are acceptable to the City. The City will reimburse you, without overhead, profit, or any other markup, for the cost of additional premium for any coverage requested by the Engineer, but not required by this Contract.

**5-4.8 Notice of Changes to Insurance.** You shall notify the City, in writing, 30 days prior to any material change to the policies of insurance provided under this Contract. This written notice is in addition to the requirements of paragraph 6 of Section 5-4.1.

**5-4.9 Excess Insurance.** Policies providing excess coverage shall follow the form of the primary policy or policies, including, all endorsements.

## SECTION 6 – PROSECUTION AND PROGRESS OF THE WORK

**6-1.1 Construction Schedule.** To the “WHITEBOOK”, ADD the following:

3. Refer to the Sample City Invoice materials in **Appendix D – Sample City Invoice with Cash Flow Forecast** and use the format shown.
4. The **90 Calendar Day** Plant Establishment Period is included in the stipulated Contract Time and shall begin with the acceptance of installation of the vegetation plan in accordance with Section 801-6, “MAINTENANCE AND PLANT ESTABLISHMENT”.

**ADD:**

**6-6.1.1 Environmental Document.**

1. The City of San Diego has prepared a **Notice of Exemption** for **Jerabek Park Improvements (Jerabek Park)**, Project No. WBS. **S-20007.02.06**, as referenced in the Contract Appendix. You shall comply with all requirements of the **Notice of Exemption** as set forth in **Appendix A**.
2. Compliance with the City’s environmental document shall be included in the Contract Price, unless separate bid items have been provided.

**6-1.5.2 Excusable Non-Compensable Delays.** To the “WHITEBOOK”, Item 1, ADD the following:

- d) Delays in work resulting from breeding season restrictions, determined necessary in accordance with the requirements of the MMRP and as recommended by the QPB and MMC

## SECTION 7 – MEASUREMENT AND PAYMENT

**7-3.1 General.** To the “WHITEBOOK”, ADD the following:

4. The Lump Sum Bid item for “**Construction of Jerabek Park Improvements**” shall include, and not be limited to, accessibility upgrades of site arrival points, accessible routes, stairways, picnic shade shelter, comfort station/concession stand, drinking fountain, parking spaces, play areas and assembly areas, lighting and electrical services, landscape and irrigation, sewer and water lines, and outdoor fitness areas as specified in the Plans, Contract Documents, and Technicals in Attachment E, SSP.

**7-3.11 Compensation Adjustments for Price Index Fluctuations.** To the “WHITEBOOK”, ADD the following:

5. This Contract **is not** subject to the provisions of The “WHITEBOOK” for Compensation Adjustments for Price Index Fluctuations for paving asphalt.

## SECTION 201 - CONCRETE, MORTAR, AND RELATED MATERIALS

**201-1.2.1 Cement.** To the "WHITEBOOK", DELETE item 1 and SUBSITUTE with the following:

1. Cement to be used shall be low alkali Type V Portland Cement conforming to ASTM C 150.

## SECTION 300 - EARTHWORK

**300-2.1 General.** To the "GREENBOOK", ADD the following:

Prior to placing new fill, approved bottom of excavations shall be scarified at least one foot, brought to above optimum moisture content, and compacted to produce a firm and unyielding surface.

**ADD:**

**300-2.1.1 Miscellaneous Grading Conditions.**

**Site Grading.** Slope grades to prevent ponding. Finish subgrades to required elevations within the following tolerances:

1. Lawn or Unpaved Areas: Plus or minus 1 inch.
2. Walks: Plus or minus 1 inch.
3. Pavements: Plus or minus 1/2 inch.

**ADD:**

**300-2.1.2 Moisture Control.**

Uniformly moisten or aerate subgrade and each subsequent fill or backfill layer before compaction to optimum moisture content.

1. Do not place backfill or fill material on surfaces that are muddy.
2. Remove and replace, or scarify and air-dry, otherwise satisfactory soil material that exceeds optimum moisture content and is too wet to compact to specified percentage of dry density.

**ADD:**

**300-2.1.3 Slope Grading.**

Site runoff shall not be permitted to flow over the tops of slopes. Positive drainage shall be established away from the top of slopes:

1. Permanent cut and fill slopes shall not be steeper than 2:1 (horizontal: vertical)

2. Compaction of the face of fill slopes shall be performed by backrolling at intervals of 4 feet or less in vertical slope height, or as dictated by the capability of the available equipment, whichever is less. Fill slopes shall be backrolled utilizing a conventional sheepsfoot -type roller.

**300-2.2.1 General.** To the "GREENBOOK", ADD the following:

A minimum of one foot of existing soil below areas to receive new fill or improvements shall be removed, scarified, moisture conditioned as necessary, and recompacted in accordance with Section 301-1.3. Additional depths of remedial grading may be required.

In areas of loose or saturated "pumping" subgrade, a layer of Tensar BX-1200, Terragrid RX1200, or approved equivalent, may be placed directly on the excavation bottom, then covered with at least one foot of open-graded crushed rock followed by one foot of minus ¾-inch well-graded aggregate base.

**300-3.5 Structure Backfill.** To the "GREENBOOK", ADD the following:

Retaining walls shall be backfilled with granular soil with less than 35% passing the No. 200 sieve based on ASTM C136 and an Expansion Index less than 20 based on ASTM D4829.

**300-4.5 Placement.** To the "GREENBOOK", ADD the following:

1. Place backfill and fill materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
2. Place backfill and fill materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.

**300-5.2 Imported Borrow.** To the "WHITEBOOK", ADD the following:

3. Imported fill shall consist of granular soil with less than 35% passing the No. 200 sieve based on ASTM C136.

## **SECTION 301 - SUBGRADE PREPARATION, TREATED MATERIALS, AND PLACEMENT OF BASE MATERIALS**

**301-1.2 Preparation of Subgrade.** To the "WHITEBOOK", ADD the following:

7. Subgrade soil shall be processed to produce near optimum moisture content for compaction. Rocks or concrete fragments greater than three inches in dimension and soil with more than two percent organic content based on ASTM D2974 or an Expansion Index greater than 50 based on ASTM D4829 shall not be reused within the upper three feet of the bottom of the proposed improvements.

8. The subgrade of any concrete slab-on-grade, defined as the area directly beneath and within five feet laterally outside the footprint of the slab, shall consist of at least three feet of very low expansion (EI<20) engineered compacted fill.
9. The subgrade beneath exterior concrete flatwork and retaining wall foundations, defined as the area directly beneath and within two feet laterally outside the footprint of the improvement, shall consist of at least two feet of low expansion (EI<50) engineered compacted fill.

**301-1.3 Relative Compaction.** To the "WHITEBOOK", ADD the following:

5. The upper one foot of soil subgrade below new asphalt paving, concrete hardscape, and concrete slabs-on-grade shall be scarified immediately prior to constructing the paving, brought to optimum moisture content, and compacted to at least 95% of the maximum dry density per ASTM D1557.
6. Aggregate base shall be compacted to at least 95% of the maximum dry density per ASTM D1557.
7. The upper one foot of soil subgrade in landscaped areas shall be compacted to a maximum of 80% of the maximum dry density per ASTM D1557.

#### **SECTION 314 TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS**

**314-2.1 General.** To the "GREENBOOK", ADD the following:

Existing markings and striping, either permanent or temporary, which are to be temporarily marked out shall be covered by black-out painting or other approved methods. Alternate methods of paint removal require prior approval of the Inspector. All removed traffic striping and pavement markings that were removed for temporary construction traffic control shall be replaced in kind at the completion of the project.

#### **SECTION 402 - UTILITIES**

**402-2 PROTECTION.** To the "WHITEBOOK", item 2, ADD the following:

- g) Refer to **Appendix G - Advanced Metering Infrastructure (AMI) Device Protection** for more information on the protection of AMI devices.

#### **SECTION 601 - TEMPORARY TRAFFIC CONTROL FOR CONSTRUCTION AND MAINTENANCE WORK ZONES**

**601-2.1.2 Engineered Traffic Control Plans (TCP).** To the "WHITEBOOK", ADD the following:

5. Engineered TCP (2 foot x 3 foot size) shall be required for the following areas:
  - a) Avenida Magnifica sawcut, driveway, sidewalk, curb and gutter, and ADA ramp.



## SECTION 800 - MATERIALS

**800-1.2.5** **Mulch.** To the "WHITEBOOK", item 3, subsection "i", ADD the following:

**Type 9 Mulch** shall be 3 inches maximum in size.

**ADD:**

**800-1.7**

**Herbicide.**

Pre-emergent herbicide shall be as determined by Contractor. The purpose of the pre-emergent herbicide is to control the growth of weeds within planter areas below the bark mulch layer. Contractor shall submit a sample label and Material Safety Data Sheet (MSDS) to the Resident Engineer for approval prior to purchase and applications.

Post-emergent herbicide shall be non-selective type for total control of undesirable vegetation, available as Roundup or approved substitution as determined by the Contractor. Contractor shall submit a sample label and Material Safety Data Sheet (MSDS) to the Resident Engineer for approval prior to purchase and applications. Application shall be in accordance with precautions and rates suggested by the manufacturer.

## SECTION 802 - NATIVE HABITAT PROTECTION, INSTALLATION, MAINTENANCE AND MONITORING

**802-3.8** **Installation.** To the "WHITEBOOK", DELETE Item 5 in its entirety and SUBSTITUTE with the following:

5. Stakes shall be installed on all trees 24' box size and larger for stabilization.

## SECTION 1001 - CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs)

**1001-1** **GENERAL.** To the "WHITEBOOK", ADD the following:

8. Based on a preliminary assessment by the City, this Contract is subject to **SWPPP Risk Level 2.**

**1001-2.10** **BMP Inspection, Maintenance, and Repair.** To the "WHITEBOOK", ADD the following:

5. Maintenance activities shall be documented by the QSP or QSD in the Construction BMP Maintenance Log for projects subject to SWPPP requirements. See **Appendix H - SWPPP Construction BMP Maintenance Log.**

## TECHNICALS

Construction Manual for:

# **Jerabek Park Improvements**

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City of San Diego, California

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## **Construction Documents 2CD DSD Submittal**

Construction Manual for:

# Jerabek Park Improvements

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City of San Diego, California

**Project Landscape Architect:**

Jeff Justus, Schmidt Design Group, Inc.

1310 Rosecrans Street, Suite G

San Diego, CA 92106

(619) 236-1462

SDG Project #: 20-412

Date: December 19, 2022

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## Construction Documents 2CD DSD Submittal

# Jerabek Park Improvements

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Construction Manual

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**SECTION 01 56 39**  
**TEMPORARY TREE AND PLANT PROTECTION**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Section includes general protection and pruning of existing trees and plants that are affected by execution of the Work, whether temporary or permanent construction.

**1.2 DEFINITIONS**

- A. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction and indicated on Drawings.
- B. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and defined by a circle concentric with each tree with a radius 1.5 times the diameter of the drip line unless otherwise indicated.

**1.3 PREINSTALLATION MEETINGS**

- A. Preinstallation Conference: Conduct conference at Project site.

**1.4 ACTION SUBMITTALS**

- A. Product Data: For each type of product.
- B. Shop Drawings:
  - 1. Include plans, elevations, sections, and locations of protection-zone fencing and signage, showing relation of equipment-movement routes and material storage locations with protection zones.
- C. Samples: For each type of the following:
  - 1. Organic Mulch: Sealed plastic bags labeled with composition of materials by percentage of weight and source of mulch.
  - 2. Protection-Zone Fencing: Assembled Samples.
  - 3. Protection-Zone Signage: Full-size Samples.
- D. Tree Pruning Schedule: Written schedule detailing scope and extent of pruning of trees to remain that interfere with or are affected by construction.



## **1.5 INFORMATIONAL SUBMITTALS**

- A. Certification: From arborist, certifying that trees indicated to remain have been protected during construction according to recognized standards and that trees were promptly and properly treated and repaired when damaged.
- B. Maintenance Recommendations: From arborist, for care and protection of trees affected by construction during and after completing the Work.
- C. Existing Conditions: Documentation of existing trees and plantings indicated to remain, which establishes preconstruction conditions that might be misconstrued as damage caused by construction activities.

## **1.6 QUALITY ASSURANCE**

- A. Arborist Qualifications: Certified Arborist as certified by ISA, licensed arborist in jurisdiction where Project is located, current member of ASCA, or registered Consulting Arborist as designated by ASCA.

## **1.7 FIELD CONDITIONS**

- A. The following practices are prohibited within protection zones:
  - 1. Storage of construction materials, debris, or excavated material.
  - 2. Moving or parking vehicles or equipment.
  - 3. Foot traffic.
  - 4. Erection of sheds or structures.
  - 5. Impoundment of water.
  - 6. Excavation or other digging unless otherwise indicated.
  - 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- B. Do not direct vehicle or equipment exhaust toward protection zones.
- C. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones and organic mulch.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. Backfill Soil: Stockpiled soil mixed with planting soil of suitable moisture content and granular texture for placing around tree; free of stones, roots, plants, sod, clods, clay lumps, pockets of coarse sand, concrete slurry, concrete layers or chunks, cement, plaster, building debris, and other extraneous materials harmful to plant growth.

1. Mixture: Well-blended mix of two parts stockpiled soil to one part planting soil.
  2. Planting Soil: Planting soil as specified in Section 800 – “Materials” of the Greenbook and Whitebook.
- B. Organic Mulch: Free from deleterious materials and suitable as a top dressing for trees and shrubs, consisting of one of the following:
1. Type: Ground or shredded bark.
- C. Protection-Zone Fencing: Fencing fixed in position and meeting the following requirements: Previously used materials may be used when approved by Architect.
1. Chain-Link Protection-Zone Fencing: Galvanized-steel fencing fabricated from minimum 2-inch (50-mm) opening, 0.148-inch- (3.76-mm-) diameter wire chain-link fabric; with pipe posts, minimum 2-3/8-inch- (60-mm-) OD line posts, and 2-7/8-inch- (73-mm-) OD corner and pull posts; with 1-5/8-inch- (42-mm-) OD top rails and 0.177-inch- (4.5-mm-) diameter bottom tension wire; with tie wires, hog ring ties, and other accessories for a complete fence system.
    - a. Height: **96 inches (2400 mm)**
  2. Gates: Swing access gates matching material and appearance of fencing, to allow for maintenance activities within protection zones.
- D. Protection-Zone Signage: Shop-fabricated, rigid plastic or metal sheet with attachment holes pre-punched and reinforced; legibly printed with nonfading lettering.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Erosion and Sedimentation Control: Examine the site to verify that temporary erosion- and sedimentation-control measures are in place. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.

### **3.2 PREPARATION**

- A. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.
- B. Tree-Protection Zones: Mulch areas inside tree-protection zones and other areas indicated. Do not exceed indicated thickness of mulch.
1. Apply **2-inch (50-mm)** uniform thickness of organic mulch unless otherwise indicated. Do not place mulch within **6 inches (150 mm)** of tree trunks.

2. Install temporary root protection matting over mulch if equipment is temporarily required within the protection zone.

### **3.3 PROTECTION ZONES**

- A. Protection-Zone Fencing: Install protection-zone fencing along edges of protection zones in a manner that will prevent people from easily entering protected areas except by entrance gates.
  1. Chain-Link Fencing: Install to comply with ASTM F567 and with manufacturer's written instructions.
  2. Posts: Set or drive posts into ground one-third the total height of the fence without concrete footings. Where a post is located on existing paving or concrete to remain, provide appropriate means of post support acceptable to Architect.
  3. Access Gates: Install where indicated.
- B. Protection-Zone Signage: Install protection-zone signage in visibly prominent locations in a manner approved by Architect.
- C. Maintain protection zones free of weeds and trash.
- D. Maintain protection-zone fencing and signage in good condition as acceptable to Architect and remove when construction operations are complete and equipment has been removed from the site.

### **3.4 EXCAVATION**

- A. General: Excavate at edge of protection zones and for trenches indicated within protection zones according to requirements in Section 300 – “Earthwork” of the Greenbook and Whitebook unless otherwise indicated.
- B. Trenching within Protection Zones: Where utility trenches are required within protection zones, excavate under or around tree roots by hand or with air spade, or tunnel under the roots by drilling, auger boring, or pipe jacking. Do not cut main lateral tree roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots as required for root pruning.
- C. Do not allow exposed roots to dry out before placing permanent backfill.

### **3.5 ROOT PRUNING**

- A. Prune tree roots that are affected by temporary and permanent construction. Prune roots as follows:

1. Cut roots manually by digging a trench and cutting exposed roots with sharp pruning instruments; do not break, tear, chop, or slant the cuts. Do not use a backhoe or other equipment that rips, tears, or pulls roots.
  2. Temporarily support and protect roots from damage until they are permanently redirected and covered with soil.
  3. Cover exposed roots with burlap and water regularly.
  4. Backfill as soon as possible according to requirements in Section 300 – “Earthwork” of the Greenbook and Whitebook.
- B. Root Pruning at Edge of Protection Zone: Prune tree roots by cleanly cutting all roots to the depth of the required excavation.
- C. Root Pruning within Protection Zone: Clear and excavate by hand or with air spade to the depth of the required excavation to minimize damage to tree root systems. If excavating by hand, use narrow-tine spading forks to comb soil to expose roots. Cleanly cut roots as close to excavation as possible.

### 3.6 CROWN PRUNING

- A. Prune branches that are affected by temporary and permanent construction. Prune branches as directed by arborist.
1. Prune to remove only injured, broken, dying, or dead branches unless otherwise indicated. Do not prune for shape unless otherwise indicated.
  2. Do not remove or reduce living branches to compensate for root loss caused by damaging or cutting root system.
  3. Pruning Standards: Prune trees according to ANSI A300 (Part 1)
- B. Cut branches with sharp pruning instruments; do not break or chop.
- C. Do not paint or apply sealants to wounds.
- D. Chip removed branches and dispose of off-site.

### 3.7 REGRADING

- A. Lowering Grade: Where new finish grade is indicated below existing grade around trees, slope grade beyond the protection zone. Maintain existing grades within the protection zone.
- B. Raising Grade: Where new finish grade is indicated above existing grade around trees, slope grade beyond the protection zone. Maintain existing grades within the protection zone.
- C. Minor Fill within Protection Zone: Where existing grade is **2 inches (50 mm)** or less below elevation of finish grade, fill with backfill soil. Place backfill soil in a single uncompacted layer and hand grade to required finish elevations.

### **3.8 FIELD QUALITY CONTROL**

- A. Inspections: Engage a qualified arborist to direct plant-protection measures in the vicinity of trees, shrubs, and other vegetation indicated to remain and to prepare inspection reports.

### **3.9 REPAIR AND REPLACEMENT**

- A. General: Repair or replace trees, shrubs, and other vegetation indicated to remain or to be relocated that are damaged by construction operations, in a manner approved by Architect.
  - 1. Perform repairs of damaged trunks, branches, and roots within 24 hours according to arborist's written instructions.
  - 2. Replace trees and other plants that cannot be repaired and restored to full-growth status, as determined by Architect.
- B. Excess Mulch: Rake mulched area within protection zones, being careful not to injure roots. Rake to loosen and remove mulch that exceeds a **2-inch (50-mm)** uniform thickness to remain.

### **3.10 DISPOSAL OF SURPLUS AND WASTE MATERIALS**

- A. Disposal: Remove excess excavated material, displaced trees, trash, and debris and legally dispose of them off Owner's property.

**END OF SECTION 015639**

**SECTION 02 41 16**  
**STRUCTURE DEMOLITION**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
1. Demolition and removal of buildings and site improvements.
  2. Removing below-grade construction.
  3. Disconnecting, capping or sealing, and removing site utilities.
  4. Salvaging items for reuse by Owner.

**1.2 MATERIALS OWNERSHIP**

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

**1.3 PREINSTALLATION MEETINGS**

- A. Pre-demolition Conference: Conduct conference at Project site.

**1.4 INFORMATIONAL SUBMITTALS**

- A. Engineering Survey: Submit engineering survey of condition of building.
- B. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for dust control and, for noise control. Indicate proposed locations and construction of barriers.
- C. Schedule of building demolition activities with starting and ending dates for each activity.
- D. Pre-demolition photographs or video.
- E. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician.

## **1.5 CLOSEOUT SUBMITTALS**

- A. Inventory of items that have been removed and salvaged.

## **1.6 QUALITY ASSURANCE**

- A. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

## **1.7 FIELD CONDITIONS**

- A. Buildings to be demolished will be vacated and their use discontinued before start of the Work.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
  - 1. Before building demolition, Owner will remove the following items:
    - a. Vending Machine
    - b. All concession room appliances including but not limited to:
      - 1) Refrigerators
      - 2) Freezers
      - 3) Microwaves
      - 4) Crockpots
      - 5) Cheese warmer
      - 6) Slushee machine
      - 7) Hot dog warmer
      - 8) Pretzel warmer
    - c. Storage shelving
    - d. Sports equipment
    - e. Landscape equipment
- C. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
  - 1. Hazardous materials will be removed by Owner before start of the Work.
  - 2. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- D. On-site storage or sale of removed items or materials is not permitted.
- E. Arrange demolition schedule so as not to interfere with Owner's on-site operations.

## **PART 2 - PRODUCTS**

### **2.1 PERFORMANCE REQUIREMENTS**

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

### **2.2 SOIL MATERIALS**

- A. Satisfactory Soils: Comply with requirements in Section 800 – “Materials” of the Greenbook and Whitebook.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Verify that utilities have been disconnected and capped before starting demolition operations.
- B. Perform engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during building demolition operations.
- C. Inventory and record the condition of items to be removed and salvaged.

### **3.2 PREPARATION**

- A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.
- B. Salvaged Items: Comply with the following:
  - 1. Clean salvaged items of dirt and demolition debris.
  - 2. Pack or crate items after cleaning. Identify contents of containers.
  - 3. Store items in a secure area until delivery to Owner.
  - 4. Transport items to storage area designated by Owner.
  - 5. Protect items from damage during transport and storage.

### **3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS**

- A. Existing Utilities to be Disconnected: Locate, identify, disconnect, and seal or cap off utilities serving buildings and structures to be demolished.



1. Arrange to shut off utilities with utility companies.
2. If removal, relocation, or abandonment of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.
3. Cut off pipe or conduit a minimum of **24 inches (610 mm)** below grade. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of authorities having jurisdiction.
4. Do not start demolition work until utility disconnecting and sealing have been completed and verified in writing.

### 3.4 PROTECTION

- A. Existing Facilities: Protect adjacent walkways, loading docks, building entries, and other building facilities during demolition operations. Maintain exits from existing buildings.
- B. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.
- C. Existing Utilities to Remain: Maintain utility services to remain and protect from damage during demolition operations. Do not interrupt existing utilities serving adjacent occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction.
- D. Temporary Protection: Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction and as indicated. Comply with requirements in Section 400 – “Protection and Restoration” of the Greenbook and Whitebook.
  1. Protect adjacent buildings and facilities from damage due to demolition activities.
  2. Protect existing site improvements, appurtenances, and landscaping to remain.
  3. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
  4. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  5. Provide protection to ensure safe passage of people around building demolition area and to and from occupied portions of adjacent buildings and structures.
  6. Protect walls, windows, roofs, and other adjacent exterior construction that are to remain and that are exposed to building demolition operations.
  7. Erect and maintain dustproof partitions and temporary enclosures to limit dust, noise, and dirt migration to occupied portions of adjacent buildings.
- E. Remove temporary barriers and protections where hazards no longer exist. Where open excavations or other hazardous conditions remain, leave temporary barriers and protections in place.

### 3.5 DEMOLITION

- A. General: Demolish indicated buildings and site improvements completely. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
  - 2. Maintain fire watch during and for at least 3 hours after flame-cutting operations.
  - 3. Maintain adequate ventilation when using cutting torches.
  - 4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  
- B. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.
  - 2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations.
  
- C. Explosives: Use of explosives is not permitted.
  
- D. Proceed with demolition of structural framing members systematically, from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  
- E. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
  
- F. Salvage: Items to be removed and salvaged are indicated on Drawings.
  
- G. Demolish foundation walls and other below-grade construction that are within footprint of new construction and extending 5 feet (1.5 m) outside footprint indicated for new construction.
  - 1. Remove below-grade construction, including basements, foundation walls, and footings, completely.
  
- H. Existing Utilities: Demolish existing utilities and below-grade utility structures that are within **5 feet (1.5 m)** outside footprint indicated for new construction. Abandon utilities outside this area.
  
- I. Below-Grade Areas: Completely fill below-grade areas and voids resulting from building demolition operations with satisfactory soil materials according to backfill requirements in Section 300 – “Earthwork” of the Greenbook and Whitebook.

- J. Site Grading: Uniformly rough grade area of demolished construction to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades.

### **3.6 CLEANING**

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
- B. Do not burn demolished materials.
- C. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.

**END OF SECTION 024116**

**SECTION 05 52 13**  
**PIPE AND TUBE RAILINGS**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Steel railings.

**1.2 ACTION SUBMITTALS**

- A. Product Data:
  - 1. Manufacturer's product lines of mechanically connected railings.
  - 2. Handrail brackets.
  - 3. Shop primer.
  - 4. Intermediate coats and topcoats.
  - 5. Bituminous paint.
  - 6. Nonshrink, nonmetallic grout.
  - 7. Anchoring cement.
  - 8. Metal finishes.
  - 9. Paint products.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: For each type of exposed finish.
- D. Delegated-Design Submittal: For railings, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

**1.3 INFORMATIONAL SUBMITTALS**

- A. Qualification Data: For delegated-design professional engineer.
- B. Welding certificates.
- C. Product Test Reports: For tests on railings performed by a qualified testing agency, in accordance with ASTM E894 and ASTM E935.

**1.4 QUALITY ASSURANCE**

- A. Welding Qualifications: Qualify procedures and personnel in accordance with the following:
  - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
  - 2. AWS D1.2/D1.2M, "Structural Welding Code - Aluminum."

3. AWS D1.6/D1.6M, "Structural Welding Code - Stainless Steel."

## **PART 2 - PRODUCTS**

### **2.1 PERFORMANCE REQUIREMENTS**

- A. Structural Performance: Railings, including attachment to building construction, shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
  1. Handrails and Top Rails of Guards:
    - a. Uniform load of 50 lbf/ ft. (0.73 kN/m) applied in any direction.
    - b. Concentrated load of 200 lbf (0.89 kN) applied in any direction.
    - c. Uniform and concentrated loads need not be assumed to act concurrently.
  2. Infill of Guards:
    - a. Concentrated load of 50 lbf (0.22 kN) applied horizontally on an area of 1 sq. ft. (0.093 sq. m).
    - b. Infill load and other loads need not be assumed to act concurrently.

### **2.2 METALS, GENERAL**

- A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.
- B. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails unless otherwise indicated.
  1. Provide type of bracket with flange tapped for concealed anchorage to threaded hanger bolt and that provides 1-1/2-inch (38-mm) clearance from inside face of handrail to finished wall surface.

### **2.3 STEEL RAILINGS**

- A. Tubing: ASTM A500/A500M (cold formed)
- B. Pipe: ASTM A53/A53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.
  1. Provide galvanized finish for exterior installations and where indicated.
- C. Plates, Shapes, and Bars: ASTM A36/A36M.

## **2.4 FASTENERS**

- A. Fastener Materials:
  - 1. Hot-Dip Galvanized Railing Components: Type 304 stainless steel or hot-dip zinc-coated steel fasteners complying with ASTM A153/A153M or ASTM F2329/F2329M for zinc coating.
- B. Post-Installed Anchors: Fastener systems with working capacity greater than or equal to the design load, according to an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC193.

## **2.5 MISCELLANEOUS MATERIALS**

- A. Welding Rods and Bare Electrodes: Select in accordance with AWS specifications for metal alloy welded.
- B. Etching Cleaner for Galvanized Metal: Complying with MPI#25.
- C. Galvanizing Repair Paint: High-zinc-dust-content paint, complying with SSPC-Paint 20 and compatible with paints specified to be used over it.
- D. Shop Primers: Provide primers that comply with Section 099113 "Exterior Painting".
- E. Shop Primer for Galvanized Steel: Primer formulated for exterior use over zinc-coated metal and compatible with finish paint systems indicated.
- F. Intermediate Coats and Topcoats: Provide products that comply with Section 099113 "Exterior Painting."
- G. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout, complying with ASTM C1107/C1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.
- H. Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound.
  - 1. Water-Resistant Product: At exterior locations, provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended by manufacturer for exterior use.

## **2.6 FABRICATION**

- A. Cut, drill, and punch metals cleanly and accurately.
  - 1. Remove burrs and ease edges to a radius of approximately 1/32 inch (1 mm) unless otherwise indicated.
  - 2. Remove sharp or rough areas on exposed surfaces.

- B. Form work true to line and level with accurate angles and surfaces.
- C. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove flux immediately.
  - 4. At exposed connections, finish exposed welds to comply with NOMMA's "Voluntary Joint Finish Standards" for Finish #1 welds; ornamental quality with no evidence of a welded joint
- D. Nonwelded Connections: Connect members with concealed mechanical fasteners and fittings. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.
- E. Form changes in direction as follows:
  - 1. As detailed.
- F. Bend members in jigs to produce uniform curvature for each configuration required. Maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.
- G. Close exposed ends of hollow railing members with prefabricated cap and end fittings of same metal and finish as railings.
- H. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated. Close ends of returns unless clearance between end of rail and wall is 1/4 inch (6 mm) or less.
- I. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.
  - 1. At brackets and fittings fastened to plaster or gypsum board partitions, provide crush-resistant fillers or other means to transfer loads through wall finishes to structural supports and prevent bracket or fitting rotation and crushing of substrate.
- J. Provide inserts and other anchorage devices for connecting railings to concrete or masonry work.
  - 1. Fabricate anchorage devices capable of withstanding loads imposed by railings.
  - 2. Coordinate anchorage devices with supporting structure.
- K. For railing posts set in concrete, provide stainless steel sleeves not less than 6 inches (150 mm) long with inside dimensions not less than 1/2 inch (13 mm) greater than outside dimensions of post, with metal plate forming bottom closure.

## **2.7 STEEL AND IRON FINISHES**

- A. Galvanized Railings:
  - 1. Hot-dip galvanize exterior steel railings, including hardware, after fabrication.
- B. For galvanized railings, provide hot-dip galvanized fittings, brackets, fasteners, sleeves, and other ferrous components.
- C. Preparing Galvanized Railings for Shop Priming: After galvanizing, thoroughly clean railings of grease, dirt, oil, flux, and other foreign matter, and treat with etching cleaner.
  - 1. Comply with SSPC-SP 16.
- D. Primer Application: Apply shop primer to prepared surfaces of railings unless otherwise indicated. Comply with requirements in SSPC-PA 1 for shop painting. Primer need not be applied to surfaces to be embedded in concrete or masonry.
  - 1. Shop prime uncoated railings with universal shop primer unless primers specified in Section 210 – “Paint and Protective Coatings” of the Greenbook and Whitebook are indicated.
- E. Shop-Painted Finish: Comply with Section 210 – “Paint and Protective Coatings” of the Greenbook and Whitebook.
  - 1. Color: As selected by Architect from manufacturer's full range.
- F. High-Performance Coating: Apply epoxy intermediate and polyurethane topcoats to prime-coated surfaces. Comply with coating manufacturer's written instructions and with requirements in SSPC-PA 1 for shop painting. Apply at spreading rates recommended by coating manufacturer.
  - 1. Color: As selected by Architect from manufacturer's full range.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION, GENERAL**

- A. Perform cutting, drilling, and fitting required for installing railings.
  - 1. Fit exposed connections together to form tight, hairline joints.
  - 2. Install railings level, plumb, square, true to line; without distortion, warp, or rack.
  - 3. Set railings accurately in location, alignment, and elevation; measured from established lines and levels.
  - 4. Do not weld, cut, or abrade surfaces of railing components that are coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
  - 5. Set posts plumb within a tolerance of 1/16 inch in 3 feet (2 mm in 1 m).



6. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet (6 mm in 3.5 m).

B. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

### **3.2 ANCHORING POSTS**

A. Use stainless steel pipe sleeves preset and anchored into concrete for installing posts. After posts are inserted into sleeves, fill annular space between post and sleeve with nonshrink, nonmetallic grout mixed and placed to comply with anchoring material manufacturer's written instructions.

B. Form or core-drill holes not less than 5 inches (125 mm) deep and 3/4 inch (20 mm) larger than OD of post for installing posts in concrete. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout mixed and placed to comply with anchoring material manufacturer's written instructions.

C. Anchor posts to metal surfaces with flanges, angle type, or floor type, as required by conditions, connected to posts and to metal supporting members as follows:

### **3.3 ATTACHING RAILINGS**

A. Attach handrails to existing guardrails at stairs. Provide brackets with 1 1/2 inch (38mm) clearance from inside face of handrail and guardrail.

B. Touchup Painting:

1. Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.

### **3.4 CLEANING**

A. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas, and repair galvanizing to comply with ASTM A780/A780M.

**END OF SECTION 055213**

**SECTION 09 91 13**  
**EXTERIOR PAINTING**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Primers.
  - 2. Finish coatings.

**1.2 ACTION SUBMITTALS**

- A. Product Data: For each type of product.
- B. Samples: For each type of topcoat product.

**1.3 QUALITY ASSURANCE**

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.

**PART 2 - PRODUCTS**

**2.1 MANUFACTURERS**

**2.2 PAINT PRODUCTS, GENERAL**

- A. Material Compatibility:
  - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer based on testing and field experience.
  - 2. For each coat in a paint system, provide products recommended in writing by topcoat manufacturer for use in paint system and on substrate indicated.
- B. Colors: As selected by Architect from manufacturer's full range.

## **2.3 PRIMERS**

- A. Water-Based, Galvanized-Metal Primer: Corrosion-resistant, pigmented, acrylic primer; formulated for use on cleaned/etched, exterior, galvanized metal to prepare it for subsequent water-based coatings.
- B. Epoxy Metal Primer: Corrosion-resistant, solvent-based, two-component epoxy primer formulated for use on prepared, exterior ferrous- and galvanized-metal surfaces.

## **2.4 FINISH COATINGS**

- A. Exterior Alkyd Enamel, Semigloss: Solvent-based, pigmented, alkyd enamel formulated for mold, microbial, and water resistance and for use on exterior, primed, wood and metal surfaces.
  - 1. Gloss Level: Manufacturer's standard semigloss finish

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Verify suitability of substrates, including surface conditions and compatibility, with finishes and primers.
- B. Proceed with coating application only after unsatisfactory conditions have been corrected.
  - 1. Application of coating indicates acceptance of surfaces and conditions.

### **3.2 PREPARATION**

- A. Comply with manufacturer's written instructions applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems specified in this Section.

### **3.3 INSTALLATION**

- A. Apply paints in accordance with manufacturer's written instructions.
- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

### **3.4 CLEANING AND PROTECTION**

- A. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- B. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- C. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### **3.5 EXTERIOR PAINTING SCHEDULE**

- A. Steel and Iron Substrates:
  - 1. Water-Based, Light Industrial Coating over Epoxy System:
    - a. Prime Coat: Epoxy metal primer.
    - b. Intermediate Coat: High-build epoxy paint, low gloss.
    - c. Topcoat: Exterior, water-based, light industrial coating, semigloss.
- B. Galvanized-Metal Substrates:
  - 1. Water-Based, Light Industrial Coating System:
    - a. Prime Coat: Epoxy metal primer.
    - b. Intermediate Coat: Matching topcoat.
    - c. Topcoat: Exterior, water-based, light industrial coating, semigloss.

**END OF SECTION 099113**

## SECTION 10 73 00

### PRE-ENGINEERED SHADE SHELTER

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION OF PRODUCT

- A. Shelter Type: 13'-6" x 50' Curved Post and Beam Shade Structure with Angled Tongue and Groove Wood with Concrete Roof Tile Canopy.
- B. Clear height under Tie Beam (UTB): 8'-0" minimum. This is the clearance under the tie beam which spans between the columns at the lowest end of the angled canopy.

##### 1.2 REFERENCES

###### A. REFERENCED STANDARDS

- A. AISC – American Institute of Steel Construction
  - i. AISC Steel Construction Manual – 14<sup>th</sup> edition
  - ii. AISC 360-10 Specification for Structural Steel Buildings
- B. ASTM – American Society for Testing and Materials
  - i. ASTM A36/A36M – Standard Specification for Carbon Structural Steel; 2008
  - ii. ASTM A325 – Standard Specification for Structural Steel Bolts, Heat Treated, 120/105 ksi Minimum Tensile Strength; 2010
  - iii. ASTM A563 – Standard Specification for Carbon and Alloy Steel Nuts; 2007a
  - iv. ASTM A500 – Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2010a
  - v. ASTM A653/A653M – Standard Specification for Sheet Steel, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvanealed) by the Hot Dip Process; 2010
  - vi. ASTM A792/A792M – Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy Coated by the Hot-Dip Process; 2010
  - vii. ASTM F1554 – Standard Specification for Anchor Bolts, Steel, 36, 50 and 105 ksi Yield Strength; 2007a
- C. AWS – American Welding Society
  - i. D1.1
  - ii. D1.3
  - iii. D1.8
- D. OSHA – Occupational Safety and Health Administration
  - i. Steel Erection Standard 29 CFR 1926.750 Part R
- E. SSPC – Steel Structures Painting Council

- i. SSPC-SP 2 – Hand Tool Cleaning; 2004
  - ii. SSPC-SP 10/NACE No. 2 – Near White Blast Cleaning; 2007
- F. LEED – Leadership in Energy and Environmental Design
- G. ISO – International Organization for Standardization

### 1.3 SYSTEM DESCRIPTION

- A. The structure shall be a pre-engineered package and shall be shipped as a pre-cut (excluding standing seam roof panels) and pre-fabricated package that shall include the structural framing members, roof panels, fasteners and roof trim as well as job specific installation instructions. The structure will be shipped in an un-assembled package for ease of shipment and minimum shipping charges.

### 1.4 SUBMITTALS

- A. Submit a minimum of four (4) sets of submittal drawings and (2) sets of structural calculations signed and sealed by a Professional Engineer licensed in the state of California.

B. PRODUCT DESIGN REQUIREMENTS:

- A. The structure shall meet the following design requirements
- i. Building Code: 2019 California Building Code
  - ii. Ground Snow Load: 20 p.s.f.
  - iii. Live Load: 20 p.s.f.
  - iv. Wind Speed: 85 m.p.h. Exp “C”
  - v. Seismic Design Category: D

C. SUBMITTAL REQUIREMENTS

A. Calculations:

- i. Design according to the requirements of the national, state or local building codes as indicated in Section 1.4.B.
- ii. Calculations shall include all member design for each different member type.
- iii. Connection design for each different connection that will determine the design of the bolts, welds, plate thickness and anchorage to the foundation.
- iv. Foundation design shall be for the loads applied, not a generic foundation design, while taking into account all soils information.

B. Submittal Drawings:

- i. Anchor bolt layout with all appropriate dimensions for installation.
- ii. Site specific foundation design.

- iii. Isometric as well as elevation and plan views of the framing members along with the member sizes and locations indicated on the drawings.
- iv. Connection details for every connection on the frame.
- v. Roof panel connections and trim installation details.
- vi. All accessories on the structure shall have an installation detail as well as connection details.

**D. FOUNDATION DESIGN**

- A. The foundation design shall be supplied by the manufacturer.
- B. Anchor bolts shall be supplied by the manufacturer.
- C. Foundation materials and labor shall be provided by the structure contractor.
- D. Owner should provide site specific soils information for proper foundation design, if that data is not provided the foundation will be design for the minimum soil values allowed by code.

**1.5 QUALITY ASSURANCE**

**A. MANUFACTURER QUALIFICATIONS**

- A. The product shall be designed, engineered and fabricated at a facility operated and directly supervised by the manufacturer.
- B. The manufacturer shall have a minimum of 10 years in steel shelter fabrication.
- C. Full Time on Staff Quality Assurance Manager.
- D. All welders must be AWS certified for welding steel structures.
- E. Membership in the American Welding Society (AWS).
- F. Membership in the American Institute of Steel Construction (AISC).
- G. Full Time on Staff Licensed Engineer.
- H. Published Quality Control System manual.
- I. Quality Control System must pass an annual audit by a Third Part Agency.
- J. ISO 9001 certification for Powder Coating System.

**B. MANUFACTURER'S CERTIFICATIONS**

- A. Clark County, NV Approved Fabricator.
- B. City of Riverside, CA Approved Fabricator.

- C. City of Houston, TX Approved Fabricator Structural Steel.

## **1.6 FIELD OR SITE CONDITIONS**

- A. Foundations shall be installed per the ICON installation drawings.
  - A. All foundations shall be cast at the same elevation unless specifically noted on the ICON installation drawings.
- B. Anchor bolts shall be placed in the foundation as per the ICON installation drawings utilizing the anchor bolt template supplied with the anchor bolts.
  - A. Anchor bolts shall be installed per the dimensions and orientation shown on the drawings.

## **1.7 MANUFACTURER WARRANTY**

- A. Shelter shall have a 10-year limited warranty on the steel framing members.
- B. Shelter shall have a 10-year limited warranty on the powder-coated elements.
- C. For all Tile Roofing there will be a pass-through warranty direct from the Roofing supplier, warranty shall be provided on request.

## **PART 2 - PRODUCTS**

### **2.1 SHELTER SYSTEM AND MATERIALS**

- A. MANUFACTURERS:
  - A. Acceptable Manufacturer (or approved equal):
    - i. ICON Shelter Systems, Inc.,  
1455 Lincoln Rd., Holland, MI, 49423.  
Email: [info@iconshelters.com](mailto:info@iconshelters.com),  
Website: [www.iconshelters.com](http://www.iconshelters.com).
- B. Pricing for this specific project and specified shelter can be requested from:
  - i. Unique Recreation  
1804 Garnet Avenue 478  
San Diego, CA 92109  
951-541-8380  
[chad@uniquerecreationinc.com](mailto:chad@uniquerecreationinc.com)



- C. The product shall be designed and fabricated at a facility operated and directly supervised by the manufacturer.
- B. SUBSTITUTION LIMITATIONS:
  - A. Substitutions must be approved a minimum of ten (10) business days prior to bid. All approved manufacturers shall be notified on writing before the bid date and shall not be allowed to bid without written notification. Any approval of an alternate manufacturer shall be through and official bid addendum prior to the bid date.
  - B. Alternate suppliers shall meet the requirements, qualifications and provide proof of certifications listed under Section 1.05 QUALITY ASSURANCE.
  - C. Alternate suppliers shall provide documentation that the powder-coat system being provided meets or exceeds the ICON supplied powder-coat system listed under Section 2.1.H.i.
- C. PRODUCT REQUIREMENTS AND MATERIALS:
  - A. GENERAL:
    - i. The pre-engineered and pre-fabricated package of parts shall be pre-cut and packaged unless noted otherwise. These packages will include all parts and pieces necessary to field assemble the shelter at the jobsite. The shelter shall be shipped in knocked down format to minimize shipping expenses. Field labor will be kept to a minimum with no on-site welding required.
  - B. CONCRETE FOR FOUNDATIONS:
    - i. Concrete shall have a minimum 28-day compressive strength of 2,500 psi unless noted otherwise on the foundation detail.
    - ii. Reinforcing steel shall be ASTM A615, Grade 60.
  - C. COLUMNS:
    - i. Hollow Structural Section (HSS) columns shall meet ASTM A500, Grade B with a minimum wall thickness of 3/16" (0.1875").
    - ii. Unless the columns are direct buried in the foundation the columns shall attach to the foundation with a minimum of four (4) anchor rods and shall meet OSHA Steel Erection Standard 29 CFR 1926.755(a)(1).
    - iii. CC6-6 Columns – 6" Diameter round Column
  - D. STRUCTURAL FRAMING:

- i. All Hollow Structural Sections (HSS) shall meet ASTM A500, Grade B. "I" Beams, tapered columns or open channel sections shall not be accepted for primary members.
- E. COMPRESSION RINGS:
- i. Compression rings shall be made of ASTM A36 structural plate or of structural channel welded together to form the ring. All connections not requiring compression rings shall use ASTM A500, Grade B HSS sections for these connections.
- F. CONNECTION REQUIREMENTS:
- i. Anchor rods shall be ASTM F1554, Grade 36 unless otherwise noted.
  - ii. Structural fasteners shall be ASTM A325 high strength bolts and A563 nuts.
  - iii. All structural fasteners shall be hidden within the framing members whenever possible.
  - iv. No field welding shall be required to finish the construction of the shelter.
  - v. Manufacturer shall supply extra fasteners.
- G. ROOFING MATERIALS:
- i. Tongue and Groove Board with Barrel Roof Tile
    - 1) Cedar Wood
    - 2) 2-Piece Mission Tile, Color: Madera Blend, by US tile or equal.
- H. FACTORY FRAME FINISH:
- i. E-COAT/ POWDERCOAT:
    - 1) The steel shall be shot-blasted to the specification of SSPC-SP10 near white blast cleaning. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
    - 2) The shot-blasted parts are then washed with zinc-phosphate in an eight (8) stage washer.
    - 3) The steel is then immersed in a liquid epoxy and coated through an electro-deposition process (E-coat), this is coated both inside and out to a uniform cover of 0.7-0.9 mils. The E-coat totally encapsulates the part for superior corrosion protection.
    - 4) The parts are then coated with a color coat of TGIC polyester powder and then one clear coat for a final finish thickness of 8 to 12 mils.

## **PART 3 - EXECUTION**

### **3.1 STORAGE AND HANDLING**

- A. When the shelter arrives at the jobsite protect the products from weather, sunlight and damage.
- B. When unloading, pad the forks and use other precautions to protect the powder-coated finish. Do not use chains to move the materials, use straps. Handle all materials carefully in the field to avoid scratching the powder-coat finish.
- C. Contractor shall store the product elevated from the soil to allow full air circulation around the materials as do not introduce mold, decay, fungi or insects into or on the materials. One end of the materials shall be elevated higher than the other end if storage will be longer than a few days as to allow the water to run off the materials.

### **3.2 INSTALLATION OF MATERIALS**

- A. The shelter shall be placed on prepared foundations that were designed by the manufacturer (unless otherwise noted). Materials for these foundations are not supplied by ICON but by the foundation installation contractor. Foundation shall be constructed to all local building code requirements and per good construction practices for the specific site conditions.
  - A. In accordance with OSHA Steel Erection Standard 29 CFR 1926.750 Part R, anchor rods shall be installed for proper column stability and shall have a minimum of four (4) anchor bolts per column. Therefore, no single anchor rod column base connections shall be allowed.
- B. The contractor shall install all parts and pieces per the manufacturer's supplied installation instructions and these specifications.
- C. The interface with other work required is to be coordinated by the customer or the customer's agent. Some design may have electrical or plumbing requirements that are not supplied by ICON.
- D. Tolerances on structural steel members are set according to AISC Code of Standard Practice for Steel Buildings and Bridges and have been used for the fabrication of this product. These tolerances will not and cannot be increased. No field slotting or opening of holes will be allowed without proper guidance from the ICON Engineering Department.

### **3.3 REPAIR**

- A. No field modifications or corrections are allowed without authorization from the ICON Engineering Department.

### **3.4 SITE QUALITY CONTROL**

- A. ICON does not require any on-site inspections or testing but these may be required by local authorities and the local building inspector. Please be aware of any on-site requirements prior to starting installation.

**END OF SECTION 10 73 00**

**SECTION 10 75 16**  
**GROUND-SET FLAGPOLES**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Section includes ground-set flagpoles made from aluminum

**1.2 ACTION SUBMITTALS**

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, operating characteristics, fittings, accessories, and finishes for flagpoles.
- B. Delegated-Design Submittal: For flagpoles.

**1.3 CLOSEOUT SUBMITTALS**

- A. Operation and Maintenance Data: For flagpoles to include in operation and maintenance manuals.

**PART 2 - PRODUCTS**

**2.1 MANUFACTURERS**

- A. Source Limitations: Obtain flagpoles as complete units, including fittings, accessories, bases, and anchorage devices, from single source from single manufacturer.

**2.2 PERFORMANCE REQUIREMENTS**

- A. Structural Performance: Flagpole assemblies, including anchorages and supports, shall withstand design loads indicated within limits and under conditions indicated.
  - 1. Wind Loads: Determine according to NAAMM FP 1001. Basic wind speed for Project location is 85 mph.

## 2.3 ALUMINUM FLAGPOLES

- A. Aluminum Flagpoles: Cone-tapered flagpoles fabricated from seamless extruded tubing complying with ASTM B241/B241M, Alloy 6063, with a minimum wall thickness of 3/16 inch (4.8 mm).
  - 1. Acceptable Manufacturer (or approved equal):
    - a. KAYPARK RECREATION  
1301 Pine Street, Janesville IA 50647  
(800) 553-2476  
sales@kaypark.com
- B. Exposed Height: 25 feet (7.5 m).
- C. Metal Foundation Tube: Manufacturer's standard corrugated-steel foundation tube, 0.060-inch (1.52-mm) wall thickness with 3/16-inch (4.8-mm) steel bottom plate and support plate; 3/4-inch- (19-mm-) diameter, steel ground spike; and steel centering wedges welded together. Galvanize foundation tube after assembly. Furnish loose hardwood wedges at top of foundation tube for plumbing pole.
- D. Sleeve for Aluminum Flagpole: Galvanized steel foundation sleeve, made to fit flagpole, for casting into concrete foundation.

## 2.4 FITTINGS

- A. Finial Ball: Flush-seam ball, sized as indicated or, if not indicated, to match flagpole-butt diameter.
  - 1. 0.063-inch (1.6-mm) spun aluminum, finished to match flagpole
- B. External Halyard: Ball-bearing, nonfouling, revolving truck assembly of cast metal with continuous **5/16-inch- (8-mm-)** diameter, braided polypropylene halyard and 9-inch (228-mm) cast-metal cleats with fasteners. Finish exposed metal surfaces to match flagpole.
  - 1. Halyards and Cleats: One at each flagpole.
  - 2. Halyard Flag Snaps: Bronze swivel snap hooks vinyl covers. Furnish two per halyard.

## 2.5 MISCELLANEOUS MATERIALS

- A. Drainage Material: Crushed stone, or crushed or uncrushed gravel; coarse aggregate.
- B. Sand: ASTM C33/C33M, fine aggregate.
- C. Elastomeric Joint Sealant: Multicomponent nonsag urethane, Single-component nonsag urethane, Single-component neutral-curing silicone joint sealant complying with requirements in Section 201 – “Concrete, Mortar, and Related Materials” of the Greenbook and Whitebook.
- D. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.

## **2.6 ALUMINUM FINISHES**

- A. Natural Satin Finish: AA-M32, fine, directional, medium satin polish; buff complying with AA-M20; seal aluminum surfaces with clear, hard-coat wax.

## **PART 3 - EXECUTION**

### **3.1 PREPARATION**

- A. Foundation Excavation: Excavate to neat clean lines in undisturbed soil. Remove loose soil and foreign matter from excavation and moisten earth before placing concrete. Place and compact drainage material at excavation bottom.
- B. Foundation Tube: Place foundation tube, center, and brace to prevent displacement during concreting. Place concrete. Plumb and level foundation tube and allow concrete to cure.
- C. Sleeves: Locate and secure sleeves in forms by bracing to reinforcement and forms.
- D. Place concrete, as specified in Section 201 – “Concrete, Mortar and Related Materials” of the Greenbook and Whitebook. Compact concrete in place by using vibrators. Moist-cure exposed concrete for no fewer than seven days or use nonstaining curing compound.
- E. Trowel exposed concrete surfaces to a smooth, dense finish, free of trowel marks, and uniform in texture and appearance. Provide positive slope for water runoff to perimeter of concrete base.

### **3.2 FLAGPOLE INSTALLATION**

- A. General: Install flagpoles where indicated and according to Shop Drawings and manufacturer's written instructions.
- B. Foundation Tube: Place flagpole in tube, seated on bottom plate between steel centering wedges, and install hardwood wedges to secure flagpole in place. Place and compact sand in foundation tube and remove hardwood wedges. Seal top of foundation tube with a 2-inch (50-mm) layer of elastomeric joint sealant and cover with flashing collar.

**END OF SECTION 107516**

**SECTION 11 68 00  
PLAYGROUND EQUIPMENT**

**PART 1-GENERAL**

**1.01 SCOPE OF WORK**

- A. Materials, labor and equipment for complete installation of play equipment as shown on the Plans.

**1.02 RELATED SECTIONS**

- A. 32 18 16.13 PLAYGROUND PROTECTIVE SURFACING

**1.03 QUALITY ASSURANCE**

- A. Licensing: Contractor's license for play equipment installers shall be either "A" or "C61-D34."
- B. Contractor shall provide materials, install play equipment, and construct playground areas in accordance with the following standards and guidelines. In case of conflict, the most restrictive- and highest quality standards and guidelines shall apply to the work.
  - a. "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use," ASTM F1487-98, published by the American Society for Testing and Materials (ASTM).
  - b. "Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment," ASTM F1292-99.
  - c. "Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment," ASTM F1951-99.
  - d. U.S. Consumer Products Safety Commission, *Handbook for Public Playground Safety*, published by the Consumer Product Safety Commission (CPSC), latest edition.
  - e. "Americans with Disabilities Act" Accessibility Guidelines (ADAAG).
  - f. All products shall bear the certification seal of the International Play Equipment Manufacturers Association (IPEMA).
  - g. All designs shall meet or exceed the Americans with Disabilities Act (ADA) "Final Accessibility Guidelines for Play Areas" regulations as published on October 18, 2000.
  - h. All manufacturers must be ISO 9001 certified.
- C. References and Standards
  - a. CPSC: Consumer Product Safety Commission
  - b. IPEMA: International Playground Equipment Manufacturers Association
  - c. ADA: Americans with Disabilities Act
  - d. ISO: International Organization for Standardization
- D. Installation of play equipment and resilient surfacing shall be in full conformance with California Administrative Code Title 24 disabled access requirements.

**1.04 DELIVERY, STORAGE AND HANDLING**



- A. Play area equipment and materials shall be ordered and delivered to the job site, and protected from construction operations and vandalism throughout the construction of the project.
- B. Damaged, vandalized or broken equipment and materials shall be cause for rejection as determined by the City's representative.

**1.05 GUARANTEES AND WARRANTIES**

- A. Contractor shall provide manufacturers' written certification that play equipment have been installed in accordance with manufacturers' recommendations and Contract Documents.
- B. Contractor shall provide the City with manufacturers' written warranties for accessible play equipment.
- C. The equipment manufacturer shall warrant material and workmanship against defects, from the date of shipment, for the period of time as follows.
  - a. **100-YEAR LIMITED WARRANTY**  
On all PlayBooster®, PlayShaper® and PlaySense® aluminum posts, stainless steel fasteners, clamps, beams and caps, against structural failure due to corrosion/natural deterioration or manufacturing defects, and on PlayBooster, Evos™ and Weevos™ steel posts and arches against structural failure due to material or manufacturing defects.
  - b. **15-YEAR LIMITED WARRANTY**  
On all plastic components (including TuffTimbers™ edging), all steel components (except 100-year steel posts), Mobius® climbers, decks and TenderTuff™ coatings (except Wiggle Ladders, Chain Ladders and Swing Chain) against structural failure due to material or manufacturing defects. TuffTurf® tiles against material or manufacturing defects.
  - c. **10-YEAR LIMITED WARRANTY**  
On concrete products against structural failure due to natural deterioration or manufacturing defects. Does not cover minor chips, hairline cracks or efflorescence.
  - d. **8-YEAR LIMITED WARRANTY**  
On Aeronet™ climbers and climbing cables against defects in materials or manufacturing defects. On CoolToppers® fabric against failure from significant fading, deterioration, breakdown, mildew, outdoor heat, cold or discoloration. This warranty is limited to the design loads as stated in the specifications found in the technical information.
  - e. **3-YEAR LIMITED WARRANTY**  
On all other parts, i.e.: CableCore® products, swing seats and hangers, grills, Mobius climber handholds, Wiggle Ladders, Chain Ladders and Swing Chain, Track Ride trolleys and bumpers, all rocking equipment including Sway Fun® gliders, PVC belting material,

HealthBeat™ hydraulic cylinders, Seesaws, Wiggle Ring Bridge, etc., against failure due to corrosion/natural deterioration or manufacturing defects.

- D. The Contractor shall guarantee installation workmanship for a period of one year from the date of Substantial Completion of the Project. The Contractor shall be responsible for coordinating manufacturer material warranty items with the manufacturer/distributor and for the installation of replacement material(s) at no additional cost to the owner.
- E. Provide copy of contractor's installation warranty on company letterhead. Start date of warranty period to be date entire project is accepted by the City of San Diego, as determined by the resident engineer.

#### 1.06 SUBMITTALS

- A. Contractor shall provide the following materials for review and acceptance by the City's representative.
  - f. Play equipment Product Data: The Contractor shall submit within ten (10) calendar days after receipt of Notice to Proceed, five (5) complete sets of the material and equipment submittals, including:
    - i. Play Equipment Manufacturer and Manufacturer's Representative's name(s) and address(s)
    - ii. Plan view drawings with model numbers; descriptive labels (including component names,) deck heights, and notations of compliance with CPSC, ASTM F1487-98 and ADA.
    - iii. Detailed component list with model numbers and catalog descriptions
    - iv. Color Chart
    - v. Written material specifications for all components
    - vi. IPEMA certification certificate from the IPEMA Website
    - vii. Copy of Manufacturer Warranty in Certificate format
    - viii. Copy of Manufacturer's ISO 9001 Certification
  - g. Approval of the submittals shall be the Contractor's authorization to order the required material and equipment. There will be no deviation from the approved submittals without the written authorization of the Owner's representative.

#### 1.07 STAKING

- A. Contractor shall provide staking and layout at the site for placement of play equipment. Safety zones shall be evaluated and accepted by the City's and manufacturer's representatives prior to play equipment installation.

#### 1.08 SAFETY

- A. Contractor shall provide for the complete protection and closure of play areas during and after installation, throughout the maintenance period until final acceptance, and at no additional cost to the City. Any injury, claim or vandalism arising from the insufficient closure and protection of the play areas shall be responsibility of the Contractor.

## 1.09 AVAILABILITY AND ORDERING OF SPECIFIED ITEMS

- A. Availability: Verify prior to bidding that all specified items, including but not limited to play equipment, accessible resilient surfacing, structures, and park furnishings will be available in time for installation during orderly and timely progress of the work.

In the event specified item or items will not be available, notify the City prior to receipt of bids.

- B. Ordering: Specified items shall be ordered within 10 days of receipt of the "Notice To Proceed." Provide written evidence of timely ordering of specified items to the Resident Engineer.

## PART 2-PRODUCTS

- 2.01 **PLAY EQUIPMENT.** Equipment shall be in accordance with Construction Plans and the following specifications, or approved substitution.

- A. Play equipment by LSI and Fitness equipment by Greenfields Outdoor Fitness shall be as specified on the plans, and shall include the following components:
- a. Freestanding Play Age 2-5:
    - i. Weevos Mainstructure with 3 Arches, 164170
    - ii. Wee Pod Climber, 164172
    - iii. Boppity Bridge, 164178
    - iv. Swiggly Stix, 173575
    - v. Pod Climber 8" HT, 120710
    - vi. Cozy Coaster Slide, 164174
    - vii. Kaleidospin Panel, 173580
    - viii. Marble Panel, 173581
    - ix. Double Bobble Spring Rider, 164075
    - x. Saddle Spinner, 152179
    - xi. Chill Spinner, 247189
    - xii. WhirlyQ Spinner, 173591
    - xiii. Welcome Sign, 182503
    - xiv. Skyways 16'x16' Cantilever Single Post Pyramid with 12' entrance, 237675
  - b. Freestanding Play Age 5-12:
    - i. PB Netplex 7-Post, CP000484 DTR
    - ii. PB Skyways 30FT DIA 7 Post Netplex Shade, CP000483
    - iii. Boogie Board, 193176
    - iv. Skyport Climber with Double Swoosh Slide, 224088
    - v. Lolliladder with (2) E-Pods
    - vi. Swiggleknots no Decks, 193171
    - vii. 56" Rollerslide, 123333
    - viii. Hourglass Panel, 123319
    - ix. E-Pod/Seat, 166809
    - x. Blender, 201545
    - xi. Sky Rail Climber, 146812

- xii. Summit Climber, 128608
  - xiii. Lollipop Climber, 176078
  - xiv. Single Slide, 123337
  - xv. Log Balance, 173596
  - xvi. Adventurescape Design #1, 158364
  - xvii. We-Saw, 186490
  - xviii. Ind combo Oodle Swing & 1-Bay for standard swing seats, CP006233/Full bucket seat w/ proguard chains, 176038
  - xix. Welcome Sign, 182503
  - xx. Cooltopper Single Post Pyramid Roof, 154884
- c. Fitness Area:
- i. 2-Person Accessible Verticle Press, SGR047W
  - ii. 2-Person Accessible Chest Press, SGR048AW
  - iii. Elliptical Cross Trainer, SHP503
  - iv. Custom Functional Fitness Rig, SHP515 C
  - v. Leg Press, UBX215
  - vi. Squat, UBX217
  - vii. Stepper, UBX292
  - viii. Customized Announcement Sign, SGR105
  - ix. 2-Person Accessible Lat Pull, SGR048W
  - x. 4-Person Pendulum, Abs, and Dip Station, SGR2005-1-22
  - xi. 4-Person Lower Body Combo, SGR021

2.02 **MANUFACTURER:** The layout shown in the plan view is based upon equipment and measurements from Greenfields Outdoor Fitness and Landscape Structures Inc (LSI). Acceptable manufacturers for each component are as indicated on the plan or approved equal.

A. Landscape Structures Inc./Coast Recreation

Contact: Gregg Rogers, (949) 633-1180, [grogers@coastrecreation.net](mailto:grogers@coastrecreation.net)

B. Greenfields Outdoor Fitness

Contact: Sam Mendelsohn, (888) 315-9037, [Sam@GreenfieldsFitness.com](mailto:Sam@GreenfieldsFitness.com)

2.03 **SUBSTITUTIONS:** Playground equipment and modular units submitted for consideration shall be equivalent in design, layout, deck size, post size, clamping/fastening system, deck/slide/climber height, ADA accessibility, appearance, color and construction detail of the playground equipment, structure or modular unit, specified in the drawings. Reasonable variations in size/height (no more than +/- 5%) and manufacturer's standard colors may be allowed at the owner's discretion. Color schemes are to match as closely as possible to the original specified colors. Play value and safety features of components must be equal or superior to specified design as judged by the owner or owner's representative.

A. Any expense of modification, adjustment or revision required to ensure compliance of furnished equipment to specified equipment and playground design shall be the sole expense and responsibility of the Contractor.

B. Equals will be considered against the specified equipment's standard of quality and design and will be determined at the owner's discretion.

## 2.04 MATERIALS:

- A. Anemone Frame Coating: Metal Frame shall be treated with C3 Coating. 2-coat 2K Epoxi – Haftgrund 855, 120 g per layer per square meter. Color: Gray. 2-coat 2K-PUR-Acrylc 5714, 120 g per layer per square meter. This item must be classified in corrosion class “C3 high” according to ISO 12944-5 according to salt fog test ISO 9227.
- B. Rope play equipment: Anemone shall be supplied according to following description and installed according to manufacturer’s instruction.
- a. Planar rope net following the steel pipes, side length approx. 25.00 x 21.50 m, height 2.80 m (with a layer thickness of protection material of 0.40 m). Mesh size generally 30 x 30 cm. Rope made of galvanized six-stranded wires of the “Herkules” type Ø 19 mm, in which each strand is tightly wrapped with PES yarn, PES “wrapping” inductively melted on to each strand. Liana ropes Ø 21 mm, reinforced with a steel wire core. Nets are completely preassembled, crossing points joined by maintenance-friendly “S” clamps of stainless steel No. 4571, Ø 8 mm. Nets fixed to the steel pipes with half formed “S” clamps of stainless steel No. 4571, Ø 8 mm and welded steel straps. Steel pipes made of S 235, delivered in 10 pieces, connected on site with muffle elements. Class of resistance to corrosion: C3 according to ISO12944-5, double primed with 2K epoxy undercoat, paint application by double coating with 2K-PUR-Acryl 5741, coating thicknesses 120 g/m<sup>2</sup> each.
  - b. 54 m bended steel pipe, Ø 273.0 x 6.3 mm
  - c. 40 m bended steel pipe, Ø 273.0 x 12.5 mm
  - d. Equipment and fitting according to EN 1176-1:2008 and EN 1176-11:2014, rope play equipment with a valid certificate of an independent testing laboratory.
- C. Single Post Tension Structure
- a. General
    - 1) The proposed structure(s) shall be manufactured by Skyways, a brand of Landscape Structures Inc. --- shall be modular and pre-fabricated, and include the structural steel frame, fabric roof, steel cables, all fasteners, and foundation hardware.
    - 2) All fabric tops must be connected to the structural frame via an internal Rapid Release system, designed to improve removal of the fabric tops in the winter months.
    - 3) All shade structures are engineered and designed to meet the following loads, but is also dependent on the geographic location of the installation and the local building codes.
      - i. CBC 2016
      - ii. 105 mph wind load
      - iii. 5psf snow load
  - b. Steel
    - 1) All steel members of the shade structure shall be designed in strict accordance with the requirements of the “American Institute of Steel Construction” (AISC) Specifications.
    - 2) All connections shall have a maximum internal sleeving tolerance of 0.0625 inches, using high-tensile strength steel sections, with a minimum sleeve length of 10 inches.
    - 3) All hollow not round structural steel members shall be cold-formed, high-strength steel, and comply with ASTM-A500, Grade B or C as required.

- 4) All steel plates shall comply to ASTM A-572, Grade 50 or to ASTM A-36 as required.
- c. Bolts
- 1) All structural field connections of the shade structure shall be designed and made with high-strength bolted connections using either ASTM A-325, Grade B or SAE J249 Grade 8 as required and indicated on the drawings.
  - 2) All stainless-steel bolts shall comply with ASTM F-593, Alloy Group 1 or 2.
  - 3) All bolt fittings that secure sleeve connections shall include washers for water-tight seals at joints.
- d. Welding
- 1) All shop-welded connections of the shade structure shall be designed and performed in strict accordance with the requirements of the "American Welding Society" (AWS) Specifications.
  - 2) Structural welds shall be made in compliance with the requirements of the "Prequalified" welded joints, where applicable, and by certified welders.
  - 3) No onsite or field welding shall be permitted.
- e. Powder Coating
- 1) Carbon structural steel tubing preparation prior to powder coating shall be executed in accordance to commercial blast cleaning SSPC-SP6 or NACE #3.
  - 2) A commercial blast-cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, mill scale, rust, coating, oxides, corrosion, as well as other products or foreign material.
  - 3) All metal parts and surfaces, except hardware, shall be coated with ProShield finish where a minimum .002" of epoxy zinc rich primer is applied. A minimum .004" of architectural-grade Super Durable polyester TGIC powder is applied. The average ProShield film thickness is .006".
  - 4) ProShield is formulated and tested per the following ASTM standards. Each color must meet or exceed the ratings listed below:
  - 5) Hardness (D3363) rating 2H
  - 6) Flexibility (D522) pass 1/8" mandrel
  - 7) Impact (D2794) rating minimum 80 inch-pounds
  - 8) Salt Fog Resistance (B117 and D1654) 4,000 hours and rating 6 or greater
  - 9) UV Exposure (G154, 340 bulb) 3,000 hours, rating delta E of 2, and 90 percent gloss retention
  - 10) Adhesion (D3359, Method B) rating 5
  - 11) Manufacturer to provide Hatch Test results to verify finish adhesion.
  - 12) Manufacturer to provide in-process quality reports results to verify finish thickness.
  - 13) Manufacturer to provide in-process quality reports results to verify complete cure of the finish.
- f. Fabric Tension Cables
- 1) All steel cables diameters and types, shall be determined based on calculated engineering load.

- 2) Structural wire rope cables shall conform to the latest revision of ASTM A 603, "Standard specification for zinc-coated steel structural wire rope".
- 3) Structural strand cables shall conform to the latest revision of ASTM A 586, "Standard specification for zinc-coated parallel and helical steel wire structural strand".
- 4) Seven wire pre-stressing strand shall conform to the latest revision of ASTM A 416, "Standard specification for uncoated seven wire stress relieved strand for pre-stressed concrete", and shall be grade 270.

g. Fabric Roof Systems

- 1) UV Shade Fabric shall be made of UV-stabilized high-density polyethylene (HDPE). This mesh fabric must be lock stitch knit with monofilament and tape yarn.
- 2) Fabric Weight shall be 8.7 Oz/SQFT.
- 3) Fabric shall conform to and pass the ASTM E-84 testing standard, NFPA701 Test Method 1 and 2 standards, and the CSFM 1237.1 Title 19 standard.
- 4) Fabric shall have a life expectancy of 12-year minimum with continuous sun exposure.
- 5) Fabric shall have minimal fading after 5 years of continuous exposure to the elements.
- 6) Tensile Strength      Warp, 206.82 lbs / Weft, 368.68 lbs
- 7) Elongation              Warp, 111.7% / Weft, 58.1%
- 8) Tear Strength              Warp, 39.56 lbs / Weft, 53.05 lbs
- 9) Burst Pressure              456 (psi)
- 10) Burst Strength              359.02 lbs
- 11) Fabric shall block a minimum of 88.5% of the UV Spectrum.
- 12) Fabric shall provide a minimum of 58.9% Shade Factor.
- 13) All fabric joints to be prefabricated, no sewing is allowed on site.
- 14) Thread shall be manufactured from 100% expanded polytetrafluoroethylene (PTFE). This mildew-resistant, exterior-approved thread shall meet or exceed the following:
  - i. Flexible temperature range
  - ii. Very low shrinkage factor
  - iii. Extremely high strength; durable in outdoor climates
  - iv. Resists flex and abrasion of fabric
  - v. Unaffected by cleaning agents, as well as acid rain, mildew, saltwater
  - vi. Rot-resistant, and unaffected by most industrial pollutants
  - vii. Specially treated for prolonged exposure to the sun
  - viii. Lockstitch thread – 1200 Denier or approved equal
  - ix. Chain stitch thread – 1200 Denier or approved equal
- 15) All corners shall be reinforced with extra non-tear fabric and strapping to properly distribute load(s).
- 16) The perimeters of the fabric top that contain the cables shall be double lockstitches.
- 17) Rapid Release system designed to improve the removal/reinstallation process of the fabric.
  - i. This system must be integrated internally into the structure, and is not an external hardware attachment.
  - ii. This system must have superior corrosion resistance than the typical finish of the structure.
  - iii. The mechanism of this system must function with an Acme Threaded Rod.

D. Foundations:

- a. Unless otherwise specified, the bury depth of all footings shall be 34" min below Finished Grade (FG) on all in-ground play events/posts.

### **PART 3 - EXECUTION**

#### **3.01 INSTALLATION**

- A. Play equipment shall be installed in accordance with manufacturers' recommendations.
- B. Play equipment shall be completely surrounded by unobstructed safety zones as recommended by the manufacturers. Resilient play surfaces only shall be located within safety zones. Play equipment safety zones shall not overlap one another unless allowed by ASTM or CPSC standards.
- C. Explicit installation instructions shall be provided by the manufacturer, which shall include detailed, scaled plan view; elevations; footing drawings and details; as well as, written instructions to assure proper installation of the playground equipment, structure or modular unit.
- D. Playground equipment must be installed by a manufacturer certified installer and be installed in accordance with the manufacturer's installation specifications. Installation crew leader must be CPSI certified. An independent 3<sup>rd</sup> party inspector, provided by the Contractor, must inspect the final installation prior to acceptance. Independent 3<sup>rd</sup> party inspector must be a Certified Playground Safety Inspector and not employed by the installer or manufacturer.
- E. Close Out: Contractor shall provide the owner with one copy of complete manufacturers installation instructions and maintenance kit. Each manufacturer sends at least two sets of installation manuals with each order. Additional sets of install instructions should be purchased from the manufacturer if originals are lost or damaged. It is the contractor's responsibility to secure the installation instructions from the installer.
- F. Clean up: The site shall be kept clean and free of tools, trash, debris, and installation materials on a daily basis. Material may be stored on site during installation with appropriate protective measures and approval by the Owner's representative.

#### **3.02 MAINTENANCE**

- A. Contractor shall maintain play equipment, resilient fill, and accessible resilient surfaces throughout the maintenance period.
- B. Scratches, dents and other damage to play equipment resulting from Contractor's operations shall be repaired to original condition, or play equipment shall be replaced as determined by the City's representative.

### **END OF SECTION 116800**



**SECTION 12 93 00  
SITE FURNISHINGS**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

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

**1.2 SUMMARY**

- A. Section Includes:
  - a) Picnic Tables
  - b) Trash and recycling receptacles
  - c) Benches
  - d) Bike Racks
  - e) Bleachers
  - f) Drinking Fountains
  - g) Bollards

**1.3 ACTION SUBMITTALS**

- A. Product Data: For each type of product.
- B. Exposed product and for each color and texture specified.
- C. Samples for Initial Selection: For units with factory-applied finishes.
- D. Samples for Verification: For each type of exposed finish, not less than 6-inch- (152-mm-) long linear components and 4-inch- square sheet components.
- E. Product Schedule: For site furnishings. Use same designations indicated on Drawings.

**1.4 INFORMATIONAL SUBMITTALS**

- A. Material Certificates: For site furnishings.

**1.5 CLOSEOUT SUBMITTALS**

- A. Maintenance Data: For site furnishings to include in maintenance manuals.

## **PART 2 - PRODUCTS**

### **2.1 PICNIC TABLES**

- A. 6' Concrete Picnic Table, Model Number: 101S
  - a. Materials:
    - i. Precast Concrete. Color: Tan.
  - b. Finishes:
    - i. Table top and bench top seat surface to be Smooth Finish, all other surfaces to be Light Sandblast.
  - c. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - d. Mounting:
    - i. Surface mount. Provide anchors and stainless-steel mounting screws.
  - e. Available through Outdoor Creations Inc. or approved equal. 2270 Barney Road, Anderson, CA 96007 Phone: (530) 365-5129.
- B. 6' Accessible Concrete Picnic Table, Model Number: 101SLE
  - a. Materials:
    - i. Precast Concrete. Color: Tan.
  - b. Finishes:
    - i. Table top and bench top seat surface to be Smooth Finish, all other surfaces to be Light Sandblast.
  - c. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - d. Mounting:
    - i. Surface mount. Provide anchors and stainless-steel mounting screws.
  - e. Available through Outdoor Creations Inc. or approved equal. 2270 Barney Road, Anderson, CA 96007 Phone: (530) 365-5129.
- C. Round Concrete Table, Model Number: 107S
  - a. Materials:
    - i. Precast Concrete. Color: Tan.
  - b. Finishes:
    - i. Table top and bench top seat surface to be Smooth Finish, all other surfaces to be Light Sandblast.
  - c. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - d. Mounting:

- i. Surface mount. Provide anchors and stainless-steel mounting screws.
      - e. Available through Outdoor Creations Inc. or approved equal. 2270 Barney Road, Anderson, CA 96007 Phone: (530) 365-5129.
  - D. Round Accessible Concrete Table, Model Number: 107AC
    - a. Materials:
      - i. Precast Concrete. Color: Tan.
    - b. Finishes:
      - i. Table top and bench top seat surface to be Smooth Finish, all other surfaces to be Light Sandblast.
    - c. Anti-Graffiti Coating
      - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
    - d. Mounting:
      - i. Surface mount. Provide anchors and stainless-steel mounting screws.
    - e. Available through Outdoor Creations Inc. or approved equal. 2270 Barney Road, Anderson, CA 96007 Phone: (530) 365-5129.

## **2.2 TRASH AND RECYCLING RECEPTACLES**

- A. Square Woodgrain Concrete Recycling Receptacle, Model Number: 515
  - a. Materials:
    - i. Precast Concrete. Color: Tan. Lid Color: Blue.
  - b. Finishes:
    - i. Woodgrain Concrete Texture
  - c. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - d. Mounting:
    - i. Surface mount. Provide anchors and stainless-steel mounting screws.
  - e. Available through Outdoor Creations Inc. or approved equal. 2270 Barney Road, Anderson, CA 96007 Phone: (530) 365-5129.
- B. Square Woodgrain Concrete Trash Receptacle, Model Number: 515
  - a. Materials:
    - i. Precast Concrete. Color: Tan. Lid Color: Bronze.
  - b. Finishes:
    - i. Woodgrain Concrete Texture
  - c. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - d. Mounting:

- i. Surface mount. Provide anchors and stainless-steel mounting screws.
- e. Available through Outdoor Creations Inc. or approved equal. 2270 Barney Road, Anderson, CA 96007 Phone: (530) 365-5129.

### **2.3 BENCHES**

- A. 7' Concrete Bench with Back, Armrests Skate Deterrents and Center Armrests, Model Number: 408SKB
  - a. Materials:
    - i. Precast Concrete. Color: Tan.
  - b. Finishes:
    - i. Smooth Finish
  - c. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - d. Mounting:
    - i. Surface mount. Provide anchors and stainless-steel mounting screws.
  - e. Available through Outdoor Creations Inc. or approved equal. 2270 Barney Road, Anderson, CA 96007 Phone: (530) 365-5129.
- B. Plank Bench with Back, Model Number: SPWB-AL
  - a. Materials:
    - i. Aluminum
  - b. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - c. Mounting:
    - i. Surface mount. Provide anchors and stainless-steel mounting screws.
  - d. Available through Kay Park Recreation or approved equal. 1301 Pine Street, Janesville, IA 50647 Phone: (800) 553-2476.

### **2.4 BIKE RACKS**

- A. 7'-4" Contemporary Bike Rack, Model Number: 013-0069
  - a. Materials:
    - i. Galvanized Steel Tubing
  - b. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - c. Mounting:
    - i. In-Ground with Concrete Footing

- d. Available through Burke or approved equal. 727 Northwest Way, Fond du Lac, WI 54937  
Phone: (800) 356-2070.

## **2.5 BLEACHERS**

- A. 15' Long - 5 Row Bleacher, Model Number: BLA5A15V4F4DWC
  - a. Materials:
    - i. Galvanized Steel
  - b. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - c. Mounting:
    - i. Surface mount. Provide anchors and stainless-steel mounting screws.
  - d. Available through Kay Park Recreation or approved equal. 1301 Pine Street, Janesville, IA 50647 Phone: (800) 553-2476.

## **2.6 DRINKING FOUNTAINS**

- A. Accessible Outdoor Stainless Steel Drinking Fountain, Model Number: 3602 and 3670 (Dog Bowl)
  - a. Materials:
    - i. Stainless Steel. Color: Brown.
  - b. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - c. Mounting:
    - i. Surface-mounted. Provide anchors and stainless-steel screws.
  - d. Available through Haws or approved equal. 1455 Kleppe Lane, Sparks, NV 89431. Phone: (775) 359-4712.
- B. Accessible Outdoor Vandal-Resistant Stainless Steel Drinking Fountain W/ pet fountain, Model Number: 3500D
  - a. Materials:
    - i. Stainless Steel. Color: Brown.
  - b. Anti-Graffiti Coating
    - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
  - c. Mounting:
    - i. Surface-mounted. Provide anchors and stainless-steel screws.
  - d. Available through Haws or approved equal. 1455 Kleppe Lane, Sparks, NV 89431. Phone: (775) 359-4712.

## **2.7 BOLLARDS**

- A. 4" Internal Locking Removable Bollard, Model Number: SSR04080
  - a. Materials:

- i. Carbon Steel. Color: Brown.
- b. Anti-Graffiti Coating
  - i. Provide Anti-Graffiti Coating/Sealer per Whitebook requirements.
- c. Available through CALPIPE Security or approved equal. 12160 Woodruff Avenue, Downey, CA 90241. Phone: (877) 283-8581.

## 2.8 MATERIAL

- A. Steel and Iron: Free of surface blemishes and complying with the following:
  - A. Plates, Shapes, and Bars: ASTM A 36/A 36M.
    - B. Steel Pipe: Standard-weight steel pipe complying with ASTM A 53/A 53M, or electric-resistance-welded pipe complying with ASTM A 135/A 135M.
  - C. Tubing: Cold-formed steel tubing complying with ASTM A 500/A 500M.
    - D. Mechanical Tubing: Cold-rolled, electric-resistance-welded carbon or alloy steel tubing complying with ASTM A 513, or steel tubing fabricated from steel complying with ASTM A 1011/A 1011M and complying with dimensional tolerances in ASTM A 500/A 500M; zinc coated internally and externally.
  - E. Sheet: Commercial steel sheet complying with ASTM A 1011/A 1011M.
  - F. Revise "Perforated Metal" Subparagraph below if specific pattern is critical for Project.
  - G. Expanded Metal: Carbon-steel sheets, deburred after expansion, and complying with ASTM F 1267.
  - H. Malleable-Iron Castings: ASTM A 47/A 47M, grade as recommended by fabricator for type of use intended.
  - I. Gray-Iron Castings: ASTM A 48/A 48M, Class 200.
- B. Stainless Steel: Free of surface blemishes and complying with the following:
  - A. Sheet, Strip, Plate, and Flat Bars: ASTM A 666.
  - B. Pipe: Schedule 40 steel pipe complying with ASTM A 312/A 312M.
  - C. Tubing: ASTM A 554.
- C. Nonshrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M; recommended in writing by manufacturer, for exterior applications.
- D. Erosion-Resistant Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with potable water at Project site to create pourable anchoring, patching, and grouting compound; resistant to erosion from water exposure without needing protection by a sealer or waterproof coating; recommended in writing by manufacturer, for exterior applications.
- E. Galvanizing: Where indicated for steel and iron components, provide the following protective zinc coating applied to components after fabrication:
  - A. Zinc-Coated Tubing: External, zinc with organic overcoat, consisting of a minimum of 0.9 oz./sq. ft. of zinc after welding, a chromate conversion coating, and a clear, polymer film.

Internal, same as external or consisting of 81 percent zinc pigmented coating, not less than 0.3 mil thick.

B. Hot-Dip Galvanizing: According to ASTM A 123/A 123M, ASTM A 153/A 153M, or ASTM A 924/A 924M.

## 2.9 FABRICATION

- F. Metal Components: Form to required shapes and sizes with true, consistent curves, lines, and angles. Separate metals from dissimilar materials to prevent electrolytic action.
- G. Welded Connections: Weld connections continuously. Weld solid members with full-length, full-penetration welds and hollow members with full-circumference welds. At exposed connections, finish surfaces smooth and blended so no roughness or unevenness shows after finishing and welded surface matches contours of adjoining surfaces.
- H. Pipes and Tubes: Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of handrail and railing components.
- I. Preservative-Treated Wood Components: Complete fabrication of treated items before treatment if possible. If cut after treatment, apply field treatment complying with AWWA M4 to cut surfaces.
- J. Exposed Surfaces: Polished, sanded, or otherwise finished; all surfaces smooth, free of burrs, barbs, splinters, and sharpness; all edges and ends rolled, rounded, or capped.
- K. Factory Assembly: Assemble components in the factory to greatest extent possible to minimize field assembly. Clearly mark units for assembly in the field.

## 2.10 GENERAL FINISH REQUIREMENTS

- L. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## 2.11 ALUMINUM FINISHES

- M. Baked-Enamel, Powder-Coat Finish: Manufacturer's standard, baked, polyester, powder-coat finish complying with finish manufacturer's written instructions for surface preparation, including pretreatment, application, baking, and minimum dry film thickness.

## 2.12 STEEL AND GALVANIZED-STEEL FINISHES

- N. Baked-Enamel, Powder-Coat Finish: Manufacturer's standard, baked, polyester, powder-coat finish complying with finish manufacturer's written instructions for surface preparation, including pretreatment, application, baking, and minimum dry film thickness.
- O. PVC Finish: Manufacturer's standard, UV-light stabilized, mold-resistant, slip-resistant, matte-textured, dipped or sprayed-on, PVC-plastisol finish, with flame retardant added; complying with coating manufacturer's written instructions for pretreatment, application, and minimum dry film thickness.

## 2.13 IRON FINISHES

- P. Baked-Enamel, Powder-Coat Finish: Manufacturer's standard, baked, polyester, powder-coat finish complying with finish manufacturer's written instructions for surface preparation, including pretreatment, application, baking, and minimum dry film thickness.

## 2.14 STAINLESS-STEEL FINISHES

- Q. Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
  - R. Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
- A. Run directional finishes with long dimension of each piece.
  - B. Directional Satin Finish: No 4.
  - C. Dull Satin Finish: No. 6.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION, GENERAL

- A. Comply with manufacturer's written installation instructions unless more stringent requirements are indicated. Complete field assembly of site furnishings where required.
- B. Unless otherwise indicated, install site furnishings after landscaping and paving have been completed.



- C. Install site furnishings level, plumb, true, and securely anchored at locations indicated on Drawings.
- D. Post Setting: Set cast-in support posts in concrete footing with smooth top, shaped to shed water. Protect portion of posts above footing from concrete splatter. Verify that posts are set plumb or at correct angle and are aligned and at correct height and spacing. Hold posts in position during placement and finishing operations until concrete is sufficiently cured.
- E. Posts Set into Voids in Concrete: Form or core-drill holes for installing posts in concrete to depth recommended in writing by manufacturer of site furnishings and 3/4 inch larger than OD of post. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions, with top smoothed and shaped to shed water.
- F. Pipe Sleeves: Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts have been inserted into sleeves, fill annular space between post and sleeve with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions, with top smoothed and shaped to shed water.

**END OF SECTION 129300**

**SECTION 26 05 19**  
**LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

**1.2 SUMMARY**

- A. Section Includes:
  - 1. Building wires and cables rated 600 V and less.
  - 2. Connectors, splices, and terminations rated 2000 V and less.

**1.3 ACTION SUBMITTALS**

- A. Product Data: For each type of product.
- B. Product Schedule: Indicate type, use, location, and termination locations.

**1.4 INFORMATIONAL SUBMITTALS**

- A. Qualification Data: For manufacturer's authorized service representative.
- B. Field quality-control reports.

**1.5 QUALITY ASSURANCE**

- A. Testing Agency Qualifications: Member company of NETA.
  - 1. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

**PART 2 - PRODUCTS**

**2.1 CONDUCTORS AND CABLES**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Alpha Wire Company.
  - 2. American Bare Conductor.

3. Belden Inc.
  4. Cerro Wire LLC.
  5. Encore Wire Corporation.
  6. General Cable Technologies Corporation.
  7. Service Wire Co.
  8. Southwire Company.
  9. Or approved equal.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. Conductor and Cable Marking: Comply with wire and cable marking according to UL's "Wire and Cable Marking and Application Guide."
- D. Conductors: Copper, complying with NEMA WC 70/ICEA S-95-658.
1. Conductor Insulation: Comply with NEMA WC 70/ICEA S-95-658 for Type THHN/THWN-2.

## 2.2 CONNECTORS AND SPLICES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. 3M Electrical Products.
  2. AFC Cable Systems; a part of Atkore International.
  3. Gardner Bender.
  4. Hubbell Power Systems, Inc.
  5. Ideal Industries, Inc.
  6. ILSCO.
  7. NSi Industries LLC.
  8. O-Z/Gedney; a brand of Emerson Industrial Automation.
  9. Service Wire Co.
  10. TE Connectivity Ltd.
  11. Or approved equal.
- B. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated; listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

## PART 3 - EXECUTION

### 3.1 CONDUCTOR MATERIAL APPLICATIONS

- A. Feeders: Copper; Stranded minimum #12 AWG.
- B. Branch Circuits: Copper. Stranded, minimum #12 AWG.

### **3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS**

- A. Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN/THWN-2, single conductors in raceway.
- B. Branch Circuits Concealed Underground: Type THHN/THWN-2, single conductors in raceway.

### **3.3 INSTALLATION OF CONDUCTORS AND CABLES**

- A. Conceal cables underground in finished walls, ceilings, and under bridge structures unless otherwise indicated.
- B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.

### **3.4 CONNECTIONS**

- A. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.
- B. Make splices, terminations, and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
  - 1. Use oxide inhibitor in each splice, termination, and tap for aluminum conductors.
- C. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches (150 mm) of slack.

### **3.5 IDENTIFICATION**

- A. Identify and color-code conductors and cables according to Section 260553 "Identification for Electrical Systems."
- B. Identify each spare conductor at each end with identity number and location of other end of conductor, and identify as spare conductor.

### **3.6 FIELD QUALITY CONTROL**

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.

- B. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
1. Perform each of the following visual and electrical tests:
    - a. Inspect exposed sections of conductor and cable for physical damage and correct connection according to the single-line diagram.
    - b. Test bolted connections for high resistance using one of the following:
      - 1) A low-resistance ohmmeter.
      - 2) Calibrated torque wrench.
    - c. Inspect compression applied connectors for correct cable match and indentation.
    - d. Inspect for correct identification.
    - e. Inspect cable jacket and condition.
    - f. Insulation-resistance test on each conductor with respect to ground and adjacent conductors. Apply a potential of 500-V dc for 300-V rated cable and 1000-V dc for 600-V rated cable for a one-minute duration.
    - g. Continuity test on each conductor and cable.
    - h. Uniform resistance of parallel conductors.
- C. Cables will be considered defective if they do not pass tests and inspections.
- D. Prepare test and inspection reports to record the following:
1. Procedures used.
  2. Results that comply with requirements.
  3. Results that do not comply with requirements and corrective action taken to achieve compliance with requirements.

END OF SECTION 260519

**SECTION 26 05 26**  
**GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

**1.2 SUMMARY**

- A. Section includes grounding and bonding systems and equipment.
- B. Section includes grounding and bonding systems and equipment, plus the following special applications:
  - 1. Underground distribution grounding.
  - 2. Foundation steel electrodes.

**1.3 ACTION SUBMITTALS**

- A. Product Data: For each type of product indicated.

**1.4 INFORMATIONAL SUBMITTALS**

- A. As-Built Data: Plans showing dimensioned as-built locations of grounding features specified in "Field Quality Control" Article, including the following:
  - 1. Ground rods.
- B. Field quality-control reports.

**1.5 QUALITY ASSURANCE**

- A. Comply with UL 467 for grounding and bonding materials and equipment.

**PART 2 - PRODUCTS**

**2.1 MANUFACTURERS**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Burndy; Part of Hubbell Electrical Systems.
2. Dossert; AFL Telecommunications LLC.
3. ERICO International Corporation.
4. Fushi Copperfield Inc.
5. Or approved equal.

## 2.2 SYSTEM DESCRIPTION

- A. Comply with UL 467 for grounding and bonding materials and equipment.

## 2.3 CONDUCTORS

- A. Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.
- B. Bare Copper Conductors:
  1. Stranded Conductors: ASTM B 8.
  2. Tinned Bonding Jumper: Tinned-copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.

## 2.4 CONNECTORS

- A. Listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected.
- B. Bolted Connectors for Conductors and Pipes: Copper or copper alloy.
- C. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

## 2.5 GROUNDING ELECTRODES

- A. Ground Rods: Copper-clad steel; 3/4 inch by 10 feet (19 mm by 3 m).

## PART 3 - EXECUTION

### 3.1 APPLICATIONS

- A. Conductors: Install stranded conductor unless otherwise indicated.
- B. Conductor Terminations and Connections:
  1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.
  2. Underground Connections: Welded connectors except at test wells and as otherwise indicated.

3. Connections to Ground Rods at Test Wells: Bolted connectors.
4. Connections to Structural Steel: Welded connectors.
5. Fencing: Bolted connectors.

### 3.2 GROUNDING UNDERGROUND DISTRIBUTION SYSTEM COMPONENTS

- A. Comply with IEEE C2 grounding requirements.
- B. Grounding Handholes: Install a driven ground rod through handhole floor, per drawing detail.

### 3.3 EQUIPMENT GROUNDING

- A. Install insulated equipment grounding conductors with all feeders and branch circuits.
- B. Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:
  1. Feeders and branch circuits.
  2. Lighting circuits.
  3. Receptacle circuits.
  4. Flexible raceway runs.
- C. Poles Supporting Outdoor Lighting Fixtures: Install grounding electrode and a separate insulated equipment grounding conductor in addition to grounding conductor installed with branch-circuit conductors.
- D. Metallic Fences: Comply with requirements of IEEE C2.
  1. Grounding Conductor: Bare copper, not less than No. 8 AWG.
  2. Gates: Shall be bonded to the grounding conductor with a flexible bonding jumper.
  3. Barbed Wire: Strands shall be bonded to the grounding conductor.

### 3.4 INSTALLATION

- A. Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.
- B. Ground Rods: Drive rods until tops are 2 inches (50 mm) below finished floor or final grade unless otherwise indicated.
  1. Interconnect ground rods with grounding electrode conductor below grade and as otherwise indicated. Make connections without exposing steel or damaging coating if any.
- C. Test Wells: Ground rod driven through drilled hole in bottom of handhole. Handholes are specified in Section 260543 "Underground Ducts and Raceways for Electrical Systems," and shall be at least 12 inches (300 mm) deep, with cover.



1. Test Wells: Install at least one test well for each service unless otherwise indicated. Install at the ground rod electrically closest to service entrance. Set top of test well flush with finished grade or floor.
- D. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance except where routed through short lengths of conduit.
1. Use exothermic-welded connectors for outdoor locations; if a disconnect-type connection is required, use a bolted clamp.

### 3.5 FIELD QUALITY CONTROL

- A. Perform tests and inspections.
1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
- B. Tests and Inspections:
1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.
  2. Inspect physical and mechanical condition. Verify tightness of accessible, bolted, electrical connections with a calibrated torque wrench according to manufacturer's written instructions.
  3. Test completed grounding system at each location where a maximum ground-resistance level is specified, at individual ground rods. Make tests at ground rods before any conductors are connected.
    - a. Measure ground resistance no fewer than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.
    - b. Perform tests by fall-of-potential method according to IEEE 81.
- C. Grounding system will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.
- E. Excessive Ground Resistance: If resistance to ground exceeds specified values, notify the Resident Engineer promptly and include recommendations to reduce ground resistance.

END OF SECTION 260526

**SECTION 26 05 73.13**  
**SHORT-CIRCUIT STUDIES**

**PART 1 - GENERAL**

**1.01 RELATED DOCUMENTS**

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

**1.02 SUMMARY**

- A. Section includes a computer-based, fault-current study to determine the minimum interrupting capacity of circuit protective devices.

**1.03 DEFINITIONS**

- A. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed and salvaged, or removed and reinstalled. Existing to remain items shall remain functional throughout the construction period.
- B. Field Adjusting Agency: An independent electrical testing agency with full-time employees and the capability to adjust devices and conduct testing indicated and that is a member company of NETA.
- C. One-Line Diagram: A diagram that shows, by means of single lines and graphic symbols, the course of an electric circuit or system of circuits and the component devices or parts used therein.
- D. Power System Analysis Software Developer: An entity that commercially develops, maintains, and distributes computer software used for power system studies.
- E. Power Systems Analysis Specialist: Professional engineer in charge of performing the study and documenting recommendations, licensed in the state where Project is located.
- F. Protective Device: A device that senses when an abnormal current flow exists and then removes the affected portion of the circuit from the system.
- G. SCCR: Short-circuit current rating.
- H. Service: The conductors and equipment for delivering electric energy from the serving utility to the wiring system of the premises served.
- I. Single-Line Diagram: See "One-Line Diagram."

**1.04 ACTION SUBMITTALS**

- A. Product Data:
  - 1. For computer software program to be used for studies.

2. Submit the following after the approval of system protective devices submittals. Submittals shall be in digital form.
  - a. Short-circuit study input data, including completed computer program input data sheets.
  - b. Short-circuit study and equipment evaluation report; signed, dated, and sealed by a qualified professional engineer.
    - 1) Submit study report for action prior to receiving final approval of distribution equipment submittals. If formal completion of studies will cause delay in equipment manufacturing, obtain approval from Architect for preliminary submittal of sufficient study data to ensure that selection of devices and associated characteristics is satisfactory.
    - 2) Revised one-line diagram, reflecting field investigation results and results of short-circuit study.

### **1.05 INFORMATIONAL SUBMITTALS**

#### **A. Qualification Data:**

1. For Power Systems Analysis Software Developer.
2. For Power System Analysis Specialist.
3. For Field Adjusting Agency.

#### **B. Product Certificates: For short-circuit study software, certifying compliance with IEEE 399.**

### **1.06 CLOSEOUT SUBMITTALS**

#### **A. Operation and Maintenance Data:**

1. For overcurrent protective devices to include in emergency, operation, and maintenance manuals.
2. The following are from the Short-Circuit Study Report:
  - a. Final one-line diagram.
  - b. Final Short-Circuit Study Report.
  - c. Short-circuit study data files.
  - d. Power system data.

### **1.07 QUALITY ASSURANCE**

- A. Study shall be performed using commercially developed and distributed software designed specifically for power system analysis.
- B. Software algorithms shall comply with requirements of standards and guides specified in this Section.
- C. Manual calculations are unacceptable.

1. Power System Analysis Software Qualifications: Computer program shall be designed to perform short-circuit studies or have a function, component, or add-on module designed to perform short-circuit studies.
  2. Computer program shall be developed under the charge of a licensed professional engineer who holds IEEE Computer Society's Certified Software Development Professional certification.
- D. Power Systems Analysis Specialist Qualifications: Professional engineer licensed in the state where Project is located. All elements of the study shall be performed under the direct supervision and control of this professional engineer.
- E. Short-Circuit Study Certification: Short-Circuit Study Report shall be signed and sealed by Power Systems Analysis Specialist.
- F. Field Adjusting Agency Qualifications:
1. Employer of a NETA ETT-Certified Technician Level III or NICET Electrical Power Testing Level III certification responsible for all field adjusting of the Work.
  2. A member company of NETA.
  3. Acceptable to authorities having jurisdiction.

## **PART 2 - PRODUCTS**

### **2.01 POWER SYSTEM ANALYSIS SOFTWARE DEVELOPERS**

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
1. Operation Technology, Inc.
  2. Power Analytics, Corporation.
- B. Comply with IEEE 399 and IEEE 551.
1. Analytical features of power systems analysis software program shall have capability to calculate "mandatory," "very desirable," and "desirable" features as listed in IEEE 399.
- C. Computer software program shall be capable of plotting and diagramming time-current-characteristic curves as part of its output.

### **2.02 SHORT-CIRCUIT STUDY REPORT CONTENTS**

- A. Executive summary of study findings.
- B. Study descriptions, purpose, basis, and scope. Include case descriptions, definition of terms, and guide for interpretation of results.
- C. One-line diagram of modeled power system, showing the following:
1. Protective device designations and ampere ratings.
  2. Conductor types, sizes, and lengths.

3. Transformer kilovolt ampere (kVA) and voltage ratings.
  4. Motor and generator designations and kVA ratings.
  5. Switchgear, switchboard, motor-control center, and panelboard designations and ratings.
  6. Derating factors and environmental conditions.
  7. Any revisions to electrical equipment required by the study.
- D. Comments and recommendations for system improvements or revisions in a written document, separate from one-line diagram.
- E. Protective Device Evaluation:
1. Evaluate equipment and protective devices and compare to available short-circuit currents. Verify that equipment withstand ratings exceed available short-circuit current at equipment installation locations.
  2. Tabulations of circuit breaker, fuse, and other protective device ratings versus calculated short-circuit duties.
  3. For 600-V overcurrent protective devices, ensure that interrupting ratings are equal to or higher than calculated 1/2-cycle symmetrical fault current.
  4. For devices and equipment rated for asymmetrical fault current, apply multiplication factors listed in standards to 1/2-cycle symmetrical fault current.
  5. Verify adequacy of phase conductors at maximum three-phase bolted fault currents; verify adequacy of equipment grounding conductors and grounding electrode conductors at maximum ground-fault currents. Ensure that short-circuit withstand ratings are equal to or higher than calculated 1/2-cycle symmetrical fault current.
- F. Short-Circuit Study Input Data:
1. One-line diagram of system being studied.
  2. Power sources available.
  3. Manufacturer, model, and interrupting rating of protective devices.
  4. Conductors.
  5. Transformer data.
- G. Short-Circuit Study Output Reports:
1. Low-Voltage Fault Report: Three-phase and unbalanced fault calculations, showing the following for each overcurrent device location:
    - a. Voltage.
    - b. Calculated fault-current magnitude and angle.
    - c. Fault-point X/R ratio.
    - d. Equivalent impedance.
  2. Momentary Duty Report: Three-phase and unbalanced fault calculations, showing the following for each overcurrent device location:
    - a. Voltage.
    - b. Calculated symmetrical fault-current magnitude and angle.
    - c. Fault-point X/R ratio.
    - d. Calculated asymmetrical fault currents:

- 1) Based on fault-point X/R ratio.
  - 2) Based on calculated symmetrical value multiplied by 1.6.
  - 3) Based on calculated symmetrical value multiplied by 2.7.
3. Interrupting Duty Report: Three-phase and unbalanced fault calculations, showing the following for each overcurrent device location:
- a. Voltage.
  - b. Calculated symmetrical fault-current magnitude and angle.
  - c. Fault-point X/R ratio.
  - d. No AC Decrement (NACD) ratio.
  - e. Equivalent impedance.
  - f. Multiplying factors for 2-, 3-, 5-, and 8-cycle circuit breakers rated on a symmetrical basis.
  - g. Multiplying factors for 2-, 3-, 5-, and 8-cycle circuit breakers rated on a total basis.

## **PART 3 - EXECUTION**

### **3.01 POWER SYSTEM DATA**

- A. Obtain all data necessary for conduct of the study.
1. Verify completeness of data supplied on one-line diagram. Call any discrepancies to Architect's attention.
  2. For equipment included as Work of this Project, use characteristics submitted under provisions of action submittals and information submittals for this Project.
  3. For equipment that is existing to remain, obtain required electrical distribution system data by field investigation and surveys, conducted by qualified technicians and engineers. Qualifications of technicians and engineers shall be as defined by NFPA 70E.
- B. Gather and tabulate the required input data to support the short-circuit study. Record data on a Record Document copy of one-line diagram. Comply with recommendations in IEEE 551 as to the amount of detail that is required to be acquired in the field. Field data gathering shall be under direct supervision and control of the engineer in charge of performing the study, and shall be by the engineer or its representative who holds NETA ETT-Certified Technician Level III or NICET Electrical Power Testing Level III certification. Data include, but are not limited to, the following:
1. Product Data for Project's overcurrent protective devices involved in overcurrent protective device coordination studies. Use equipment designation tags that are consistent with electrical distribution system diagrams, overcurrent protective device submittals, input and output data, and recommended device settings.
  2. Obtain electrical power utility impedance at the service.
  3. Power sources and ties.
  4. For transformers, include kVA, primary and secondary voltages, connection type, impedance, X/R ratio, taps measured in percent, and phase shift.
  5. For reactors, provide manufacturer and model designation, voltage rating, and impedance.

6. For circuit breakers and fuses, provide manufacturer and model designation. List type of breaker, type of trip, SCCR, current rating, and breaker settings.
7. Generator short-circuit current contribution data, including short-circuit reactance, rated kVA, rated voltage, and X/R ratio.
8. Busway manufacturer and model designation, current rating, impedance, lengths, and conductor material.
9. Motor horsepower and NEMA MG 1 code letter designation.
10. Conductor sizes, lengths, number, conductor material and conduit material (magnetic or nonmagnetic).
11. Derating factors.

### **3.02 SHORT-CIRCUIT STUDY**

- A. Perform study following the general study procedures contained in IEEE 399.
- B. Calculate short-circuit currents according to IEEE 551.
- C. Base study on device characteristics supplied by device manufacturer.
- D. Extent of electrical power system to be studied is indicated on Drawings.
- E. Begin short-circuit current analysis at the service, extending down to system overcurrent protective devices as follows:
  1. To normal system low-voltage load buses where fault current is 10 kA or less.
  2. Exclude equipment rated 240 V ac or less when supplied by a single transformer rated less than 125 kVA.
- F. Study electrical distribution system from normal and alternate power sources throughout electrical distribution system for Project. Study all cases of system-switching configurations and alternate operations that could result in maximum fault conditions.
- G. Include the ac fault-current decay from induction motors, synchronous motors, and asynchronous generators and apply to low- and medium-voltage, three-phase ac systems. Also account for the fault-current dc decrement to address asymmetrical requirements of interrupting equipment.
- H. Calculate short-circuit momentary and interrupting duties for a three-phase bolted fault and a single line-to-ground fault at each equipment indicated on one-line diagram.
  1. For grounded systems, provide a bolted line-to-ground fault-current study for areas as defined for the three-phase bolted fault short-circuit study.
- I. Include in the report identification of any protective device applied outside its capacity.

END OF SECTION 260573.13

**SECTION 26 05 73.19**  
**ARC-FLASH HAZARD ANALYSIS**

**PART 1 - GENERAL**

**1.01 RELATED DOCUMENTS**

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

**1.02 SUMMARY**

- A. Section includes a computer-based, arc-flash study to determine the arc-flash hazard distance and the incident energy to which personnel could be exposed during work on or near electrical equipment.

**1.03 DEFINITIONS**

- A. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.
- B. Field Adjusting Agency: An independent electrical testing agency with full-time employees and the capability to adjust devices and conduct testing indicated and that is a member company of NETA.
- C. One-Line Diagram: A diagram that shows, by means of single lines and graphic symbols, the course of an electric circuit or system of circuits and the component devices or parts used therein.
- D. Power System Analysis Software Developer: An entity that commercially develops, maintains, and distributes computer software used for power system studies.
- E. Power Systems Analysis Specialist: Professional engineer in charge of performing the study and documenting recommendations, licensed in the state where Project is located.
- F. Protective Device: A device that senses when an abnormal current flow exists and then removes the affected portion from the system.
- G. SCCR: Short-circuit current rating.
- H. Service: The conductors and equipment for delivering electric energy from the serving utility to the wiring system of the premises served.
- I. Single-Line Diagram: See "One-Line Diagram."

**1.04 ACTION SUBMITTALS**

- A. Product Data: For computer software program to be used for studies.



- B. Study Submittals: Submit the following submittals after the approval of system protective devices submittals. Submittals shall be in digital form:
1. Arc-flash study input data, including completed computer program input data sheets.
  2. Arc-flash study report; signed, dated, and sealed by Power Systems Analysis Specialist.
  3. Submit study report for action prior to receiving final approval of distribution equipment submittals. If formal completion of studies will cause delay in equipment manufacturing, obtain approval from Architect for preliminary submittal of sufficient study data to ensure that selection of devices and associated characteristics is satisfactory.

#### **1.05 INFORMATIONAL SUBMITTALS**

- A. Qualification Data:
1. For Power Systems Analysis Software Developer.
  2. For Power System Analysis Specialist.
  3. For Field Adjusting Agency.
- B. Product Certificates: For arc-flash hazard analysis software, certifying compliance with IEEE 1584 and NFPA 70E.

#### **1.06 CLOSEOUT SUBMITTALS**

- A. Operation and Maintenance Data:
1. Provide maintenance procedures in equipment manuals according to requirements in NFPA 70E.

#### **1.07 QUALITY ASSURANCE**

- A. Study shall be performed using commercially developed and distributed software designed specifically for power system analysis.
- B. Software algorithms shall comply with requirements of standards and guides specified in this Section.
- C. Manual calculations are unacceptable.
- D. Power System Analysis Software Qualifications: An entity that owns and markets computer software used for studies, having performed successful studies of similar magnitude on electrical distribution systems using similar devices.
1. Computer program shall be designed to perform arc-flash analysis or have a function, component, or add-on module designed to perform arc-flash analysis.
  2. Computer program shall be developed under the charge of a licensed professional engineer who holds IEEE Computer Society's Certified Software Development Professional certification.
- E. Power Systems Analysis Specialist Qualifications: Professional engineer in charge of performing the arc-flash study, analyzing the arc flash, and documenting recommendations, licensed in the

state where Project is located. All elements of the study shall be performed under the direct supervision and control of this professional engineer.

- F. Arc-Flash Study Certification: Arc-Flash Study Report shall be signed and sealed by Power Systems Analysis Specialist.
- G. Field Adjusting Agency Qualifications:
  - 1. Employer of a NETA ETT-Certified Technician Level III or NICET Electrical Power Testing Level III certification responsible for all field adjusting of the Work.
  - 2. A member company of NETA.
  - 3. Acceptable to authorities having jurisdiction.

## **PART 2 - PRODUCTS**

### **2.01 COMPUTER SOFTWARE DEVELOPERS**

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. EasyPower, LLC (formerly ESA Inc.).
  - 2. Power Analytics, Corporation.
  - 3. SKM Systems Analysis, Inc.
  - 4. Or approved equal.
- B. Comply with IEEE 1584 and NFPA 70E.
- C. Analytical features of device coordination study computer software program shall have the capability to calculate "mandatory," "very desirable," and "desirable" features as listed in IEEE 399.

### **2.02 ARC-FLASH STUDY REPORT CONTENT**

- A. Executive summary of study findings.
- B. Study descriptions, purpose, basis, and scope. Include case descriptions, definition of terms, and guide for interpretation of results.
- C. One-line diagram, showing the following:
  - 1. Protective device designations and ampere ratings.
  - 2. Conductor types, sizes, and lengths.
  - 3. Transformer kilovolt ampere (kVA) and voltage ratings, including derating factors and environmental conditions.
  - 4. Motor and generator designations and kVA ratings.
  - 5. Switchgear, switchboard, motor-control center, panelboard designations, and ratings.
- D. Study Input Data: As described in "Power System Data" Article.

- E. Short-Circuit Study Output Data: As specified in "Short-Circuit Study Output Reports" Paragraph in "Short-Circuit Study Report Contents" Article in Section 260573.13 "Short-Circuit Studies."
- F. Protective Device Coordination Study Report Contents: As specified in "Coordination Study Report Contents" Article in Section 260573.16 "Coordination Studies."
- G. Arc-Flash Study Output Reports:
  - 1. Interrupting Duty Report: Three-phase and unbalanced fault calculations, showing the following for each equipment location included in the report:
    - a. Voltage.
    - b. Calculated symmetrical fault-current magnitude and angle.
    - c. Fault-point X/R ratio.
    - d. No AC Decrement (NACD) ratio.
    - e. Equivalent impedance.
    - f. Multiplying factors for 2-, 3-, 5-, and 8-cycle circuit breakers rated on a symmetrical basis.
    - g. Multiplying factors for 2-, 3-, 5-, and 8-cycle circuit breakers rated on a total basis.
- H. Incident Energy and Flash Protection Boundary Calculations:
  - 1. Arcing fault magnitude.
  - 2. Protective device clearing time.
  - 3. Duration of arc.
  - 4. Arc-flash boundary.
  - 5. Restricted approach boundary.
  - 6. Limited approach boundary.
  - 7. Working distance.
  - 8. Incident energy.
  - 9. Hazard risk category.
  - 10. Recommendations for arc-flash energy reduction.
- I. Fault study input data, case descriptions, and fault-current calculations including a definition of terms and guide for interpretation of computer printout.

### **2.03 ARC-FLASH WARNING LABELS**

- A. Comply with requirements in Section 260553 "Identification for Electrical Systems" for self-adhesive equipment labels. Produce a 3.5-by-5-inch (76-by-127-mm) self-adhesive equipment label for each work location included in the analysis.
- B. Label shall have an orange header with the wording, "WARNING, ARC-FLASH HAZARD," and shall include the following information taken directly from the arc-flash hazard analysis:
  - 1. Location designation.
  - 2. Nominal voltage.
  - 3. Protection boundaries.
    - a. Arc-flash boundary.

- b. Restricted approach boundary.
    - c. Limited approach boundary.
  - 4. Arc flash PPE category.
  - 5. Required minimum arc rating of PPE in Cal/cm squared.
  - 6. Available incident energy.
  - 7. Working distance.
  - 8. Engineering report number, revision number, and issue date.
- C. Labels shall be machine printed, with no field-applied markings.

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION**

- A. Examine Project overcurrent protective device submittals. Proceed with arc-flash study only after relevant equipment submittals have been assembled. Overcurrent protective devices that have not been submitted and approved prior to arc-flash study may not be used in study.

### **3.02 ARC-FLASH HAZARD ANALYSIS**

- A. Comply with NFPA 70E and its Annex D for hazard analysis study.
- B. Preparatory Studies: Perform the Short-Circuit and Protective Device Coordination studies prior to starting the Arc-Flash Hazard Analysis.
  - 1. Short-Circuit Study Output: As specified in "Short-Circuit Study Output Reports" Paragraph in "Short-Circuit Study Report Contents" Article in Section 260573.13 "Short-Circuit Studies."
  - 2. Coordination Study Report Contents: As specified in "Coordination Study Report Contents" Article in Section 260573.16 "Coordination Studies."
- C. Calculate maximum and minimum contributions of fault-current size.
  - 1. Maximum calculation shall assume a maximum contribution from the utility and shall assume motors to be operating under full-load conditions.
  - 2. Calculate arc-flash energy at 85 percent of maximum short-circuit current according to IEEE 1584 recommendations.
  - 3. Calculate arc-flash energy at 38 percent of maximum short-circuit current according to NFPA 70E recommendations.
  - 4. Calculate arc-flash energy with the utility contribution at a minimum and assume no motor contribution.
- D. Calculate the arc-flash protection boundary and incident energy at locations in electrical distribution system where personnel could perform work on energized parts.
- E. Include medium- and low-voltage equipment locations, except equipment rated 240 V ac or less fed from transformers less than 125 kVA.
- F. Calculate the limited, restricted, and prohibited approach boundaries for each location.

- G. Incident energy calculations shall consider the accumulation of energy over time when performing arc-flash calculations on buses with multiple sources. Iterative calculations shall take into account the changing current contributions, as the sources are interrupted or decremented with time. Fault contribution from motors and generators shall be decremented as follows:
1. Fault contribution from induction motors shall not be considered beyond three to five cycles.
  2. Fault contribution from synchronous motors and generators shall be decayed to match the actual decrement of each as closely as possible (for example, contributions from permanent magnet generators will typically decay from 10 per unit to three per unit after 10 cycles).
- H. Arc-flash energy shall generally be reported for the maximum of line or load side of a circuit breaker. However, arc-flash computation shall be performed and reported for both line and load side of a circuit breaker as follows:
1. When the circuit breaker is in a separate enclosure.
  2. When the line terminals of the circuit breaker are separate from the work location.
- I. Base arc-flash calculations on actual overcurrent protective device clearing time. Cap maximum clearing time at two seconds based on IEEE 1584, Section B.1.2.

### **3.03 POWER SYSTEM DATA**

- A. Obtain all data necessary for conduct of the arc-flash hazard analysis.
1. Verify completeness of data supplied on one-line diagram on Drawings. Call discrepancies to Architect's attention.
  2. For new equipment, use characteristics from approved submittals under provisions of action submittals and information submittals for this Project.
  3. For existing equipment, whether or not relocated, obtain required electrical distribution system data by field investigation and surveys conducted by qualified technicians and engineers.
- B. Electrical Survey Data: Gather and tabulate the following input data to support study. Comply with recommendations in IEEE 1584 and NFPA 70E as to the amount of detail that is required to be acquired in the field. Field data gathering shall be under the direct supervision and control of the engineer in charge of performing the study, and shall be by the engineer or its representative who holds NETA ETT-Certified Technician Level III or NICET Electrical Power Testing Level III certification. Data include, but are not limited to, the following:
1. Product Data for overcurrent protective devices specified in other Sections and involved in overcurrent protective device coordination studies. Use equipment designation tags that are consistent with electrical distribution system diagrams, overcurrent protective device submittals, input and output data, and recommended device settings.
  2. Obtain electrical power utility impedance or available short circuit current at the service.
  3. Power sources and ties.
  4. Short-circuit current at each system bus (three phase and line to ground).
  5. Full-load current of all loads.
  6. Voltage level at each bus.

7. For transformers, include kVA, primary and secondary voltages, connection type, impedance, X/R ratio, taps measured in percent, and phase shift.
8. For reactors, provide manufacturer and model designation, voltage rating and impedance.
9. For circuit breakers and fuses, provide manufacturer and model designation. List type of breaker, type of trip and available range of settings, SCCR, current rating, and breaker settings.
10. Generator short-circuit current contribution data, including short-circuit reactance, rated kVA, rated voltage, and X/R ratio.
11. For relays, provide manufacturer and model designation, current transformer ratios, potential transformer ratios, and relay settings.
12. Busway manufacturer and model designation, current rating, impedance, lengths, size, and conductor material.
13. Motor horsepower and NEMA MG 1 code letter designation.
14. Low-voltage conductor sizes, lengths, number, conductor material and conduit material (magnetic or nonmagnetic).
15. Medium-voltage conductor sizes, lengths, conductor material, conductor construction and metallic shield performance parameters, and conduit material (magnetic or nonmagnetic).

### **3.04 LABELING**

- A. Apply one arc-flash label on the front cover of each section of the equipment for each equipment included in the study. Base arc-flash label data on highest values calculated at each location.
- B. Each piece of equipment listed below shall have an arc-flash label applied to it:
  1. Low voltage transformers. Exclude transformers with high voltage side 240 V or less and less than 125 kVA.
  2. Panelboard and safety switch over 250 V.
  3. Applicable panelboard and safety switch under 250 V.
  4. Control panel.
  5. Pedestal.
- C. Note on record Drawings the location of equipment where the personnel could be exposed to arc-flash hazard during their work.
  1. Indicate arc-flash energy.
  2. Indicate protection level required.

### **3.05 APPLICATION OF WARNING LABELS**

- A. Install arc-flash warning labels under the direct supervision and control of Power System Analysis Specialist.

### **3.06 DEMONSTRATION**

- A. Engage Power Systems Analysis Specialist to train Owner's maintenance personnel in potential arc-flash hazards associated with working on energized equipment and the significance of arc-flash warning labels.

END OF SECTION 260573.19

**SECTION 26 56 13**  
**LIGHTING POLES AND STANDARDS**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

**1.2 SUMMARY**

- A. Section Includes:
  - 1. Poles and accessories for support of luminaires.

**1.3 DEFINITIONS**

- A. EPA: Equivalent projected area.
- B. Luminaire: Complete lighting fixture.
- C. Pole: Luminaire-supporting structure.
- D. Standard: See "Pole."

**1.4 ACTION SUBMITTALS**

- A. Product Data: For each pole, accessory, and luminaire-supporting, arranged as indicated.
  - 1. Include data on construction details, profiles, EPA, cable entrances, materials, dimensions, weight, rated design load, and ultimate strength of individual components.
  - 2. Include finishes for lighting poles and luminaire-supporting devices.
  - 3. Anchor bolts and base plate covers.
  - 4. Manufactured pole foundations.
- B. Shop Drawings:
  - 1. Include plans, elevations, sections, and mounting and attachment details.
  - 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
  - 3. Detail fabrication and assembly of poles and pole accessories.
  - 4. Foundation construction details, including material descriptions, dimensions, anchor bolts, support devices, and calculations, signed and sealed by a professional engineer licensed in the state of installation.
  - 5. Anchor bolt templates keyed to specific poles and certified by manufacturer.



6. Method and procedure of pole installation. Include manufacturer's written installations.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Pole and Support Component Certificates: Signed by manufacturers of poles, certifying that products are designed for indicated load requirements according to AASHTO LTS-6-M and that load imposed by luminaire and attachments has been included in design. The certification shall be based on design calculations signed and sealed by a professional engineer.
- B. Qualification Data: For Installer and testing agency.
- C. Seismic Qualification Certificates: For luminaire, accessories, and components, from manufacturer.
  1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
  2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
  3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.
- D. Material Test Reports:
  1. For each pole, by a qualified testing agency.
- E. Source quality-control reports.
- F. Sample Warranty: Manufacturer's standard warranty.
- G. Soil test reports

#### 1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For poles to include in operation and maintenance manuals.
  1. "Operation and Maintenance Data," shall include pole inspection and repair procedures.

#### 1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Pole repair materials.

#### 1.8 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Qualified according to ASTM C 1093 for foundation testing.

## 1.9 DELIVERY, STORAGE, AND HANDLING

- A. Store poles on decay-resistant skids at least 12 inches (300 mm) above grade and vegetation. Support poles to prevent distortion and arrange to provide free air circulation.
- B. Retain factory-applied pole wrappings on metal poles until right before pole installation. Handle poles with web fabric straps.

## 1.10 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of pole(s) that fail in materials or workmanship; that corrode; or that fade, stain, perforate, erode, or chalk due to effects of weather or solar radiation within a specified warranty period. Manufacturer may exclude lightning damage, hail damage, vandalism, abuse, or unauthorized repairs from special warranty period.
  - 1. Warranty Period: Five years from date of Substantial Completion.
  - 2. Warranty Period for Corrosion Resistance: Five years from date of Substantial Completion.
  - 3. Warranty Period for Color Retention: Five years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Seismic Performance: Foundation and pole shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
  - 1. The term "withstand" means "the system will remain in place without separation of any parts when subjected to the seismic forces specified."
  - 2. Component Importance Factor: 1.5.
- B. Structural Characteristics: Comply with AASHTO LTS-6-M.
- C. Dead Load: Weight of luminaire and its horizontal and vertical supports, lowering devices, and supporting structure, applied according to AASHTO LTS-6-M.
- D. Live Load: Single load of 500 lbf (2200 N) distributed according to AASHTO LTS-6-M.
- E. Wind Load: Pressure of wind on pole and luminaire, calculated and applied according to AASHTO LTS-6-M.
  - 1. Basic wind speed for calculating wind load for poles 50 feet (15 m) high or less is 90 mph (40 m/s).
    - a. Wind Importance Factor: 1.0.
    - b. Minimum Design Life: 25 years.
    - c. Velocity Conversion Factor: 1.0.

- F. Strength Analysis: For each pole, multiply the actual EPA of luminaires and brackets by a factor of 1.1 to obtain the EPA to be used in pole selection strength analysis.
- G. Luminaire Attachment Provisions: Comply with luminaire manufacturers' mounting requirements. Use stainless-steel fasteners and mounting bolts unless otherwise indicated.

## 2.1 STEEL POLES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  1. Hubbell Incorporated.
  2. Lithonia Lighting; Acuity Brands Lighting, Inc.
  3. Lumca Lighting.
- B. Poles: Comply with ASTM A 500/A 500M, Grade B carbon steel with a minimum yield of 46,000 psig; one-piece construction up to 40 feet in height with access handhole in pole wall.
  1. Shape: Square, and straight, flat top.
  2. Mounting Provisions: Butt flange for bolted mounting on foundation or breakaway support.
- C. Brackets for Luminaires: Detachable, cantilever, without underbrace.
  1. Adaptor fitting welded to pole, allowing the bracket to be bolted to the pole-mounted adapter, then bolted together with stainless-steel bolts.
  2. Cross Section: Tapered oval, with straight tubular end section to accommodate luminaire. Match pole material and finish.
- D. Grounding and Bonding Lugs: Welded 1/2-inch threaded lug, complying with requirements in Section 26 05 26 "Grounding and Bonding for Electrical Systems," listed for attaching grounding and bonding conductors of type and size indicated, and accessible through handhole.
- E. Fasteners: Stainless steel, size and type as determined by manufacturer. Corrosion-resistant items compatible with support components.
  1. Materials: Compatible with poles and standards as well as to substrates to which poles and standards are fastened and shall not cause galvanic action at contact points.
  2. Anchor Bolts, Leveling Nuts, Bolt Caps, and Washers: Hot-dip galvanized after fabrication unless otherwise indicated.
- F. Handhole: Oval shaped, with minimum clear opening of 2-1/2 by 5 inches (65 by 130 mm), with cover secured by stainless-steel captive screws.
- G. Prime-Coat Finish: Manufacturer's standard prime-coat finish ready for field painting.
- H. Powder-Coat Finish: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" recommendations for applying and designating finishes.
  1. Surface Preparation: Clean surfaces to comply with SSPC-SP 1 to remove dirt, oil, grease, and other contaminants that could impair powder coat bond. Grind welds and

polish surfaces to a smooth, even finish. Remove mill scale and rust, if present, from uncoated steel, according to SSPC-SP 5/NACE No. 1 or SSPC-SP 8.

2. Powder coat shall comply with AAMA 2604.
  - a. Electrostatic applied powder coating; single application with a minimum 2.5- to 3.5-mils (64- to 89-um) dry film thickness; cured according to manufacturer's instructions. Coat interior and exterior of pole for equal corrosion protection.
  - b. Color: As selected by Architect from manufacturer's full range.

## 2.2 POLE ACCESSORIES

A. Decorative accessories, supplied by decorative pole manufacturer, include the following:

1. Fixture Cross Arms: Aluminum, for mounting luminaire.
2. 7-Pin Twist-Lock Receptacle.

B. Brackets for Luminaires: Detachable, cantilever, without underbrace.

1. Adaptor fitting welded to pole, allowing the bracket to be bolted to the pole-mounted adaptor, then bolted together with stainless-steel bolts.
2. Cross Section: Tapered oval, with straight tubular end section to accommodate luminaire. Match pole material and finish.

C. Fasteners: Size and type as determined by manufacturer. Corrosion-resistant items compatible with support components.

1. Materials: Compatible with poles and standards as well as the substrates to which poles and standards are fastened and shall not cause galvanic action at contact points.
2. Anchor Bolts, Leveling Nuts, Bolt Caps, and Washers: Hot-dip galvanized after fabrication unless otherwise indicated.

D. Grounding and Bonding Lugs: Welded 1/2-inch (13-mm) threaded lug, complying with requirements in Section 260526 "Grounding and Bonding for Electrical Systems," listed for attaching grounding and bonding conductors of type and size indicated, and accessible through handhole.

## 2.3 GENERAL FINISH REQUIREMENTS

A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

B. Appearance of Finished Work: Noticeable variations in same piece are unacceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine poles, luminaire-mounting devices, lowering devices, and pole accessories before installation. Components that are scratched, dented, marred, wet, moisture damaged, or visibly damaged are considered defective.
- C. Examine roughing-in for foundation and conduit to verify actual locations of installation.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 POLE FOUNDATION

- A. Concrete Pole Foundations: Cast in place, with anchor bolts to match pole-base flange. Structural steel complying with ASTM A36/A36M and hot-dip galvanized according to ASTM A123/A123M; and with top-plate and mounting bolts to match pole-base flange and strength require to support pole, luminaire and accessories.
- B. Anchor Bolts: Install plumb using manufacturer-supplied steel template, uniformity spaced.

### 3.3 POLE INSTALLATION

- A. Alignment: Align pole foundations and poles for optimum directional alignment of luminaires and their mounting provisions on pole.
- B. Clearances: Maintain the following minimum horizontal distances of poles from surface and underground features unless otherwise indicated on drawing.
  - 1. Fire Hydrants and Water Piping: 60 inches (1520 mm).
  - 2. Water, Gas, Electric, Communications, and Sewer Lines: 10 feet (3 m).
  - 3. Trees: 15 feet (5 m) from tree trunk.
- C. Raise and set pole using web fabric slings (not chain or cable) at locations indicated by manufacturer.

### 3.4 GROUNDING

- A. Ground Metal Poles and Support Structures: Comply with requirements in Section 260526 "Grounding and Bonding for Electrical Systems."
  - 1. Install grounding electrode for each pole unless otherwise indicated.
  - 2. Install grounding conductor pigtail in the base for connecting luminaire to grounding system.

### 3.5 IDENTIFICATION

- A. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

### 3.6 FIELD QUALITY CONTROL

- A. Special Inspections: Engage a qualified special inspector to perform the following special inspections:
  - 1. Inspect poles for nicks, mars, dents, scratches, and other damage.
  - 2. System function tests.

END OF SECTION 265613

**SECTION 26 56 19**  
**LED EXTERIOR LIGHTING**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

**1.2 SUMMARY**

A. Section Includes:

- 1. Exterior solid-state luminaires that are designed for and exclusively use LED lamp technology.
- 2. Luminaire supports.

B. Related Requirements:

- 1. Section 265613 "Lighting Poles and Standards" for poles and standards used to support exterior lighting equipment.

**1.3 DEFINITIONS**

- A. CCT: Correlated color temperature.
- B. CRI: Color rendering index.
- C. Fixture: See "Luminaire."
- D. IP: International Protection or Ingress Protection Rating.
- E. Lumen: Measured output of lamp and luminaire, or both.
- F. Luminaire: Complete lighting unit, including lamp, reflector, and housing.

**1.4 ACTION SUBMITTALS**

A. Product Data: For each type of luminaire.

- 1. Arrange in order of luminaire designation.
- 2. Include data on features, accessories, and finishes.
- 3. Include physical description and dimensions of luminaire.
- 4. Lamps, include life, output (lumens, CCT, and CRI), and energy-efficiency data.
- 5. Wiring diagrams for power, control, and signal wiring.

6. Means of attaching luminaires to supports and indication that the attachment is suitable for components involved.

B. Shop Drawings: For nonstandard or custom luminaires.

1. Include plans, elevations, sections, and mounting and attachment details.
2. Include details of luminaire assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
3. Include diagrams for power, signal, and control wiring.

C. Product Schedule: For luminaires and lamps. Use same designations indicated on Drawings.

D. Delegated-Design Submittal: For luminaire supports.

1. Include design calculations for luminaire supports.

## 1.5 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:

1. Luminaires.
2. Structural members to which equipment and luminaires will be attached.
3. Underground utilities and structures.
4. Above-grade utilities and structures.
5. Existing above-grade utilities and structures.

B. Qualification Data: For testing laboratory providing photometric data for luminaires.

C. Seismic Qualification Certificates: For luminaires, accessories, and components, from manufacturer.

1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

D. Product Certificates: For each type of the following:

1. Luminaire.

E. Product Test Reports: For each luminaire, for tests performed by manufacturer.

F. Source quality-control reports.

G. Sample warranty.



## 1.6 CLOSEOUT SUBMITTALS

## 1.7 QUALITY ASSURANCE

- A. Luminaire Photometric Data Testing Laboratory Qualifications: Luminaire manufacturers' laboratory that is accredited under the NVLAP for Energy Efficient Lighting Products.
- B. Provide luminaires from a single manufacturer for each luminaire type.
- C. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.
- D. Mockups: For exterior luminaires, complete with power and control connections.
  - 1. Obtain Resident Engineer's approval of luminaires in mockups before starting installations.
  - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Resident Engineer specifically approves such deviations in writing.
  - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

## 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Protect finishes of exposed surfaces by applying a strippable, temporary protective covering prior to shipping.

## 1.9 FIELD CONDITIONS

- A. Verify existing and proposed utility structures prior to the start of work associated with luminaire installation.
- B. Mark locations of exterior luminaires for approval by Resident Engineer prior to the start of luminaire installation.

## 1.10 WARRANTY

- A. Warranty: Manufacturer and Installer agree to repair or replace components of luminaires that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Structural failures, including luminaire support components.
    - b. Faulty operation of luminaires and accessories.
    - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
  - 2. Warranty Period: 5 year(s) from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Seismic Performance: Luminaires shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
- B. Seismic Performance: Luminaires and lamps shall be labeled vibration and shock resistant.
  - 1. The term "withstand" means "the luminaire will remain in place without separation of any parts when subjected to the seismic forces specified."

### 2.2 LUMINAIRE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. UL Compliance: Comply with UL 1598 and listed for wet location.
- C. Lamp base complying with ANSI C81.61 or IEC 60061-1.
- D. CRI of minimum 70. CCT of 4000 K.
- E. L70 lamp life of 70000 hours.
- F. Lamps dimmable from 100 percent to 0 percent of maximum light output.
- G. Internal driver.
- H. Nominal Operating Voltage: 277 Vac.
- I. In-line Fusing: On the primary for each luminaire.
- J. Lamp Rating: Lamp marked for outdoor use.
- K. Source Limitations: For luminaires, obtain each color, grade, finish, type, and variety of luminaire from single source with resources to provide products of consistent quality in appearance and physical properties.

### 2.3 LUMINAIRE TYPES

- A. Area and Site:
  - 1. Luminaire Shape: Curved and Straight.
  - 2. Mounting: Pole.
  - 3. Luminaire-Mounting Height: see schedule and detail drawings.
  - 4. Distribution: As indicated on the drawings.
  - 5. Diffusers and Globes: Heat and impact resistant tempered flat glass.
  - 6. Housings:

- a. Aluminum housing and heat sink.

## 2.4 FINISHES

- A. Luminaire Finish: Manufacturer's standard paint applied to factory-assembled and -tested luminaire before shipping. Where indicated, match finish process and color of pole or support materials.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine roughing-in for luminaire electrical conduit to verify actual locations of conduit connections before luminaire installation.
- C. Examine pedestrian bridge and pole base bridge overhang for suitable conditions where luminaires will be installed.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 GENERAL INSTALLATION REQUIREMENTS

- A. Comply with NECA 1.
- B. Use fastening methods and materials selected to resist seismic forces defined for the application and approved by manufacturer, and coordinated with pedestrian bridge fabricator.
- C. Install lamps in each luminaire.
- D. Fasten luminaire to structural support.
- E. Supports:
  - 1. Sized and rated for luminaire weight.
  - 2. Able to maintain luminaire position after cleaning and relamping.
  - 3. Support luminaires without causing deflection of finished surface.
  - 4. Luminaire-mounting devices shall be capable of supporting a horizontal force of 100 percent of luminaire weight and a vertical force of 400 percent of luminaire weight.
- F. Wiring Method: Install cables in raceways. Conceal raceways and cables.
- G. Install luminaires level, plumb, and square with finished grade unless otherwise indicated.
- H. Coordinate layout and installation of luminaires with other construction.

- I. Adjust luminaires that require field adjustment or aiming. Include adjustment of photoelectric device to prevent false operation of relay by artificial light sources, favoring a north orientation.
- J. Comply with requirements in Section 260519 "Low-Voltage Electrical Power Conductors and Cables" for wiring connections and wiring methods.

### 3.3 IDENTIFICATION

- A. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

### 3.4 FIELD QUALITY CONTROL

- A. Inspect each installed luminaire for damage. Replace damaged luminaires and components.
- B. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
  - 1. Operational Test: After installing luminaires, switches, and accessories, and after electrical circuitry has been energized, test units to confirm proper operation.
  - 2. Verify operation of photoelectric controls.
- C. Illumination Tests:
  - 1. Measure light intensities at night. Use photometers with calibration referenced to NIST standards. Comply with the following IES testing guide(s):
    - a. IES LM-5.
    - b. IES LM-50.
    - c. IES LM-52.
    - d. IES LM-64.
    - e. IES LM-72.
  - 2. Operational Test: After installing luminaires, switches, and accessories, and after electrical circuitry has been energized, test units to confirm proper operation.
- D. Luminaire will be considered defective if it does not pass tests and inspections.
- E. Prepare a written report of tests, inspections, observations, and verifications indicating and interpreting results. If adjustments are made to lighting system, retest to demonstrate compliance with standards.

### 3.5 ADJUSTING

- A. Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting the direction of aim of luminaires to suit occupied conditions. Make up to two visits to Project during other-than-normal hours for this purpose. Some of this work may be required during hours of darkness.

1. During adjustment visits, inspect all luminaires. Replace lamps or luminaires that are defective.
2. Parts and supplies shall be manufacturer's authorized replacement parts and supplies.
3. Adjust the aim of luminaires in the presence of the Resident Engineer.

END OF SECTION 265619

**SECTION 28 20 00**  
**VIDEO SURVEILLANCE**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

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

**1.2 SUMMARY**

- A. Section includes a video surveillance system consisting of cameras, digital video recorder, data transmission wiring, and a control station with its associated equipment.

**1.3 DEFINITIONS**

- A. AGC: Automatic gain control.
- B. BNC: Bayonet Neill-Concelman - type of connector.
- C. B/W: Black and white.
- D. CCD: Charge-coupled device.
- E. FTP: File transfer protocol.
- F. IP: Internet protocol.
- G. LAN: Local area network.
- H. MPEG: Moving picture experts group.
- I. NTSC: National Television System Committee.
- J. PC: Personal computer.
- K. PTZ: Pan-tilt-zoom.
- L. RAID: Redundant array of independent disks.
- M. TCP: Transmission control protocol - connects hosts on the Internet.
- N. UPS: Uninterruptible power supply.
- O. WAN: Wide area network.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include dimensions and data on features, performance, electrical characteristics, ratings, and finishes.
- B. Shop Drawings: For video surveillance. Include plans, elevations, sections, details, and attachments to other work.
  - 1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
  - 2. Functional Block Diagram: Show single-line interconnections between components for signal transmission and control. Show cable types and sizes.
  - 3. Dimensioned plan and elevations of equipment racks, control panels, and consoles. Show access and workspace requirements.
  - 4. UPS: Sizing calculations.
- C. Design Data: Include an equipment list consisting of every piece of equipment by model number, manufacturer, serial number, location, and date of original installation.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For cameras, power supplies, infrared illuminators, monitors, videotape recorders, digital video recorders, video switches, and control-station components to include in emergency, operation, and maintenance manuals.

#### 1.6 PROJECT CONDITIONS

- A. Environmental Conditions: Capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:
  - 1. Control Station: Rated for continuous operation in ambient temperatures of 60 to 85 deg F (16 to 29 deg C) and a relative humidity of 20 to 80 percent, noncondensing.
  - 2. Interior, Controlled Environment: System components, except central-station control unit, installed in temperature-controlled interior environments shall be rated for continuous operation in ambient temperatures of 36 to 122 deg F (2 to 50 deg C) dry bulb and 20 to 90 percent relative humidity, noncondensing. Use NEMA 250, Type 1 enclosures.
  - 3. Exterior Environment: System components installed in locations exposed to weather shall be rated for continuous operation in ambient temperatures of minus 30 to plus 122 deg F (minus 34 to plus 50 deg C) dry bulb and 20 to 90 percent relative humidity, condensing. Rate for continuous operation when exposed to rain as specified in NEMA 250, winds up to 85 mph (137 km/h) and snow cover up to 24 inches (610 mm) thick. Use NEMA 250, Type 3R enclosures.
  - 4. Hazardous Environment: System components located in areas where fire or explosion hazards may exist because of flammable gases or vapors, flammable liquids, combustible dust, or ignitable fibers shall be rated, listed, and installed according to NFPA 70.
  - 5. Security Environment: Camera housing for use in high-risk areas where surveillance equipment may be subject to physical violence.

## 1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of cameras, equipment related to camera operation, and control-station equipment that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Three years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 SYSTEM REQUIREMENTS

- A. Video-signal format shall comply with NTSC standard, composite interlaced video. Composite video-signal termination shall be 75 ohms.
- B. Surge Protection: Protect components from voltage surges originating external to equipment housing and entering through power, communication, signal, control, or sensing leads. Include surge protection for external wiring of each conductor's entry connection to components.
  - 1. Minimum Protection for Power Connections 120 V and More: Auxiliary panel suppressors complying with requirements in Section 264313 "Surge Protection for Low-Voltage Electrical Power Circuits."
  - 2. Minimum Protection for Communication, Signal, Control, and Low-Voltage Power Connections: Comply with requirements in Section 264313 "Surge Protection for Low-Voltage Electrical Power Circuits" as recommended by manufacturer for type of line being protected.
- C. Tamper Protection: Tamper switches on enclosures, control units, pull boxes, junction boxes, cabinets, and other system components shall initiate a tamper-alarm signal when unit is opened or partially disassembled. Control-station, control-unit alarm display shall identify tamper alarms and indicate locations.

### 2.2 PERFORMANCE REQUIREMENTS

- A. Seismic Performance: Video surveillance system shall withstand the effects of earthquake motions determined according to ASCE/SEI 7
  - 1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified and "the unit will be fully operational after the seismic event."
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. Comply with NECA 1.
- D. Comply with NFPA 70.



## 2.3 STANDARD CAMERAS

- A. Armix Pro Series – DOME CAM, 5MP IP, POE, 2.8mm
- B. Armix Pro Series – BULLET CAM, 5MP IP POE VARIFOCAL LENS
- C. Or equal.
- D. Color Camera:
  - 1. Comply with UL 639.
  - 2. Pickup Device: CCD interline transfer, 380,000 771(H) by 492(V) pixels.
  - 3. Horizontal Resolution: 480 lines.
  - 4. Signal-to-Noise Ratio: Not less than 50 dB, with camera AGC off.
  - 5. With AGC, manually selectable on or off.
  - 6. Sensitivity: Camera shall provide usable images in low-light conditions, delivering an image at a scene illumination of 0.002 lux at F1.6, with camera AGC off.
  - 7. Sensitivity: Camera shall deliver 1-V peak-to-peak video signal at the minimum specified light level. Illumination for the test shall be with lamps rated at approximately 2200-K color temperature, and with camera AGC off.
  - 8. Manually selectable modes for backlight compensation or normal lighting.
  - 9. Scanning Synchronization: Determined by external synch over the coaxial cable. Camera shall revert to internally generated synchronization on loss of external synch signal.
  - 10. White Balance: Auto-tracing white balance, with manually settable fixed balance option.
  - 11. Motion Detector: Built-in digital.
- E. Automatic Color Dome Camera: Assembled and tested as a manufactured unit, containing dome assembly, color camera, motorized pan and tilt, zoom lens, and receiver/driver.
  - 1. Comply with UL 639.
  - 2. Pickup Device: CCD interline transfer, 380,000 [768(H) by 494(V)] pixels.
  - 3. Horizontal Resolution: 480 lines.
  - 4. Signal-to-Noise Ratio: Not less than 50 dB, with camera AGC off.
  - 5. With AGC, manually selectable on or off.
  - 6. Sensitivity: Camera shall provide usable images in low-light conditions, delivering an image at a scene illumination of 0.005 lux at F1.6, with camera AGC off.
  - 7. Sensitivity: Camera shall deliver 1-V peak-to-peak video signal at the minimum specified light level. Illumination for the test shall be with lamps rated at approximately 2200-K color temperature, and with camera AGC off.
  - 8. Manually selectable modes for backlight compensation or normal lighting.
  - 9. Pan and Tilt: Direct-drive motor, 360-degree rotation angle, and 180-degree tilt angle. Pan-and-tilt speed shall be controlled by operator. Movement from preset positions shall be not less than 300 degrees per second.
  - 10. Preset Positioning: Eight user-definable scenes, each allowing 16-character titles. Controls shall include the following:
    - a. In "sequence mode," camera shall continuously sequence through preset positions, with dwell time and sequencing under operator control.
    - b. Motion detection shall be available at each camera position.
    - c. Up to four preset positions may be selected to be activated by an alarm. Each of the alarm positions may be programmed to output a response signal.

11. Scanning Synchronization: Determined by external synch over the coaxial cable. Camera shall revert to internally generated synchronization on loss of external synch signal.
12. White Balance: Auto-tracing white balance, with manually settable fixed balance option.
13. Motion Detector: Built-in digital.
14. Dome shall support multiplexed control communications using coaxial cable recommended by manufacturer.

## 2.4 LENSES

- A. Armix Pro Series – DOME CAM, 5MP IP, POE, 2.8mm
- B. Armix Pro Series – BULLET CAM, 5MP IP POE VARIFOCAL LENS
- C. Or equal.
- D. Description: Optical-quality coated lens, designed specifically for video-surveillance applications and matched to specified camera. Provide color-corrected lenses with color cameras.
  1. Auto-Iris Lens: Electrically controlled iris with circuit set to maintain a constant video level in varying lighting conditions.
  2. Fixed Lens: With calibrated focus ring.
  3. Zoom Lens: Motorized, remote-controlled unit, rated as "quiet operating." Features include the following:
    - a. Electrical Leads: Filtered to minimize video signal interference.
    - b. Motor Speed: Variable.
    - c. Lens shall be available with preset positioning capability to recall the position of specific scenes.

## 2.5 POWER SUPPLIES

- A. Low-voltage power supplies matched for voltage and current requirements of cameras and accessories, and of type as recommended by manufacturer of camera, infrared illuminator, and lens.
  1. Enclosure: NEMA 250, Type 3.

## 2.6 CAMERA-SUPPORTING EQUIPMENT

- A. Armix Pro Series – DOME CAM, 5MP IP, POE, 2.8mm
- B. Armix Pro Series – BULLET CAM, 5MP IP POE VARIFOCAL LENS
- C. Or equal.
- D. Minimum Load Rating: Rated for load in excess of the total weight supported times a minimum safety factor of two.

- E. Pan Units: Motorized automatic-scanning units arranged to provide remote-controlled manual and automatic camera panning action, and equipped with matching mounting brackets.
  - 1. Scanning Operation: Silent, smooth, and positive.
  - 2. Stops: Adjustable without disassembly, to limit the scanning arc.
  
- F. Pan-and-Tilt Units: Motorized units arranged to provide remote-controlled aiming of cameras with smooth and silent operation, and equipped with matching mounting brackets.
  - 1. Panning Rotation: 0 to 355 degrees, with adjustable stops.
  - 2. Tilt Movement: 90 degrees, plus or minus 5 degrees, with adjustable stops.
  - 3. Speed: 12 degrees per second in both horizontal and vertical planes.
  - 4. Wiring: Factory prewired for camera and zoom lens functions and pan-and-tilt power and control.
  - 5. Built-in encoders or potentiometers for position feedback.
  - 6. Pan-and-tilt unit shall be available with preset positioning capability to recall the position of a specific scene.
  
- G. Mounting Brackets for Fixed Cameras: Type matched to items supported and mounting conditions. Include manual pan-and-tilt adjustment.
  
- H. Protective Housings for Fixed and Movable Cameras: Steel enclosures with internal camera mounting and connecting provisions that are matched to camera/lens combination and mounting and installing arrangement of camera to be housed.
  - 1. Tamper switch on access cover sounds an alarm signal when unit is opened or partially disassembled. Central-control unit shall identify tamper alarms and indicate location in alarm display.
  - 2. Camera Viewing Window: Polycarbonate window, aligned with camera lens.
  - 3. Duplex Receptacle: Internally mounted.
  - 4. Alignment Provisions: Camera mounting shall provide for field aiming of camera and permit removal and reinstallation of camera lens without disturbing camera alignment.
  - 5. Sun shield shall not interfere with normal airflow around the housing.
  - 6. Mounting bracket and hardware for wall or ceiling mounting of the housing. Bracket shall be of same material as the housing; mounting hardware shall be stainless steel.
  - 7. Finish: Housing and mounting bracket shall be factory finished using manufacturer's standard finishing process suitable for the environment.
  - 8. Enclosure Rating: NEMA 3R.

## 2.7 NETWORK VIDEO RECORDERS

- A. Armix Pro Series – NVR, DMS SERIES, 8CH, 200MBPS
  
- B. External storage or internal 250-1, 500-GB hard disk drive.
  - 1. Video and audio recording over TCP/IP network.
  - 2. Video recording of MPEG-2 and MPEG-4 streams.
  - 3. Video recording up to 48 Mbps for internal storage and up to 100 Mbps for external storage.
  - 4. Duplex Operation: Simultaneous recording and playback.

5. Continuous and alarm-based recording.
6. Full-Featured Search Capabilities: Search based on camera, time, or date.
7. Automatic data replenishment to ensure recording even if network is down.
8. Digital certification by watermarking.
9. Internal RAID storage or non-RAID storage of up to 1500 GB.
10. Capable of adding external RAID storage up to 7000 GB for models with no internal storage.
11. Full integration with LAN, Intranet, or Internet through standard Web browser or video management software.
12. Integrated Web server FTP server functionality.
13. Supports up to 16 devices.

## 2.8 IP VIDEO SYSTEMS

### A. Armix Pro Series

### B. Description:

1. System shall provide high-quality delivery and processing of IP-based video, audio, and control data using standard Ethernet-based networks.
2. System shall have seamless integration of all video surveillance and control functions.
3. Graphical user interface software shall manage all IP-based video matrix switching and camera control functions, two-way audio communication, alarm monitoring and control, and recording and archive/retrieval management. IP system shall also be capable of integrating into larger system environments.
4. System design shall include all necessary compression software for high-performance, dual-stream, MPEG-2/MPEG-4 video. Unit shall provide connections for all video cameras, camera PTZ control data, bidirectional audio, discreet sensor inputs, and control system outputs.
5. All camera signals shall be compressed, encoded, and delivered onto the network for processing and control by the IP video-management software.
6. Camera system units shall be ruggedly built and designed for extreme adverse environments, complying with NEMA Type environmental standards.
7. Encoder/decoder combinations shall place video, audio, and data network stream that can be managed from multiple workstations on the user's LAN or WAN.
8. All system interconnect cables, workstation PCs, PTZ joysticks, and network intermediate devices shall be provided for full performance of specified system.

## 2.9 SIGNAL TRANSMISSION COMPONENTS

- A. Cable: Coaxial cable elements have 75-ohm nominal impedance. Comply with requirements in Section 26519 "Low-Voltage Electrical Power Conductors and Cables."
- B. Video Surveillance Coaxial Cable Connectors: BNC type, 75 ohms. Comply with requirements in Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine pathway elements intended for cables. Check raceways and other elements for compliance with space allocations, installation tolerance, hazards to camera installation, and other conditions affecting installation.
- B. Examine roughing-in for LAN, WAN, and IP network before device installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 WIRING

- A. Comply with requirements in Section 270528 "Pathways for Communications Systems."
- B. Wiring Method: Install cables in raceways unless otherwise indicated.
  - 1. Except raceways are not required in accessible indoor ceiling spaces and attics.
  - 2. Except raceways are not required in hollow gypsum board partitions.
  - 3. Conceal raceways and wiring except in unfinished spaces.
- C. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii. Provide and use lacing bars and distribution spools.
- D. Splices, Taps, and Terminations: For power and control wiring, use numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.
- E. Grounding: Provide independent-signal circuit grounding recommended in writing by manufacturer.

### 3.3 VIDEO SURVEILLANCE SYSTEM INSTALLATION

- A. Install cameras and infrared illuminators level and plumb.
- B. Install cameras with 84-inch- (2134-mm-) minimum clear space below cameras and their mountings. Change type of mounting to achieve required clearance.
- C. Set pan unit and pan-and-tilt unit stops to suit final camera position and to obtain the field of view required for camera. Connect all controls and alarms, and adjust.
- D. Install power supplies and other auxiliary components at control stations unless otherwise indicated.

- E. Install tamper switches on components indicated to receive tamper switches, arranged to detect unauthorized entry into system-component enclosures and mounted in self-protected, inconspicuous positions.
- F. Avoid ground loops by making ground connections only at the control station.
  - 1. For 12- and 24-V dc cameras, connect the coaxial cable shields only at the monitor end.
- G. Identify system components, wiring, cabling, and terminals according to Section 270553 "Identification for Communications Systems."

### 3.4 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections..
- C. Perform tests and inspections.
  - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
- D. Tests and Inspections:
  - 1. Inspection: Verify that units and controls are properly installed, connected, and labeled, and that interconnecting wires and terminals are identified.
  - 2. Pretesting: Align and adjust system and pretest components, wiring, and functions to verify that they comply with specified requirements. Conduct tests at varying lighting levels, including day and night scenes as applicable. Prepare video-surveillance equipment for acceptance and operational testing as follows:
    - a. Prepare equipment list described in "Informational Submittals" Article.
    - b. Verify operation of auto-iris lenses.
    - c. Set back-focus of fixed focal length lenses. At focus set to infinity, simulate nighttime lighting conditions by using a dark glass filter of a density that produces a clear image. Adjust until image is in focus with and without the filter.
    - d. Set back-focus of zoom lenses. At focus set to infinity, simulate nighttime lighting conditions by using a dark glass filter of a density that produces a clear image. Additionally, set zoom to full wide angle and aim camera at an object 50 to 75 feet (17 to 23 m) away. Adjust until image is in focus from full wide angle to full telephoto, with the filter in place.
    - e. Set and name all preset positions; consult Owner's personnel.
    - f. Set sensitivity of motion detection.
    - g. Connect and verify responses to alarms.
    - h. Verify operation of control-station equipment.

3. Test Schedule: Schedule tests after pretesting has been successfully completed and system has been in normal functional operation for at least 14 days. Provide a minimum of 10 days' notice of test schedule.
  4. Operational Tests: Perform operational system tests to verify that system complies with Specifications. Include all modes of system operation. Test equipment for proper operation in all functional modes.
- E. Video surveillance system will be considered defective if it does not pass tests and inspections.
- F. Prepare test and inspection reports.

### 3.5 ADJUSTING

- A. Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to two visits to Project during other-than-normal occupancy hours for this purpose. Tasks shall include, but are not limited to, the following:
1. Check cable connections.
  2. Check proper operation of cameras and lenses. Verify operation of auto-iris lenses and adjust back-focus as needed.
  3. Adjust all preset positions; consult Owner's personnel.
  4. Recommend changes to cameras, lenses, and associated equipment to improve Owner's use of video surveillance system.
  5. Provide a written report of adjustments and recommendations.

### 3.6 CLEANING

- A. Clean installed items using methods and materials recommended in writing by manufacturer.
- B. Clean video-surveillance-system components, including camera-housing windows, lenses, and monitor screens.

### 3.7 DEMONSTRATION

- A. Train Owner's maintenance personnel to adjust, operate, and maintain video-surveillance equipment.

END OF SECTION 282000

**32 18 16.13**  
**PLAYGROUND PROTECTIVE SURFACING**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Section includes:
- a. Poured-in-Place (PIP) Playground Surfacing System shall consist of 0.5-1.5 mm size TPV (Thermal Plastic Vulcanized) granules mixed with an Aliphatic binder.
  - b. Excavation, permeable concrete base, and subdrainage for playground surfacing.

**1.2 REFERENCES**

- A. APPLICABLE STANDARDS ASTM International:
- a. ASTM C1028 Standard Test Method for Determining the Static Coefficient of friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull Meter Method – This standard replaces ASTM D2047 02/2019.
  - b. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers – Tension
  - c. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
  - d. ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials
  - e. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties using the British Pendulum Tester
  - f. ASTM F1292-18 Standard Specification for Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment
  - g. ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems under and around Playground Equipment
  - h. ASTM F2479-12 Standard Specification for Purchase, Installation and Maintenance

**1.3 SYSTEM DESCRIPTION**

- A. Performance Requirements: Provide a 2-layer rubber-urethane playground surfacing system which has been designed, manufactured and installed to meet the following criteria:
- a. Shock Attenuation (ASTM F1292-09):
    - i. Gmax: Peak deceleration of no more than 200 G-max
    - ii. Head Injury Criteria: No more than 1,000 for a head-first fall from the highest accessible portion of play equipment being installed as shown on drawings.
    - iii. Flammability (ASTM D2859): Pass.
    - iv. Tensile Strength (ASTM D412): 60 psi (413 kPa).
    - v. Tear Resistance (ASTM D624): 140%.
    - vi. Water Permeability: 0.4 gal/yd<sup>2</sup>/second.
    - vii. Accessibility: Comply with requirements of ASTM F1951.



#### **1.4 SUBMITTALS**

- A. Product Data: Submit manufacturer's product data and installation instructions showing depths of Wear Course and sub-base materials, anchoring systems and edge details.
- B. Verification Samples: Submit manufacturer's standard verification samples of 6" x 6" minimum.
- C. Quality Assurance/Control Submittals: Submit the following:
  - a. Certificate of qualifications of the playground surfacing installer.
  - b. Manufacturer's Written Warranty.
  - c. Closeout Submittals: Warranty documents.

#### **1.5 QUALITY ASSURANCE**

- A. Area Safety: Poured in place within playground equipment use zones shall meet or exceed the performance requirements of the CPSC, ADA and Fall Height Test ASTM F1292-18. IPEMA certification is required. (ASTM F1292-18 section 4.3.3: The laboratory test used to determine critical fall height shall have been conducted on surfacing material samples identical in design, materials, components, and thickness and manufactured as the installed playground surface). ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
- B. Accessibility: NOTE: Children's outdoor play areas shall be in compliance with the Uniform Federal Accessibility Standards (9UFAS) FED-STD-795 and the Architectural and Engineer Instructions (9AEI) Design Criteria. The requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) 28 CFR Part 36 that provide equal or greater accessibility than the requirements of UFAS must also be met in children's outdoor play areas.
- C. (PIP) Playground Surfacing Systems intended to serve as accessible paths of travel for persons with disabilities shall be firm, stable, and slip resistant, and shall meet the requirements of ASTM F195-14 and ASTM F1292-18.
- D. TPV material shall be angular granules with a (Shore A) hardness of 65°A ±5 and a particle size between .5-1.5 mm. Binder shall be not less than 15% percent of the total weight of TPV material used in the wear surface and shall provide 100% percent coating of the particles. No other granule sizes are acceptable.
- E. Third part test results of tensile strength equal to or greater than 170psi and elongation yield equal to or greater than 80% percent.
- F. Certifications: Certified Installers should be under the installers employ for a minimum of 180 days.

#### **1.6 DELIVERY, STORAGE & HANDLING**

- A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F (4 degrees C) and a maximum temperature of 90 degrees F (32 degrees C).

## 1.7 PROJECT/SITE CONDITIONS

- A. PIP surfacing must be installed on a dry subsurface, with no prospect of rain within the initial drying period, and within the recommended temperature range of the manufacturer. Installation in weather conditions of extreme heat, or less than 55°F, and/or high humidity may affect cure time and the structural integrity of the final product. Immediate surroundings of the site must be reasonably free of dust conditions as this could affect the final surface appearance. The manufacturer's Service Center Manager reserves the right to control the installation based on such factors without penalty to the company

## 1.8 WARRANTY

- A. Warranty: PIP surfacing shall maintain required impact attenuation characteristics and be guaranteed against defects in workmanship and materials. Warranty will be specific to maintenance requirements and performance standards of completed product.
- B. Proper drainage is critical to the longevity of the Poured-in-Place surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas and void the warranty.
- C. Warranty Period: Seven (7) years from date entire project is accepted by the City of San Diego, as determined by the Resident Engineer.

## PART 2 - PRODUCTS

### 2.1 POURED-IN-PLACE PLAYGROUND SURFACING SYSTEM

- A. Manufacturer: TotTurf TPV Supreme, or approved equal.  
Contact: David Purcell @ Roberson Recreational Surfaces 2414 W. 12<sup>th</sup> Street, Suite 5; Temple, AZ 85281; Telephone: (760) 809-1875; Fax: (602) 340-0402; E-mail: dpurcell@totturf.com  
Manufacturers Website: <http://www.totturf.com/>
- a. PRODUCT SCOPE:
  - i. Poured in Place Surface: The poured in place surface shall consist of 100 percent recycled granulated and or shredded tire material mixed with a polyurethane binder and capped with a TPV granule mixed with an aliphatic binder.
  - ii. It shall consist of a uniform material manufactured in such a way that the Wear Course meets the requirements specified herein for wear surface.
  - iii. The type safety surfacing shall be a poured-in-place system and shall be indicated on the drawings.
- b. CUSHION LAYER SECTION
  - i. Impact Attenuating Cushion Layer: Cushion Layer consists of shredded styrene butadiene rubber (SBR) and/or cryogenic crumb rubber and adhered with a 100% percent solids polyurethane binder to form a resilient porous material.

- ii. Strands of SBR may vary from 0.5 mm – 2.0 mm in thickness by 3.0 mm – 20 mm in length.
  - iii. SBR Crumb Rubber (5-9 mesh) using a sieve analysis ASTM D5644 with a fiber content of .1% or less mixed in.
  - iv. Foam or standard rubber granules are not to be permitted in a Cushion Layer.
  - v. Binder shall be between 10-14% percent of the total weight of the material and shall provide 100% percent coating of the particles.
  - vi. The Cushion Layer shall be compatible with the Wear Course and must meet requirements herein for impact attenuation.
- c. WEAR COURSE
- i. Wear Course shall consist of Thermal Plastic Vulcanized (TPV) granules with an Aliphatic binder formulated to produce an even, uniform, seamless surface up to 2000 square feet. (Contact sales representative for seamless pads over 2000 square feet).
  - ii. TPV material shall be angular granules with a (Shore A) hardness of 65°A ±5 and particle size between .5-1.5 mm. Binder shall be 22-24% percent of the total weight of TPV material used in the wear surface and shall provide 100% percent coating of the particles. No other granule sizes are acceptable.
  - iii. Thickness of the Wear Course shall be ½” – 5/8” inch (minimum ½” inch, 12.7mm).
  - iv. The Wear Course shall be porous.
  - v. See the manufacturer’s specification for the TPV High Density wear resistant inserts under swings, slide exits, and high traffic areas.
- d. BINDER
- i. No Toluene Diphenyl Isocyanate (TDI) shall be used. Aliphatic urethane is to be used.
  - ii. No filler materials shall be used in urethane such as plasticizers, and the catalyzing agent shall contain no heavy metals.
  - iii. Weight of polyurethane shall be no less than 8.5 lbs/gal (1.02 Kg/1) and no more than 9.5 lbs/gal (1.14 Kg/1).
  - iv. Manufacturer is permitted to modify the type of urethane required to match extreme weather conditions. Substitutions must be equal to or exceed Aliphatic quality

## **PART 3 - EXECUTION**

### **3.1 MANUFACTURER’S INSTRUCTIONS**

- A. Comply with the instructions and recommendations of the playground surfacing manufacturer.

### **3.2 PREPARATION**

- A. Finished Grade/Slope: Verify that finished elevations of adjacent areas are as indicated on the architectural or site plans, that the appropriate sub-grade elevation has been established for

the particular safety surface to be installed, and that the subsurface has been installed per architectural, site or equipment plans while meeting accessibility and use zones requirements.

- B. Aggregate Sub Base: Tolerance of aggregate sub base shall be within 3/8" inch (10 mm) in 10' ft (3050 mm). Verify that aggregate sub base has been fully compacted. Per ADA Guidelines: compacted Aggregate sub base – 4" inches of 3/4" inch minus irregular stone with fines compacted to 95% percent in 2" inch watered lifts.
- C. Concrete Sub Base: Tolerance of concrete sub base shall be within 1/8" inch (3.0 mm) in 10' feet (3050 mm). Concrete must cure for 7 days prior to application of cushion layer. Concrete must cure 28 days if wear course is to be applied directly to concrete surface. If Poured in Place surfacing is installed, verify that the Concrete Sub Base has cured (all areas appear white in color usually at 7 days) and that all concrete curing compounds and other deleterious substances that might adversely affect adhesion have been removed. Surface shall be clean and dry.
- D. Drainage: Verify that sub-surfacing drainage, if required, has been installed to provide positive drainage.

### **3.3 INSTALLATION**

- A. Poured in Place Surfacing: Components of the poured in place surfacing shall be mixed on site in a rotating tumbler to ensure components are thoroughly mixed and are in accordance with manufacturer's recommendations. Installation of surfacing shall be seamless up to 2,000 square feet per day and completely bonded to concrete of sub base. Material shall cover all foundations and fill around all elements penetrating the surface.
- B. Cushion Layer: Whenever practical, cushion layer of surfacing material shall be installed in one continuous pour on the same day of up to 2,000 square feet. When a second pour is required, step the seam (see detail) and fully coat the step of the previous work with polyurethane binder to ensure 100% percent bond with new work. Apply adhesive in small quantities so that new cushion layer can be placed before the adhesive dries.
- C. Wear Course: Wear Course must be TPV (Thermoplastic Elastomer Vulcanized) rubber granules. Wear surface shall be bonded to Cushion Layer. If necessary, additional primer will be used between the cushion layer and Wear Course. Apply adhesive to Cushion Layer in small quantities allowing the Wear Course to be applied before adhesive dries. Surface shall be hand troweled to a smooth, even finish. Except where the Wear Course is composed of differing color patterns, pour shall be continuous and seamless up to 2,000 square feet per day; (Contact sales representative for seamless installations in excess of 2000 square feet). Where seams are required due to color change, size or adverse weather, a step configuration will be constructed to maintain Wear Course integrity. The edge of initial pour shall be coated with adhesive and wearing surface mixture shall be immediately applied. Pads with multiple seams are encouraged to include a top coat of urethane before being placed into use. Butt joint seams are not acceptable except for repairs. Under special conditions and with owners written approval seams may be permitted in same color pad. Consult with manufacturer for specific applications.

- D. Perimeter: For installations over Existing Concrete, the perimeter must be saw cut to provide a keyway 1" inch deep by 1" inch wide, or formed during the pour, with surfacing rolled down into the void. Primer adhesive must be applied to all sides of the void. When connecting to a concrete curb or border, the inside vertical edge shall be primed with adhesive and the final 2" inches of the cushion layer shall be tapered to allow the wear surface material to be 1.5" inches – 2" inches thick where it joins the concrete edge.
- E. Thickness: Construction methods, such as the use of measured screeds or guides shall be employed to ensure that full depth or specified surfacing material is installed. Surfacing system thickness throughout the playground equipment use zone shall be as required to meet the impact attenuation requirements specified herein.
- F. Clean up: Manufacturer's installers shall work to minimize excessive adhesive on adjacent surfaces or play equipment. Spills of excess adhesive shall be promptly cleaned. Manufacturer's Services: For poured in place safety surfacing, a manufacturer's representative who is experienced in the installation of playground safety surfacing shall be provided. The representative shall supervise the installation to ensure that the system meets the impact attenuation requirements as specified herein.
- G. Security & Waste Disposal: Surface installation crew shall be responsible for the protection of surface during the installation process while on site only. Owner or general contractor shall be responsible for the protection of the surface during the curing period upon completion of the installation and overnight during the installation. Owner or general contractor shall be responsible for having a dumpster on site for all waste and debris. Failure to provide security and a dumpster will result in additional cost.
- H. Utilities & Access: Power and water must be available within 300 feet of installation. Site will require tractor-trailer access. In a case where tractor-trailer access is not possible, owner or general contractor shall be responsible for transporting materials from delivering carrier to the installation site.

### **3.4 PROTECTION**

- A. Protect the installed playground surface from damage resulting from subsequent construction activity on the site.
- B. Protection: The safety surface shall be allowed to fully cure in accordance with Manufacturer's instructions. The surface shall be protected by the owner from all traffic during the curing period of 48 hours or as instructed by the Manufacturer.

**END OF SECTION 321816**

# Jerabek Park Improvements

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## Supplemental Specifications – Prefabricated Building Specifications

## SECTION 13000

### PREFABRICATED RESTROOM/STORAGE/CONCESSION BUILDING

#### A. General, Specifications and Clarification of Prefabricated Building and Site Installation

1. This portion of the bid specifications does not follow the CSI standard format as the prefabricated structure in this bid is an **offsite constructed "product"** and not "typical" general construction.
2. The **installation of the product on site is general construction**, which must be coordinated between the general contractor and the subcontractor. Specifications for the building foundation/pad shall be provided herein by the specified design/build subcontractor. Due to the responsibility of the specified building subcontractor for architecture, engineering and a five-year warranty, the site pad/foundation must meet the subcontractor's design so the pad and building can be considered from a single source for warranty purposes. The subcontractor must accept the pad and compactions tests before they take responsibility for the entire system under their warranty.

#### B. Architectural Design/Engineering and Insurance Responsibility

1. While the City of San Diego has provided bid specifications and a design for the building, the building design/build subcontractor remains legally responsible for architecture, engineering, and all applicable building, safety, health, fire, and accessibility code compliance. Since they hold professional design responsibility to the owner, the building subcontractor must furnish certification that they provide product liability insurance in the amounts required by the general specifications **to cover property damage and personal injury**. Final drawings shall be stamped by a California engineer and California Department of Housing and Community Development, suitable for local permitting.

#### C. Errors and Omissions Insurance

1. The building design/build subcontractor must also provide an additional Professional Architectural and Engineering Errors and Omissions insurance, in the minimum amount of \$2,000,000, **to cover claims against the owner or the general contractor for State and Federal ADA handicapped accessibility and other design/engineering code issues**. This Errors and Omission Policy must remain in effect for 5 years from the completion and owner acceptance of the project. Product liability insurance (since it does not cover professional design responsibility only) will be insufficient for this bid and will be cause for rejection of the bidder.

#### D. Insurance for the Building offsite, while in transit, and/or on site until turn over and final owner acceptance

1. The subcontractor may request invoicing for a percentage of building completion in-plant, monthly. Under UCC law, this means that the subcontractor is turning over responsibility for the portion invoiced to the owner yet the building will not be on the owner's property and may not be covered by the owners insurance. Therefore, the building subcontractor must provide a separate insurance policy insuring the owner and general contractor as additionally insured for liability, damage and/or vandalism to the building while in the manufacturing facility, while in transit, and/or while in storage at a certified bonded storage facility or at the final project site for up to \$200,000 for each prefabricated building module, until the building is final accepted by owner.

#### E. General Contractor Coordination with Design/Build Subcontractor

1. The specified prefabricated public restroom building requires coordination between the General Contractor (who prepares the site subgrade and delivery access for the prefabricated building) and the prefabricated restroom building subcontractor (who completes the architectural design, engineering, off-site building construction, delivery and installation on site.) The specified prefabricated restroom building specifications include unique components/systems which are custom to the restroom building subcontractor. Since the restroom subcontractor is responsible for design, additional insurance requirements for errors and omissions is required.

**F. General Contractor, General Scope of Work**

1. The general contractor for this project is responsible for the site survey and staking the building locations, finished slab survey elevations and marking on site, construction and compaction of the required building pads; access to the site for a large crane and tractor trailers delivering the prefabricated building; providing water, sewer, and power at a point of connection (POC) within 6 feet of the building and at the depth required by the building subcontractor and local code; and the installation of any sidewalks outside the building footprint.
2. The general contractor is responsible for verification to the building subcontractor design/build firm that there are no unanticipated site delivery issues such as overhead wires, trees, tree roots, or existing grade changes and that prevent a clear path of travel between a roadway and the final site exists for a tractor trailer and crane to expedite delivery. The design/build subcontractor requires that the general contractor certify that the required delivery crane must be able to set the building modules within 35' distance from the center of the building to the center of the crane hoist.

**G. Prefabricated Restroom Building, General Scope of Work:**

1. The prefabricated restroom building specialist will provide to the general contractor final building design architectural drawings and engineering calculations under the responsibility of a licensed structural engineer, in compliance with all local, state and federal codes. The design/build subcontractor shall construct the building offsite as a permanently relocatable building, transport it to the final required destination, and install the building turnkey, on a general contractor prepared pad per the drawings included in this bid.

**H. Licensing:**

The subcontractor must comply with all the State of California; Department of Housing and Community Development, prefabricated "Commercial Modular Requirements" as follows:

1. The building *manufacturer* must be licensed by the State of California, Department of Housing and Community Development as a manufacturer.
2. The selling dealer (if applicable) must be a California licensed dealer and present their license for verification with the bid.
3. The licensed dealer must also possess a State of California Contractors License Board Class B License and present their license for verification with the bid.

**I. Bid Standard for the Prefabricated Restroom Building**

1. The City of San Diego understands that there are several firms who design and build various types of public restroom building in varying quality and architectural styles, using similar or different construction methods and materials. For the purpose of this bid, the owner has selected:

**Public Restroom Company**, 2587 Business Parkway, Minden, NV 89423 and specifies herein that this firm is the standard for architectural design (safety, green design, code compliance, and site-



specific compatibility.) PRC is also the standard of building performance and quality for the 50-year building design-life with low-maintenance based upon the longevity of the materials selected. Other firms quoting “or equal” whose criteria and standards do not comply will be rejected.

Contact: Chad Kaufman, President  
Phone: 888-888-2060 ext. 109  
Fax: 888-888-1448  
Email: [chad@publicrestroomcompany.com](mailto:chad@publicrestroomcompany.com)  
Web: [www.publicrestroomcompany.com](http://www.publicrestroomcompany.com)

2. Pre-cast structures are not acceptable

#### **J. “Or Equal Restroom Design/Build Subcontractors”**

The City of San Diego may also allow other firms to become qualified to bid, but any firms so authorized to bid must fully comply with these bid specifications and plans, or be subject to post bid rejection.

- a) Or Equal applicant shall provide scaled floor plans and elevations, to show general architectural design criteria is met.
  - b) Or Equal applicant shall provide a written list of each and every deviation from the published bid specifications/plans. Lack of specificity to each deviation from the bid specifications will be cause for rejection.
  - c) Or Equal applicant shall provide a manufacturer’s certification of concrete test compliance from a national independent testing laboratory. The written report must state the concrete compressive strength and absorption resistance per ASTM standard #C39 and #C642, respectively.
  - d) Or Equal applicant must provide a list of every building they designed and built over the last 3 years utilizing the same building materials/systems design criteria as published in this bid. Provide date of building bid, date of completion, and most knowledgeable owner contact.
  - e) Or equal applicant shall provide certification of the special insurance required in this bid.
  - f) Or Equal applicant shall be responsible for and bear all cost for architecture, plan checks, design and structural engineering and all fees in obtaining approvals and permits from applicable agencies.
3. The City of San Diego or their consultant will be solely responsible for the decision to accept or reject the “or equal” submission.

#### **K. Certificate of Off-site Inspection and Construction Compliance, Provision for Maintenance Manuals, and Warranty**

1. The off-site restroom construction requires that a licensed third-party inspection firm provide the owner and the local building official with certification and compliance for the building with the approved plans and specifications. A certificate of compliance shall be issued by this inspector to the local building official to provide certification that the building meet and or exceed the approved plans and applicable codes.
2. At the project conclusion, the building subcontractor shall furnish two sets of complete maintenance manuals including a trouble shooting guide, location of manufacturers of key

components for replacement parts together with final as-built plans, and a **5-year component/20-year structural warranty** to the owner or general contractor.

#### **L. Site Scope of Work by General Contractor**

The general contractor shall prepare the restroom building subgrade to receive the prefabricated building in accordance with the bid subgrade preparation drawings or foundation plan.

1. The building subgrade/footings shall be constructed per the bid drawings
2. The General Contractor shall provide water point of service at 30" below finished building slabs; sewer at 24" below the finished building slabs; and electrical at 36" below the finished building slabs or other per bid plans.
3. General Contractor shall coordinate with restroom subcontractor to provide full site delivery access for a 70' tractor-trailer and hydro crane to the final building sites.
4. If the final site access is over existing sidewalks, utilities, or landscaping, the General Contractor shall be responsible for plating and or tree trimming, utility line removal, or other to protect any existing conditions.
5. The hydro crane must be able to locate no greater than 35' from the center point of the building to the center point of the crane.
6. The utilities shall be furnished per bid site plans at specified points of connection (POC) nominally 6' from the building lines.
7. General contractor shall furnish and install final grading, landscaping and sidewalks.

#### **M. Connection to Utilities**

1. The restroom subcontractor will stub-out: Electrical, Water, and Sewer at the proper POINT OF CONNECTION AND AT THE PROPER ELEVATION BELOW GRADE, for this project. Restroom subcontractor shall provide final hook up of the water from building to POC; sewer hookup to POC; and electrical sleeve from building panel to POC only. Final utility connections shall be by General Contractor or others. General contractor shall flush the water lines thoroughly before making final water connection to the building. **Thoroughly flushing the water lines for AT LEAST 30 MINUTES is critical to ensure that the new code required low-flow fixtures and flush valves that are extremely sensitive to particulate matter in the water will not malfunction.**

#### **N. Concrete Slab, Required Independent Testing Laboratory Certification:**

1. The prefabricated building slabs special concrete technology claims to be water and urine resistant for life due to special additive technology. The building subcontractor must furnish a test certification of compliance from a national independent testing laboratory to support the claim for absorption resistance. The written report must state the concrete compressive strength (minimum of 7,000 PSI) and absorption resistance (not greater than 3%) per ASTM standard #C642 and #C39 respectively. Since this non-absorbency capability is so significant, the design/build subcontractor must provide a general certification of compliance.

#### **O. Prefabricated Restroom Building:**

1. The City of San Diego has evaluated several prefabricated restroom building suppliers. This bid requires such building be used in lieu of site-built traditional construction because of the unique built-in advantages guaranteed by the design/build firm. This technology includes many new innovations such as non-absorbent concrete; anti-microbial components to reduce health risks; built in vandal resistance design; lowered maintenance and long-term warranties that reduce owner risk for failure. The specifications below are written around this new technology.

#### **P. Mat Engineered Concrete Building Slab/Foundation:**

1. The mat engineered 8" thick slab/foundation shall be engineered and constructed to withstand the transportation weight of the building without cracking and to resist absorption from any liquids deposited on the surface. The concrete slab shall be constructed inside a steel angle curb, reinforced with dual mats (tension and compression,) and poured with a custom concrete formula with special admixtures to create a finished slab that is water-resistant for life.
2. Perimeter Steel Curb: 5/16" 50,000 kip steel 6" X 6" welded continuous angle.
3. Rebar Steel Mat: Two layers of 40,000 tensile steel rebar in varying sizes per engineers' requirements, including a perimeter structural continuous grade beam design inside the exterior steel angle and at any other location deemed by the engineer of record as required for the use intended. In coastal locations or when required for corrosion resistance rebar shall be epoxy coated or fiberglass to resist permanent corrosion. Rebar mats shall be wire tied to code with a minimum of three turns of the wire and overlaps shall be minimum of 15 diameters for any connection.
4. All slab openings shall be surrounded with two layers of steel collars as required by the engineer of record to stop corner cracking and to reinforce the openings for lifting.
5. 1" thick by 3" minimum length threaded nuts shall be welded to the steel perimeter frame with continuous ¼" fillet welds. Nuts shall be welded to common steel plates per the engineer of records design and attached to the interior steel rebar structural mats.
6. The engineer of record shall provide lifting locations with sufficient reinforcement to allow the safe lifting of the entire designed weight of the structure with dual 1" steel bolts and washers at each lifting location. The number of lifting locations with each location fitted with removable ¾" 8" X 8" 50,000 tensile strength steel angles shall be determined by the engineer of record.
7. The slab shall be poured over a 1" thick steel plate table. The concrete mix design shall not exceed a 3" slump and shall be stinger vibrated for maximum consolidation. All floors shall slope to any floor drains within each room and if no floor drain is present the floor should not slope. The surface shall be a very light broom that should meet a coefficient of friction on the surface of .06. Birdbaths shall be cause for rejection.
8. The steel perimeter angle will remain below the concrete surface by nominal two inches to prevent corrosion. After the site concrete sidewalks are poured, the joint shall be full flow sealed with self-leveling grey urethane caulk to prevent penetration of water into the joint.
9. The building shall be designed for future relocation and shall provide protection for the lifting openings in the mat slab so that the threaded openings will be available for future use if needed.
10. The building system shall be designed for placement on a general contractor site prepared class 2 building subgrade/and or footings as required by code, per the bid drawings, suitable for 1500 pounds soil bearing capacity minimum. Any soils survey (if necessary) shall be by owner or engineer of record.

**Q. Exterior & Interior Masonry Block Walls**

1. The block walls shall be nominal 6" x 6" x 16" CMU Slumpstone™ manufactured by Angelus Block Co, Inc. The building corners shall have matching corner return block for a uniform appearance. The exterior walls shall be 6" thickness per State of California codes or engineering for wind and seismic. The interior and exterior alcove walls shall be 4" block to nominally 7'-6" above finished floor and wood-framed with applicable required finishes above for pony and gable walls. A structural steel tubular .188 wall cap beam shall be welded to 5/16" 40,000 kip steel plate embeds, at intervals per the engineer of record, within the masonry wall. The cap beam shall be ZRC primed and painted, color to be selected by owner.
2. The 8" mat engineered concrete slab shall be cured a minimum of 7 days. Holes for vertical dowels shall be drilled into the mat engineered slab avoiding any grade beams or other structural reinforcement. Once the holes are drilled, extract and clean out the remaining material and using

two-part structural epoxy, wet set the #3 or #4 vertical rebar (as specified on the engineering calculations into holes drilled to the depth per the engineer of record requirements. Each rebar shall be held vertical to allow equal epoxy support to each dowel during the drying period. Engineering calculations require that rebar shall be installed in each concrete block center void or every block hole. The engineered uplift on each rebar shall be sufficient to restrain any load imposed on the masonry block wall for vertical rebar pull out from the concrete mat engineered slab.

#### **R. Roof System**

1. The roof structure shall be 2" x 6" wood rafters at 24" on center with 5/8" OSB sheathing and ice and water shield membrane with 2-Piece Mission Barrel Roof Tile, color to be selected by owner from manufacturer's brochure. Building roof rake and fascia shall be wrapped with 16 gauge formed metal, primed and painted. Color to be selected by owner.
2. There shall be a provision for a multi-position flagpole mounting bracket located on the fascia per bid drawings, Qty. 40.
3. The roof design shall exceed compliance with local code at 20 PSF live load and wind load "C".
4. The restroom ventilation screens (described in a following section) shall be attached to the stainless steel frames and vandal resistant. Roof color shall be determined by owner and selected from the color chart by restroom supplier.

#### **S. Interior Wall and Floor Finish:**

1. Interior precision CMU block masonry walls shall be smoothed to a pebble grain finish with 2-4 mil layers of 7-day curing block fillers and painted with two additional 4 mil layers of industrial high solids industrial grade enamel, color to be white.
2. Interior restroom, utility chase and storage room floors shall be covered with a two-part epoxy coating with a base coat, colored flakes, and a final clear coat with non-slip additive (colored flakes chosen by owner from chart by restroom supplier.)

#### **T. Exterior Wall Finish, Masonry and Gable**

1. The building exterior finish shall be 6" x 6" x 16" CMU Slumpstone™ manufactured by Angelus Block Co, Inc. The building corners shall have matching corner return block for a uniform appearance.
2. The gable area and above cap beam finish shall be fiber-reinforced horizontal-lap cement board, woodgrain finish, painted in a color selected by owner.
3. Drinking fountain/lavatory/vending machine alcoves shall be covered with 6" x 6" Saltillo tile, including accent tiles with epoxy grout, colors/style selected by owner from manufacturers brochure.

#### **U. Passive Ventilation System (Restrooms/Utility Chase)**

1. The vent screens shall be woven ¼" X 1" X 1", 316T, stainless steel wire mesh set in welded stainless steel angles attached to the masonry wall with vandal resistant stainless steel screws, per plans. There shall also be a 8" x 16" aluminum louvered vent in each restroom located on the chase wall at 9' AFF, nominal.

#### **2. Doors and Gates**

1. The restroom entry doors shall be 7' 0" high (with 6" undercut at bottom of door for ventilation and security), custom fabricated, 14-gauge steel; reinforced with 14-gauge steel ribs welded at 6" intervals on each face, concealed; reinforced with a welded plate for door closer mounting
2. Doors shall be hung on a single continuous, 1 million cycle, aluminum gear hinge with stainless

steel vandal resistant screws at nominal 4" on center. The doors shall weigh nominally 176 lbs each for a 36" X 84" door. Custom fabricated 14-gauge steel door jambs with 4" steel heads shall be welded to the steel cap beam and be solid filled with 3000 psi masonry grout mix. Doors shall be primed and painted with two coats of industrial enamel; color selected by owner.

3. All exterior entry doors shall have a ¼" thick stainless steel "Z-shaped" anti-microbial pull handles
4. All exterior entry doors locksets (with the exception of restroom doors) shall be Best 83T (IE7 series cylinder/IC7 series core) commercial series dead bolts. The interior push-plate shall be anti-microbial for public safety and hygiene.
5. Restroom entry doors locksets shall be Schlage B-600 series deadbolts with Best IC7 series cores with occupancy indicator.
6. The door closer (restroom and concession entry doors only) shall be "LCN" heavy duty #4210 Series, fastened to a structural reinforced door plate per door manufacturer design.
7. Stainless steel vandal resistant fasteners shall be used on all hardware.

### 3. Specialties

1. All specialty washroom equipment shall be commercial grade stainless steel fastened securely to walls with vandal resistant stainless steel screws to avoid removal by vandals as follows:
2. Toilet paper holders shall be dual Aslin TPD0250SR-SS, two-roll stainless steel. Toilet paper holders shall be attached to block walls with 4 epoxy-bedded vandal resistant stainless steel fasteners. Install dispenser/dispensers per City standards.
3. Stainless steel grab bars to code shall be 1 ¼" minimum exposed fastener vandal resistant design and installed at each accessible water closet.
4. Cast Aluminum California Title-24 compliant signage shall be recessed into block surface flush with masonry/stucco exterior and door sign shall be blind fastened with epoxy adhesive and stainless steel fasteners. Wall signs shall have raised pointed Braille tips. Signage shall comply with AB1732, identifying the restrooms as "All Gender Restrooms."
5. Stainless steel baby-changing stations (Qty. 4 - Foundations Model 200-EH-1) shall be mounted in restrooms with identifying signage on the exterior adjacent to the restroom signage, per plan.

### 4. Plumbing:

1. Building shall be fully compliant with current with the following codes:
  - a) All applicable State of California Building Codes. Latest edition applicable.
  - b) California Plumbing Code. Latest edition applicable.
2. GENERAL: All components and fabrications shall be designed to reduce life cycle maintenance, be compatible with current maintenance spare parts, and shall be listed in a spare parts/maintenance manual (two copies) delivered in utility chase of building.
3. WATER PIPING: Shall be type L copper soldered per code above grade and type K with silver solder below grade. All water piping shall be designed and constructed with high and low point drain fittings. All piping shall be mounted on Uni-strut wall brackets with neoprene isolators, to code.
4. WATER PRESSURE GAUGE/VALVE COMBO: install three commercial grade industrial water pressure gauges (one on incoming line, one at pressure regulator valve and one after water filter), isolation ball valves, 150 PSI pressure regulator with wye strainer, 10-micron water filter with clear canister, and check valve.
5. PLUMBING FAUCETS, ISOLATION VALVES AND ACTUATORS: All fixtures except those with flush valves shall be isolated with ball valves for each fixture, concealed hydraulic push-button flush valves, and metered push-button lavatory faucets.
6. DWV PIPING: DWV piping shall be concealed behind the wall. DWV piping shall be PVC DWV, solvent welded, for all concealed piping. A cast iron no hub DWV vent pipe with a cast iron roof mounted vandal cap vent shall be required, through the roof.

7. REMOVABLE PIPE TRAPS: all floor drain, sink drain, and waste traps shall be removable for maintenance. Floor drains shall be trapped behind the wall in the utility chase using a combination waste and vent system. Floor drains shall be increased two pipe sizes over standard to allow code use. Trap primers for restroom floor drains shall be located in the utility chase. All surface mounted utility chase piping shall be mounted on Uni-strut with plastic isolators to code. Sink drain traps shall be concealed behind the utility chase walls where maintenance staff can access all plumbing.
8. PLUMBING FIXTURES: Plumbing fixtures shall be 14-gauge, 316 stainless steel manufactured by Acorn. Toilets shall be wall hung, rear discharge, with concealed, ADA-compliant, hydraulic metal push-button type, flush valves. Toilet seats shall be black solid core plastic, non-flammable construction with continuous stainless steel concealed self-checking hinges. Exterior Lavatories shall have concealed remote traps behind the mechanical wall. Schedule of fixtures:
  - a. Water Closets: Acorn Penal-Ware, 1675-W-1-HET-FVBO-9-ADA-PFS
  - b. Water Closet Flush Valve: Zurn ZH6152AV-HET-7L-BG with metal button
  - c. Lavatories: Acorn Penal-ware 1652LRB-1-DMS-03-M-H1
  - d. Lavatory Faucet: Chicago MVP 333-665PSHABCP
9. FLOOR GRATES: Removable 350 lbs per square foot pultruded fiberglass non-skid floor grates shall be installed over every opening in the utility chase for OSHA compliance.
10. HOSE BIB: There shall be one Acorn 8120-CP hose bib provided in the utility chase. There shall also be a J.R. Smith 5509QT-R-150 exterior hose bib located at the exterior alcove adjacent to the exterior-mounted lavatories.
11. EMERGENCY EYE WASH STATION: Shall be Guardian model G1814P mounted in the utility chase. The station shall be plumbed with tempered water to meet code.
12. HI-LO DRINKING FOUNTAIN: Shall be Haws 1109.14, 14-gauge, 304 stainless steel.
13. BOTTLE FILLER: Shall be Haws 1920 with Haws 6469 drip tray mounted to the drinking fountain, 14-gauge, 304 stainless steel.

**5. Electrical:**

1. GENERAL: Electrical system and components shall be commercial grade or better and piping conduits shall be installed on commercial Uni-strut wall hangers. Interior/exterior lighting fixtures in public areas shall provide lifetime manufacturer's warranty.
2. PANELS/WIRING:
  - a. Main Panel: 300 amp, 120/240v, single-phase, industrial grade Panel Board, Square "D" QO series with 300 amp main circuit breaker, shall be mounted in the utility chase in the restroom building. All breakers shall be bolt-on type, minimum 10,000 A.I.C. RMS (Sym). Wiring shall be copper wire #12 min in EMT piping with compression fittings.
  - b. Concession Panel: 200 amp, 120/240v, single-phase, industrial grade Panel Board, Square "D" QO series with 300 amp main circuit breaker, shall be mounted in the utility chase in the restroom building. All breakers shall be bolt-on type, minimum 10,000 A.I.C. RMS (Sym). Wiring shall be copper wire #12 min in EMT piping with compression fittings. All concession GFCI outlets shall be dedicated circuits.
3. PIPING: All piping shall be surface mounted to the masonry block walls with minimum of 2" fastener penetration. EMT conduit shall be compression type. Main panel shall maintain a 30" X 36" safety code required clear space, floor to 6' above finished floor.
4. HAND DRYER: Shall be concealed, low energy, remote located vandal resistant design. Dryer shall be mounted in the utility chase with only protruding cast metal air nozzles and start switch accessible to the public at exterior lavatory. Dryers shall be 840 watts, low energy consumption. One mounted adjacent to each exterior lavatory.

5. WATER HEATERS (exterior lavatories): Shall be Steibel-Eltron DHC 3-2 (Qty. 2) shall be located in the utility chase, servicing the lavatories. The water to the lavatory shall be tempered via thermostatic valve. There shall be an additional Steibel-Eltron DHC 12-E servicing the mop sink and eye-wash station.
6. EXTERIOR LIGHTING: Luminaire YWP610, 15 watt, LED, vandal resistant, high-impact polycarbonate lens fixtures shall be installed per plans,
7. INTERIOR LIGHTING: Luminaire SWP1212, 15 watt, LED, vandal resistant high-impact polycarbonate lens fixtures shall be installed in the restrooms per plans (one in each restroom) and shall have integral occupancy sensors. The chase shall have a two 4' single-tube, 18-watt LED fixture suitable for wet locations, with a single switch at door entry. The storage room shall have two (2) 4' double-tube, 36-watt LED fixture, suitable for wet locations, with a single switch at door entry.
8. LIGHTING CONTROL: All interior restroom lighting shall be controlled by built-in fixture occupancy sensors and 2 bypass switches (one for interior lighting and one for exterior lighting), so maintenance staff can check operation during daylight hours. A single photocell, roof mounted, and shall control all exterior lighting.
9. ELECTRICAL OUTLETS: One (1) commercial spec grade duplex outlet shall be located in the utility chase. There additional outlets located in the storage room per plan.

## **6. CONCESSION ROOM:**

1. The food service area shall meet all requirements of the California Retail Food Code. This concession facility is classified as "food warming/heating only" and shall comply with the San Diego County Department of Environmental Health.
2. EQUIPMENT: The concession room shall be per plan with the following equipment included within the building upon delivery:
3. COUNTERS: custom fabricated, 14-gauge 304T stainless steel counters per plan.
4. 3-COMPARTMENT CORNER SINK: 1 (one) Advance-Tabco FC-K6-18D, NSF-rated 3-compartment sink with two drain boards shall drain to floor sink and installed per plan. Faucet shall be Chicago 445-DJ18, Qty. 2, for corner sink.
5. FLOOR SINK: Watts FS-753-P-128
6. HAND SINK: Kohler K-2007 with American Standard 7500.170.002 faucet.
7. SOAP DISPENSER: Bobrick B-2111
8. PAPER TOWEL DISPENSER: Bobrick B-262.
9. MOP SINK: Mustee-62M; with American Standard 8344.112 faucet and a 3-mop holder mounted to wall.
10. WATER HEATER: 50 gallon tank, 12 KW, quick-recovery.
11. INTERIOR LIGHTING: Double tube, wet-location, 36 watt LED fixture with a single switch at door entry. There shall be six (6) in the concession.
12. ELECTRICAL OUTLETS: Twelve (12) duplex commercial grade outlets with dedicated circuits shall be provided in the concession room. Final locations to be determined.
13. AIR CURTAIN: Mars NHV-42 with micro switch, located over entry door.
14. FLOORS: Shall be 6" x 6" quarry tile with 6" x 5" cove base, set with epoxy thin-set and grey epoxy grout. Color to be selected from manufacturer's brochure.
15. WALLS/CEILING: Shall be furred with wood studs and insulation to code, then covered with 24" tongue and groove PVC panels, and finished with PVC trim at each seam and every corner to maintain a washable surface.
16. CONCESSION WINDOWS: Shall be Ready Access #275 low profile single panel slider, mill finish with 19 x 39 service opening with restrictor plate. A lockable shutter door (same construction as

exterior doors described above) shall cover the window and be able to lock open against the building during operating hours.

17. CONCESSION WINDOW SHUTTER DOOR: Shall be 4'-0" x 4'-0", custom fabricated, 14 gauge steel; reinforced with concealed 14 gauge steel ribs welded at 6" intervals on each face, reinforced with a welded plate for door closer mounting. Doors shall be hung on a single continuous, 1 million cycle, aluminum gear hinge with stainless steel vandal resistant screws at nominal 4" on center. Door shall lock with a Schlage B-600 series commercial series dead bolt and have a sweep at the bottom of the door. Door and frame paint color to be selected by owner.
18. HVAC SYSTEM: There shall be 2 (two) Friedrich PDH15K5SG PTAC, Packaged Air-Cooled systems. Provide programmable thermostat. Exterior vandal-resistant louver shall be painted to match exterior.
19. Pantry Shelves shall be 3-tier Metro shelving, chrome finish.

#### **7. Shipping Protection**

The building, while traveling over roads to the destination may encounter inclement weather or road grime that could require substantial cleaning when it arrives on site. The building shall be shrink-wrapped before transportation and sufficiently strong to arrive at the owner site intact for exterior finish protection. Materials removed on site shall be disposed of and recycled by restroom building install staff.

#### **8. Certifications**

Building shall be certified in compliance with the plan approval by the State of California, Department of Housing and Community Development. The building shall be delivered with an applied insignia, in compliance with all State regulations. The local building authority shall provide site inspections for the underground mechanical piping and final connections, footings, and access issues outside the restroom footprint. Restroom building subcontractor shall also furnish 5-year component/20-year structural warranty and maintenance manuals for the building and components.

**END OF SECTION 13000**



**SUPPLEMENTARY SPECIAL PROVISIONS**  
**APPENDICES**

**APPENDIX A**  
**NOTICE OF EXEMPTION**

## NOTICE OF EXEMPTION

(Check one or both)

TO:  Recorder/County Clerk  
P.O. Box 1750, MS A-33  
1600 Pacific Hwy, Room 260  
San Diego, CA 92101-2400

FROM: City of San Diego  
Engineering & Capital Projects Department  
525 B Street, Suite 750, MS 908A  
San Diego, CA 92101

Office of Planning and Research  
1400 Tenth Street, Room 121  
Sacramento, CA 95814

**Project Name:** Jerabek Park

**Project No. / WBS No.:** S-20007.02.06

**Project Location-Specific:** The project is located at Jerabek Park, 10150 Avenida Magnifica, San Diego, CA 92131 within the Scripps Miramar Ranch Community Planning Area (Council District 5). The project is bound by Avenida Magnifica and Scripps Trail to the east and southeast, Jerabek Elementary School to the south, Scripps Ranch Swim & Racquet Club to the northeast, and open space to the north and west.

**Project Location-City/County:** San Diego/San Diego

**Description of nature and purpose of the Project:** The project provides for the American Disabilities Act (ADA) accessibility upgrade/ replacement of site arrival points, accessible routes, stairways, drinking fountains, parking spaces, play areas and assembly areas as well as the addition of outdoor fitness areas. The project also includes the demolition of the existing comfort station/ concession stand with associated footings, along with the installation of a prefabricated shade structure and a prefabricated comfort station/ concession stand. Existing utilities will be modified as needed to support the upgrades, and new storm drain infrastructure and basins will be installed. Depth of excavation for the project will be approximately five feet.

A portion of the project occurs adjacent to the City's Multi-Habitat Planning Area (MHPA) and will be required to comply with the MHPA Land Use Adjacency Guidelines as specified in Section 1.4.3 of the Multiple Species Conservation Program's (MSCP) Subarea Plan. The project includes an MHPA Boundary Line Correction to resolve an MHPA boundary mapping error.

**Name of Public Agency Approving Project:** City of San Diego

**Name of Person or Agency Carrying Out Project:** City of San Diego  
Engineering and Capital Projects Department  
Contact: Mayra Medel, Senior Planner  
Email/Phone No.: MMedel@sandiego.gov / (619) 533-4603  
525 B Street, Suite 750 (MS 908A), San Diego, CA 92101

Exempt Status:

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269 (b)(c))
- Categorical Exemption: Sections 15301 (b), (c), (d), and (h) [Existing Facilities], 15302 [Replacement or Reconstruction], and 15303 [New Construction]
- Statutory Exemptions:

Reasons why project is exempt: The City of San Diego conducted an environmental review which determined that the project meets the categorical exemption criteria set forth in CEQA State Guidelines, Sections 15301 (b), (c), (d), and (h) (Existing Facilities) which consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features involving negligible or no expansion of existing or former use including modification of existing landscaping, modification of existing utilities, addition of ADA parking spaces to the parking lot, and repair of existing sidewalks; 15302 [Replacement or Reconstruction], which allows for the replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced, including demolition of the existing comfort station/concession stand and replacement with a prefabricated comfort station/concession stand, replacement of drinking fountains, replacement of existing play areas with ADA accessible play areas, and replacement of existing curb ramps and sidewalks for ADA compliance; 15303 [New Construction], which allows for the construction and location of limited numbers of new, small facilities or structures, including installation of a shade structure, outdoor fitness areas, and storm water infrastructure; and where the exceptions listed in Section 15300.2 would not apply.

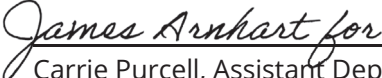
Lead Agency Contact Person: Mayra Medel

Telephone: (619) 533-4603

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a notice of exemption been filed by the public agency approving the project? ( ) Yes ( ) No

It is hereby certified that the City of San Diego has determined the above activity to be exempt from CEQA

  
\_\_\_\_\_  
Carrie Purcell, Assistant Deputy Director

8/2/2022  
\_\_\_\_\_  
Date

Check One:

- (X) Signed By Lead Agency  
( ) Signed by Applicant

Date Received for Filing with County Clerk or OPR:

**APPENDIX B**  
**FIRE HYDRANT METER PROGRAM**

<b>CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS</b>	<b>NUMBER DI 55.27</b>	<b>DEPARTMENT Water Department</b>
<b>SUBJECT  FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)</b>	<b>PAGE 1 OF 10</b>	<b>EFFECTIVE DATE  October 15, 2002</b>
	<b>SUPERSEDES DI 55.27</b>	<b>DATED April 21, 2000</b>

1. **PURPOSE**

1.1 To establish a Departmental policy and procedure for issuance, proper usage and charges for fire hydrant meters.

2. **AUTHORITY**

2.1 All authorities and references shall be current versions and revisions.

2.2 San Diego Municipal Code (NC) Chapter VI, Article 7, Sections 67.14 and 67.15

2.3 Code of Federal Regulations, Safe Drinking Water Act of 1986

2.4 California Code of Regulations, Titles 17 and 22

2.5 California State Penal Code, Section 498B.0

2.6 State of California Water Code, Section 110, 500-6, and 520-23

2.7 Water Department Director

**Reference**

2.8 State of California Guidance Manual for Cross Connection Programs

2.9 American Water Works Association Manual M-14, Recommended Practice for Backflow Prevention

2.10 American Water Works Association Standards for Water Meters

2.11 U.S.C. Foundation for Cross Connection Control and Hydraulic Research Manual

3. **DEFINITIONS**

3.1 **Fire Hydrant Meter:** A portable water meter which is connected to a fire hydrant for the purpose of temporary use. (These meters are sometimes referred to as Construction Meters.)

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- 3.2 **Temporary Water Use:** Water provided to the customer for no longer than twelve (12) months.
- 3.3 **Backflow Preventor:** A Reduced Pressure Principal Assembly connected to the outlet side of a Fire Hydrant Meter.

4. **POLICY**

- 4.1 The Water Department shall collect a deposit from every customer requiring a fire hydrant meter and appurtenances prior to providing the meter and appurtenances (see Section 7.1 regarding the Fees and Deposit Schedule). The deposit is refundable upon the termination of use and return of equipment and appurtenances in good working condition.
- 4.2 Fire hydrant meters will have a 2 ½" swivel connection between the meter and fire hydrant. The meter shall not be connected to the 4" port on the hydrant. All Fire Hydrant Meters issued shall have a Reduced Pressure Principle Assembly (RP) as part of the installation. Spanner wrenches are the only tool allowed to turn on water at the fire hydrant.
- 4.3 The use of private hydrant meters on City hydrants is prohibited, with exceptions as noted below. All private fire hydrant meters are to be phased out of the City of San Diego. All customers who wish to continue to use their own fire hydrant meters must adhere to the following conditions:
  - a. Meters shall meet all City specifications and American Water Works Association (AWWA) standards.
  - b. Customers currently using private fire hydrant meters in the City of San Diego water system will be allowed to continue using the meter under the following conditions:
    - 1. The customer must submit a current certificate of accuracy and calibration results for private meters and private backflows annually to the City of San Diego, Water Department, Meter Shop.

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2. The meter must be properly identifiable with a clearly labeled serial number on the body of the fire hydrant meter. The serial number shall be plainly stamped on the register lid and the main casing. Serial numbers shall be visible from the top of the meter casing and the numbers shall be stamped on the top of the inlet casing flange.
3. All meters shall be locked to the fire hydrant by the Water Department, Meter Section (see Section 4.7).
4. All meters shall be read by the Water Department, Meter Section (see Section 4.7).
5. All meters shall be relocated by the Water Department, Meter Section (see Section 4.7).
6. These meters shall be tested on the anniversary of the original test date and proof of testing will be submitted to the Water Department, Meter Shop, on a yearly basis. If not tested, the meter will not be allowed for use in the City of San Diego.
7. All private fire hydrant meters shall have backflow devices attached when installed.
8. The customer must maintain and repair their own private meters and private backflows.
9. The customer must provide current test and calibration results to the Water Department, Meter Shop after any repairs.
10. When private meters are damaged beyond repair, these private meters will be replaced by City owned fire hydrant meters.



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11. When a private meter malfunctions, the customer will be notified and the meter will be removed by the City and returned to the customer for repairs. Testing and calibration results shall be given to the City prior to any re-installation.
  12. The register shall be hermetically sealed straight reading and shall be readable from the inlet side. Registration shall be in hundred cubic feet.
  13. The outlet shall have a 2 ½ “National Standards Tested (NST) fire hydrant male coupling.
  14. Private fire hydrant meters shall not be transferable from one contracting company to another (i.e. if a company goes out of business or is bought out by another company).
- 4.4 All fire hydrant meters and appurtenances shall be installed, relocated and removed by the City of San Diego, Water Department. All City owned fire hydrant meters and appurtenances shall be maintained by the City of San Diego, Water Department, Meter Services.
- 4.5 If any fire hydrant meter is used in violation of this Department Instruction, the violation will be reported to the Code Compliance Section for investigation and appropriate action. Any customer using a fire hydrant meter in violation of the requirements set forth above is subject to fines or penalties pursuant to the Municipal Code, Section 67.15 and Section 67.37.
- 4.6 Conditions and Processes for Issuance of a Fire Hydrant Meter**
- Process for Issuance
- a. Fire hydrant meters shall only be used for the following purposes:
    1. Temporary irrigation purposes not to exceed one year.

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2. Construction and maintenance related activities (see Tab 2).
  - b. No customer inside or outside the boundaries of the City of San Diego Water Department shall resell any portion of the water delivered through a fire hydrant by the City of San Diego Water Department.
  - c. The City of San Diego allows for the issuance of a temporary fire hydrant meter for a period not to exceed 12 months (365 days). An extension can only be granted in writing from the Water Department Director for up to 90 additional days. A written request for an extension by the consumer must be submitted at least 30 days prior to the 12 month period ending. No extension shall be granted to any customer with a delinquent account with the Water Department. No further extensions shall be granted.
  - d. Any customer requesting the issuance of a fire hydrant meter shall file an application with the Meter Section. The customer must complete a "Fire Hydrant Meter Application" (Tab 1) which includes the name of the company, the party responsible for payment, Social Security number and/or California ID, requested location of the meter (a detailed map signifying an exact location), local contact person, local phone number, a contractor's license (or a business license), description of specific water use, duration of use at the site and full name and address of the person responsible for payment.
  - e. At the time of the application the customer will pay their fees according to the schedule set forth in the Rate Book of Fees and Charges, located in the City Clerk's Office. All fees must be paid by check, money order or cashiers check, made payable to the City Treasurer. Cash will not be accepted.
  - f. No fire hydrant meters shall be furnished or relocated for any customer with a delinquent account with the Water Department.
  - g. After the fees have been paid and an account has been created, the

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meter shall be installed within 48 hours (by the second business day). For an additional fee, at overtime rates, meters can be installed within 24 hours (within one business day).

#### 4.7 Relocation of Existing Fire Hydrant Meters

- a. The customer shall call the Fire Hydrant Meter Hotline (herein referred to as “Hotline”), a minimum of 24 hours in advance, to request the relocation of a meter. A fee will be charged to the existing account, which must be current before a work order is generated for the meter’s relocation.
- b. The customer will supply in writing the address where the meter is to be relocated (map page, cross street, etc). The customer must update the original Fire Hydrant Meter Application with any changes as it applies to the new location.
- c. Fire hydrant meters shall be read on a monthly basis. While fire hydrant meters and backflow devices are in service, commodity, base fee and damage charges, if applicable, will be billed to the customer on a monthly basis. If the account becomes delinquent, the meter will be removed.

#### 4.8 Disconnection of Fire Hydrant Meter

- a. After ten (10) months a “Notice of Discontinuation of Service” (Tab 3) will be issued to the site and the address of record to notify the customer of the date of discontinuance of service. An extension can only be granted in writing from the Water Department Director for up to 90 additional days (as stated in Section 4.6C) and a copy of the extension shall be forwarded to the Meter Shop Supervisor. If an extension has not been approved, the meter will be removed after twelve (12) months of use.
- b. Upon completion of the project the customer will notify the Meter Services office via the Hotline to request the removal of the fire hydrant meter and appurtenances. A work order will be generated

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for removal of the meter.

- c. Meter Section staff will remove the meter and backflow prevention assembly and return it to the Meter Shop. Once returned to the Meter Shop the meter and backflow will be tested for accuracy and functionality.
- d. Meter Section Staff will contact and notify Customer Services of the final read and any charges resulting from damages to the meter and backflow or its appurtenance. These charges will be added on the customer's final bill and will be sent to the address of record. Any customer who has an outstanding balance will not receive additional meters.
- e. Outstanding balances due may be deducted from deposits and any balances refunded to the customer. Any outstanding balances will be turned over to the City Treasurer for collection. Outstanding balances may also be transferred to any other existing accounts.

5. **EXCEPTIONS**

- 5.1 Any request for exceptions to this policy shall be presented, in writing, to the Customer Support Deputy Director, or his/her designee for consideration.

6. **MOBILE METER**

- 6.1 Mobile meters will be allowed on a case by case basis. All mobile meters will be protected by an approved backflow assembly and the minimum requirement will be a Reduced Pressure Principal Assembly. The two types of Mobile Meters are vehicle mounted and floating meters. Each style of meters has separate guidelines that shall be followed for the customer to retain service and are described below:

- a) **Vehicle Mounted Meters:** Customer applies for and receives a City owned Fire Hydrant Meter from the Meter Shop. The customer mounts the meter on the vehicle and brings it to the Meter Shop for

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inspection. After installation is approved by the Meter Shop the vehicle and meter shall be brought to the Meter Shop on a monthly basis for meter reading and on a quarterly basis for testing of the backflow assembly. Meters mounted at the owner's expense shall have the one year contract expiration waived and shall have meter or backflow changed if either fails.

b) **Floating Meters:** Floating Meters are meters that are not mounted to a vehicle. **(Note: All floating meters shall have an approved backflow assembly attached.)** The customer shall submit an application and a letter explaining the need for a floating meter to the Meter Shop. The Fire Hydrant Meter Administrator, after a thorough review of the needs of the customer, (i.e. number of jobsites per day, City contract work, lack of mounting area on work vehicle, etc.), may issue a floating meter. At the time of issue, it will be necessary for the customer to complete and sign the "Floating Fire Hydrant Meter Agreement" which states the following:

- 1) The meter will be brought to the Meter Shop at 2797 Caminito Chollas, San Diego on the third week of each month for the monthly read by Meter Shop personnel.
- 2) Every other month the meter will be read and the backflow will be tested. This date will be determined by the start date of the agreement.

If any of the conditions stated above are not met the Meter Shop has the right to cancel the contract for floating meter use and close the account associated with the meter. The Meter Shop will also exercise the right to refuse the issuance of another floating meter to the company in question.

Any Fire Hydrant Meter using reclaimed water shall not be allowed use again with any potable water supply. The customer shall incur the cost of replacing the meter and backflow device in this instance.

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7. **FEE AND DEPOSIT SCHEDULES**

7.1 **Fees and Deposit Schedules:** The fees and deposits, as listed in the Rate Book of Fees and Charges, on file with the Office of the City Clerk, are based on actual reimbursement of costs of services performed, equipment and materials. These deposits and fees will be amended, as needed, based on actual costs. Deposits, will be refunded at the end of the use of the fire hydrant meter, upon return of equipment in good working condition and all outstanding balances on account are paid. Deposits can also be used to cover outstanding balances.

All fees for equipment, installation, testing, relocation and other costs related to this program are subject to change without prior notification. The Mayor and Council will be notified of any future changes.

8. **UNAUTHORIZED USE OF WATER FROM A HYDRANT**

8.1 Use of water from any fire hydrant without a properly issued and installed fire hydrant meter is theft of City property. Customers who use water for unauthorized purposes or without a City of San Diego issued meter will be prosecuted.

8.2 If any unauthorized connection, disconnection or relocation of a fire hydrant meter, or other connection device is made by anyone other than authorized Water Department personnel, the person making the connection will be prosecuted for a violation of San Diego Municipal Code, Section 67.15. In the case of a second offense, the customer's fire hydrant meter shall be confiscated and/or the deposit will be forfeited.

8.3 Unauthorized water use shall be billed to the responsible party. Water use charges shall be based on meter readings, or estimates when meter readings are not available.

8.4 In case of unauthorized water use, the customer shall be billed for all applicable charges as if proper authorization for the water use had been obtained, including but not limited to bi-monthly service charges, installation charges and removal charges.

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- 8.5 If damage occurs to Water Department property (i.e. fire hydrant meter, backflow, various appurtenances), the cost of repairs or replacements will be charged to the customer of record (applicant).

**Water Department Director**

- Tabs: 1. Fire Hydrant Meter Application  
2. Construction & Maintenance Related Activities With No Return To Sewer  
3. Notice of Discontinuation of Service

#### APPENDIX

**Administering Division:** Customer Support Division

**Subject Index:** Construction Meters  
Fire Hydrant  
Fire Hydrant Meter Program  
Meters, Floating or Vehicle Mounted  
Mobile Meter  
Program, Fire Hydrant Meter

**Distribution:** DI Manual Holders



# Application for Fire Hydrant Meter (EXHIBIT A)

(For Office Use Only)

NS REQ	FACH
DATE	BY

METER SHOP (619) 527-7449

## Meter Information

Application Date	Requested Install Date:
------------------	-------------------------

Fire Hydrant Location: (Attach Detailed Map//Thomas Bros. Map Location or Construction drawing.) <u>Zip:</u>	T.B.	G.B. (CITY USE)
Specific Use of Water:		
Any Return to Sewer or Storm Drain, if so, explain:		
Estimated Duration of Meter Use: <input type="text"/>	<input type="checkbox"/>	Check Box if Reclaimed Water

## Company Information

Company Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ( )
*Business license#		*Contractor license#	
A Copy of the Contractor's license OR Business License is required at the time of meter issuance.			
Name and Title of Billing Agent: <small>(PERSON IN ACCOUNTS PAYABLE)</small>			Phone: ( )
Site Contact Name and Title:			Phone: ( )
Responsible Party Name:			Title:
Cal ID#			Phone: ( )
Signature:		Date:	
Guarantees Payment of all Charges Resulting from the use of this Meter. Insures that employees of this Organization understand the proper use of Fire Hydrant Meter			

<b>Fire Hydrant Meter Removal Request</b>	Requested Removal Date:
Provide Current Meter Location if Different from Above:	
Signature:	Title: Date:
Phone: ( )	Pager: ( )

<input type="checkbox"/> City Meter	<input type="checkbox"/> Private Meter
Contract Acct #:	Deposit Amount: <b>\$ 936.00</b> Fees Amount: <b>\$ 62.00</b>
Meter Serial #	Meter Size: <b>05</b> Meter Make and Style: <b>6-7</b>
Backflow #	Backflow Size: Backflow Make and Style:
Name:	Signature: Date:



**WATER USES WITHOUT ANTICIPATED CHARGES FOR RETURN TO SEWER**

Auto Detailing  
Backfilling  
Combination Cleaners (Vactors)  
Compaction  
Concrete Cutters  
Construction Trailers  
Cross Connection Testing  
Dust Control  
Flushing Water Mains  
Hydro Blasting  
Hydro Seeing  
Irrigation (for establishing irrigation only; not continuing irrigation)  
Mixing Concrete  
Mobile Car Washing  
Special Events  
Street Sweeping  
Water Tanks  
Water Trucks  
Window Washing

**Note:**

1. If there is any return to sewer or storm drain, then sewer and/or storm drain fees will be charges.

Date

Name of Responsible Party  
Company Name and Address  
Account Number: \_\_\_\_\_

Subject: Discontinuation of Fire Hydrant Meter Service

Dear Water Department Customer:

The authorization for use of Fire Hydrant Meter # \_\_\_\_\_, located at *(Meter Location Address)* ends in 60 days and will be removed on or after *(Date Authorization Expires)*. Extension requests for an additional 90 days must be submitted in writing for consideration 30 days prior to the discontinuation date. If you require an extension, please contact the Water Department, or mail your request for an extension to:

City of San Diego  
Water Department  
Attention: Meter Services  
2797 Caminito Chollas  
San Diego, CA 92105-5097

Should you have any questions regarding this matter, please call the Fire Hydrant Hotline at (619) \_\_\_\_\_ - \_\_\_\_\_.

Sincerely,

Water Department

**APPENDIX C**

**MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE**

## MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE

1. Soil amendment
2. Fiber mulch
3. PVC or PE pipe up to 16 inch diameter
4. Stabilizing emulsion
5. Lime
6. Preformed elastomeric joint seal
7. Plain and fabric reinforced elastomeric bearing pads
8. Steel reinforced elastomeric bearing pads
9. Waterstops (Special Condition)
10. Epoxy coated bar reinforcement
11. Plain and reinforcing steel
12. Structural steel
13. Structural timber and lumber
14. Treated timber and lumber
15. Lumber and timber
16. Aluminum pipe and aluminum pipe arch
17. Corrugated steel pipe and corrugated steel pipe arch
18. Structural metal plate pipe arches and pipe arches
19. Perforated steel pipe
20. Aluminum underdrain pipe
21. Aluminum or steel entrance tapers, pipe downdrains, reducers, coupling bands and slip joints
22. Metal target plates
23. Paint (traffic striping)
24. Conductors
25. Painting of electrical equipment
26. Electrical components
27. Engineering fabric
28. Portland Cement
29. PCC admixtures
30. Minor concrete, asphalt
31. Asphalt (oil)
32. Liquid asphalt emulsion
33. Epoxy

**APPENDIX D**

**SAMPLE CITY INVOICE WITH CASH FLOW FORECAST**

City of San Diego, CM&FS Div., 9753 Chesapeake Drive, SD CA 92123

**Project Name:**

Work Order No or Job Order No.

City Purchase Order No.

Resident Engineer (RE):

RE Phone#: Fax#:

**Contractor's Name:**

Contractor's Address:

Contractor's Phone #:

Contractor's fax #:

Contact Name:

**Invoice No.**

**Invoice Date:**

Billing Period: ( To )

Item #	Item Description	Contract Authorization		Extension	Previous Totals To Date		This Estimate		Totals to Date	
		Unit	Price		Qty	Amount	% / QTY	Amount	% / QTY	Amount
1					\$	-	\$	-	0.00%	\$
2					\$	-	\$	-	0.00%	\$
3					\$	-	\$	-	0.00%	\$
4					\$	-	\$	-	0.00%	\$
5					\$	-	\$	-	0.00%	\$
6					\$	-	\$	-	0.00%	\$
7					\$	-	\$	-	0.00%	\$
8					\$	-	\$	-	0.00%	\$
9					\$	-	\$	-	0.00%	\$
10					\$	-	\$	-	0.00%	\$
11					\$	-	\$	-	0.00%	\$
12					\$	-	\$	-	0.00%	\$
13					\$	-	\$	-	0.00%	\$
14					\$	-	\$	-	0.00%	\$
15					\$	-	\$	-	0.00%	\$
16					\$	-	\$	-	0.00%	\$
17					\$	-	\$	-	0.00%	\$
<b>Field Orders</b>										
<b>CHANGE ORDER No.</b>										
Total Authorized Amount (including approved Change Order)					\$		\$		<b>Total Billed</b>	\$

**SUMMARY**

A. Original Contract Amount	\$	-
B. Approved Change Order #00 Thru #00	\$	-
C. Total Authorized Amount (A+B)	\$	-
D. Total Billed to Date	\$	-
E. Less Total Retention (5% of D)	\$	-
F. Less Total Previous Payments	\$	-
<b>G. Payment Due Less Retention</b>	<b>\$0.00</b>	
H. Remaining Authorized Amount	\$0.00	

I certify that the materials have been received by me in the quality and quantity specified

Resident Engineer \_\_\_\_\_

Construction Engineer \_\_\_\_\_

**Retention and/or Escrow Payment Schedule**

Total Retention Required as of this billing (Item E)	\$0.00
Previous Retention Withheld in PO or in Escrow	\$0.00
<b>Add'l Amt to Withhold in PO/Transfer in Escrow:</b>	<b>\$0.00</b>
<b>Amt to Release to Contractor from PO/Escrow:</b>	

Contractor Signature and Date: \_\_\_\_\_

NOTE: CONTRACTOR TO CALCULATE TO THE 2ND DECIMAL PLACE.

# Construction Cash Flow Forecast

## "Sewer and Water Group Job 965 (W)"

WBS #:	B18108
Date Submitted:	10/10/2018
NTP Date:	3/23/2018
Final Statement of WD Date:	5/23/2020
Contract #:	K-XX-XXXX-XXX-X
Contract Amount:	\$5,617,000

Year	January	February	March	April	May	June	July	August	September	October	November	December
2018			15,000	25,000	52,000	52,000	100,000	100,000	10,000	100,000	100,000	100,000
2019	10,000	10,000	85,000	58,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000	1,000,000
2020	100,000	100,000	100,000	1,000,000	1,000,000							
2021												
2022												
2023												
2024												
2025												

**APPENDIX E**  
**LOCATION MAP**

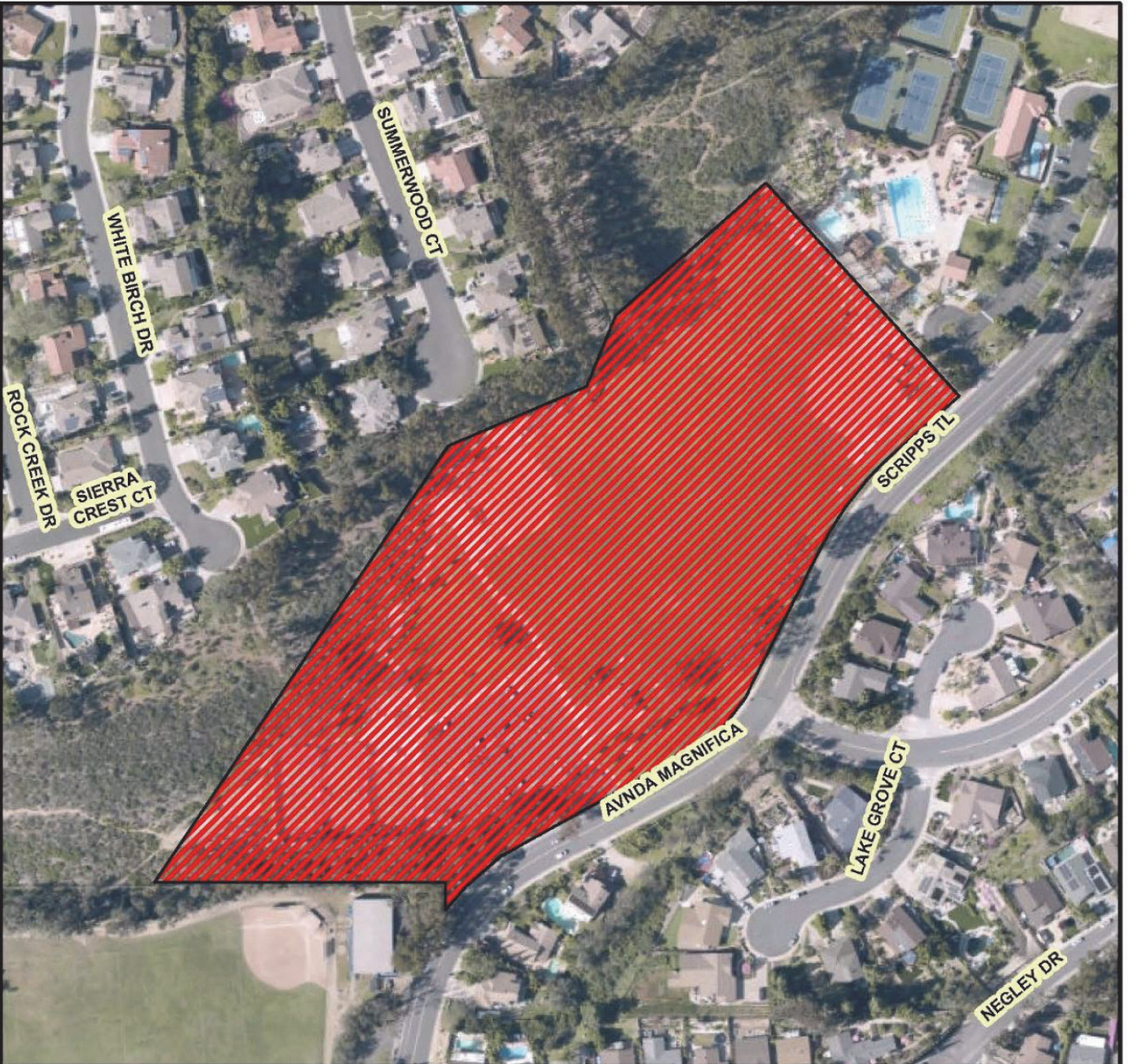
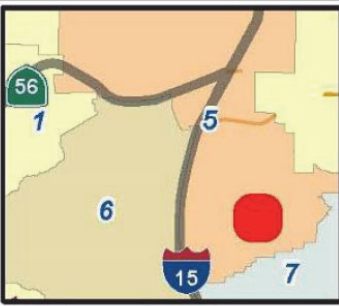


# Jerabek Park Improvements

Senior Engineer  
Darren Genova  
619-533-4601

Project Manager  
Lydia Marshall  
619-533-4154

FOR QUESTIONS ABOUT THIS  
PROJECT Call: 619-533-4207  
Email: [engineering@sandiego.gov](mailto:engineering@sandiego.gov)



## Legend:

 S20007 Jerabek Park Improvements



S:\PITS\PITS-CIP-Preliminary-Engineering-and-Program-Coordination\Drafting\Park & Rec Projects\Jerabek Parks Improvements\ArcGIS Pro\

COMMUNITY NAME: Miramar Ranch North

COUNCIL DISTRICT: 5

SAP ID: B-20007

Date: 12/30/2019



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**APPENDIX F**  
**SAMPLE OF PUBLIC NOTICE**



CONSTRUCTION NOTICE

PROJECT TITLE

Work on your street will begin within one week to replace the existing water mains servicing your community.

The work will consist of:

- Saw-cutting and trench work on Ingulf Street from Morena Boulevard to Galveston Street to install new water mains, water laterals and fire hydrants.
• Streets where trenching takes place will be resurfaced and curb ramps will be upgraded to facilitate access for persons with disabilities where required.
• This work is anticipated to be complete in your community by December 2016.

How your neighborhood may be impacted:

- Water service to some properties during construction will be provided by a two-inch highline pipe that will run along the curb. To report a highline leak call 619-515-3525.
• Temporary water service disruptions are planned. If planned disruptions impact your property, you will receive advance notice.
• Parking restrictions will exist because of the presence of construction equipment and materials.
• "No Parking" signs will be displayed 72 hours in advance of the work.
• Cars parked in violation of signs will be TOWED.

Hours and Days of Operation:

Monday through Friday X:XX AM to X:XX PM.

City of San Diego Contractor:

Company Name, XXX-XXX-XXXX



CONSTRUCTION NOTICE

PROJECT TITLE

Work on your street will begin within one week to replace the existing water mains servicing your community.

The work will consist of:

- Saw-cutting and trench work on Ingulf Street from Morena Boulevard to Galveston Street to install new water mains, water laterals and fire hydrants.
• Streets where trenching takes place will be resurfaced and curb ramps will be upgraded to facilitate access for persons with disabilities where required.
• This work is anticipated to be complete in your community by December 2016.

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• Parking restrictions will exist because of the presence of construction equipment and materials.
• "No Parking" signs will be displayed 72 hours in advance of the work.
• Cars parked in violation of signs will be TOWED.

Hours and Days of Operation:

Monday through Friday X:XX AM to X:XX PM.

City of San Diego Contractor:

Company Name, XXX-XXX-XXXX

## **APPENDIX G**

### **ADVANCED METERING INFRASTRUCTURE (AMI) DEVICE PROTECTION**

## Protecting AMI Devices in Meter Boxes and on Street Lights

The Public Utilities Department (PUD) has begun the installation of the Advanced Metering Infrastructure (AMI) technology as a new tool to enhance water meter reading accuracy and efficiency, customer service and billing, and to be used by individual accounts to better manage the efficient use of water. **All AMI devices shall be protected per Section 402-2, "Protection", of the 2021 Whitebook.**

AMI technology allows water meters to be read electronically rather than through direct visual inspection by PUD field staff. This will assist PUD staff and customers in managing unusual consumption patterns which could indicate leaks or meter tampering on a customer's property.

Three of the main components of an AMI system are the:

- A. Endpoints, see Photo 1:

**Photo 1**



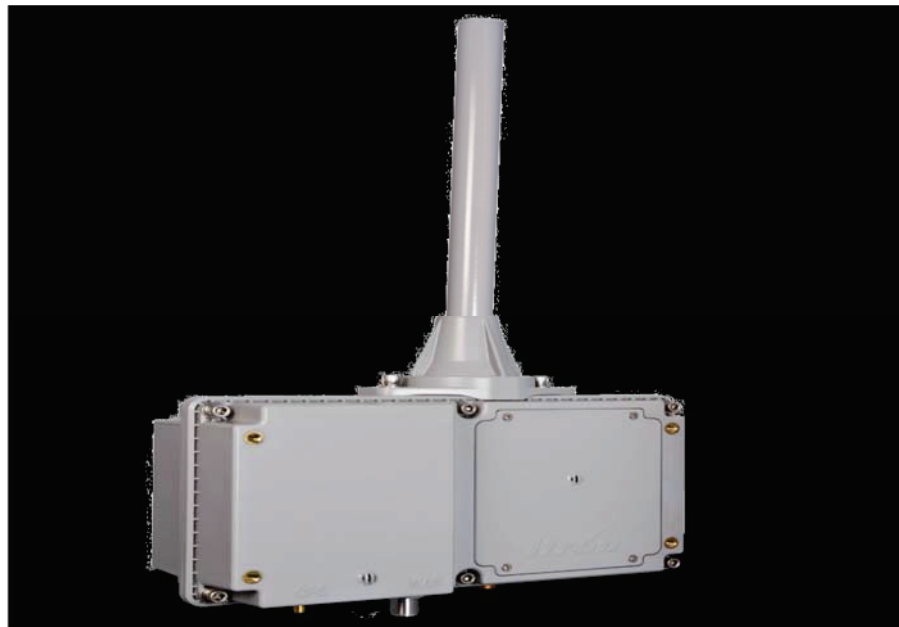
B. AMI Antenna attached to Endpoint (antenna not always required), see Photo 2:



---

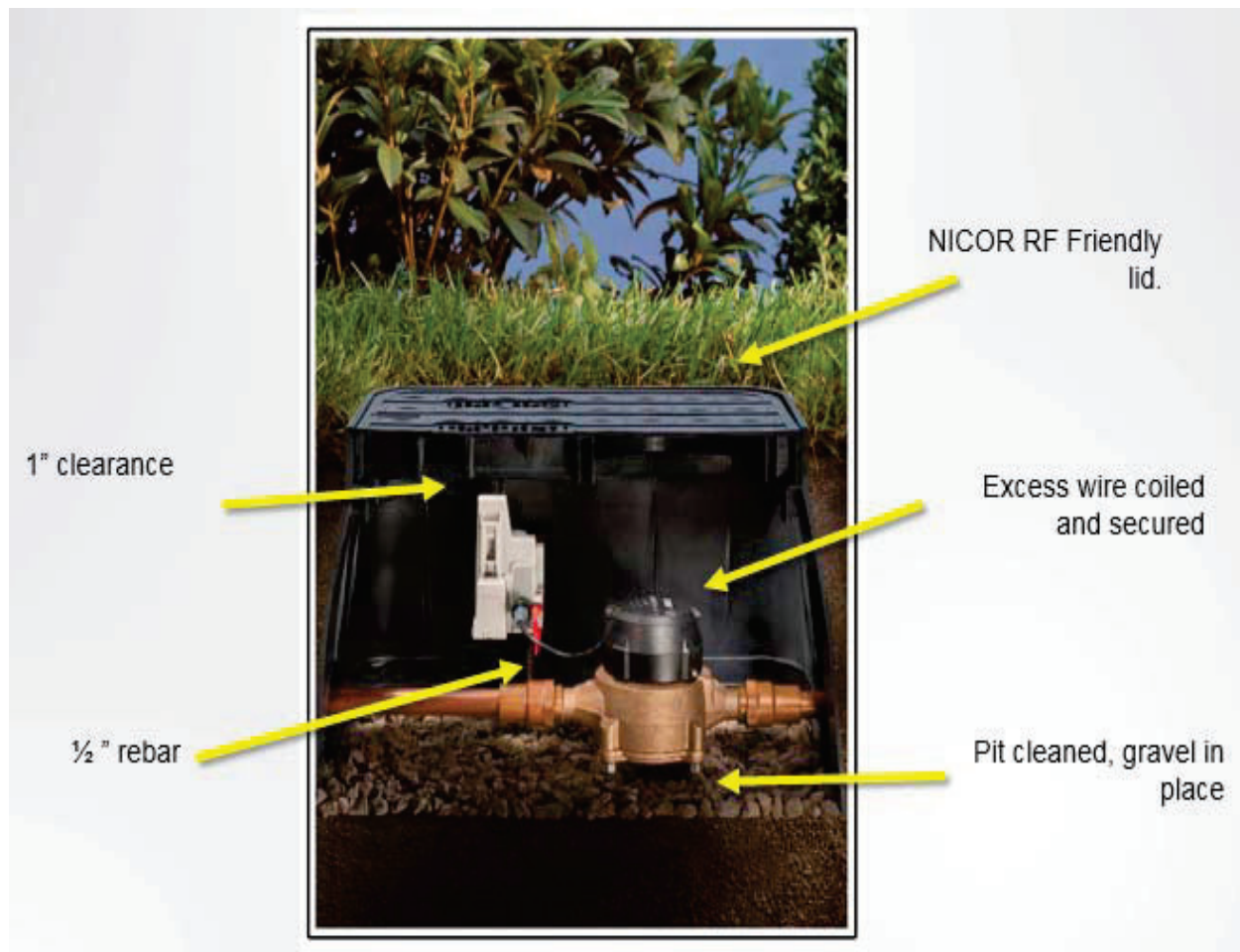
Network Devices, see Photo 3:

**Photo 3**



AMI endpoints transmit meter information to the AMI system and will soon be on the vast majority of meters in San Diego. These AMI devices provide interval consumption data to the PUD's Customer Support Division. If these devices are damaged or communication is interrupted, this Division will be alerted of the situation. The endpoints are installed in water meter boxes, coffins, and vaults adjacent to the meter. A separate flat round antenna may also be installed through the meter box lid. This antenna is connected to the endpoint via cable. The following proper installation shall be implemented when removing the lid to avoid damaging the antenna, cable, and/or endpoint. Photo 4 below demonstrates a diagram of the connection:

**Photo 4**



The AMI device ERT/Endpoint/Transmitter shall be positioned and installed as discussed in this Appendix. If the ERT/Endpoint/Transmitter is disturbed, it shall be re-installed and returned to its original installation with the end points pointed upwards as shown below in Photo 5.

**The PUD's code compliance staff will issue citations and invoices to you for any damaged AMI devices that are not re-installed as discussed in the Contract Document**

Photo 5 below shows a typical installation of an AMI endpoint on a water meter.

**Photo 5**

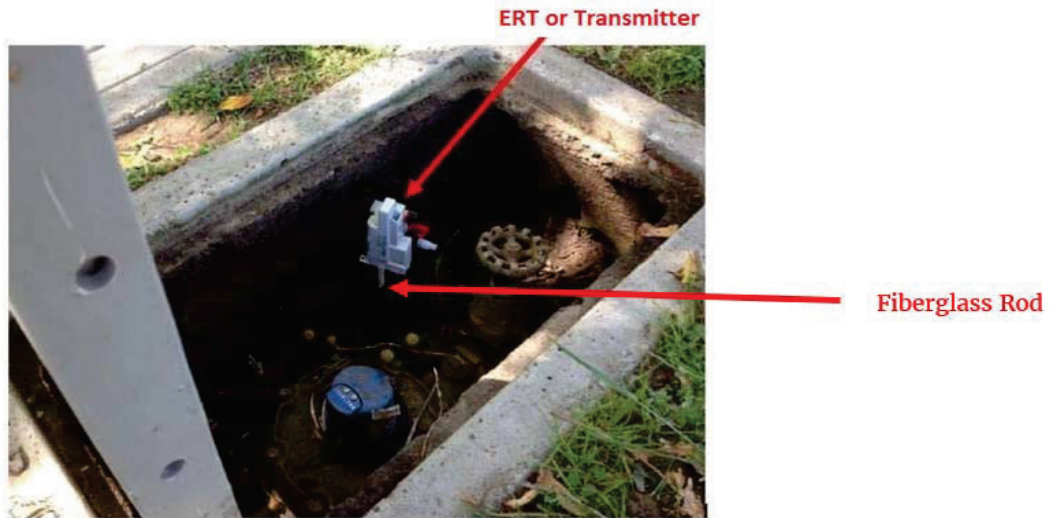


Photo 6 below is an example of disturbance that shall be avoided:

**Photo 6**





**You are responsible when working in and around meter boxes.** If you encounter these endpoints, use proper care and do not disconnect them from the registers on top of the water meter. If the lid has an antenna drilled through, do not change or tamper with the lid and inform the Resident Engineer immediately about the location of that lid. Refer to Photo 7 below:

**Photo 7**



Another component of the AMI system are the Network Devices. The Network Devices are strategically placed units (mainly on street light poles) that collect interval meter reading data from multiple meters for transmission to the Department Control Computer. **If you come across any of these devices on street lights that will be removed or replaced (refer to Photos 8 and 9 below), notify AMI Project Manager Arwa Sayed at (619) 362-0121 immediately.**

Photo 8 shows an installed network device on a street light. On the back of each Network Device is a sticker with contact information. See Photo 9. **Call PUD Water Emergency Repairs at 619-515-3525 if your work will impact these street lights.** These are assets that belong to the City of San Diego and you shall be responsible for any costs of disruption of this network.

**Photo 8**



**Network Device**

**Photo 9**



**If you encounter any bad installations, disconnected/broken/buried endpoints, or inadvertently damage any AMI devices or cables, notify the Resident Engineer immediately. The Resident Engineer will then immediately contact the AMI Project Manager, Arwa Sayed, at (619) 362-0121.**

## APPENDIX H

### SWPPP CONSTRUCTION BMP MAINTENANCE LOG

## SWPPP Construction BMP Maintenance Log

Examples of construction BMP maintenance activities include but are not limited to tasks listed below. The contractor is ultimately responsible for compliance with the Storm Water Standards Manual and/or the Construction General Permit, and for ensuring all BMPs function per manufacturer's specifications. Use the attached log to schedule and document maintenance activities. The log shall be kept with the project SWPPP document at all times.

### **Construction BMP Maintenance Activities**

- Maintain stabilized construction entrances/exits
- Redress gravel/rock to full coverage and remove any sediment accumulation
- Remove and replace geotextile/compost blanket/plastic with holes or tears
- Redress and restabilize erosion or rilling greater than 1-inch deep
- Reapply hydraulic stabilization products to full coverage
- Remove and replace silt fence/fiber roll/gravel bags/etc. with holes or tears
- Reinstall or replace silt fence/fiber roll/etc. with sags
- Remove sediment accumulation from perimeter controls
- Remove sediment accumulation from storm drain inlet protection and check dams
- Remove sediment accumulation from energy dissipators
- Repair or remove any vehicle/equipment that leaks
- Remove any accumulation in drip pans or containment
- Empty concrete washouts when they reach 75% capacity
- Empty waste disposal containers when they reach 95% capacity

Construction BMP Maintenance Log

**Project Title:**  
**WBS/IO No:**  
**WDID:**

Scheduled Date/Time	Completion Date/Time	Location	Maintenance Tasks Performed	Logged By

**ATTACHMENT F**

**RESERVED**

**ATTACHMENT G**  
**CONTRACT AGREEMENT**

**ATTACHMENT G**  
**CONTRACT AGREEMENT**

---

**CONSTRUCTION CONTRACT**

This contract is made and entered into between THE CITY OF SAN DIEGO, a municipal corporation, herein called "City", and **Whillock Contracting Inc**, herein called "Contractor" for construction of **Jerabek Park Improvements**; Bid No. **K-23-2139-DBB-3**; in the total amount of **SIX MILLION SIXTY EIGHT THOUSAND THREE HUNDRED NINETY FOUR DOLLARS (\$6,068,394)**, which is comprised of the Base Bid plus Additive Alternate B, consisting of an amount not to exceed **SIX MILLION SIXTY EIGHT THOUSAND THREE HUNDRED NINETY FOUR DOLLARS (\$6,068,394)**.

IN CONSIDERATION of the payments to be made hereunder and the mutual undertakings of the parties hereto, City and Contractor agree as follows:

1. The following are incorporated into this contract as though fully set forth herein:
    - (a) The attached Faithful Performance and Payment Bonds.
    - (b) The attached Proposal included in the Bid documents by the Contractor.
    - (c) Reference Standards listed in the Instruction to Bidders and the Supplementary Special Provisions (SSP).
    - (d) That certain documents entitled **Jerabek Park Improvements**, on file in the office of the Purchasing & Contracting Department as Document No. **S-20007**, as well as all matters referenced therein.
  2. The Contractor shall perform and be bound by all the terms and conditions of this contract and in strict conformity therewith shall perform and complete in a good and workmanlike manner **Jerabek Park Improvements**, Bid Number **K-23-2139-DBB-3**, San Diego, California.
  3. For such performances, the City shall pay to Contractor the amounts set forth at the times and in the manner and with such additions or deductions as are provided for in this contract, and the Contractor shall accept such payment in full satisfaction of all claims incident to such performances.
  4. No claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
  5. This contract is effective as of the date that the Mayor or designee signs the agreement and is approved by the City Attorney in accordance with San Diego Charter Section 40.
-



**CONTRACT AGREEMENT (continued)**

IN WITNESS WHEREOF, this Agreement is signed by the City of San Diego, acting by and through its Mayor or designee, pursuant to Municipal Code §22.3102, authorizing such execution.

**THE CITY OF SAN DIEGO**

**APPROVED AS TO FORM**

By Berric Doringo

Mara W. Elliott, City Attorney  
By Dana Fairchild

Print Name: Berric Doringo  
Deputy Director  
Purchasing & Contracting Dept.

Print Name: Dana Fairchild  
Deputy City Attorney

Date: 4/19/2023

Date: 4/24/2023

**CONTRACTOR** Whillock Contracting, Inc.

By [Signature]

Print Name: Tory M. Whillock

Title: Secretary

Date: 3/2/2023

City of San Diego License No.: B1991001382

State Contractor's License No.: 572217

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER: 1000001767

## **CERTIFICATIONS AND FORMS**

The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certifications, forms and affidavits submitted as part of this bid are true and correct.

## **BIDDER'S GENERAL INFORMATION**

To the City of San Diego:

Pursuant to "Notice Inviting Bids", specifications, and requirements on file with the City Clerk, and subject to all provisions of the Charter and Ordinances of the City of San Diego and applicable laws and regulations of the United States and the State of California, the undersigned hereby proposes to furnish to the City of San Diego, complete at the prices stated herein, the items or services hereinafter mentioned. The undersigned further warrants that this bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that 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, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that 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, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

The undersigned bidder(s) further warrants that bidder(s) has thoroughly examined and understands the entire Contract Documents (plans and specifications) and the Bidding Documents therefore, and that by submitting said Bidding Documents as its bid proposal, bidder(s) acknowledges and is bound by the entire Contract Documents, including any addenda issued thereto, as such Contract Documents incorporated by reference in the Bidding Documents.

**NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID UNDER 23  
UNITED STATES CODE 112 AND PUBLIC CONTRACT CODE 7106**

State of California

County of San Diego

The bidder, being first duly sworn, deposes and says that he or she is authorized by the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that 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, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that 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, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

## CONTRACTOR CERTIFICATION

---

### COVID-19 VACCINATION ORDINANCE

#### CERTIFICATION OF COMPLIANCE

I hereby certify that I am familiar with the requirements of San Diego Ordinance No. O-21398 implementing the City's Mandatory COVID-19 Vaccination Policy.

#### TERMS OF COMPLIANCE

The City's Mandatory COVID-19 Vaccination Policy, outlined in San Diego Ordinance O-21398 (Nov. 29, 2021), requires ALL City contractors, who interact in close contact with City employees while providing contracted services indoors in City facilities or while performing bargaining unit work while indoors, to be fully vaccinated against COVID-19, effective January 3, 2022, as a condition for provision or continued provision of contracted services.

1. "City contractor" means a person who has contracted with the City of San Diego to provide public works, goods, services, franchise, or consultant services for or on behalf of the City, and includes a subcontractor, vendor, franchisee, consultant, or any of their respective officers, directors, shareholders, partners, managers, employees, or other individuals associated with the contractor, subcontractor, consultant, or vendor. "Person" means any natural person, firm, joint venture, joint stock company, partnership, association, club, company, corporation business trust or organization.
2. "Fully vaccinated" means a person has received, at least 14 days prior, either the second dose in a two-dose COVID-19 vaccine series or a single-dose COVID-19 vaccine, or otherwise meets the criteria for full vaccination against COVID-19 as stated in applicable public health guidance, orders, or law. Acceptable COVID-19 vaccines must be approved by the U.S. Food and Drug Administration (FDA) or authorized for emergency use by the FDA or the World Health Organization.
3. "Close contact" means a City contractor is **within 6 feet** of a City employee for a **cumulative total of 15 minutes or more over a 24-hour period** (for example, three individual 5-minute exposures for a total of 15 minutes).
4. City contractors who interact in close contact with City employees must fully comply with the City's Mandatory COVID-19 Vaccination Policy, which may include a reporting program that tracks employee vaccination status.
5. City contractors with employees or subcontractors who interact in close contact with City employees must certify that those members of their workforce, and subcontractors regardless of tier, who work indoors at a City facility, are fully vaccinated and that the City contractor has a program to track employee compliance.
6. City contractors that have an Occupational Safety and Health Administration compliant testing program for members of their workforce, as a reasonable accommodation, may be considered for compliance.

Non-compliance with the City's Mandatory COVID-19 Vaccination Policy may result in termination of a contract for cause, pursuant to the City's General Terms and Provisions, Reference Standards, and the San Diego Municipal Code.

## **CONTRACTOR CERTIFICATION**

---

### **DRUG-FREE WORKPLACE**

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in the WHITEBOOK, Section 5-1.3, "Drug-Free Workplace", of the project specifications, and that;

This company has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

## CONTRACTOR CERTIFICATION

---

### AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the Americans With Disabilities Act (ADA) outlined in the WHITEBOOK, Section 5-1.2, "California Building Code, California Code of Regulations Title 24 and Americans with Disabilities Act". of the project specifications, and that:

This company has in place workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

## **CONTRACTOR CERTIFICATION**

---

### **CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE**

I declare under penalty of perjury that I am authorized to make this certification on behalf of the company submitting this bid/proposal, that as Contractor, I am familiar with the requirements of City of San Diego Municipal Code § 22.3004 regarding Contractor Standards as outlined in the WHITEBOOK, Section 5-1.4, ("Contractor Standards and Pledge of Compliance"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3004.



## **CONTRACTOR CERTIFICATION**

---

### **EQUAL BENEFITS ORDINANCE CERTIFICATION**

I declare under penalty of perjury that I am familiar with the requirements of and in compliance with the City of San Diego Municipal Code § 22.4300 regarding Equal Benefits Ordinance.

## **CONTRACTOR CERTIFICATION**

---

### **EQUAL PAY ORDINANCE CERTIFICATION**

Contractor shall comply with the Equal Pay Ordinance (EPO) codified in the San Diego Municipal Code (SDMC) at section 22.4801 through 22.4809, unless compliance is not required based on an exception listed in SDMC section 22.4804.

Contractor shall require all of its subcontractors to certify compliance with the EPO in their written subcontracts.

Contractor must post a notice informing its employees of their rights under the EPO in the workplace or job site.

By signing this Contract with the City of San Diego, Contractor acknowledges the EPO requirements and pledges ongoing compliance with the requirements of SDMC Division 48, section 22.4801 et seq., throughout the duration of this Contract.

## **CONTRACTOR CERTIFICATION**

---

### **PRODUCT ENDORSEMENT**

I declare under penalty of perjury that I acknowledge and agree to comply with the provisions of City of San Diego Administrative Regulation 95.65, concerning product endorsement. Any advertisement identifying or referring to the City as the user of a product or service requires the prior written approval of the City.

**AFFIDAVIT OF DISPOSAL**

(To be submitted upon completion of Construction pursuant to the contracts Certificate of Completion)

**WHEREAS**, on the \_\_\_\_\_ DAY OF \_\_\_\_\_, 2\_\_\_\_ the undersigned entered into and executed a contract with the City of San Diego, a municipal corporation, for:

**Jerabek Park Improvements**

(Project Title)

as particularly described in said contract and identified as Bid No. **K-23-2139-DBB-3**; SAP No. (WBS) **S-20007**; and **WHEREAS**, the specification of said contract requires the Contractor to affirm that "all brush, trash, debris, and surplus materials resulting from this project have been disposed of in a legal manner"; and **WHEREAS**, said contract has been completed and all surplus materials disposed of:

**NOW, THEREFORE**, in consideration of the final payment by the City of San Diego to said Contractor under the terms of said contract, the undersigned Contractor, does hereby affirm that all surplus materials as described in said contract have been disposed of at the following location(s)

and that they have been disposed of according to all applicable laws and regulations.

Dated this \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_\_.

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

**ATTEST:**

State of \_\_\_\_\_ County of \_\_\_\_\_

On this \_\_\_\_\_ DAY OF \_\_\_\_\_, 2\_\_\_\_, before the undersigned, a Notary Public in and for said County and State, duly commissioned and sworn, personally appeared \_\_\_\_\_ known to me to be the \_\_\_\_\_ Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

Notary Public in and for said County and State

**LIST OF SUBCONTRACTORS**

**\*\*\* PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY \*\*\* TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY\*\*\* SEE INSTRUCTIONS TO BIDDERS, FOR FURTHER INFORMATION**

In accordance with the requirements of the "Subletting and Subcontracting Fair Practices Act", Section 4100, of the California Public Contract Code (PCC), the Bidder is to list below the name, address and license number of each Subcontractor who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement, in an amount of or in excess of 0.5% of the Contractor's total Bid. Failure to comply with this requirement may result in the Bid being rejected as non-responsive. The Contractor is to list only one Subcontractor for each portion of the Work. The Bidder's attention is directed to the Special Provisions - General; Paragraph 2-3 Subcontracts, which stipulates the percentage of the Work to be performed with the Bidder's own forces. The Bidder is to also list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which the Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONTRACTOR OR DESIGNER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB <sup>Ⓞ</sup>	WHERE CERTIFIED <sup>Ⓜ</sup>	CHECK IF JOINT VENTURE PARTNERSHIP
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							

① As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

- Certified Minority Business Enterprise
- Certified Disadvantaged Business Enterprise
- Other Business Enterprise
- Certified Small Local Business Enterprise
- Woman-Owned Small Business
- Service-Disabled Veteran Owned Small Business
- MBE
- DBE
- OBE
- SLBE
- WoSB
- SDVOSB
- Certified Woman Business Enterprise
- Certified Disabled Veteran Business Enterprise
- Certified Emerging Local Business Enterprise
- Small Disadvantaged Business
- HUBZone Business
- WBE
- DVBE
- ELBE
- SDB
- HUBZone

② As appropriate, Bidder shall indicate if Subcontractor is certified by:

- City of San Diego
- California Public Utilities Commission
- State of California's Department of General Services
- State of California
- CITY
- CPUC
- CADoGS
- CA
- State of California Department of Transportation
- City of Los Angeles
- U.S. Small Business Administration
- CALTRANS
- LA
- SBA

**The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.**

**NAMED EQUIPMENT/MATERIAL SUPPLIER LIST**

**\*\*\* PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY \*\*\* TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY \*\*\* SEE INSTRUCTIONS TO BIDDERS FOR FURTHER INFORMATION**

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB <sup>①</sup>	WHERE CERTIFIED <sup>②</sup>
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____						
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____						

- ① As appropriate, Bidder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):
- |   |        |  |         |
|---|--------|--|---------|
| Certified Minority Business Enterprise        | MBE    | Certified Woman Business Enterprise            | WBE     |
| Certified Disadvantaged Business Enterprise   | DBE    | Certified Disabled Veteran Business Enterprise | DVBE    |
| Other Business Enterprise                     | OBE    | Certified Emerging Local Business Enterprise   | ELBE    |
| Certified Small Local Business Enterprise     | SLBE   | Small Disadvantaged Business                   | SDB     |
| Woman-Owned Small Business                    | WoSB   | HUBZone Business                               | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB |  |         |
- ② As appropriate, Bidder shall indicate if Vendor/Supplier is certified by:
- |  |        |  |          |
|--|--------|--|----------|
| City of San Diego                                    | CITY   | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission               | CPUC   | City of Los Angeles                              | LA       |
| State of California's Department of General Services | CADoGS | U.S. Small Business Administration               | SBA      |
| State of California                                  | CA     |  |          |

**The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.**

## **ELECTRONICALLY SUBMITTED FORMS**

**FAILURE TO FULLY COMPLETE AND SUBMIT ANY OF THE FOLLOWING FORMS WILL DEEM YOUR BID NON-RESPONSIVE.**

**PLANETBIDS WILL NOT ALLOW FOR BID SUBMISSIONS WITHOUT THE ATTACHMENT OF THESE FORMS**

The following forms are to be completed by the bidder and submitted (uploaded) electronically with the bid in PlanetBids.

- A. BID BOND – See Instructions to Bidders, Bidders Guarantee of Good Faith (Bid Security) for further instructions**
- B. CONTRACTOR’S CERTIFICATION OF PENDING ACTIONS**
- C. MANDATORY DISCLOSURE OF BUSINESS INTERESTS FORM**
- D. DEBARMENT AND SUSPENSION CERTIFICATION FOR PRIME CONTRACTOR**
- E. DEBARMENT AND SUSPENSION CERTIFICATION FOR SUBCONTRACTORS, SUPPLIERS AND MANUFACTURERS**
- F. SUBCONTRACTOR LISTING FOR ALTERNATE ITEMS**

ORIGINAL

**BID BOND**

**See Instructions to Bidders, Bidder Guarantee of Good Faith  
(Bid Security)**

KNOW ALL MEN BY THESE PRESENTS,

That Whillock Contracting, Inc. as Principal,  
and Travelers Casualty and Surety Company of America as Surety, are held  
and firmly bound unto The City of San Diego hereinafter called "OWNER," in the sum  
of **10% OF THE TOTAL BID AMOUNT** 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.

WHEREAS, said Principal has submitted a Bid to said OWNER to perform the WORK required under  
the bidding schedule(s) of the OWNER's Contract Documents entitled

Jerabek Park Improvements Bid No. K-23-2139-DBB-3

NOW THEREFORE, if said Principal is awarded a contract by said OWNER and, within the time and in  
the manner required in the "Notice Inviting Bids" enters into a written Agreement on the form of  
agreement bound with said Contract Documents, furnishes the required certificates of insurance, and  
furnishes the required Performance Bond and Payment Bond, then this obligation shall be null and  
void, otherwise it shall remain in full force and effect. In the event suit is brought upon this bond by  
said OWNER and OWNER prevails, said Surety shall pay all costs incurred by said OWNER in such suit,  
including a reasonable attorney's fee to be fixed by the court.

SIGNED AND SEALED, this 2nd day of February, 2023

Whillock Contracting, Inc. (SEAL)  
(Principal)

Travelers Casualty and Surety Company of America (SEAL)  
(Surety)

Tory M Whillock, Secretary

Jerry E Mosier Attorney-in-Fact

By: [Signature]  
(Signature)

By: [Signature]  
(Signature)

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY)





**Travelers Casualty and Surety Company of America  
Travelers Casualty and Surety Company  
St. Paul Fire and Marine Insurance Company**

**POWER OF ATTORNEY**


**KNOW ALL MEN BY THESE PRESENTS:** That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **JERRY E MOSIER** of **SAN CARLOS**, California, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

**IN WITNESS WHEREOF**, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April**, **2021**.



State of Connecticut

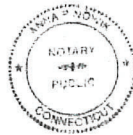
City of Hartford ss.

By:   
Robert L. Raney, Senior Vice President

On this the **21st** day of **April**, **2021**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

**IN WITNESS WHEREOF**, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, **2026**



  
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

**RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

**FURTHER RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

**FURTHER RESOLVED**, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

**FURTHER RESOLVED**, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **2nd** day of **February**, **2023**



  
Kevin E. Hughes, Assistant Secretary

**To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.  
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.**

## 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 San Diego )

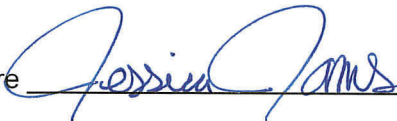
On February 2, 2023 before me, Jessica James, Notary Public  
(insert name and title of the officer)

personally appeared Tory M Whillock and Jerry E Mosier,  
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.

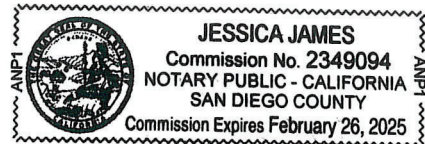
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

Signature



(Seal)



### CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

CHECK ONE BOX ONLY.

- The undersigned certifies that within the past 10 years the Bidder has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers.
  
- The undersigned certifies that within the past 10 years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

DATE OF CLAIM	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/REMEDIAL ACTION TAKEN
n/a					

Contractor Name: Whillock Contracting, Inc.

Certified By Tory M. Whillock Title Secretary  
Name

  
Signature Date 2/2/2023

**USE ADDITIONAL FORMS AS NECESSARY**





**DEBARMENT AND SUSPENSION CERTIFICATION  
PRIME CONTRACTOR  
FAILURE TO COMPLETE AND SUBMIT AT TIME OF BID SHALL RENDER BID NON-RESPONSIVE**

EFFECT OF DEBARMENT OR SUSPENSION
To promote integrity in the City's contracting processes and to protect the public interest, the City shall only enter into contracts with responsible- bidders and contractors. In accordance with San Diego Municipal Code §22.0814 (a): <i>Bidders</i> and <i>contractors</i> who have been <i>debarred</i> or <i>suspended</i> are excluded from submitting bids, submitting responses to requests for proposal or qualifications, receiving <i>contract</i> awards, executing <i>contracts</i> , participating as a <i>subcontractor</i> , employee, agent or representative of another <i>person</i> contracting with the City.

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of Names of the Principal Individual owner(s).

The names of all persons interested in the foregoing proposal as Principals are as follows:

NAME	TITLE
Mark B. Whillock	President
Brent P. Whillock	Vice President
Tory M. Whillock	Secretary
Susan K. Whillock	Treasurer

**IMPORTANT NOTICE:** If Bidder or other interested person is a corporation, state secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if Bidder or other interested person is an individual, state first and last names in full.

The Bidder, under penalty of perjury, certifies that, except as noted below, he/she or any person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal, State or local agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal, State or local agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

n/a

Exceptions will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Contractor Name: Whillock Contracting, Inc.

Certified By Tory M. Whillock Title Secretary

Name



Signature

Date 2/2/2023

**NOTE:** Providing false information may result in criminal prosecution or administrative sanctions.

**DEBARMENT AND SUSPENSION CERTIFICATION**  
**SUBCONTRACTORS, SUPPLIERS AND MANUFACTURERS**  
**\*TO BE COMPLETED BY BIDDER\***

FAILURE TO COMPLETE AND SUBMIT AT TIME OF BID SHALL RENDER BID NON-RESPONSIVE

Names of the Principal individual owner(s)

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of Names of the Principal Individual owner(s) for their subcontractor/supplier/manufacturers.

Please indicate if principal owner is serving in the capacity of **subcontractor**, **supplier**, and/or **manufacturer**:

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Chase Alvarez	President - Alvarez & Shaw

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Chris Nickelatti	President - Crown Fence

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER


NAME	TITLE
Donald Diffenbaugh	President - Donald D. Diffenbaugh Construction

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Jon Kirk	President - Kirk Paving

Contractor Name: Whillock Contracting, Inc.

Certified By Tory M. Whillock Title Secretary

Name  
  
 Signature

Date 2/2/2023

**\*USE ADDITIONAL FORMS AS NECESSARY\*\***

**DEBARMENT AND SUSPENSION CERTIFICATION**  
**SUBCONTRACTORS, SUPPLIERS AND MANUFACTURERS**  
**\*TO BE COMPLETED BY BIDDER\***

FAILURE TO COMPLETE AND SUBMIT AT TIME OF BID SHALL RENDER BID NON-RESPONSIVE

Names of the Principal individual owner(s)

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of Names of the Principal Individual owner(s) for their subcontractor/supplier/manufacturers.

Please indicate if principal owner is serving in the capacity of **subcontractor**, **supplier**, and/or **manufacturer**:

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Jeffrey Hicks	President - Solid Structures

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Jose Arellano	President - Makelele Systems

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER


NAME	TITLE
Richard Hawley	President - Robertson Industries

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Ryan Swenson	RMO - Ace Electric

Contractor Name: Whillock Contracting, Inc.

Certified By Tory M. Whillock Title Secretary

Name  
  
 Signature

Date 2/2/2023

**\*USE ADDITIONAL FORMS AS NECESSARY\*\***



**DEBARMENT AND SUSPENSION CERTIFICATION**  
**SUBCONTRACTORS, SUPPLIERS AND MANUFACTURERS**  
 \*TO BE COMPLETED BY BIDDER\*

FAILURE TO COMPLETE AND SUBMIT AT TIME OF BID SHALL RENDER BID NON-RESPONSIVE

Names of the Principal individual owner(s)

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of Names of the Principal Individual owner(s) for their subcontractor/supplier/manufacturers.

Please indicate if principal owner is serving in the capacity of **subcontractor**, **supplier**, and/or **manufacturer**:

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Charles Kaufman IV	President - Public Restroom Company

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
James Moen	President - Western State Builders

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER


NAME	TITLE

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE

Contractor Name: Whillock Contracting, Inc.

Certified By Tory M. Whillock Title Secretary

Name  
  
 Signature

Date 2/2/2023

\*USE ADDITIONAL FORMS AS NECESSARY\*\*

## SUBCONTRACTORS FOR ALTERNATES

\*\*\* FOR USE WHEN LISTING SUBCONTRACTORS FOR ALTERNATES ONLY \*\*\*  
 (Use Additional Sheets As Needed)

IDENTIFY ALTERNATE <small>(example: Deductive Alternate B) Only one Alternate and Sub per line</small>	SUBCONTRACTOR NAME, LOCATION, PHONE & EMAIL	SUBCONTRACTOR'S CA LICENSE NUMBER	SUBCONTRACTOR'S DIR REGISTRATION NUMBER	IS SUBCONTRACTOR CONSTRUCTOR, DESIGNER, OR SUPPLIER	TYPE OF WORK	DOLLAR VALUE OF THE ALTERNATE SUBCONTRACT <small>(Negative if Deductive)</small>
A	Name: Kirk Paving Address: 8722 Winter Gardens Blvd City: Lakeside State: CA Zip: 92040 Phone: 619-938-9958 Email: info@kirkpaving.us	749206	1000002341	Subcontractor	Paving	\$ 18,293.00
B	Name: Kirk Paving Address: 8722 Winter Gardens Blvd City: Lakeside State: CA Zip: 92040 Phone: 619-938-9958 Email: info@kirkpaving.us	749206	1000002341	Subcontractor	Paving	\$ 55,710.50
	Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____					
	Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____					

# City of San Diego

CITY CONTACT: Brittany Friedenreich, Senior Contract Specialist, Email: [BFriedenreic@sandiego.gov](mailto:BFriedenreic@sandiego.gov)  
Phone No. (619) 533-3104

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## ADDENDUM A



**FOR**

## JERABEK PARK IMPROVEMENTS

BID NO.: K-23-2139-DBB-3  
SAP NO. (WBS/IO/CC): S-20007  
CLIENT DEPARTMENT: 1714  
COUNCIL DISTRICT: 5  
PROJECT TYPE: GA

---

### **BID DUE DATE:**

**2:00 PM  
FEBRUARY 2, 2023**

**CITY OF SAN DIEGO'S ELECTRONIC BIDDING SITE, PLANETBIDS**

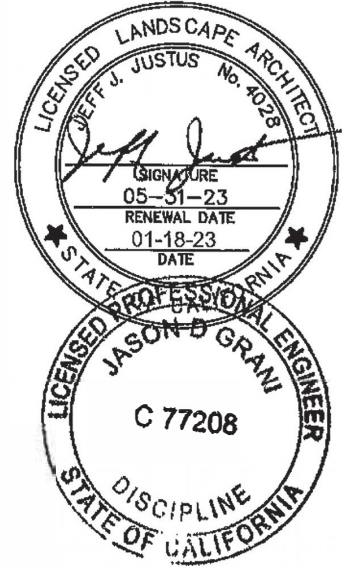
<http://www.sandiego.gov/cip/bidopps/index.shtml>

**ENGINEER OF WORK**

The Engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Landscape Architect:

Jeff Justus                      01/18/2023  
1) Registered Landscape Architect                      Date

Seal:



[Signature]                      1/18/23  
2) For City Engineer                      Date

Seal:

## A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the Contract Documents are hereby made effective as though originally issued with the bid package. Bidders are reminded that all previous requirements to this solicitation remain in full force and effect.

## B. NOTICE INVITING BIDS

1. To Section 3, Estimated Construction Cost, page 5, **DELETE** in its entirety and **SUBSTITUTE** with the following:
  3. **ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is **\$6,120,000**.

## C. PLANS

1. To Drawing numbers **0100208-01-D, 0100208-03-D, 0100208-08-D, 0100208-14-D, 0100208-16-D, 0100208-18-D, 0100208-20-D, 0100208-23-D** through **0100208-27-D, 0100208-29-D** through **0100208-30-D, 0100208-32-D, 0100208-34-D** through **0100208-35-D, 0100208-39-D, 0100208-41-D, 0100208-43-D, 0100208-46-D** through **0100208-48-D, 0100208-51-D** through **0100208-52-D, 0100208-55-D, 0100208-58-D** through **0100208-60-D, 0100208-74-D, 0100208-81-D** through **0100208-82-D, 0100208-95-D, 0100208-101-D,** and **0100208-103-D, DELETE** in their entirety and **REPLACE** with pages 4 through 38 of this Addendum.

Rania Amen, Director  
Engineering & Capital Projects Department

Dated: *January 20, 2023*  
San Diego, California

RA/AP/rs



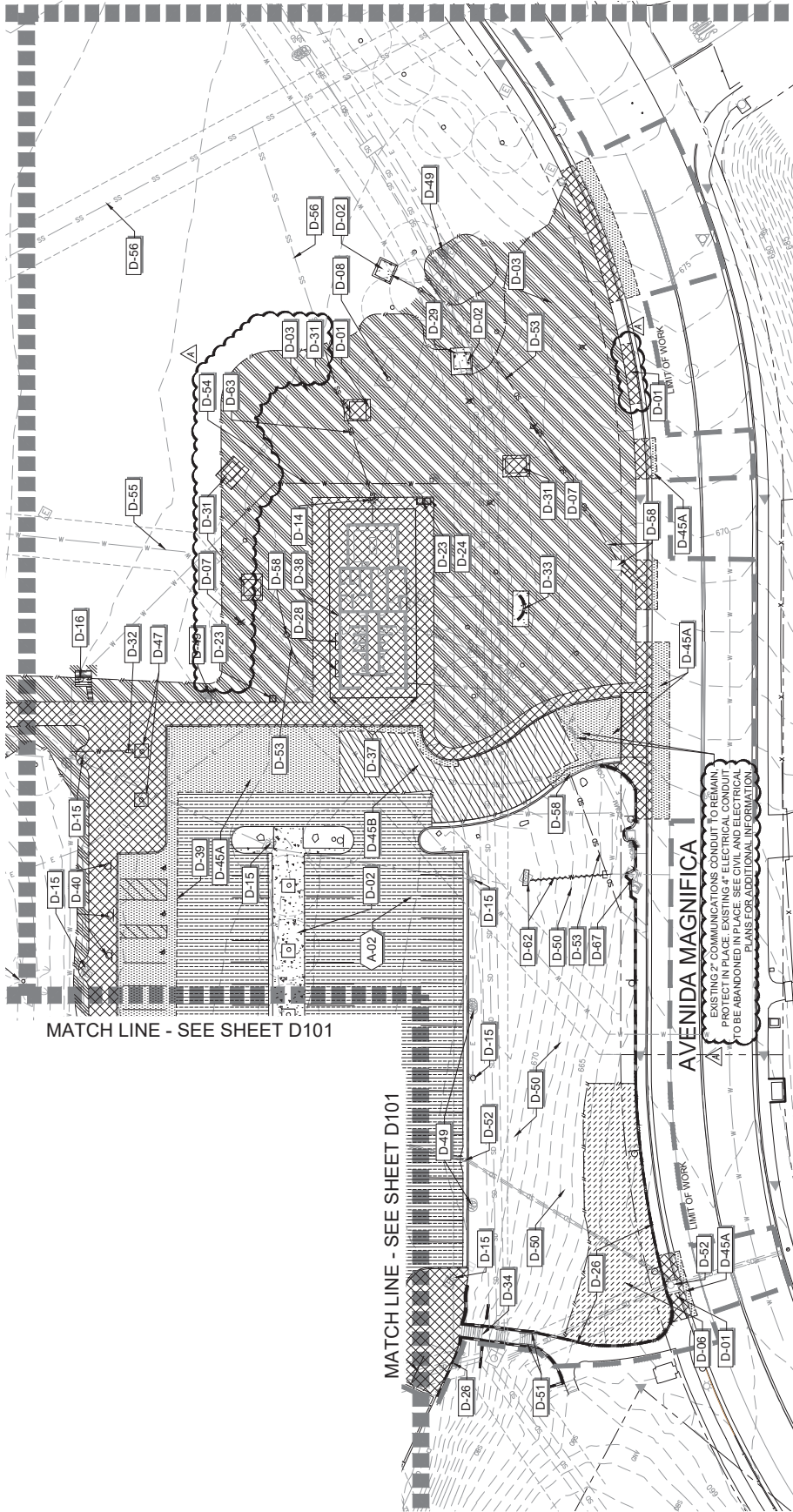


MATCH LINE - SEE SHEET D105

MATCH LINE - SEE SHEET D102

MATCH LINE - SEE SHEET D101

MATCH LINE - SEE SHEET D101



SEE SHEET D101 FOR LANDSCAPE DEMOLITION LEASER AND NOTES  
SEE SHEET D01 - D105 FOR LANDSCAPE DEMOLITION PLANS

WARNING  
1/2"  
1" = 20'-0"  
1/4" = 5'-0"  
1/8" = 1'-0"

CONSULTANT

**SCHMIDT DESIGN GROUP**

100 Robinson St, Suite 405, San Diego, CA 92106  
TEL: 619.231.1428 FAX: 619.231.1429  
SCHMIDTDESIGN.COM

PLT DATE: 01/18/2023

**SAN DIEGO**

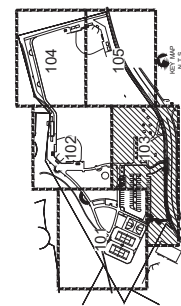
REGISTERED PROFESSIONAL ENGINEER IN CIVIL  
NO. CT7208

REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT  
NO. 170923

PLANS FOR THE CONSTRUCTION OF: <b>JERABEK PARK IMPROVEMENTS</b> LANDSCAPE DEMOLITION PLAN		WSP NO. S-20097
ENGINEERING & CAPITAL PROJECTS DEPARTMENT SHEET 03 OF 105 SHEETS		DMT NO.
PROJECT NO. C77208	DATE 12/21/2022	REV. NO. 158299
DESIGNED BY	DATE FILED	MARKED COORDINATES
ORIGINAL SOC	12/21/22	228-2145
ACCESSORY A SOC	1/18/23	LANDSCAPE COORDINATES
AS-BUILTS	DATE SHOWN	DRAWING NO. D103
REVISIONS	DATE COMMENT	01/02/2023-08-0

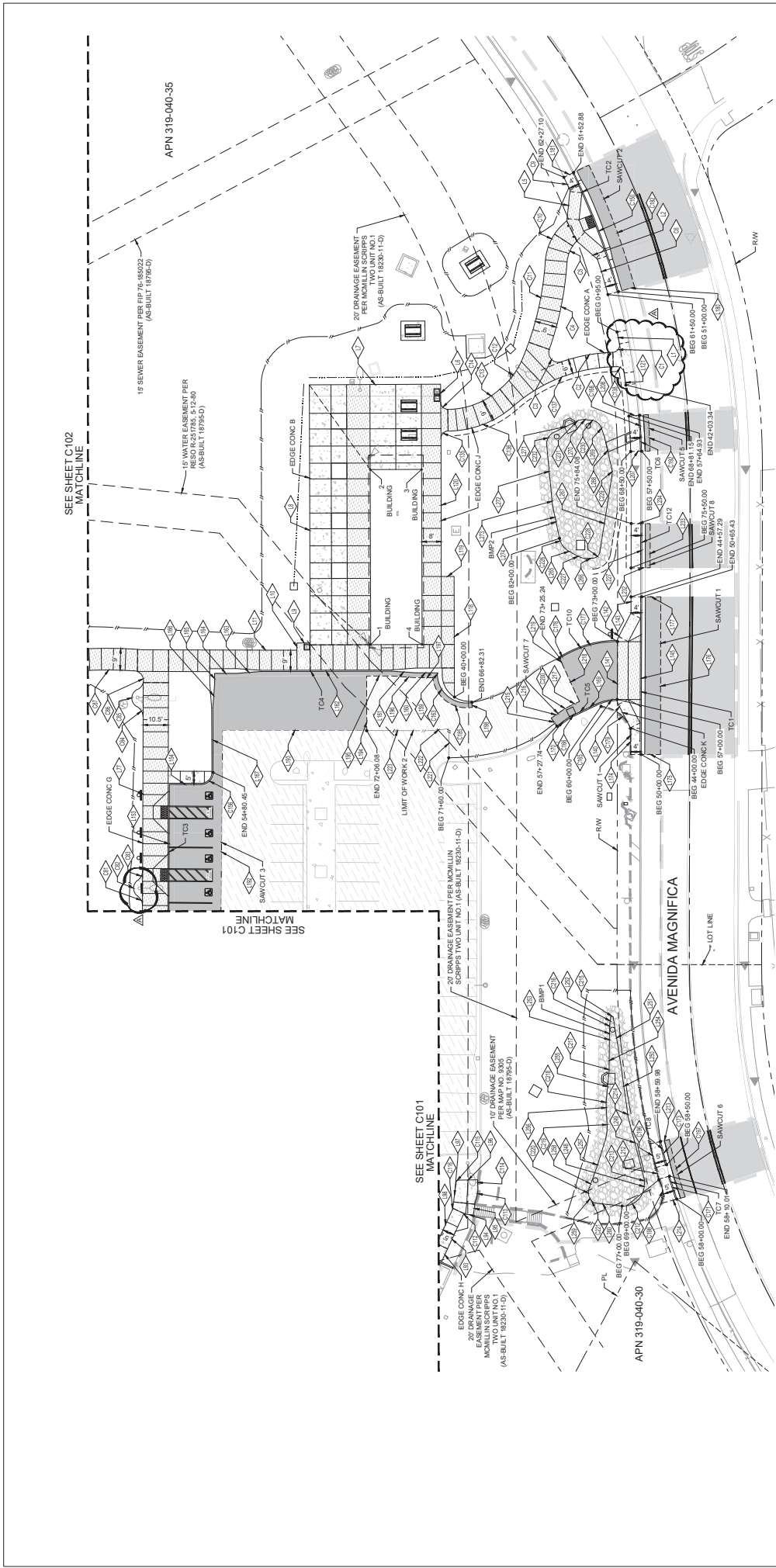
DATE: 01/18/2023  
 DRAWN BY: M.L.S. (M.L.S. 04791.JJ)  
 PROJECT # 20412  
 CITY: SAN DIEGO, CA  
 COUNTY: SAN DIEGO  
 STATE: CALIFORNIA  
 LICENSE NO. 170923  
 LICENSE TYPE: LANDSCAPE ARCHITECTURE  
 LICENSE EXPIRES: 12/31/2025

ADDENDUM A









PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
HORIZONTAL CONTROL PLANS

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
SHEET 16 OF 105 SHEETS

DATE: 12/21/2022  
BY: JHON GRIFFIN  
CHECKED: JHON GRIFFIN  
DATE: 12/21/2022  
PROJECT NO.: 1902-0006  
DRAWING NO.: 0100208-16-D  
C103

WARNING  
1/2"  
SCALE  
FOR ALL DIMENSIONS  
UNLESS OTHERWISE SPECIFIED

**SAN DIEGO**  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL ENGINEER  
NO. CT7208

**SCHMIDT DESIGN GROUP**  
CONSULTANT  
11/16/2023

**CR**  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL ENGINEER  
NO. 11162/2023

PROJECT # 41035  
DINBY TT CR BY RD

PLT DATE: 01/18/2023

ADDITIONAL DESIGN PANEL REVIEWER

SCALE 1" = 20'

C104  
C102

EDGE CONC B										
CH	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN NE	END NE	BEGIN STA	END STA	BEGIN STA	END STA
C0	5.91	S87° 54' 30.46"W	268.67	S38° 12' 20.89"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	2+10.00	2+15.91	2+10.00	2+15.91
L5	12.91	S87° 54' 30.46"W	23.00	S89° 56' 21.98"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	2+15.91	2+28.82	2+15.91	2+28.82
C10	19.51	S87° 54' 30.46"W	122.25	S75° 04' 36.55"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	2+28.82	2+48.33	2+28.82	2+48.33
C11	41.58	S87° 54' 30.46"W	33.00	S81° 32' 04.48"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	2+48.33	3+05.94	2+48.33	3+05.94
C12	16.04	S87° 54' 30.46"W	32.50	S89° 20' 08.11"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	3+05.94	3+29.65	3+05.94	3+29.65
C13	23.71	S87° 54' 30.46"W	3.00	N17° 18' 38.53"E	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	3+29.65	3+43.30	3+29.65	3+43.30
C14	4.05	S87° 54' 30.46"W	7.90	N17° 18' 38.53"E	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	3+43.30	3+47.30	3+43.30	3+47.30
L7	54.47	S87° 54' 30.46"W	107.13	S81° 44' 10.97"E	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	3+47.30	3+98.27	3+47.30	3+98.27
L8	107.13	S87° 54' 30.46"W	5.00	S87° 23' 40.93"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	3+98.27	5+03.39	3+98.27	5+03.39
L9	5.00	S87° 23' 40.93"W	5.00	N27° 55' 51.97"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	5+03.39	5+08.89	5+03.39	5+08.89
L10	3.00	S87° 23' 40.93"W	185.00	N87° 16' 05.10"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	5+08.89	5+11.89	5+08.89	5+11.89
L11	63.72	N27° 55' 51.97"W	185.00	N87° 16' 05.10"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	5+11.89	5+75.61	5+11.89	5+75.61
C15	83.07	N27° 55' 51.97"W	5.00	N21° 30' 47.68"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	5+75.61	6+58.69	5+75.61	6+58.69
C16	4.82	N27° 55' 51.97"W	4.00	N48° 04' 48.35"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	6+58.69	6+63.51	6+58.69	6+63.51
C17	7.57	N27° 55' 51.97"W	5.00	N79° 16' 20.31"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	6+63.51	6+71.07	6+63.51	6+71.07
C18	5.06	N27° 55' 51.97"W	100.00	N41° 04' 33.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	6+71.07	6+76.13	6+71.07	6+76.13
C19	11.11	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	6+76.13	6+87.24	6+76.13	6+87.24
C20	32.80	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	6+87.24	7+20.04	6+87.24	7+20.04
L12	29.74	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	7+20.04	7+49.78	7+20.04	7+49.78
L13	44.50	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	7+49.78	7+94.28	7+49.78	7+94.28
L14	29.96	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	7+94.28	8+24.24	7+94.28	8+24.24
L15	8.47	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	8+24.24	8+32.72	8+24.24	8+32.72
L16	19.70	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	8+32.72	8+52.42	8+32.72	8+52.42
L17	7.80	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	8+52.42	8+60.22	8+52.42	8+60.22
L18	10.00	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	8+60.22	8+70.02	8+60.22	8+70.02
L19	18.09	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	8+70.02	8+88.11	8+70.02	8+88.11
L20	10.00	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	8+88.11	8+98.11	8+88.11	8+98.11
L21	15.42	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	8+98.11	9+13.53	8+98.11	9+13.53
L22	20.14	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	9+13.53	9+33.67	9+13.53	9+33.67
L23	8.67	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	9+33.67	9+42.24	9+33.67	9+42.24
L24	152.77	N27° 55' 51.97"W	180.00	N37° 46' 46.75"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	9+42.24	10+95.01	9+42.24	10+95.01
C21	16.97	N27° 55' 51.97"W	25.00	N47° 47' 21.30"E	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	10+95.01	11+11.98	10+95.01	11+11.98
L25	56.86	N27° 55' 51.97"W	25.00	N15° 44' 43.99"E	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	11+11.98	11+68.84	11+11.98	11+68.84
C22	10.62	N27° 55' 51.97"W	25.00	N15° 44' 43.99"E	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	11+68.84	11+79.47	11+68.84	11+79.47
L26	230.52	N27° 55' 51.97"W	25.00	N15° 44' 43.99"E	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	11+79.47	14+12.99	11+79.47	14+12.99
C23	37.83	N27° 55' 51.97"W	25.00	N15° 44' 43.99"E	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	14+12.99	14+50.82	14+12.99	14+50.82
L27	3.85	N27° 55' 51.97"W	25.00	N45° 16' 00.07"E	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	14+50.82	14+54.67	14+50.82	14+54.67
L28	8.88	N27° 55' 51.97"W	25.00	N44° 32' 05.49"E	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	14+54.67	14+63.55	14+54.67	14+63.55
L29	32.96	N27° 55' 51.97"W	25.00	N45° 12' 05.29"W	N 1912039.38 E 6306447.77	N 1912039.38 E 6306447.77	14+63.55	14+96.50	14+63.55	14+96.50

EDGE CONC A										
CH	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN NE	END NE	BEGIN STA	END STA	BEGIN STA	END STA
C1	3.00	S87° 54' 30.46"W	3.00	N87° 18' 46.47"W	N 1911964.47 E 6306397.65	N 1911964.47 E 6306397.65	1+05.07	1+08.07	1+05.07	1+08.07
C2	21.70	N28° 30' 45.16"W	72.00	N28° 30' 45.16"W	N 1911964.47 E 6306397.65	N 1911964.47 E 6306397.65	1+08.07	1+29.77	1+08.07	1+29.77
C3	8.97	N17° 04' 29.59"E	4.00	N17° 04' 29.59"E	N 1911964.47 E 6306397.65	N 1911964.47 E 6306397.65	1+29.77	1+35.73	1+29.77	1+35.73
C4	36.91	N73° 25' 09.33"E	134.25	N73° 25' 09.33"E	N 1911964.47 E 6306397.65	N 1911964.47 E 6306397.65	1+35.73	1+72.64	1+35.73	1+72.64
C5	9.99	N87° 17' 20.07"E	14.00	N87° 17' 20.07"E	N 1911964.47 E 6306397.65	N 1911964.47 E 6306397.65	1+72.64	1+82.63	1+72.64	1+82.63
C6	15.31	S19° 03' 11.86"W	258.67	S45° 25' 31.11"W	N 1911964.47 E 6306397.65	N 1911964.47 E 6306397.65	1+82.63	1+94.03	1+82.63	1+94.03

EDGE CONC C										
CH	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN NE	END NE	BEGIN STA	END STA	BEGIN STA	END STA
C25	51.71	N1° 06' 34.71"E	406.00	N1° 06' 34.71"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	15+00.00	15+45.71	15+00.00	15+45.71
C26	20.00	N16° 03' 00.58"E	406.00	N16° 03' 00.58"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	15+45.71	15+71.70	15+45.71	15+71.70
C27	30.10	N12° 30' 44.02"E	406.00	N12° 30' 44.02"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	15+71.70	16+01.81	15+71.70	16+01.81
L30	31.62	N9° 52' 52.19"E	406.00	N9° 52' 52.19"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	16+01.81	16+33.42	16+01.81	16+33.42
L31	20.00	N15° 04' 27.02"E	406.00	N15° 04' 27.02"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	16+33.42	16+43.42	16+33.42	16+43.42
L32	50.04	N15° 56' 35.19"E	406.00	N15° 56' 35.19"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	16+43.42	17+03.46	16+43.42	17+03.46
L33	96.54	N82° 46' 26.64"E	406.00	N82° 46' 26.64"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	17+03.46	18+00.00	17+03.46	18+00.00
L34	26.94	S27° 19' 33.36"E	406.00	S27° 19' 33.36"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	18+00.00	18+26.94	18+00.00	18+26.94
L35	86.79	N82° 17' 52.37"E	406.00	N82° 17' 52.37"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	18+26.94	19+13.74	18+26.94	19+13.74
C28	16.97	N42° 27' 27.07"E	25.00	N42° 27' 27.07"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	19+13.74	19+30.71	19+13.74	19+30.71
L36	51.12	N32° 29' 30.85"E	34.00	N32° 29' 30.85"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	19+30.71	19+81.83	19+30.71	19+81.83
C29	14.72	N48° 08' 56.33"E	34.00	N48° 08' 56.33"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	19+81.83	19+96.55	19+81.83	19+96.55
L37	23.52	N48° 08' 56.33"E	34.00	N48° 08' 56.33"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	19+96.55	20+20.07	19+96.55	20+20.07
C30	26.14	N70° 10' 23.92"E	34.00	N70° 10' 23.92"E	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	20+20.07	20+46.21	20+20.07	20+46.21
L38	5.81	N42° 26' 02.86"W	34.00	N42° 26' 02.86"W	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	20+46.21	20+52.02	20+46.21	20+52.02
L39	8.88	N42° 26' 02.86"W	34.00	N42° 26' 02.86"W	N 1912176.71 E 6306014.23	N 1912176.71 E 6306014.23	20+52.02	20+70.91	20+52.02	20+70.91

EDGE CONC D										
CH	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN NE	END NE	BEGIN STA	END STA</		

Point #	Raw Description	Elevation	Northing	Easting
1	BUILDING	674.350	1912023.5337	6306238.9188
2	BUILDING	674.350	1912027.9335	6306302.9000
3	BUILDING	674.350	1912029.1635	6306313.0219
4	BUILDING	674.350	1912024.7438	6306248.0187

Point #	Raw Description	Elevation	Northing	Easting
1	BUILDING	674.350	1912023.5337	6306238.9188
2	BUILDING	674.350	1912027.9335	6306302.9000
3	BUILDING	674.350	1912029.1635	6306313.0219
4	BUILDING	674.350	1912024.7438	6306248.0187

EDGE CONC J	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
L116	50.07	N81°44'10.97"E			40+00.00	40+50.06
L119	5.34	N28°15'48.03"W			40+50.06	40+55.40
L120	57.31	N81°49'27.89"E			40+55.40	41+12.71
C135	4.64	S79°01'01.31"E	3.00	81°07'05.69"E	41+12.71	41+17.35
C136	29.66	S48°59'06.00"E	41.50	54°59'06.00"E	41+17.35	41+47.01
C137	46.96	S48°59'48.97"E	66.00	54°59'48.97"E	41+47.01	41+93.97
C138	4.37	N28°15'48.03"W			41+93.97	41+98.34
L121	5.00	S53°56'22.00"W			41+98.34	42+03.34

EDGE CONC K	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
L140	12.25	N34°54'07.82"E			44+00.00	44+12.25
L141	26.18	N62°08'54.98"E			44+12.25	44+38.43
L142	12.14	N69°23'42.14"E			44+38.43	44+50.56
L143	6.73	N62°08'54.98"E			44+50.56	44+57.29

EDGE CONC L	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
C145	37.91	N15°13'08.26"E	12.00	15°13'08.26"E	44+60.00	44+97.91

EDGE CONC M	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
C146	32.99	N81°08'56.33"E	10.50	81°08'56.33"E	45+00.00	45+32.99

EDGE CONC N	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
C147	37.70	N81°08'56.33"E	12.00	81°08'56.33"E	45+00.00	46+37.70

EDGE CONC O	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
L128	13.66	S48°51'46.29"E			46+00.00	46+13.66
L129	13.26	N41°28'32.75"E			46+13.66	46+26.92
L130	41.34	N81°52'41.41"E			46+26.92	46+68.26
L131	15.24	S48°51'46.29"E			46+68.26	46+83.50
L132	18.00	S3°29'54.97"E			46+83.50	47+01.50
L133	61.95	N81°35'13.07"E			47+01.50	47+63.45

SEATWALL 1	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
L136	37.05	N3°25'17.17"W			48+00.00	48+37.05

SEATWALL 2	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
L139	37.46	N3°25'19.78"W			48+35.00	48+72.46

TC1	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
L145	65.43	N52°05'54.27"E			50+00.00	50+65.43

TC2	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
C150	52.88	N11°18'53.89"E	283.17	11°18'53.89"E	51+00.00	51+52.88

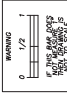
TC3	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
L148	13.61	S66°42'44.40"W			52+00.00	52+13.61
L149	86.64	N3°20'22.05"W			52+13.61	52+99.66
L150	10.00	N82°09'46.65"E			52+99.66	53+09.66
C155	12.57	N17°09'46.65"E	8.00	17°09'46.65"E	53+09.66	53+22.22
L151	10.18	N27°59'11.35"W			53+22.22	53+32.40
L152	77.79	N52°09'46.65"E			53+32.40	54+10.19
L153	49.27	N52°09'46.14"E			54+10.19	54+59.46
L154	13.07	S27°51'41.08"E			54+59.46	54+72.53
C156	7.92	S72°51'39.78"E	5.00	72°51'39.78"E	54+72.53	54+80.45

PORT TABLE	Point #	Raw Description	Elevation	Northing	Easting
	1	BUILDING	674.350	1912023.5337	6306238.9188
	2	BUILDING	674.350	1912027.9335	6306302.9000
	3	BUILDING	674.350	1912029.1635	6306313.0219
	4	BUILDING	674.350	1912024.7438	6306248.0187

TC4	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
C163	21.13	N11°18'43.37"E	12.00	11°18'43.37"E	55+00.00	55+21.13
L169	0.53	N81°44'48.77"E			55+21.13	55+21.66
L160	9.65	N28°14'57.64"W			55+21.66	55+30.71
L161	10.03	N23°57'56.66"W			55+30.71	55+40.74
L162	54.17	N28°14'57.65"W			55+40.74	55+94.91
L163	10.03	N28°14'57.65"W			55+94.91	56+04.93
L164	9.26	N11°18'43.37"E			56+04.93	56+14.18
L165	4.25	S81°44'48.77"W			56+14.18	56+18.43
L166	10.03	S60°02'08.80"W			56+18.43	56+28.46
L167	26.82	S81°44'48.77"W			56+28.46	56+55.29

TC5	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
C165	9.02	N11°18'43.37"E	20.00	11°18'43.37"E	57+00.00	57+09.02
L169	10.31	N33°35'46.30"W			57+09.02	57+19.33
C168	3.57	N81°44'48.77"E	20.00	81°44'48.77"E	57+19.33	57+22.91
L170	4.84	N81°49'38.70"W			57+22.91	57+27.74

TC6	LENGTH	LINE BEARING	RADIUS	CHORD ANGLE	BEGIN STATION	END STATION
C168	14.83	N59°46'14.61"E	311.33	59°46'14.61"E	57+50.00	57+64.83



PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
 HORIZONTAL CONTROL PLANS

ENGINEERING & ARCHITECTURE DEPARTMENT  
 SHEET 20 OF 105 SHEETS

DATE: 12/21/2022  
 DRAWING NO: C107  
 PROJECT NO: 1912028-20-D

APPROVED: [Signature]  
 CHECKED: [Signature]  
 DATE: 12/21/2022

DESIGNED: [Signature]  
 DATE: 12/21/2022

PROJECT NO: 1912028-20-D  
 DRAWING NO: C107

**SCHMIDT DESIGN GROUP**  
 CONSULTANT

11/16/2023

PROJECT # 41035  
 DNEY.TT CH.BY.RD

**CR**  
 CONSULTANT

11/16/2023

PROJECT # 41035  
 DNEY.TT CH.BY.RD

**ABBREVIATIONS**

- FG FINISHED GROUND
- FL FLOW LINE
- FENCE
- FNC FINISHED SURFACE
- FS FINISHED SURFACE
- GB GRADE BREAK
- PL PROPERTY LINE
- TC TOP OF CURB
- TW TOP OF WALL
- NOTE: PARENTHESIS INDICATE EXISTING CONDITION

**CONSTRUCTION NOTES**

- 1 SAWCUT EXISTING ASPHALT PAVEMENT (FULL DEPTH)
- 2 SAWCUT EXISTING SIDEWALK AT NEAREST JOINT
- 3 CONSTRUCT 8" CURB PER CITY OF SAN DIEGO STANDARD DRAWING SDG-150.
- 4 FURNISH AND INSTALL 4" WIDE WHITE 2-COAT PAINT.
- 5 PROTECT IN PLACE
- 6 PAINT CURB RED

**LEGEND**

- STANDARDS AND DETAILS**
- SAWCUT LINE
  - GRAVING DAYLIGHT LINE
  - TYPE II SLURRY SEAL
  - ASPHALT PAVEMENT SECTION: 3" AC OVER 8" C1B
  - VARIABLE OVERLAY, 2" MIN
  - ADDITIONAL TERRAZZO
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PROPOSED SWALE
  - ACCESSIBLE PARKING STALL SIGN
  - EXISTING CONTOUR
  - PROPOSED CONTOUR
  - GRADE BREAK
  - LANDSCAPE LIMIT OF WORK

**GENERAL NOTES**

1. UNLESS OTHERWISE SHOWN ON PLANS, CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS WITHIN GRADING LIMITS AND REMOVE ALL IMPEDANCES FOR THE PROPOSED FACILITIES.
2. VERIFY THE EXISTENCE AND HORIZONTAL/VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. VERIFY THAT ANY UTILITIES SHOWN TO BE RELOCATED BY THIS PROJECT ARE ACCURATELY LOCATED AND DEPTHS ARE CORRECT. IMMEDIATELY NOTIFY THE ENGINEER OF ANY REMAINING UTILITY CONFLICTS PRIOR TO THE START OF ANY DEMOLITION WORK.
3. ADJUSTMENT OF EXISTING UTILITIES PERTAINS TO SURFACE FEATURES ONLY.
4. SEE GRADING ENLARGEMENT SHEETS C01, C02, AND C03 FOR ADDITIONAL VERTICAL INFORMATION.
5. ACCESSIBLE WALKWAYS SHALL NOT EXCEED 4.5% RUNNING SLOPE AND 1.5% CROSS SLOPE UNLESS OTHERWISE NOTED.



SCALE 1" = 20'

PL DATE: 01/18/2023

PROJECT: 41035  
DNEY TT, CH BT, RD

CONSULTANT



REGISTERED PROFESSIONAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL CIVIL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT  
NO. 017208

REGISTERED PROFESSIONAL ARCHITECT  
NO. 017208

REGISTERED PROFESSIONAL ELECTRICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL MECHANICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL CHEMICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL INDUSTRIAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL METALLURGICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL AERONAUTICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL NUCLEAR ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL AGRICULTURAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL MARINE ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL AERONAUTICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL AERONAUTICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL AERONAUTICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL AERONAUTICAL ENGINEER  
NO. 017208

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NO. 017208

REGISTERED PROFESSIONAL AERONAUTICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL AERONAUTICAL ENGINEER  
NO. 017208

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
SHEET 23 OF 105 SHEETS

DATE: 1/21/2022  
BY: JHOSH GRINI  
CHECKED: JHOSH GRINI  
APPROVED: JHOSH GRINI  
DATE: 1/21/2022

PROJECT: 41035  
DNEY TT, CH BT, RD

CONTRACTOR: [BLANK]

DRAWING NO.: C201  
PROJECT NO.: 01020208-23-0

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
GRADING PLANS

REGISTERED PROFESSIONAL ENGINEER  
NO. 017208

SCHMIDT DESIGN GROUP

REGISTERED PROFESSIONAL CIVIL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT  
NO. 017208

REGISTERED PROFESSIONAL ARCHITECT  
NO. 017208

REGISTERED PROFESSIONAL ELECTRICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL MECHANICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL CHEMICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL INDUSTRIAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL NUCLEAR ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL AGRICULTURAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL MARINE ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL AERONAUTICAL ENGINEER  
NO. 017208

REGISTERED PROFESSIONAL AERONAUTICAL ENGINEER  
NO. 017208

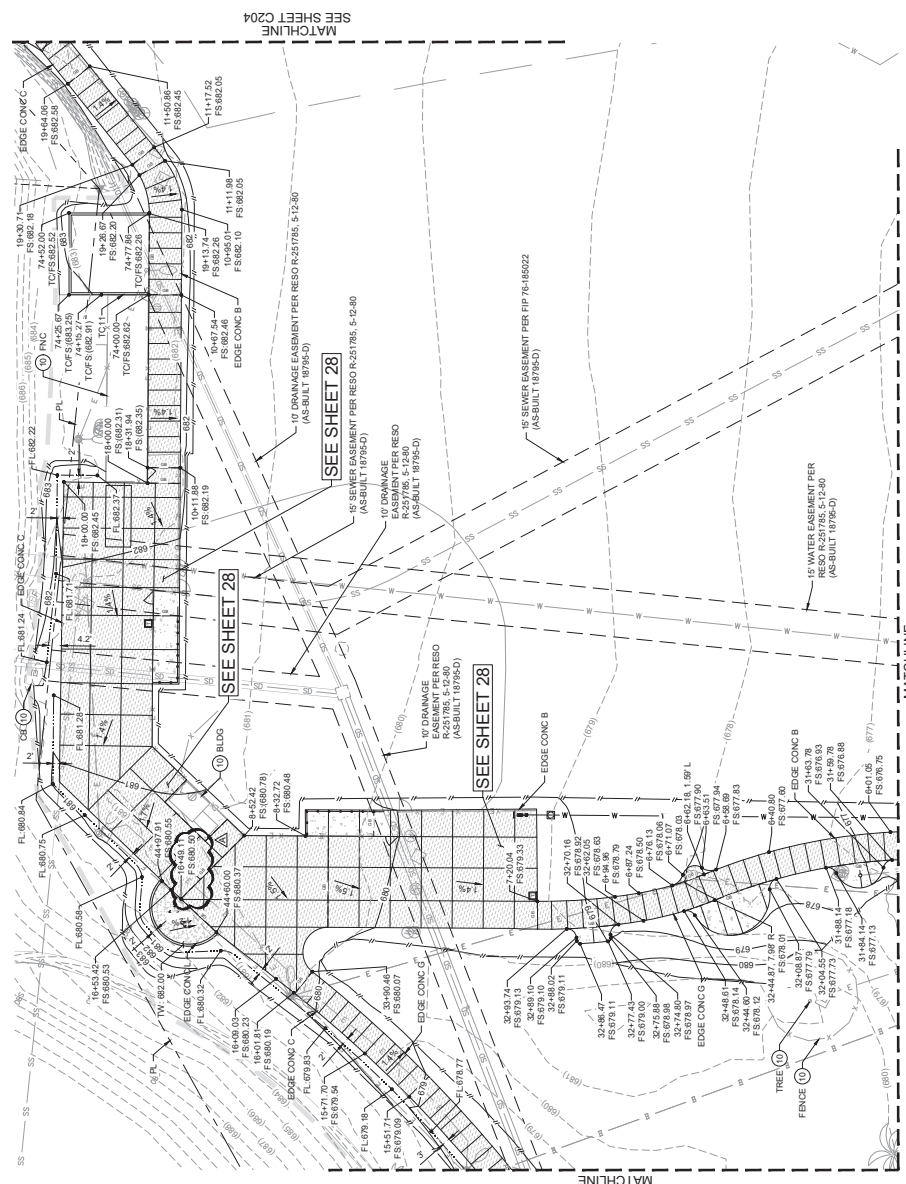
REGISTERED PROFESSIONAL AERONAUTICAL ENGINEER  
NO. 017208

**CONSTRUCTION NOTES**  
 (10) PROTECT IN PLACE

- ABBREVIATIONS**
- BLDG BUILDING
  - CB CATCH BASIN
  - FNC FENCE
  - FG FINISHED GROUND
  - FL FLOW LINE
  - FS FINISHED SURFACE
  - GB GRADE BREAK
  - PL PROPERTY LINE
  - TC TOP OF CURB
  - TW TOP OF WALL
- NOTE: PARENTHESES INDICATE EXISTING CONDITION

- LEGEND**
- SAWCUT LINE
  - - - GRADING DAYLIGHT LINE
  - TYPE II SLURRY SEAL
  - ASPHALT PAVEMENT SECTION - 3" AC OVER 8" C/B
  - VARIABLE OVERLAY 2" MIN
  - ADDITIVE ALTERNATE
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PROPOSED SWALE
  - ACCESSIBLE PARKING STALL SIGN
  - EXISTING CONTOUR
  - PROPOSED CONTOUR
  - GRADE BREAK
  - LANDSCAPE LIMIT OF WORK

**STANDARDS AND DETAILS**



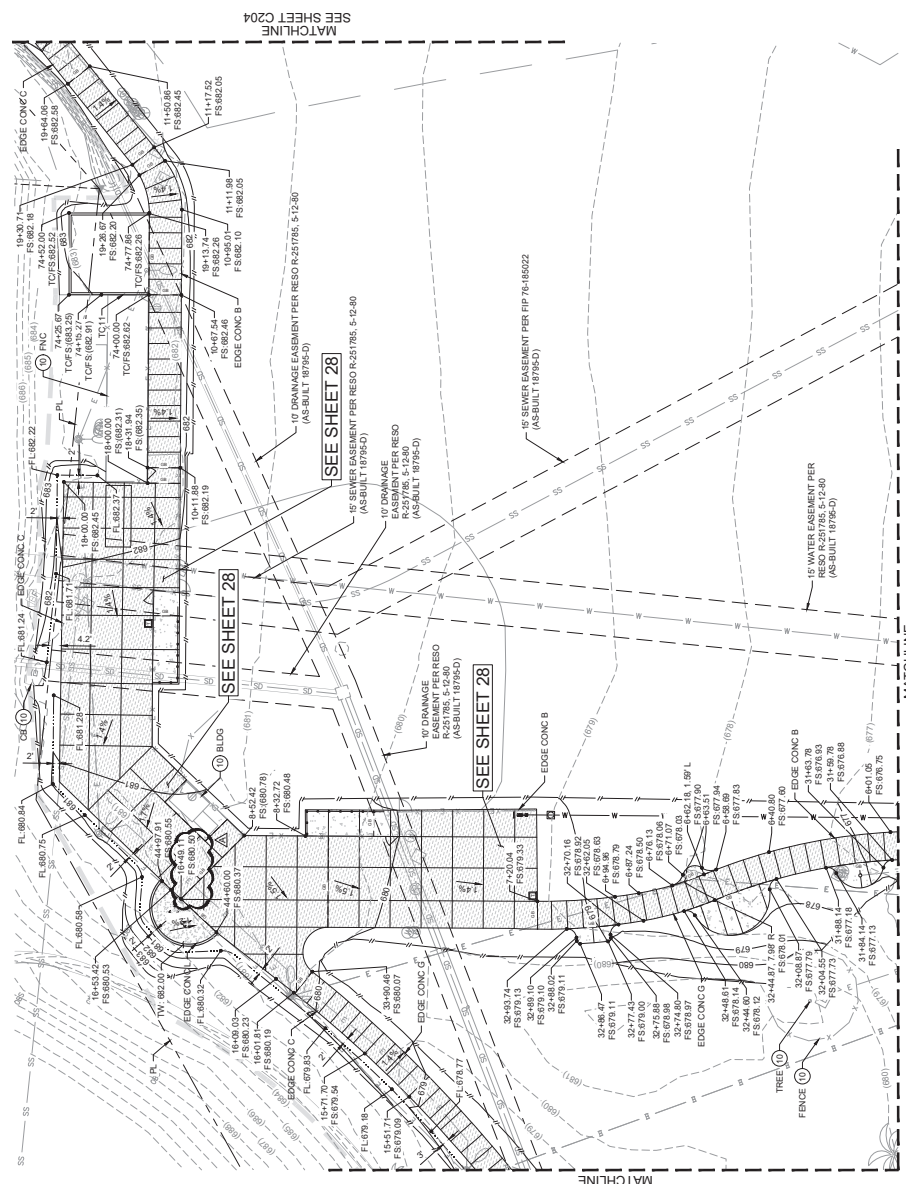
SEE SHEET C201 MATCHLINE  
 SEE SHEET C204 MATCHLINE

**CONSTRUCTION NOTES**  
 (10) PROTECT IN PLACE

- ABBREVIATIONS**
- BLDG BUILDING
  - CB CATCH BASIN
  - FNC FENCE
  - FG FINISHED GROUND
  - FL FLOW LINE
  - FS FINISHED SURFACE
  - GB GRADE BREAK
  - PL PROPERTY LINE
  - TC TOP OF CURB
  - TW TOP OF WALL
- NOTE: PARENTHESES INDICATE EXISTING CONDITION

- LEGEND**
- SAWCUT LINE
  - - - GRADING DAYLIGHT LINE
  - TYPE II SLURRY SEAL
  - ASPHALT PAVEMENT SECTION - 3" AC OVER 8" C/B
  - VARIABLE OVERLAY 2" MIN
  - ADDITIVE ALTERNATE
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PER LANDSCAPE CONSTRUCTION PLANS
  - PROPOSED SWALE
  - ACCESSIBLE PARKING STALL SIGN
  - EXISTING CONTOUR
  - PROPOSED CONTOUR
  - GRADE BREAK
  - LANDSCAPE LIMIT OF WORK

**STANDARDS AND DETAILS**



SEE SHEET C201 MATCHLINE  
 SEE SHEET C204 MATCHLINE



SCALE 1" = 20'



DATE: 11/16/2023

PROJECT # 41005  
 DINEVIT, C/BY RD

PLT DATE: 01/18/2023

CONSULTANT



REGISTERED PROFESSIONAL ENGINEER  
 CIVIL  
 NO. C7208



REGISTERED PROFESSIONAL ENGINEER  
 CIVIL  
 NO. C7208

DATE: 11/16/2023

DATE: 11/16/2023

DATE: 11/16/2023

DATE: 11/16/2023

PLANS FOR THE CONSTRUCTION OF: <b>JERABEK PARK IMPROVEMENTS</b>		SHEET 24 OF 105 SHEETS	
ENGINEERING & CAPITAL PROJECTS DEPARTMENT		GRADING PLANS	
PROJECT NO.	5-20097	DATE	11/21/2022
PROJECT NAME	JERABEK PARK	APPROVED BY	J. GRIFFIN
DESIGNER	SR	DATE	11/21/2022
CHECKER	SR	DATE	11/21/2022
APPROVED BY	J. GRIFFIN	DATE	11/21/2022
PROJECT NO.	5-20097	DRAWING NO.	C202
PROJECT NAME	JERABEK PARK	DRAWING TITLE	GRADING PLANS
DESIGNER	SR	DRAWING NO.	0100208-24-D
CHECKER	SR	DRAWING NO.	0100208-24-D
APPROVED BY	J. GRIFFIN	DRAWING NO.	0100208-24-D
PROJECT NO.	5-20097	DRAWING NO.	0100208-24-D
PROJECT NAME	JERABEK PARK	DRAWING NO.	0100208-24-D
DESIGNER	SR	DRAWING NO.	0100208-24-D
CHECKER	SR	DRAWING NO.	0100208-24-D
APPROVED BY	J. GRIFFIN	DRAWING NO.	0100208-24-D

ADDENDUM A

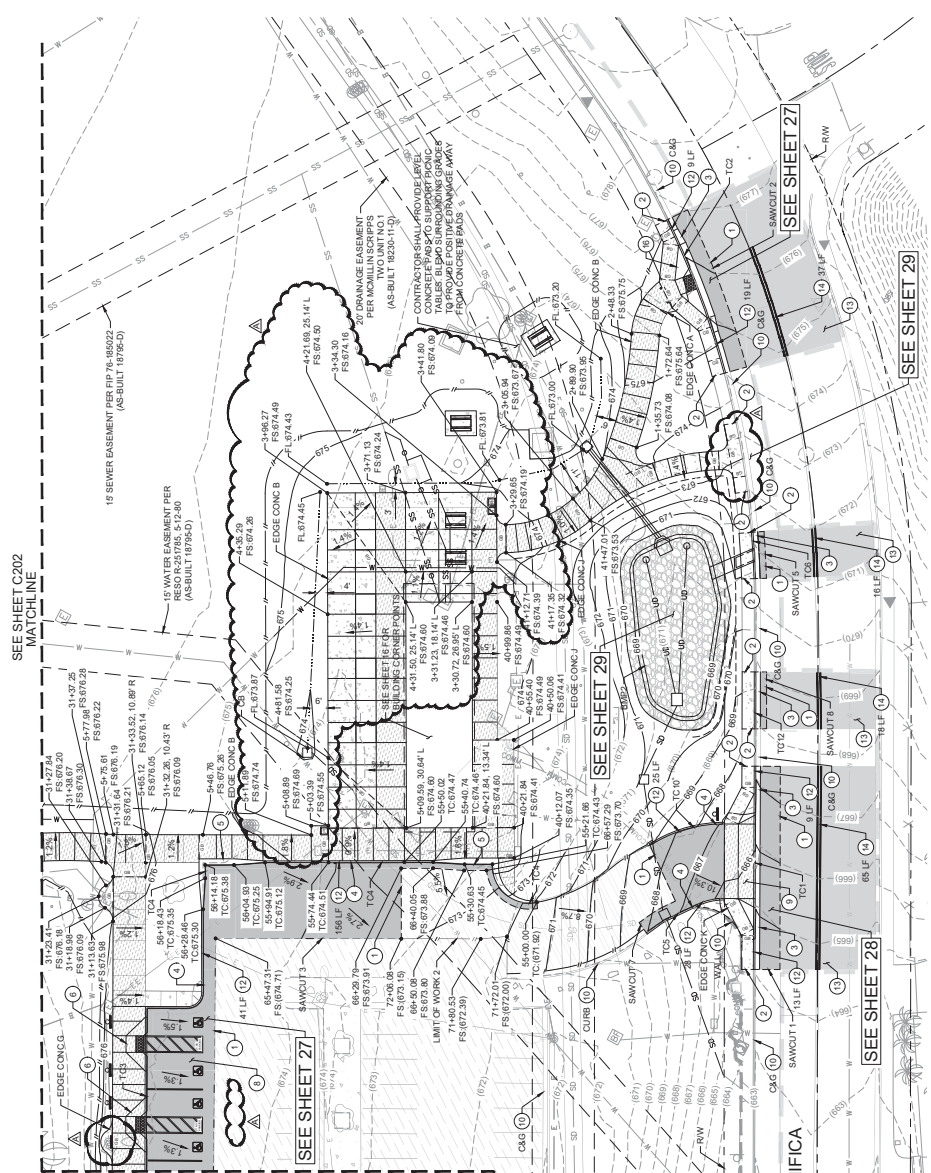
**LEGEND**

SAWTOOTH LINE	CONSTRUCT CATCH BASIN PER CITY OF SAN DIEGO STANDARD DRAWING SDG-151.
GRADING DAYLIGHT LINE	CONSTRUCT CURB PER CITY OF SAN DIEGO STANDARD DRAWING SDG-150.
TYPE II SLURRY SEAL	CONSTRUCT MODIFIED FCC TYPE B ROLLED CURB PER SDG-102 OVER 8" CIB
ASPHALT PAVEMENT SECTION - 3" AC OVER 8" CIB	G-4 WITH TRANSITIONS PER DETAIL A ON SHEET C102
VARIABLE OVERLAY, 2" W/4	CONSTRUCT TYPE B CURB RAMP PER CITY OF SAN DIEGO STANDARD DRAWING SDG-133.
ADDITIVE ALTERNATE	CONSTRUCT FCC DRIVEWAY PER CITY OF SAN DIEGO STANDARD DRAWING SDM-117.
PEDESTRIAN CONCRETE PAVING PER LANDSCAPING PLANS	PROTECT IN PLACE
VEHICULAR CONCRETE PAVING	PAINT CURB RED
PROPOSED SWALE	CONSTRUCT TYPE II SLURRY SEAL
ACCESSIBLE PARKING STALL SIGN	INSTALL YELLOW AND PASSING LINE (DETAIL 22) PER CALTRANS STANDARD PLAN RSP AZ2A.
EXISTING CONTOUR	INSTALL WHITE RIGHT EDGE LINE (DET AL 27B) PER CALTRANS STANDARD PLAN RSP AZ2B.
PROPOSED CONTOUR	CONSTRUCT TYPE B CURB RAMP PER CITY OF SAN DIEGO STANDARD DRAWING SDG-133.
GRADE BREAK	
LANDSCAPE LIMIT OF WORK	

**CONSTRUCTION NOTES**

- SAW CUT EXISTING ASPHALT PAVEMENT (FULL DEPTH)
- SAW CUT EXISTING SIDEWALK AT NEAREST JOINT
- CONSTRUCT CURB AND GUTTER PER CITY OF SAN DIEGO STANDARD DRAWING SDG-151.
- CONSTRUCT CURB PER CITY OF SAN DIEGO STANDARD DRAWING SDG-150.
- CONSTRUCT MODIFIED FCC TYPE B ROLLED CURB PER SDG-102 OVER 8" CIB
- G-4 WITH TRANSITIONS PER DETAIL A ON SHEET C102
- CONSTRUCT TYPE B CURB RAMP PER CITY OF SAN DIEGO STANDARD DRAWING SDG-133.
- CONSTRUCT FCC DRIVEWAY PER CITY OF SAN DIEGO STANDARD DRAWING SDM-117.
- PROTECT IN PLACE
- PAINT CURB RED
- CONSTRUCT TYPE II SLURRY SEAL
- INSTALL YELLOW AND PASSING LINE (DETAIL 22) PER CALTRANS STANDARD PLAN RSP AZ2A.
- INSTALL WHITE RIGHT EDGE LINE (DET AL 27B) PER CALTRANS STANDARD PLAN RSP AZ2B.
- CONSTRUCT TYPE B CURB RAMP PER CITY OF SAN DIEGO STANDARD DRAWING SDG-133.

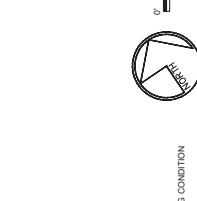
**STANDARDS AND DETAILS**



**ABBREVIATIONS**

C&G	CURB AND GUTTER
CB	CATCH BASIN
C1	CURB INLET
FG	FINISHED GROUND
FL	FLOW LINE
FS	FINISHED SURFACE
GB	GRADE BREAK
TC	TOP OF CURB
TW	TOP OF WALL

NOTE: PARENTHESES INDICATE EXISTING CONDITION



**CONSULTANT**

**SCHMIDT DESIGN GROUP**

REGISTERED PROFESSIONAL ENGINEER - CIVIL

NO. 07208

11/16/2023

PROJECT # 41035

DIBBY TT, CH BY RD

PLT DATE: 01/18/2023

**CR**

REGISTERED PROFESSIONAL ENGINEER - CIVIL

NO. 07208

11/16/2023

**SAN DIEGO**

REGISTERED PROFESSIONAL ENGINEER - CIVIL

NO. 07208

11/16/2023

**PLANS FOR THE CONSTRUCTION OF:**

**JERABEK PARK IMPROVEMENTS**

**GRADING PLANS**

ENGINEERING & CAPITAL PROJECTS DEPARTMENT

SHEET 25 OF 105 SHEETS

DATE: 1/22/2022

DATE CHECKED: 01/02/08-25-D

DRAWING NO. C203

**CONSTRUCTION NOTES**

- 2 SAWCUT EXISTING SIDEWALK AT NEAREST JOINT

**ABBREVIATIONS**

- FG FINISHED GROUND
- FL FLOW LINE
- FS FINISHED SURFACE
- GB GRADE BREAK
- TC TOP OF CURB
- TW TOP OF WALL

NOTE: PARENTHESES INDICATE EXISTING CONDITION

**LEGEND**

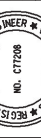
- SAWCUT LINE
- GRADING DAYLIGHT LINE
- TYPE II SLURRY SEAL
- ASPHALT PAVEMENT SECTION: 3" AC OVER 8" CB
- VARIABLE OVERLAY: 2" MIN
- ADDITIVE ALTERNATE
- PERLANDSCAPE CONSTRUCTION PLANS
- PERLANDSCAPE CONSTRUCTION PLANS
- PERLANDSCAPE CONSTRUCTION PLANS
- PERLANDSCAPE CONSTRUCTION PLANS
- PROPOSED SWALE
- ACCESSIBLE PARKING STALL SIGN
- EXISTING CONTOUR
- PROPOSED CONTOUR
- GRADE BREAK
- LANDSCAPE LIMIT OF WORK



SEE SHEET C202



WARNING: THIS DRAWING IS THE PROPERTY OF SCHMIDT DESIGN GROUP. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF SCHMIDT DESIGN GROUP.



**SCHMIDT DESIGN GROUP**  
 10000 LA JOLLA VILLAGE CENTER DRIVE, SUITE 100  
 SAN DIEGO, CALIFORNIA 92121  
 (619) 594-9200  
 WWW.SCHMIDTDG.COM

CONSULTANT  
 PROJECT # 41005  
 DIBBY TT, CH, BT, RD  
 11/16/2023  
 PLOT DATE: 01/18/2023

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
 GRADING PLANS  
 SHEET 26 OF 105 SHEETS

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
 SHEET 26 OF 105 SHEETS

DATE: 1/22/2022  
 BY: JHOSH GRINI  
 CHECKED: JHOSH GRINI  
 APPROVED: JHOSH GRINI  
 ORIGINAL: JHOSH GRINI  
 ADDENDUM A: JHOSH GRINI  
 AS-BUILTS: JHOSH GRINI  
 REVISIONS: JHOSH GRINI

WSP NO: S-20097  
 PMT NO: 198299  
 DRAWING NO: C204  
 DATE COMPLETED: 01/02/08-26-D

ADDED/REMOVED

ADDENDUM A







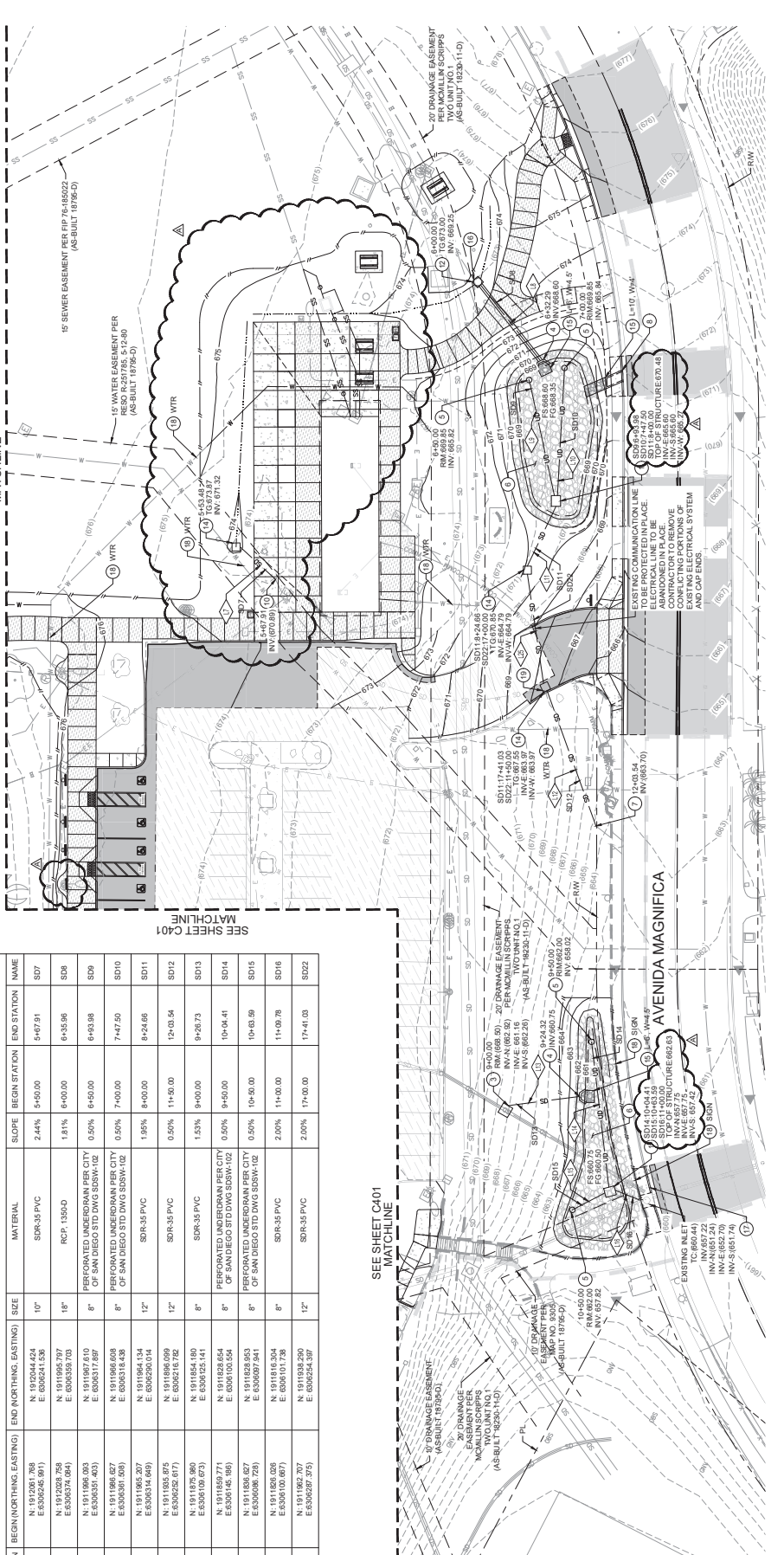


STORM DRAIN LINE ALIGNMENT DATA

LINE	LINE/CHORD DIRECTION	BEGIN (NORTHING, EASTING)	END (NORTHING, EASTING)	SIZE	MATERIAL	SLOPE	BEGIN STATION	END STATION	NAME
L7	S14 24 21.85°W	N 191924.254 E 630624.591	N 191924.254 E 630624.591	10"	SDR-35 PVC	2.4%	5+50.00	5+67.91	SD7
L8	S23 34 14.33°W	N 191926.797 E 630630.703	N 191926.797 E 630630.703	18"	RCP, 1500-D	1.81%	6+00.00	6+35.96	SD8
L9	S49 37 56.07°W	N 191986.093 E 630635.403	N 191986.093 E 630635.403	8"	PERFORATED UNDERDRAIN PER CITY OF SAN DIEGO STD DWG SDSW-102	0.09%	6+50.00	6+93.98	SD9
L10	S65 04 13.99°W	N 191986.027 E 630631.838	N 191986.027 E 630631.838	8"	PERFORATED UNDERDRAIN PER CITY OF SAN DIEGO STD DWG SDSW-102	0.09%	7+00.00	7+47.50	SD10
L11	S57 30 20.45°W	N 191984.134 E 630626.014	N 191984.134 E 630626.014	12"	SDR-35 PVC	1.95%	8+00.00	8+24.66	SD11
L12	S42 00 57.78°W	N 191886.099 E 630626.677	N 191886.099 E 630626.677	12"	SDR-35 PVC	0.56%	11+50.00	12+05.54	SD12
L13	S32 27 26.41°E	N 191876.980 E 630610.673	N 191876.980 E 630610.673	8"	SDR-35 PVC	1.53%	9+00.00	9+26.73	SD13
L14	S65 07 00.86°W	N 191850.771 E 630616.554	N 191850.771 E 630616.554	8"	PERFORATED UNDERDRAIN PER CITY OF SAN DIEGO STD DWG SDSW-102	0.09%	9+50.00	10+04.41	SD14
L15	S65 00 30.54°E	N 191828.953 E 630609.941	N 191828.953 E 630609.941	8"	PERFORATED UNDERDRAIN PER CITY OF SAN DIEGO STD DWG SDSW-102	0.09%	10+00.00	10+40.99	SD15
L16	S81 17 05.99°E	N 191826.026 E 630610.677	N 191826.026 E 630610.677	8"	SDR-35 PVC	2.00%	11+00.00	11+09.78	SD16
L25	S52 20 02.19°W	N 191932.280 E 630629.355	N 191932.280 E 630629.355	12"	SDR-35 PVC	2.00%	17+00.00	17+41.03	SD22

SEE SHEET C402 MATCHLINE

SEE SHEET C401 MATCHLINE



CONSTRUCTION NOTES

- CONSTRUCT BURIED OVERFLOW STRUCTURE PER CITY OF SAN DIEGO STD. DWG. SDSW-103. DETAIL ON SHEET 0801.
- CONSTRUCT LOW FLOW DIVERSION STRUCTURE PER DETAIL ON SHEET 0801.
- CONSTRUCT STORM DRAIN CLEANOUT PER CITY OF SAN DIEGO STD. DWG. NO. SDSW-101.
- CONSTRUCT BIFURCATION BASIN PER DETAIL C ON SHEET 0801.
- CONSTRUCT 48" SDR-35 PVC BEND. SIZES PER PLAN, DETAIL E ON SHEET 0801.
- CONNECT TO EXISTING 18" PVC STORM DRAIN. CONSTRUCT 18" SDR-35 CONCRETE CATCH BASIN BY BROOKS OR APPROVED EQUAL CATCH BASIN SHALL INCLUDE A BLACK STEEL GATE.
- CONSTRUCT 24"X24" CONCRETE CATCH BASIN BY WATER UTILITIES WITHIN LIMIT OF WORK INCLUDE A BLACK STEEL GATE.
- CONSTRUCT GROUDED BIRAP NO. 2 BACKING, 1:1, T. LEAKING AND WEIR PER PLAN.
- CONNECT EXISTING STORM DRAIN TO PROPOSED CATCH BASIN.
- RECONSTRUCT SIDEWALK UNDERDRAIN PER SHEET 04-27.
- PROTECT IN PLACE.
- RECONNECT EXISTING STORM DRAIN TO PROPOSED CATCH BASIN.

PLANS FOR THE CONSTRUCTION OF:  
JERABEK PARK IMPROVEMENTS  
STORM DRAIN PLANS

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
SHEET 32 OF 105 SHEETS

DATE: 12/21/2022  
BY: JHOSH GIBLIN  
CHECKED: JHOSH GIBLIN  
DATE: 12/21/22  
BY: JHOSH GIBLIN  
CHECKED: JHOSH GIBLIN

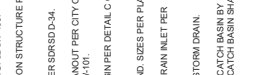
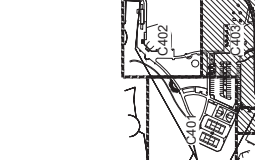
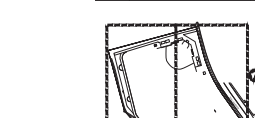
PROJECT NO. 1583299  
DRAWING NO. C403  
DATE SUBMITTED: 01/02/2023

REGISTERED PROFESSIONAL ENGINEER  
NO. 67208  
CIVIL  
STATE OF CALIFORNIA

SCHMIDT DESIGN GROUP  
1000 LA JOLLA VILLAGE CENTER DRIVE, SUITE 100  
SAN DIEGO, CA 92161  
TEL: 619.451.1000  
WWW.SCHMIDTDESIGNGROUP.COM

CIVIL ENGINEER  
NO. 67208  
STATE OF CALIFORNIA

PROJECT # 41035  
DIBBY TT, CH B7, RD  
PLT DATE: 01/18/2023



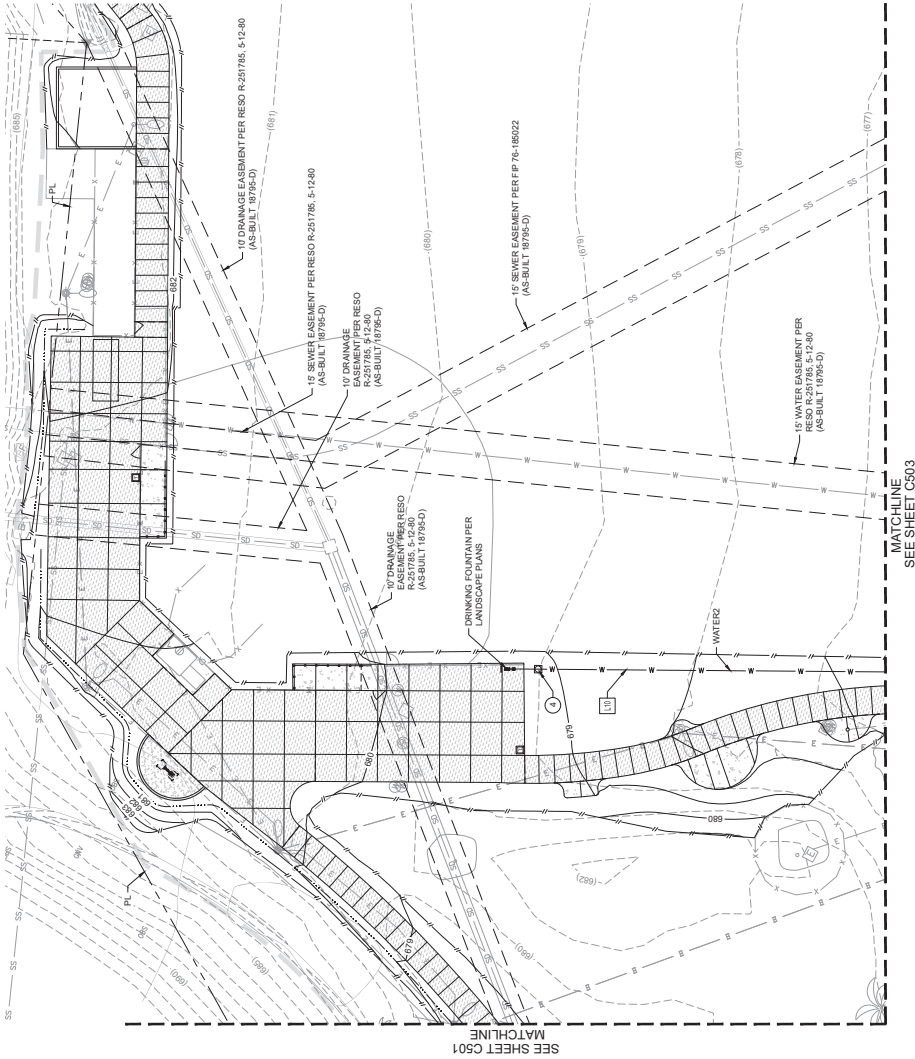
WATER LINE ALIGNMENT DATA									
X	LENGTH	SIZE	LINECHORD DIRECTION	BEGIN(NORTHING, EASTING)	END(NORTHING, EASTING)	BEGIN STATION	END STATION	NAME	
L1	39.66	1.5"	N86°52'35.10"E	N: 1911988.574 E: 6305986.977	N: 1911989.745 E: 6305935.670	0+00.00	0+39.66	WATER1	
L2	25.58	1.5"	N79°37'35.10"E	N: 1911987.325 E: 6305935.670	N: 1911997.084 E: 6305980.445	0+39.66	0+65.24	WATER1	
L3	50.58	1.5"	N79°37'35.10"E	N: 1911997.084 E: 6305980.445	N: 1922006.192 E: 6306010.201	0+65.24	1+15.82	WATER1	
L4	16.50	1.5"	N86°22'35.10"E	N: 1912006.192 E: 6306010.201	N: 1922012.273 E: 6306025.541	1+15.82	1+32.32	WATER1	
L5	30.19	1.5"	N84°22'35.10"E	N: 1912012.273 E: 6306025.541	N: 1922025.328 E: 6306032.780	1+32.32	1+62.51	WATER1	
L6	26.83	1.5"	N85°37'26.80"W	N: 1912025.328 E: 6306032.780	N: 1912049.339 E: 6306041.244	1+62.51	1+89.34	WATER1	
L7	15.74	1.5"	N70°37'26.80"W	N: 1912049.339 E: 6306041.244	N: 1912054.911 E: 6306026.395	1+89.34	2+05.08	WATER1	
L10	135.79	1.5"	N27°37'30.20"W	N: 1912054.911 E: 6306026.395	N: 1912234.008 E: 6306130.882	3+00.00	4+35.79	WATER2	
L15	10.71	1.5"	N24°05'22.80"W	N: 1912234.008 E: 6306130.882	N: 1912237.232 E: 6306253.288	4+35.79	5+46.50	WATER3	
L18	7.33	1.5"	N17°08'08.00"E	N: 1912237.232 E: 6306253.288	N: 1912238.514 E: 6306238.895	5+46.50	6+07.33	WATER4	
L19	50.24	1.5"	N27°53'53.95"W	N: 1912238.514 E: 6306238.895	N: 1912249.874 E: 6306253.288	6+07.33	6+47.58	WATER4	
L20	31.47	1.5"	N72°46'09.71"W	N: 1912249.874 E: 6306253.288	N: 1912260.919 E: 6306253.288	6+47.58	6+89.04	WATER4	

**CONSTRUCTION NOTES**

- 1. FURNISH AND INSTALL DRINKING FOUNTAIN F.GATE VALVE WITH RED BRASS CROSS HANDLE AND UNION METER BOX SHALL PER CITY HARDSCAPE

**LEGEND**

- SANUCUT LINE
- LIMIT OF WORK
- EXISTING SANITARY SEWER LATERAL
- EXISTING WATER LINE
- EXISTING TELEPHONE LINE
- EXISTING ELECTRICAL LINE
- PROPOSED SCH40 PVC DOMESTIC WATER SERVICE
- PROPOSED STORM DRAIN LINE
- PROPOSED 80R-33 PVC SANITARY SEWER LATERAL



PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
WET UTILITY PLAN

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
SHEET 34 OF 105 SHEETS

DATE: 1/22/2022  
BY: JHONATHAN GRIFFIN  
CHECKED: JHONATHAN GRIFFIN  
DATE: 1/22/2022

PROJECT NO: 1922-006  
DRAWING NO: 01020208-34-D  
C502

**SCHMIDT DESIGN GROUP**  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL  
No. 47208  
11/16/2023

**CR**  
CONSTRUCTION RESOURCES  
11/16/2023

PROJECT # 41005  
DNEYTT, CH B/T RD

SCALE 1" = 20'

1" = 10'

SEE SHEET C501

SEE SHEET C503

SEE SHEET C500

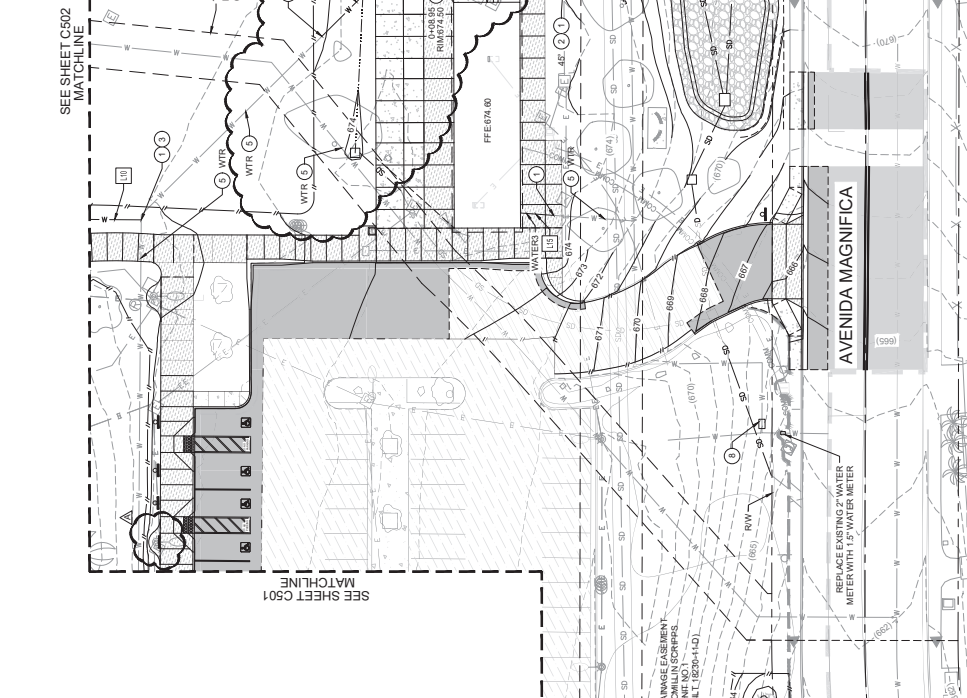
SEWER LINE ALIGNMENT DATA						
X	LENGTH	SIZE	LINE/CHORD DIRECTION	BEGIN (NORTHING, EASTING)	END STATION	NAME
L30	57.63	4"	N44° 00' 00.00"E	N 1912048.200 E 6300308.112	0+57.63	SEWER
				N 1922089.677 E 6300348.146	0+100.00	
					2.00%	

- CONSTRUCTION NOTES**
- CONNECT TO EXISTING WATER LINE
  - CONSTRUCT 30H 40 PVC BEND, ANGLE PER PLANS
  - CONSTRUCT 30H 40 PVC TEE
  - PROTECT IN PLACE
  - CONNECT TO EXISTING SANITARY SEWER LATERAL MATCH INVERT.
  - CONSTRUCT 30H 36 PVC SANITARY SEWER CLEANOUT PER CITY OF SAN DIEGO STD DWG SDS-102.
  - FURNISH AND INSTALL 1.5' BACKFLOW PREVENTER IN ENCLOSURE PER CITY OF SAN DIEGO STD DWG SDW-155.
  - CONSTRUCT 2" SCH 40 PVC SANITARY SEWER UNDERGROUND VENT PIPING
  - CONSTRUCT 3" SCH 40 PVC SANITARY SEWER WASTE PIPING

- LEGEND**
- SAWCUT LINE
  - LIMIT OF WORK
  - EXISTING SANITARY SEWER LATERAL
  - EXISTING WATER LINE
  - EXISTING TELEPHONE LINE
  - EXISTING ELECTRICAL LINE
  - PROPOSED 30H 40 PVC DOMESTIC WATER SERVICE
  - PROPOSED STORM DRAIN LINE
  - PROPOSED 30H 36 PVC SANITARY SEWER LATERAL
  - SS

SEE SHEET C501 MATCHLINE

SEE SHEET C502 MATCHLINE



PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
WET UTILITY PLAN

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
SHEET 35 OF 105 SHEETS

DATE: 1/27/2022  
BY: JHOSH GRINI  
CHECKED: JHOSH GRINI  
DATE: 1/27/22  
DATE: 1/27/22

PROJECT NO: 1902-0006  
DRAWING NO: 1902-0006  
SHEET NO: 35 OF 105

CONTRACTOR: DATE SAVED: DATE CHECKED: 01/02/2023

PROJECT # 41035  
DIBBY, T. CH. BY: RD

WARNING: ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.

SCALE: 1" = 20'

PL DATE: 01/18/2023

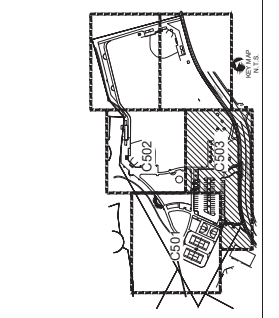
REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF CALIFORNIA  
NO. C77208

SCHMIDT DESIGN GROUP  
10500 LA JOLLA VILLAGE CENTER DRIVE, SUITE 100  
SAN DIEGO, CA 92131  
SCHMIDTDESIGN.COM

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF CALIFORNIA  
NO. 111622023

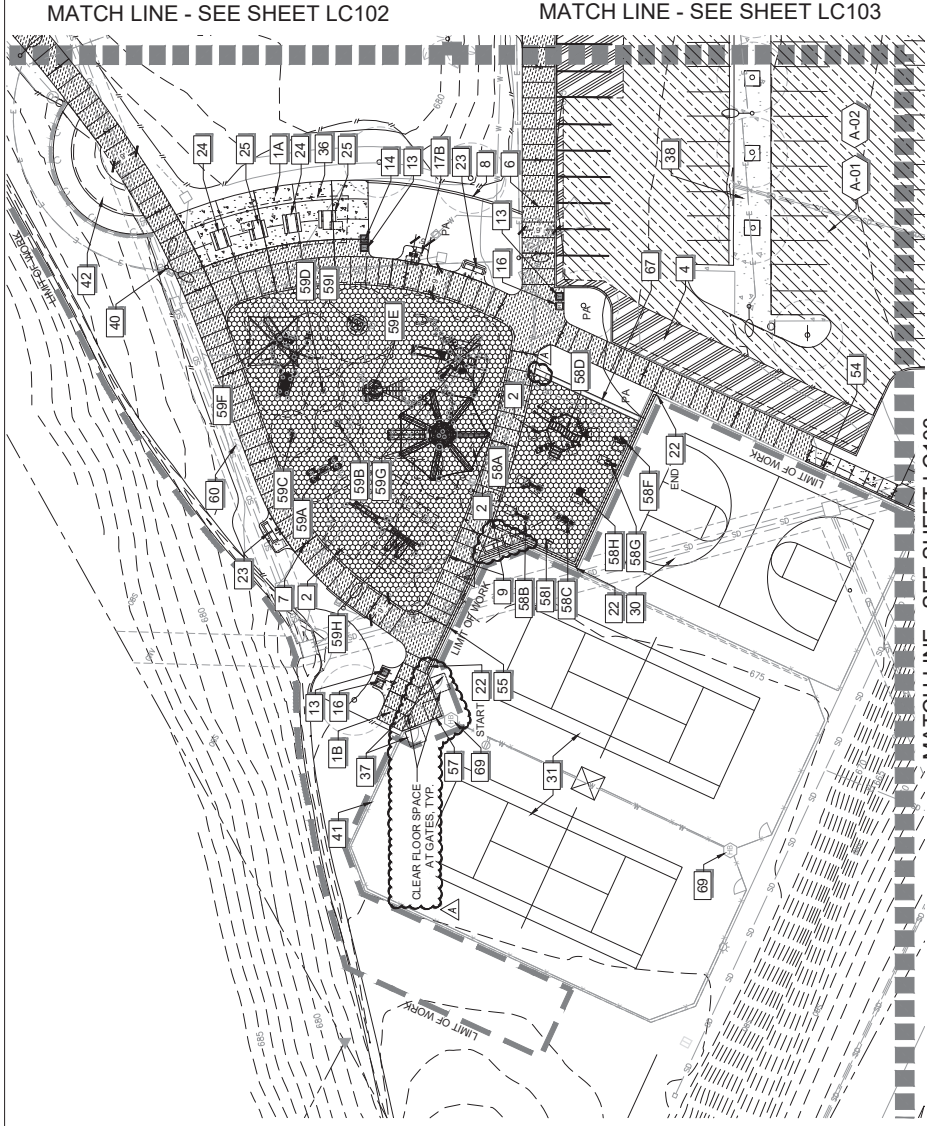
PROJECT # 41035  
DIBBY, T. CH. BY: RD



SCALE 1" = 20'

1" = 15'





MATCH LINE - SEE SHEET LC102

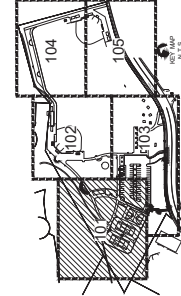
MATCH LINE - SEE SHEET LC103

MATCH LINE - SEE SHEET LC103

SEE SHEET LC001 FOR LANDSCAPE CONSTRUCTION LEGEND AND NOTES  
 SEE SHEET LC002 FOR LANDSCAPE CONSTRUCTION PLANS  
 SEE SHEET LC003 FOR LANDSCAPE CONSTRUCTION LEGEND  
 SEE SHEET LC004 FOR LANDSCAPE CONSTRUCTION DETAILS  
 SEE SHEET LC005 FOR LANDSCAPE CONSTRUCTION DETAILS



CONSULTANT  
**SCHMIDT  
 DESIGN  
 GROUP**  
 100 Broadway, Suite 100, San Diego, CA 92102  
 TEL: 619.231.1979 FAX: 619.231.1989  
 SCHMIDTDESIGN.COM  
 SDGS PROJECT # 20412  
 DN BY: M.L.S. DM, RDP, CA, BY: JJ  
 PLOT DATE: 01.18.2023



PLANS FOR THE CONSTRUCTION OF: <b>JERABEK PARK IMPROVEMENTS</b> LANDSCAPE CONSTRUCTION PLAN		ENGINEERING & CAPITAL PROJECTS DEPARTMENT
SHEET 1 OF 105 SHEETS		
DATE	1/27/2022	WSP NO. S-20097
BY	J. GRIFFIN	DATE CHECKED
APPROVED	[Signature]	DATE SUBMITTED
DESCRIPTION	LANDSCAPE CONSTRUCTION PLAN	
ORIGINAL	NO	
ADDITIONAL	NO	
AS-BUILT	NO	
DATE		
PROJECT NO.	0100208-41-D	DRAWING NO.
		LC101

AT FITNESS AREA

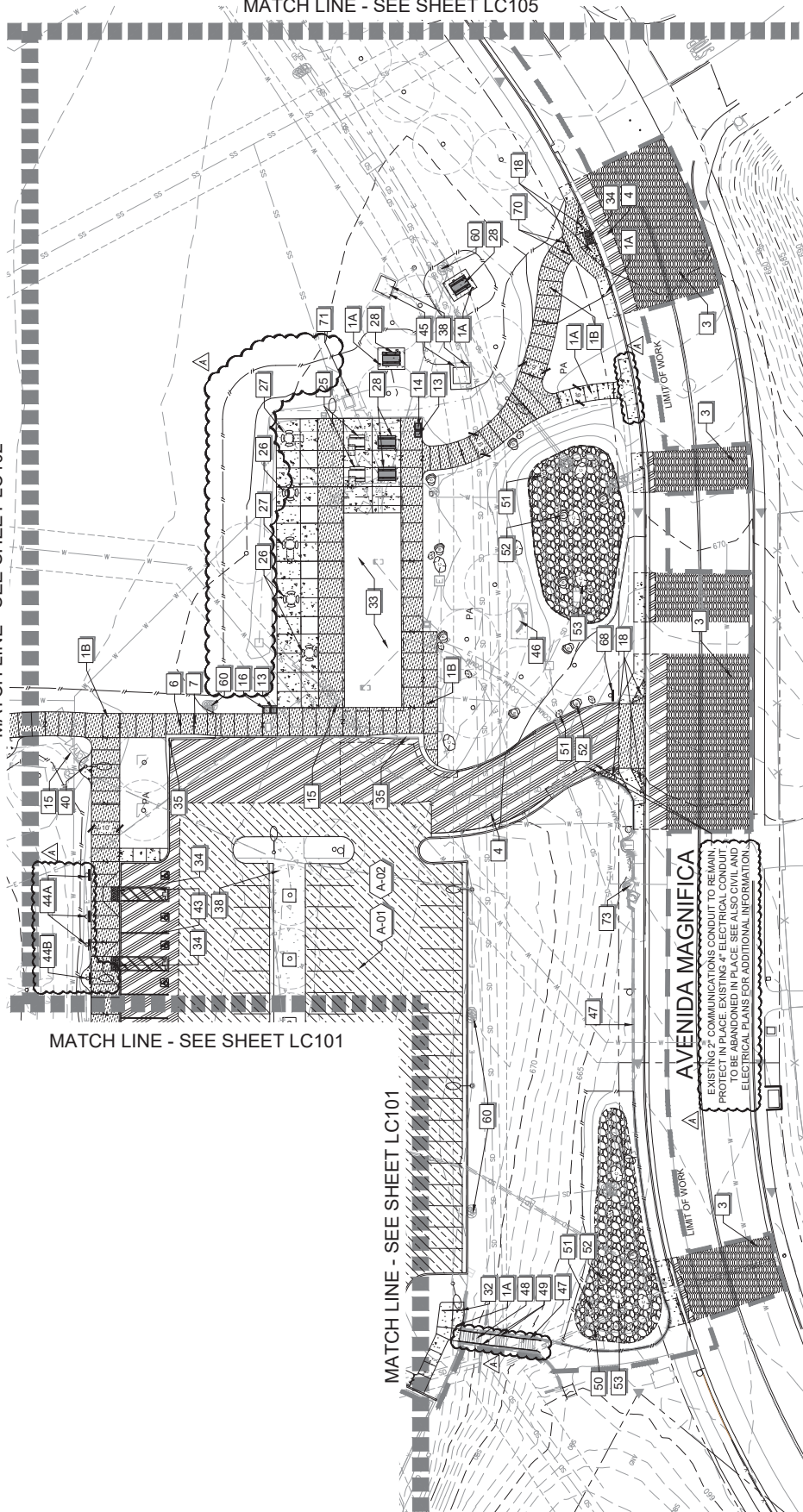


MATCH LINE - SEE SHEET LC102

MATCH LINE - SEE SHEET LC101

MATCH LINE - SEE SHEET LC101

MATCH LINE - SEE SHEET LC105



**AVENIDA MAGNIFICA**  
 EXISTING 2" COMMUNICATIONS CONDUIT TO REMAIN  
 PROTECT IN PLACE EXISTING 4" ELECTRICAL CONDUIT  
 TO BE ABANDONED IN PLACE SEE ALSO CIVIL AND  
 ELECTRICAL PLANS FOR ADDITIONAL INFORMATION

SEE SHEET LC101 FOR LANDSCAPE CONSTRUCTION LEGENDS AND NOTES  
 SEE SHEET LC102 FOR LANDSCAPE CONSTRUCTION PLANS  
 SEE SHEET LC103 FOR LANDSCAPE CONSTRUCTION LEGEND  
 SEE SHEET LC104 FOR LANDSCAPE CONSTRUCTION DETAILS  
 SEE SHEET LC201 - LC204 FOR LANDSCAPE CONSTRUCTION DETAILS

**CONSULTANT**

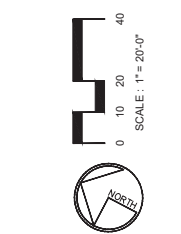
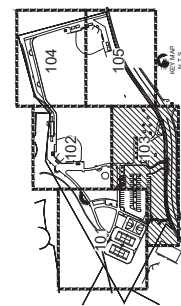
**SCHMIDT DESIGN GROUP**

100 Sherman St., Suite 5, San Diego, CA 92106  
 TEL: 619.291.1979 FAX: 619.291.2809  
 WWW.SCHMIDTDESIGN.COM

**REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING**  
 NO. CT7208

**REGISTERED LANDSCAPE ARCHITECT**  
 NO. 12000

PLT DATE: 01/18/2023



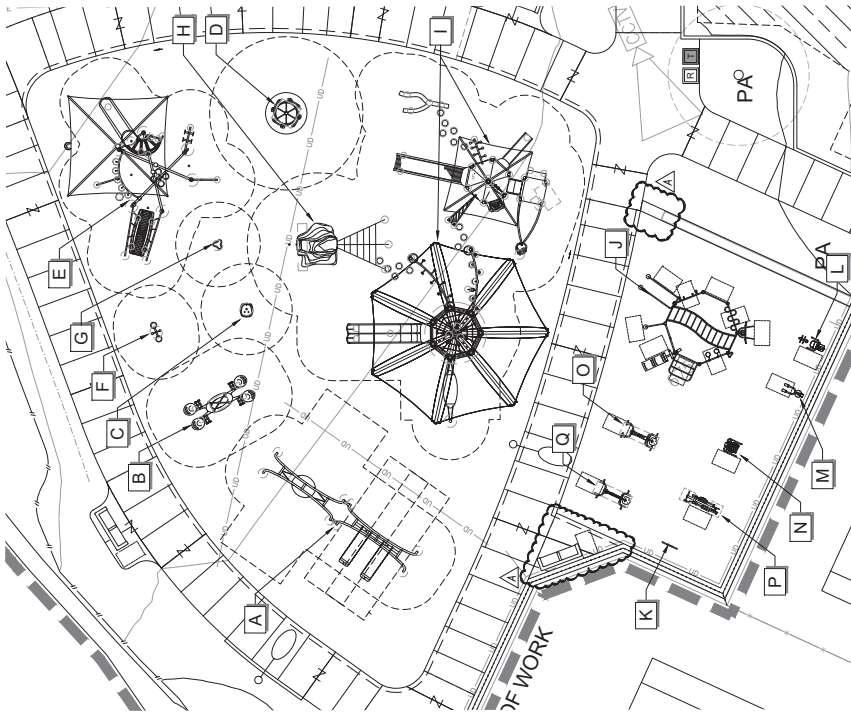
PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
 LANDSCAPE CONSTRUCTION PLAN

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
 SHEET LC1 OF 105 SHEETS

DATE	1/27/2022
BY	JHOSH GRINI
APPROVED	[Signature]
DATE	1/27/2022
BY	[Signature]
DATE	1/27/2022
BY	[Signature]
DATE	1/27/2022
BY	[Signature]
DATE	1/27/2022
BY	[Signature]
DATE	1/27/2022
BY	[Signature]

WSP NO. S-20097  
 PWT NO. 1582999  
 PAV. NO. 1582999  
 MARKET COORDINATES  
 228-2745  
 1582999  
 DRAWING NO. LC103

ADDENDUM A



01 ENLARGEMENT: PLAYGROUND EQUIPMENT LAYOUT PLAN  
SCALE: 1" = 10'-0"

**PLAY EQUIPMENT LEGEND:**

PLEASE NOTE: PLAY EQUIPMENT COMPONENTS LISTED BELOW ARE PER MANUFACTURER'S RECOMMENDATIONS. (OR APPROVED EQUAL). AVAILABLE THROUGH VENDORS: LANDSCAPE STRUCTURES INC. PHONE: (714) 919-9100. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

- A** 2 BAY SWING SET WITH OODLE SWING AND BUCKET SEATS. AVAILABLE THROUGH LANDSCAPE STRUCTURES INC. OR APPROVED EQUAL. PH: 800.328.0035.
- B** WESA W. MODEL #: 186480. AVAILABLE THROUGH LANDSCAPE STRUCTURES INC. OR APPROVED EQUAL. PH: 800.328.0035.
- C** CHILL SPINNER. MODEL #: 247189. AVAILABLE THROUGH LANDSCAPE STRUCTURES INC. OR APPROVED EQUAL. PH: 800.328.0035.
- D** WHIRLYO SPINNER. MODEL #: 273569. AVAILABLE THROUGH LANDSCAPE STRUCTURES INC. OR APPROVED EQUAL. PH: 800.328.0035.
- E** 2-5 YEAR OLD PLAY STRUCTURE WITH CANTILEVER SINGLE POSTS, BRIDGE, SWIGGLY STIX, COZY COASTERS SLIDE, MARBLE PANEL, KALEIDOSPIN PANEL, POD CLIMBER AND WEE POD CLIMBER. AVAILABLE THROUGH LANDSCAPE STRUCTURES OR APPROVED EQUAL. PH: 800.328.0035.
- F** DOUBLE BOBBLE SPRING RIDER. MODEL #: 164075. AVAILABLE THROUGH LANDSCAPE STRUCTURES INC. OR APPROVED EQUAL. PH: 800.328.0035.
- G** SADDLE SPINNER. MODEL #: 152179. AVAILABLE THROUGH LANDSCAPE STRUCTURES INC. OR APPROVED EQUAL. PH: 800.328.0035.
- H** ADVENTUREScape DESIGN #1 WITH POINTE AND OUTRIGGER. MODEL #: 168964. AVAILABLE THROUGH LANDSCAPE STRUCTURES INC. OR APPROVED EQUAL. PH: 800.328.0035.
- I** 5-12 YEAR OLD PLAY STRUCTURE WITH 7 POST SHADE AND 12' TOWER WITH ROLLER COASTER, SKYPART CLIMBER WITH LOULABRDER, SWIGGLERKNOTS, SKYPART CLIMBER WITH DOUBLE SWOOSH SLIDE, SKYTRAIL CLIMBER, SUMMIT CLIMBER, LOLLIPOP CLIMBER, COOLTOPPER SINGLE POST ROOF, BLENDER, LOG BALANCE BEAM, LOG STEPPER, SINGLE SLIDE AND 50' ROLLERSLIDE. AVAILABLE THROUGH LANDSCAPE STRUCTURES INC. OR APPROVED EQUAL. PH: 800.328.0035.

NOTE: PLAY AREA COMPLIES WITH THE SPECIFIC REQUIREMENTS OF CBC-11B-1008.

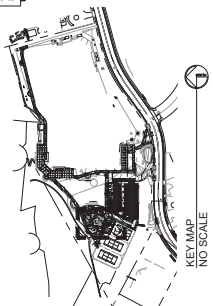
**FITNESS EQUIPMENT LEGEND:**

PLEASE NOTE: FITNESS EQUIPMENT COMPONENTS LISTED BELOW ARE PER MANUFACTURER'S RECOMMENDATIONS. (OR APPROVED EQUAL). AVAILABLE THROUGH VENDORS: LANDSCAPE STRUCTURES INC. PHONE: (888) 315-9037. EMAIL: INFO@GREENFIELDFITNESS.COM. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

- J** CUSTOM FUNCTIONAL FITNESS RIG. MODEL #: SHP2009-5-19-C. AVAILABLE THROUGH GREENFIELDS OUTDOOR FITNESS OR APPROVED EQUAL. PH: 888.315.9037.
- K** CUSTOMIZED ANNOUNCEMENT SIGN. MODEL #: SCR2005-1-105. AVAILABLE THROUGH GREENFIELDS OUTDOOR FITNESS OR APPROVED EQUAL. PH: 888.315.9037.
- L** LEG PRESS (ADJUSTABLE RESISTANCE). MODEL #: UBX-215. AVAILABLE THROUGH GREENFIELDS OUTDOOR FITNESS OR APPROVED EQUAL. PH: 888.315.9037.
- M** SQUAT (ADJUSTABLE RESISTANCE). MODEL #: UBK-217. AVAILABLE THROUGH GREENFIELDS OUTDOOR FITNESS OR APPROVED EQUAL. PH: 888.315.9037.
- N** STEPPER (ADJUSTABLE RESISTANCE). MODEL #: UBX-202. AVAILABLE THROUGH GREENFIELDS OUTDOOR FITNESS OR APPROVED EQUAL. PH: 888.315.9037.
- O** 2-PERSON ACCESSIBLE VERTICAL PRESS. MODEL #: SHP2009-5-19-C. AVAILABLE THROUGH GREENFIELDS OUTDOOR FITNESS OR APPROVED EQUAL. PH: 888.315.9037.
- P** ELLIPTICAL CROSS TRAINER. MODEL #: SHP2009-5-03. AVAILABLE THROUGH GREENFIELDS OUTDOOR FITNESS OR APPROVED EQUAL. PH: 888.315.9037.
- Q** 2-PERSON ACCESSIBLE CHEST PRESS. MODEL #: SCR2005-1-48A-W. AVAILABLE THROUGH GREENFIELDS OUTDOOR FITNESS OR APPROVED EQUAL. PH: 888.315.9037.

NOTE: FLOOR AND GROUND SURFACES SHALL BE STABLE, FIRM, AND AND SLIP RESISTANT. AND SHALL COMPLY WITH SECTION 11B-302.

SEE SHEET 0001 FOR LANDSCAPE CONSTRUCTION LEGEND AND NOTICES  
SEE SHEET 10-09 - LC108 FOR LANDSCAPE CONSTRUCTION PLANS  
SEE SHEET 10-10 - LC109 FOR LANDSCAPE CONSTRUCTION LEGEND  
SEE SHEET 10-11 - LC110 FOR LANDSCAPE CONSTRUCTION DETAILS  
SEE SHEET 10-29 - LC129 - LC131 FOR LANDSCAPE CONSTRUCTION DETAILS



**CONSULTANT**

**SCHMIDT DESIGN GROUP**  
100 Robinson St., Suite 100, San Diego, CA 92106  
(619) 594-1200 | FAX (619) 594-1209  
www.schmidtsg.com

**REGISTERED PROFESSIONAL ENGINEER - CIVIL**  
NO. CT7208

**REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT**  
NO. 12102

PLT DATE: 01/18/2023



PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
LANDSCAPE CONSTRUCTION ENLARGEMENT

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
SHEET 01 OF 105 SHEETS

WSP NO: S-20097  
PMT NO: 158299  
PMT NO: 158299  
MARKED COORDINATES  
MARKED COORDINATES  
DRAWING NO.: LC106

DATE: 1/27/2022  
DATE: 1/27/2022  
DATE: 1/27/2022

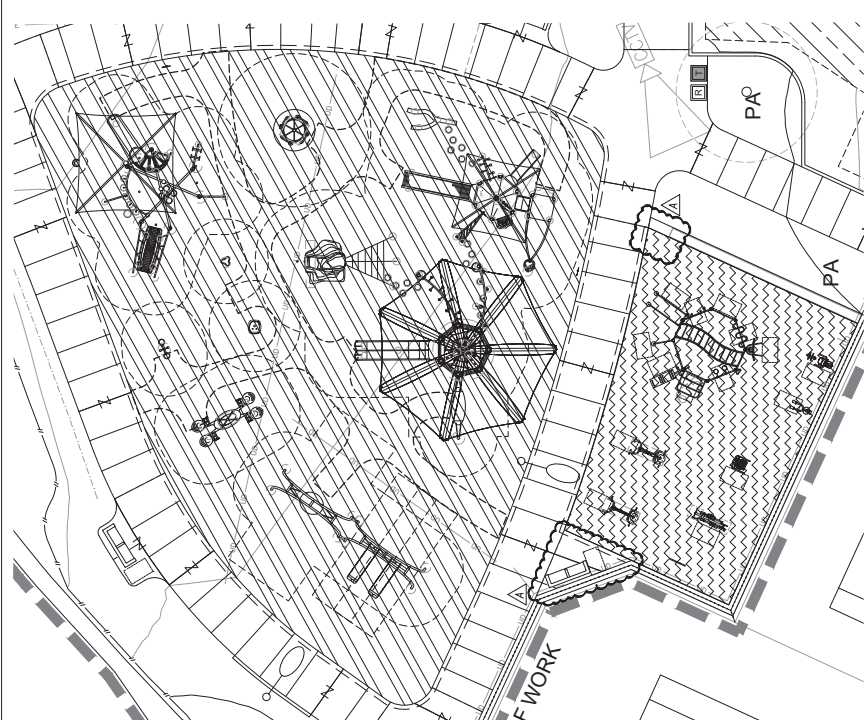
APPROVED: [Signature]  
DATE: 1/27/2022

BY: [Signature]  
DATE: 1/27/2022

ORIGINAL: [Signature]  
DATE: 1/27/2022

AS-BUILTS: [Signature]  
DATE: 1/27/2022

CONTRACTOR: [Signature]  
DATE: 1/27/2022



**01** ENLARGEMENT: ACCESSIBLE PATH OF TRAVEL & RESILIENT SURFACING LAYOUT PLAN  
SCALE: 1" = 10'

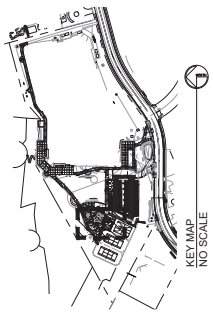


**SAFETY SURFACING LEGEND:**

SYMBOL	DESCRIPTION	DETAIL
	COLOR #1: RESILIENT PLAY SURFACING, TOTTURF SUPREME TPV 5-15MM POURED IN PLACE RUBBER AVAILABLE THROUGH TOTTURF OR APPROVED EQUAL. PH. (760) 809-1875. COLOR BLEND #1 = 50% STANDARD GREEN RH10, 25% TURQUOISE RH26, 25% CREAM RH31	1/LC202 3/LC202 5/LC202
	COLOR #2: RESILIENT PLAY SURFACING, TOTTURF SUPREME TPV 5-15MM POURED IN PLACE RUBBER AVAILABLE THROUGH TOTTURF OR APPROVED EQUAL. PH. (760) 809-1875. COLOR BLEND #2 = 25% EARTH YELLOW/MUSTARD YELLOW RH40, 25% BRIGHT YELLOW RH41, 25% STANDARD BEIGE RH30, 25% CREAM RH31	2/LC202 6/LC202 7/LC202

NOTE: PLAY AREA MUST BE ACCESSIBLE AND ON AN ACCESSIBLE ROUTE.

SEE SHEET LC001 FOR LANDSCAPE CONSTRUCTION LEGEND AND NOTES  
SEE SHEET LC002 FOR LANDSCAPE CONSTRUCTION ENLARGEMENTS  
SEE SHEET LC101 - LC105 FOR LANDSCAPE CONSTRUCTION PLANS  
SEE SHEET LC106 - LC107 FOR LANDSCAPE CONSTRUCTION ENLARGEMENTS  
SEE SHEET LC018 FOR LANDSCAPE SOUNDING AND DETAILS



**CONSULTANT**

**SCHMIDT DESIGN GROUP**  
100 Riverside St., Suite G, San Diego, CA 92101  
(619) 231-1421  
www.schmidtsg.com

PROJECT # 20-412  
DN BY: M.L.S. DM, RJP, CA, EY, JJ  
PLT DATE: 01.18.2023



ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
LANDSCAPE CONSTRUCTION ENLARGEMENT

SHEET 21 OF 105 SHEETS

DATE: 1/22/2022  
BY: JHSDT/GML  
CHECKED: [Signature]  
DATE: 1/27/22  
DATE: 1/20/23

PROJECT: JERABEK PARK IMPROVEMENTS  
DRAWING NO.: LC107

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
LANDSCAPE CONSTRUCTION ENLARGEMENT

WSP NO: S-20097  
PMT NO: 1582399  
MARKET COORDINATES: 228-1745  
LANDMARK COORDINATES: [Blank]

DATE SHIPPED: [Blank]  
DATE COMPLETED: [Blank]

APPROVED BY: [Signature]  
DATE: 1/27/22

CONTRACTOR: [Blank]

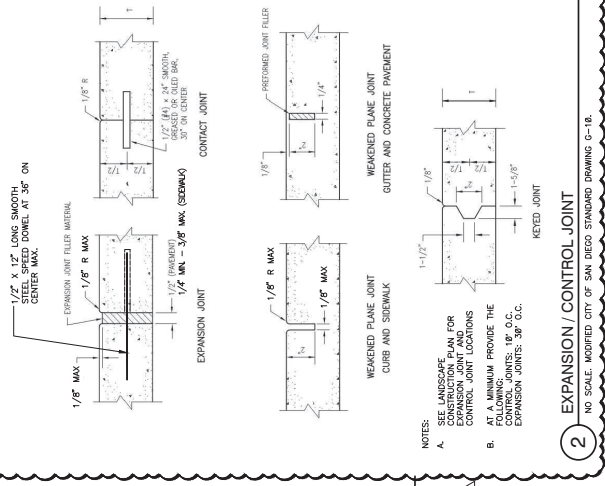
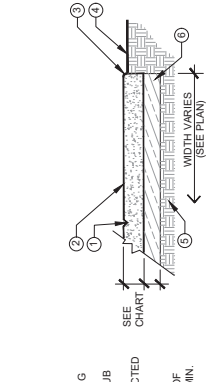
- LEGEND:**
- SCORE LINES AND EXPANSION JOINTS
  - CONCRETE PAVING - PER CHART
  - 1/2" RAD. ON ALL OUTSIDE EDGES
  - FINISH GRADE 1" BELOW EDGE OF PAVING IN TURF AREAS TO HAVE SOD, 1/2" IN AREAS TO BE HYDROSEEDED, 2" IN SHRUB BEDS
  - 12" OF SUBGRADE TO BE COMPACTED AT 95% MIN PER GEOTECH REPORT
  - BASE MATERIAL - PER CHART
  - CLASS II AGGREGATE BASE, UPPER 12" OF SUBGRADE TO BE COMPACTED AT 95% MIN. PER GEOTECH REPORT.

**CONCRETE PAVING CHART**

TYPE	THICKNESS	STRENGTH
PEDESTRIAN CONCRETE WALKS & SLABS	5" MIN. OVER NATIVE	520-C-3000
VEHICULAR CONCRETE	7.5" MIN. OVER 6" CLASS II BASE	560-C-3250

- NOTES:**
- AT A MINIMUM PROVIDE THE FOLLOWING: CONSTRUCTION JOINTS: 19" O.C. EXPANSION JOINTS: 30' O.C.
  - ALL REINFORCEMENT MUST BE CENTERED IN CONCRETE PROFILE.
  - CONCRETE COLOR AND FINISH PER PLAN.
  - RECOMMENDATIONS OF GEOTECHNICAL REPORT AND/OR STRUCTURAL ENGINEER UNLESS OTHERWISE NOTED ON THESE DRAWINGS

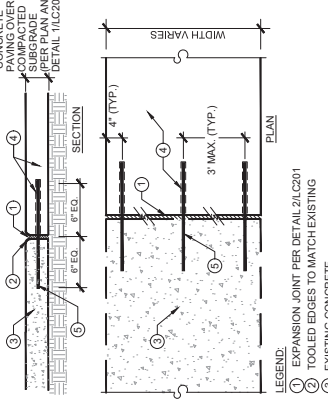
**1 CONCRETE PAVING**  
NO SCALE



**2 EXPANSION / CONTROL JOINT**  
NO SCALE. MODIFIED CITY OF SAN DIEGO STANDARD DRAWING G-18.

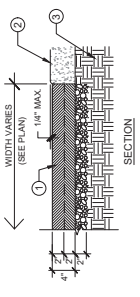
- LEGEND:**
- CONCRETE PAVING PER PLANS
  - 8" WIDE RETAINING CURB
  - #4 REBAR HORIZONTAL AND VERTICAL WITH 12" MINIMUM SPACES
  - EXISTING 4" CONCRETE PAVING AT BASKETBALL COURT WITH 14" CLASS II AGGREGATE BASE
  - UPPER 12" OF SUBGRADE TO BE COMPACTED AT 95% MIN. PER GEOTECH REPORT
  - #4 REBAR, DRILL AND GROUT INTO EXISTING CONCRETE AT CENTERLINE
- NOTES:**
- PROVIDE CONTROL JOINTS AT 30'-0" ON CENTER MAXIMUM TYP.
  - CENTER REBAR IN MOW CURB, TYP.

**5 RAISED CONCRETE CURB AT BASKETBALL COURT**  
NO SCALE



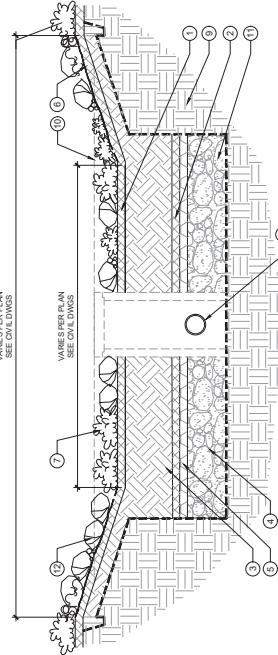
- LEGEND:**
- EXPANSION JOINT PER DETAIL 21C201
  - TOOLED EDGES TO MATCH EXISTING
  - EXISTING CONCRETE
  - NEW CONCRETE PER PLAN. INSTALL SLEEVE WHERE DOWEL OCCURS.
  - 12" LENGTH 1/2" SMOOTH STEEL DOWEL FOR EXISTING CONCRETE, DRILL AND GROUT INTO EXISTING AT CENTERLINE TYP.

**4 CONCRETE PAVING CONNECTION (EXISTING TO NEW)**  
NO SCALE



- LEGEND:**
- 4" THICK DECOMPOSED GRANITE PAVING WITH STABILIZER. INSTALL (2) 1/2" DIA. 12" LONG SMOOTH STEEL DOWEL AT 36" ON CENTER MAX.
  - WHEN ADJACENT TO CONCRETE PAVING, CONCRETE CURB OR ADJACENT AGGREGATE PATH: THE TOP OF D.O.G. PAVING TO MEET FLUSH (1/2" MAX.) WITH TOP OF ADJACENT PAVING.
  - UPPER 12" OF SUBGRADE TO BE COMPACTED AT 95% MIN. PER GEOTECH REPORT
- NOTES:**
- SEE CONSTRUCTION PLAN FOR DECOMPOSED GRANITE PAVING OR OTHER FINISHES AND MANIPULATION OF GRANITE PAVING OR CRUSHER FINES PRIOR TO INSTALLATION FOR APPROVAL OF COLOR.
  - STABILIZER TO BE BLENDED INTO DECOMPOSED GRANITE PAVING PRIOR TO DELIVERY TO SITE.

**3 STABILIZED DECOMPOSED GRANITE PAVING**  
NO SCALE



- LEGEND:**
- 2" MULCH LAYER AT PLANTING AREAS SEE PLANTING PLANS FOR MULCH TYPE.
  - 2" CHOKER SAND. SEE CIVIL PLANS
  - 18" THICK BSM MEDIA. SEE CIVIL PLANS
  - 12" LAYER OPEN GRADED CLEAN GRAVEL. SEE CIVIL PLANS.
  - 2" ASTM NO. 8 STONE. SEE CIVIL PLANS
  - BIO-BASIN  
NO SCALE
  - 30' MIN IMPERMEABLE LINER. SEE CIVIL PLANS
  - COBBLE PER LANDSCAPE PLANTING PLANS. COBBLE SIZE: 3" MINUS 10% OF TOTAL COBBLE, 2"-4" (45% OF TOTAL COBBLE), 4"-12" (45% OF TOTAL COBBLE). PROVIDE 1" WEEDED COBBLE OVER BIO-BASIN. ALL COBBLE WITHIN BIO-BASINS.
  - BASIN SIDE SLOPES SEE CIVIL PLANS
  - COBBLE PER LANDSCAPE PLANTING PLANS. COBBLE SIZE: 3" MINUS 10% OF TOTAL COBBLE, 2"-4" (45% OF TOTAL COBBLE), 4"-12" (45% OF TOTAL COBBLE). PROVIDE 1" WEEDED COBBLE OVER BIO-BASIN. ALL COBBLE WITHIN BIO-BASINS.
  - 30' MIN IMPERMEABLE LINER. SEE CIVIL PLANS
  - COBBLE PER LANDSCAPE PLANTING PLANS. COBBLE SIZE: 3" MINUS 10% OF TOTAL COBBLE, 2"-4" (45% OF TOTAL COBBLE), 4"-12" (45% OF TOTAL COBBLE). PROVIDE 1" WEEDED COBBLE OVER BIO-BASIN. ALL COBBLE WITHIN BIO-BASINS.

SEE SHEET LC007 FOR LANDSCAPE CONSTRUCTION LEGEND AND NOTES  
SEE SHEET LC008 - LC009 FOR LANDSCAPE CONSTRUCTION PLANS  
SEE SHEET LC010 - LC011 FOR LANDSCAPE CONSTRUCTION DIMENSIONS  
SEE SHEET LC012 - LC013 FOR LANDSCAPE CONSTRUCTION DETAILS

**CONSULTANT**

**SCHMIDT DESIGN GROUP**

100 Broadway St., Suite 6, San Diego, CA 92102  
(619) 231-1971 (F) 231-142-3489  
SCHMIDTDESIGN.COM

**REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING**  
NO. C77208

**REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT**  
NO. 12127

PLT DATE: 01.18.2023  
DN BY: JAL/LS, CAL/EP, CAL/RY, JJ

**ENGINEERING & CAPITAL PROJECTS DEPARTMENT**  
SHEET 41 OF 105 SHEETS

DATE: 12/21/2022  
BY: JH/ST/GR/ML  
APPROVED: JH/ST/GR/ML  
DATE: 12/21/2022  
ORIGINAL: JH/ST/GR/ML  
ADDRESS: A SOC  
AS-BUILTS  
CONTRACTOR: [BLANK]  
DATE SAVED: [BLANK]  
DATE CHECKED: [BLANK]

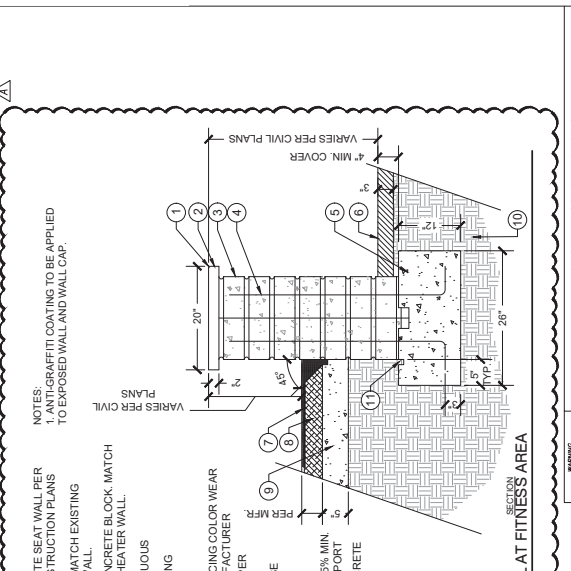
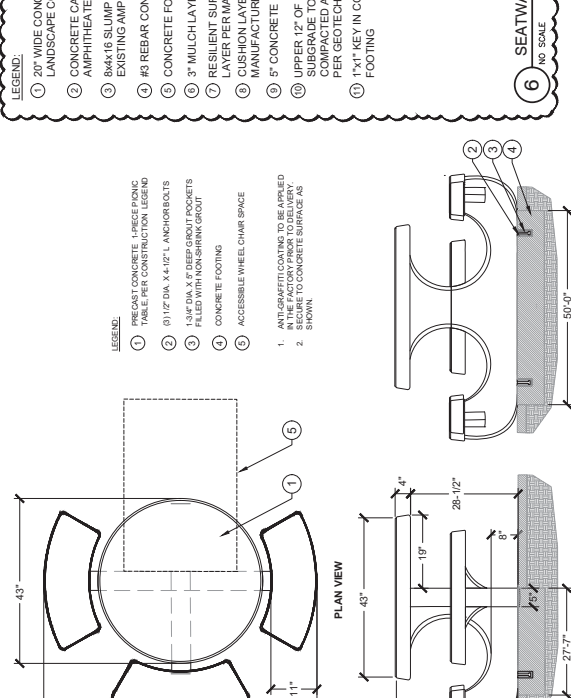
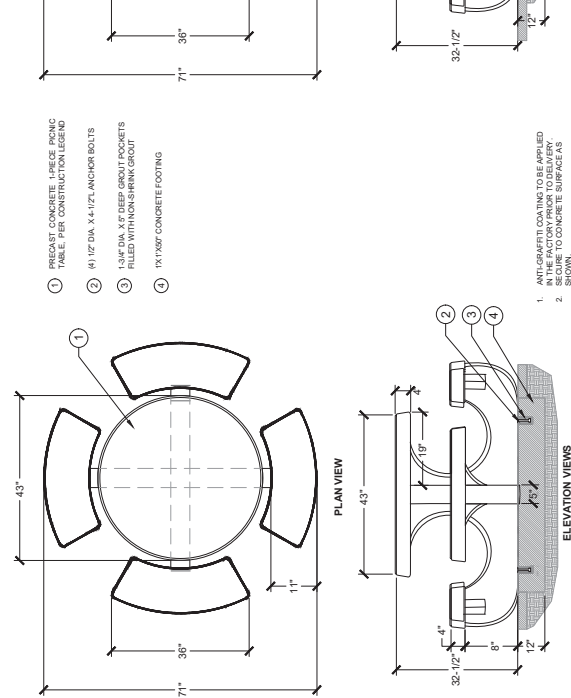
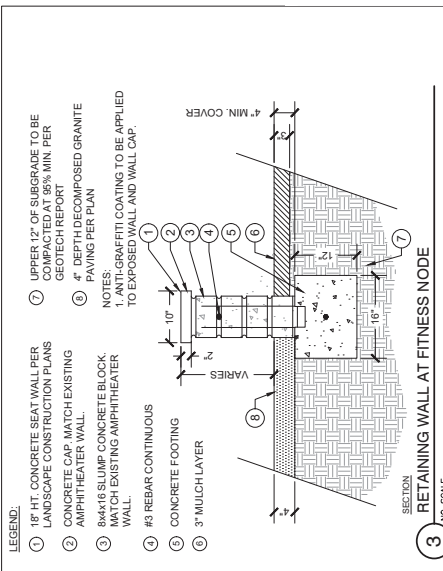
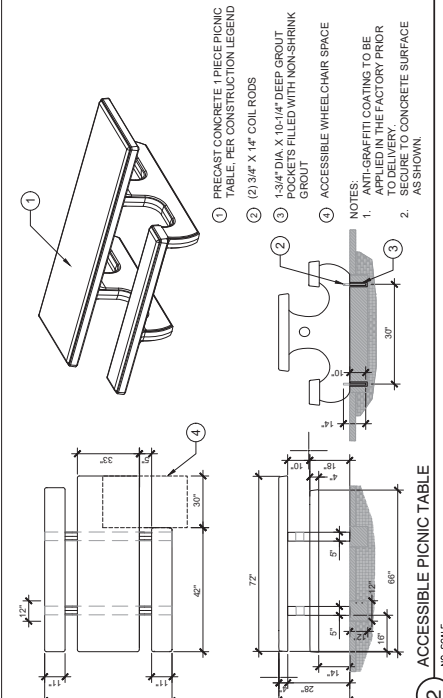
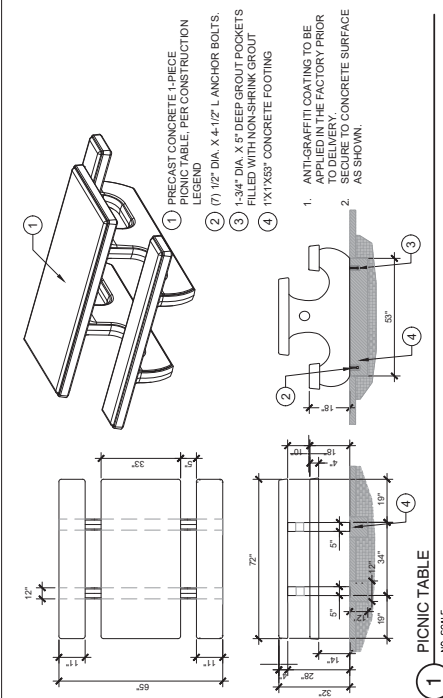
WIP NO: S-20097  
PMT NO: 1583299  
PWA NO: 1583299  
MARKED COORDINATES  
22817745  
22817745  
22817745

DRAWING NO. LC201  
0100208-48-D

UPDATED DETAIL 2

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**

LANDSCAPE DETAILS



**1** NO SCALE

**2** NO SCALE

**3** NO SCALE

**4** NO SCALE

**5** NO SCALE

**6** NO SCALE

**CONSULTANT**

**SCHMIDT DESIGN GROUP**

100 Sherman St., Suite 1, San Diego, CA 92103  
TEL: 619.291.1979 FAX: 619.291.2499  
WWW.SCHMIDTDESIGN.COM

**REGISTERED PROFESSIONAL ENGINEER - CIVIL**  
NO. 07208

**REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT**  
NO. 12023

PLT DATE: 01/18/2023

SDG PROJECT #: 20-412  
DN BY: M.L.S. (DP) 04/27/23

**ENGINEERING & CAPITAL PROJECTS DEPARTMENT**

**JERABEK PARK IMPROVEMENTS**

**LANDSCAPE DETAILS**

SHEET 01 OF 105 SHEETS

DATE: 12/21/2022

BY: JH/ST/GR/ML

DATE: 12/21/2022

APPROVED: [Signature]

DATE: 12/21/2022

PROJECT NO: 19A2-006

MARKET COORDINATOR: [Signature]

AS-BUILTS: [Signature]

DATE SHOWN: [Signature]

DATE CHECKED: [Signature]

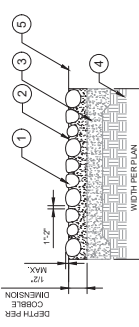
DRAWING NO. LC204

0100208-51-D

UPDATES TO FILE

- NOTES:**
- A. ALL METAL TO BE GALVANIZED STEEL INSIDE AND OUT. WELD AND GRIND SMOOTH ALL CONNECTIONS, EDGES, AND SHARP EDGES TO ELIMINATE ANY SHARP EDGES. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO FABRICATION.
  - B. PAINT ALL EXPOSED WELDS WITH GALVANIZED PAINT.
  - C. ALL RADIUS SHALL BE SMOOTH. SEE ALSO SDM-118 FOR ADDITIONAL INFORMATION.
  - D. EXISTING ADJACENT PAVING TO REMAIN. PROTECT IN PLACE.
  - E. EXISTING GALVANIZED HANDRAIL/GUARDRAIL AND POSTS TO BE PROTECTED IN PLACE.
  - F. EXISTING CHEEK WALL ON BOTH SIDES OF STAIRS. REPAIR BROKEN AREAS AS REQUIRED.
  - G. 1-1/2" O.D. ROUND STEEL HANDRAILS BOTH SIDES. WELD TO POSTS (SEE SECTION).
  - H. 2" O.D. ROUND STEEL POST. SET IN 2 1/2" SLEEVE. GROUT IN PLACE WITH POR-ROCK OR APPROVED EQUAL. POR-ROCK SHALL BE INSTALLED WITH A GROUT TO PROVIDE POSITIVE GALVANIZED GUARDRAIL POST.
  - I. EXISTING CONCRETE STAIRS TO REMAIN. PROTECT IN PLACE.
  - J. 1/2" STEEL SUPPORT. WELD ALL CONNECTIONS AND GRIND SMOOTH.
  - K. TYPICAL 3" BORDER OF HIGHLY CONTRASTING COLOR PLACED PARALLEL TO AND NOT MORE THAN 1" FROM NOSE. SEE SDM-118 AND CBC-11B-504.4.1.
  - L. FINISH GRADE.
  - M. CENTER LINE OF CHEEK WALL.

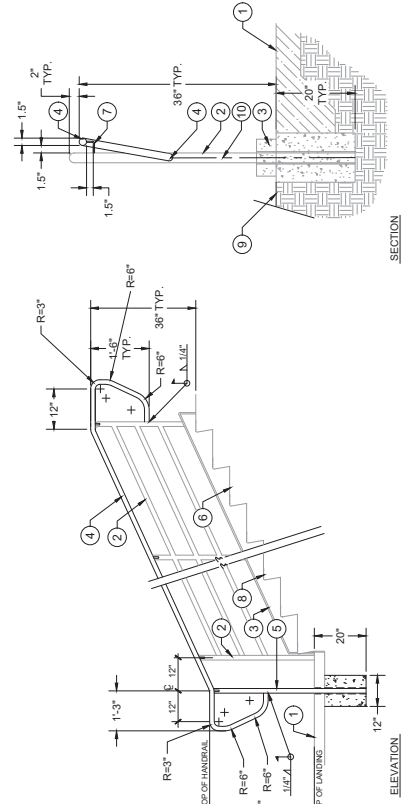
- LEGEND:**
- 1 EXISTING ADJACENT PAVING PER PLAN & LEGEND
  - 2 DECORATIVE COBBLE STONE PAVING PER PLAN & LEGEND
  - 3 DECORATIVE CONCRETE PAVING THROUGH DAVIS COLORS OR APPROVED EQUAL. PH: 323-265-8323.
  - 4 CONCRETE PAVING SECTION PER DETAIL PAVING
  - 5 UPPER 1/2" OF SURFACE TO BE COMPACTED AT 95% MIN. PER GEOTECH REPORT
  - 6 ADJACENT FINISH SURFACE PER PLANS



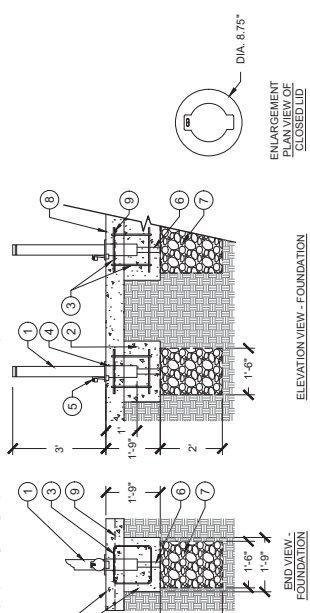
- LEGEND:**
- 1 DECORATIVE COBBLE STONE PAVING PER PLAN & LEGEND
  - 2 DECORATIVE CONCRETE PAVING THROUGH DAVIS COLORS OR APPROVED EQUAL. PH: 323-265-8323.
  - 3 CONCRETE PAVING SECTION PER DETAIL PAVING
  - 4 UPPER 1/2" OF SURFACE TO BE COMPACTED AT 95% MIN. PER GEOTECH REPORT
  - 5 ADJACENT FINISH SURFACE PER PLANS

- NOTES:**
- A. ALL SURFACES SHALL SLOPE TO DRAIN PER PLAN
  - B. INSTALL CURB OR CURB-LIKE PANEL FOR LANDSCAPE ARCHITECTS APPROVAL PRIOR TO INSTALLATION
  - C. EXPOSED COBBLE FINISH TO BE 250 (ORANGE) GRADE TOP CAST OR EQUAL (MAX 1/2" EXPOSED DEPTH)
  - D. DECORATIVE COBBLE STONE PAVING AND CONCRETE PAVING SECTION TO BE APPROVED PRIOR TO INSTALLATION BY THE CITY OF SAN DIEGO CIVIL ENGINEER AND LANDSCAPE ARCHITECT FOR REVIEW & APPROVAL OF DEPTH PRIOR TO INSTALLATION.

**3 COBBLE STONE PAVING**  
NO SCALE



**1 STAIRS WITH HANDRAIL (BASED ON SDM - 118 WITH MODIFICATIONS)**  
NO SCALE



- LEGEND:**
- 1 4" NOMINAL SIZE SCH. 80 CARBON STEEL REMOVABLE BOLLARD WITH VIKING CAP STYLE.
  - 2 CONCRETE FOOTING PER CAL PIPE SECURITY BOLLARD OR EQUAL
  - 3 #4 REBAR STIRRUPS & HORIZONTAL REINFORCEMENT
  - 4 EMBEDDED SLEEVE WITH LID
  - 5 PAD LOCK
  - 6 2" P.V.C DRAIN PIPE TO DRY WELL
  - 7 CRUSHED ROCK 3/4" MIN. 18" X 18" X 24" DRY WELL. LINE ALL SIDES OF DRY WELL WITH FILTER FABRIC PRIOR TO PLACING CRUSHED ROCK
  - 8 ADJACENT CONCRETE PAVING PER PLAN
  - 9 REBAR, WHERE REQUIRED BASED ON CONCRETE TYPE AND THICKNESS. PER PLAN

**2 REMOVABLE BOLLARD**  
NO SCALE

SEE SHEET LC08 FOR LANDSCAPE CONSTRUCTION LEGEND AND NOTES  
SEE SHEET LC09 FOR LANDSCAPE CONSTRUCTION DIMENSIONS  
SEE SHEET LC01 - LC07 FOR LANDSCAPE CONSTRUCTION PLANS  
SEE SHEET LC01 - LC07 FOR LANDSCAPE CONSTRUCTION DETAILS

**CONSULTANT**

**SCHMIDT DESIGN GROUP**

100 Marston St., Suite 5, San Diego, CA 92108  
619.434.7800 | FAX 619.434.7809  
SCHMIDTDESIGN.COM

PLT DATE: 01.18.2023

**REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING**  
NO. C77208



**ENGINEERING & CAPITAL PROJECTS DEPARTMENT**  
LANDSCAPE DETAILS

SHEET 52 OF 105 SHEETS

DATE: 12/21/2022  
BY: JHOSH GRINI  
CHECKED: [Signature]  
DATE: 12/21/22  
PROJECT: JERABEK PARK IMPROVEMENTS  
SHEET: 52 OF 105 SHEETS

DATE: 12/21/22  
DATE CHECKED: [Signature]

**PLANS FOR THE CONSTRUCTION OF:**  
**JERABEK PARK IMPROVEMENTS**

WSP NO: S-20097  
PMT NO: 1583299  
PMT NO: 1583299  
MARKED COORDINATES  
222.7745  
148.6417 (EASTING/NORTHING)

DRAWING NO. LC205  
01/02/08-52-D

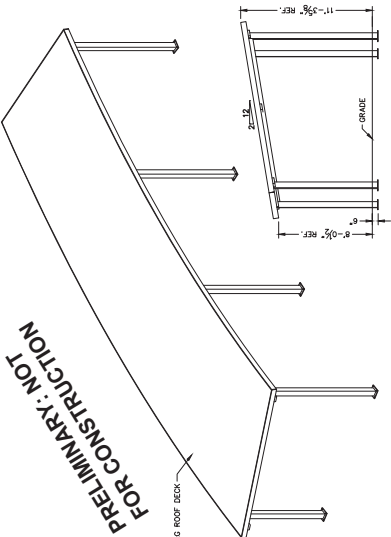








**PRELIMINARY: NOT FOR CONSTRUCTION**

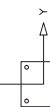


AXONOMETRIC VIEW - SHADE STRUCTURE

LOADS TO FOUNDATION (KIPS, IN-KIPS)	FOUNDATION LOADS		
	AXIAL (FX)	SHEAR (FY)	MOMENT (MY) (MOMENT (MZ))
DL	3.15	-0.03	-12.04
SL	2.57	-0.03	-10.59
W-UPLIFT	-1.64	0.03	-17.48
W-FY	0.85	-0.24	8.49
W-FZ	1.80	0.01	-26.31
E-FY	0.19	2.60	-1.05
E-Z	-1.69	-0.02	-185.08

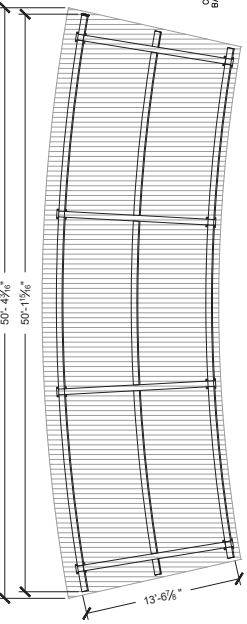
LOADS TO FOUNDATION (KIPS, IN-KIPS)	FOUNDATION LOADS		
	AXIAL (FX)	SHEAR (FY)	MOMENT (MY) (MOMENT (MZ))
DL	2.73	0.02	-18.14
SL	2.13	0.02	-16.76
W-UPLIFT	-4.21	-0.05	-47.26
W-FY	-1.93	0.29	-16.89
W-FZ	4.23	-0.03	-40.97
E-FY	-0.23	-1.98	-0.75
E-Z	1.71	-0.01	-135.37

THESE FOUNDATION LOADS ARE FOR ESTIMATING PURPOSE ONLY. THE ACTUAL LOADS WILL BE DETERMINED IN THE FINAL ENGINEERING.

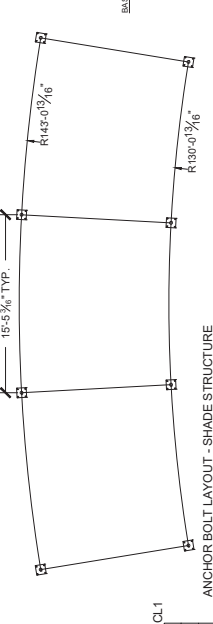


- NOTES:
- TABLE SHOWS UNFACTORED SERVICE LOADS
  - A FOUNDATION DESIGN HAS NOT BEEN PERFORMED BY ICON SHELTER SYSTEMS INC.
  - A LICENSED ENGINEER FAMILIAR WITH SOIL CONDITIONS AT CONSTRUCTION SITE MUST PERFORM A FOUNDATION DESIGN
  - CONSULTANT HAS BEEN ENGINEERED AS AN OPEN STRUCTURE
  - COORDINATES ARE LOCAL TO THE COLUMN

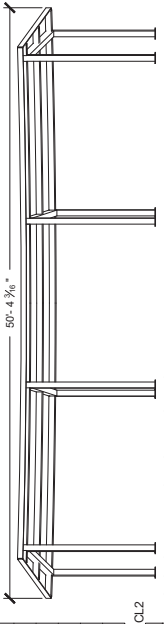
DEFINITIONS:  
 W-Z = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST AXIAL LOAD  
 W-UPLIFT = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST UPLIFT LOAD  
 W-FY = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Y DIRECTION  
 W-FZ = SERVICE LEVEL WIND LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE SAME LOCAL Y DIRECTION  
 E-FY = SERVICE LEVEL SEISMIC LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Y DIRECTION  
 E-Z = SERVICE LEVEL SEISMIC LOAD REACTION WITH THE GREATEST MAGNITUDE OF SHEAR IN THE LOCAL Z DIRECTION



PLAN VIEW - SHADE STRUCTURE



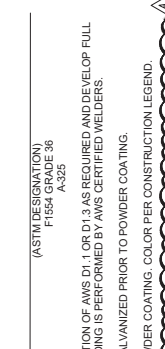
ANCHOR BOLT LAYOUT - SHADE STRUCTURE



SECTION ELEVATION - SHADE STRUCTURE

**SHADE STRUCTURE NOTES**

MATERIALS (ASTM DESIGNATION)  
 ANCHOR BOLTS F1554 GRADE 36 A-325  
 ALL WELDING CONFORMS TO THE LATEST EDITION OF AWS D1.1 OR D1.3 AS REQUIRED AND DEVELOP FULL STRENGTH OF COMPONENT PARTS. ALL WELDING IS PERFORMED BY AWS CERTIFIED WELDERS.  
 ALL COMPONENTS TO BE HOT DIPPED ZINC GALVANIZED PRIOR TO POWDER COATING.  
 DUE TO STANDARDIZED FABRICATION PARTS SHOWN MAY BE UPGRADED. REFER TO THE SHIPPING BILL OF MATERIALS FOR POSSIBLE SUBSTITUTIONS.  
 ICON SHELTER SYSTEMS INC. RECOMMENDS THAT THE PRIMARY FRAMING INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM OF FIVE (5) YEARS OF DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.  
 HIGH STRENGTH BOLTING:  
 ALL HIGH STRENGTH BOLTS ARE A-325 BOLTS WITH HEAVY HEX NUTS. THE BOLTS ARE TO BE INSTALLED UTILIZING THE SPECIFICATION FOR STRUCTURAL JOINTS ASTM A325 OR A490 BOLTS. (6302/2004) AS PREPARED BY RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) FOR THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION. THE BOLTS ARE TO BE INSTALLED WITH A TORQUE WRENCH TO THE FULL EFFORT AS THE TORQUE WRENCH IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OF THE FULL EFFORT OF AN IRON WORKER USING AN ORDINARY SPUD WRENCH TO BRING THE PLIES INTO FIRM CONTACT, WHICH IS THE CONDITION WHEN THE PLANES OF CONTACT BETWEEN TWO PLIES ARE SOLIDLY SEATED AGAINST EACH OTHER. NO EXCESSIVE FORCE SHOULD BE APPLIED TO THE TORQUE WRENCH TO BRING THE CONNECTIONS TOGETHER. THE TORQUE WRENCH SHOULD BE USED TO BRING THE CONNECTIONS TOGETHER TO INSURE PROPER TIGHTNESS. UNLESS NOTED OTHERWISE, IT IS THE RESPONSIBILITY OF THE INSTALLER TO INSURE PROPER TIGHTNESS. PROPER EJECTION OF THE FRAMING MEMBERS REQUIRES THE MAIN COLUMNS TO BE PLUMB & SQUARE. THE CONNECTIONS TO THE BEAMS AND EAVE BEAMS SHOULD BE PLUMB & SQUARE BEFORE INSTALLING THE PURLINS. PURLINS MUST BE PARALLEL TO THE BEAMS AND EAVE BEAMS.  
 FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION AND PROVIDE COMPENSATION FOR ALL SLOPES.



SECTION ELEVATION - SHADE STRUCTURE

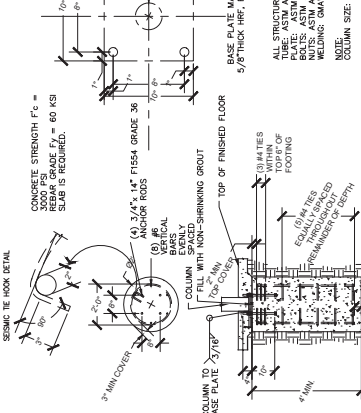
CONTRACTOR TO PROVIDE COMPLETE COMPONENTS WILL BE: CHOLE MISION BARRIOS ROOFING SYSTEM PLATE: ASTM A36 BOLTS: ASTM A325 NUTS: ASTM A325 WELDING: GMAW NOTE COLUMN SIZE: 606X316

CONTRACTOR IS TO PROVIDE THE SHADE STRUCTURE IN PLACE, INCLUDING ROOFING AND FOOTING. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND INSTALLATION OF THE SHADE STRUCTURE. CONTRACTOR WILL PROVIDE FOOTING DESIGN INCLUDING STAMPED STRUCTURAL DRAWINGS AND CALCULATIONS. CONTRACTOR SHALL SUBMIT TO THE CITY OF SAN DIEGO DEVELOPMENT SERVICES DEPARTMENT FOR DEFERRED SUBMITTAL APPROVAL. CONTRACTOR SHALL PAY FOR ALL FEES REQUIRED FOR REVIEW AND PERMITTING.

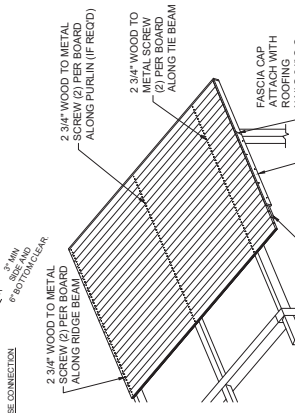
SEE SHEET LC001 FOR LANDSCAPE CONSTRUCTION LEGEND AND NOTES  
 SEE SHEET LC002 FOR LANDSCAPE CONSTRUCTION LEGEND AND NOTES  
 SEE SHEET LC108 - LC107 FOR LANDSCAPE CONSTRUCTION ENFORCEMENTS  
 SEE SHEET LC201 - LC204 FOR LANDSCAPE CONSTRUCTION DETAILS

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
 SHADE STRUCTURE NOTES AND DETAILS

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
 SHEET 01 OF 105 SHEETS  
 PROJECT NO. 17221/2022  
 DRAWING NO. LC401  
 DATE SAVED 01/02/2023 6:01:00  
 DATE CANCELED  
 APPROVED BY: JHON GRIFFIN  
 DATE: 1/2/23  
 CHECKED BY: JHON GRIFFIN  
 DATE: 1/2/23  
 DESIGNED BY: JHON GRIFFIN  
 DATE: 1/2/23  
 DRAWN BY: JHON GRIFFIN  
 DATE: 1/2/23



FASTENERS  
 TONGUE & GROOVE BOARD SECTION



PRELIMINARY DRAWINGS SHOWN AS 6" BURIED STANDARD BASE CONNECTION COLUMN TYPE: A (6" BURIED)

CONTRACTOR TO PROVIDE COMPLETE COMPONENTS WILL BE: CHOLE MISION BARRIOS ROOFING SYSTEM PLATE: ASTM A36 BOLTS: ASTM A325 NUTS: ASTM A325 WELDING: GMAW NOTE COLUMN SIZE: 606X316

CONTRACTOR IS TO PROVIDE THE SHADE STRUCTURE IN PLACE, INCLUDING ROOFING AND FOOTING. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND INSTALLATION OF THE SHADE STRUCTURE. CONTRACTOR WILL PROVIDE FOOTING DESIGN INCLUDING STAMPED STRUCTURAL DRAWINGS AND CALCULATIONS. CONTRACTOR SHALL SUBMIT TO THE CITY OF SAN DIEGO DEVELOPMENT SERVICES DEPARTMENT FOR DEFERRED SUBMITTAL APPROVAL. CONTRACTOR SHALL PAY FOR ALL FEES REQUIRED FOR REVIEW AND PERMITTING.

SEE SHEET LC001 FOR LANDSCAPE CONSTRUCTION LEGEND AND NOTES  
 SEE SHEET LC002 FOR LANDSCAPE CONSTRUCTION LEGEND AND NOTES  
 SEE SHEET LC108 - LC107 FOR LANDSCAPE CONSTRUCTION ENFORCEMENTS  
 SEE SHEET LC201 - LC204 FOR LANDSCAPE CONSTRUCTION DETAILS

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
 SHADE STRUCTURE NOTES AND DETAILS

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
 SHEET 01 OF 105 SHEETS  
 PROJECT NO. 17221/2022  
 DRAWING NO. LC401  
 DATE SAVED 01/02/2023 6:01:00  
 DATE CANCELED  
 APPROVED BY: JHON GRIFFIN  
 DATE: 1/2/23  
 CHECKED BY: JHON GRIFFIN  
 DATE: 1/2/23  
 DESIGNED BY: JHON GRIFFIN  
 DATE: 1/2/23  
 DRAWN BY: JHON GRIFFIN  
 DATE: 1/2/23

CONSULTANT  
**SCHMIDT DESIGN GROUP**  
 100 Sherman St., Suite 5, San Diego, CA 92108  
 (619) 291-1420  
 schmidtsg.com

REGISTERED PROFESSIONAL ENGINEER  
 CIVIL  
 NO. C77208  
 EXPIRES 12/31/25

REGISTERED PROFESSIONAL ENGINEER  
 CIVIL  
 NO. C77208  
 EXPIRES 12/31/25

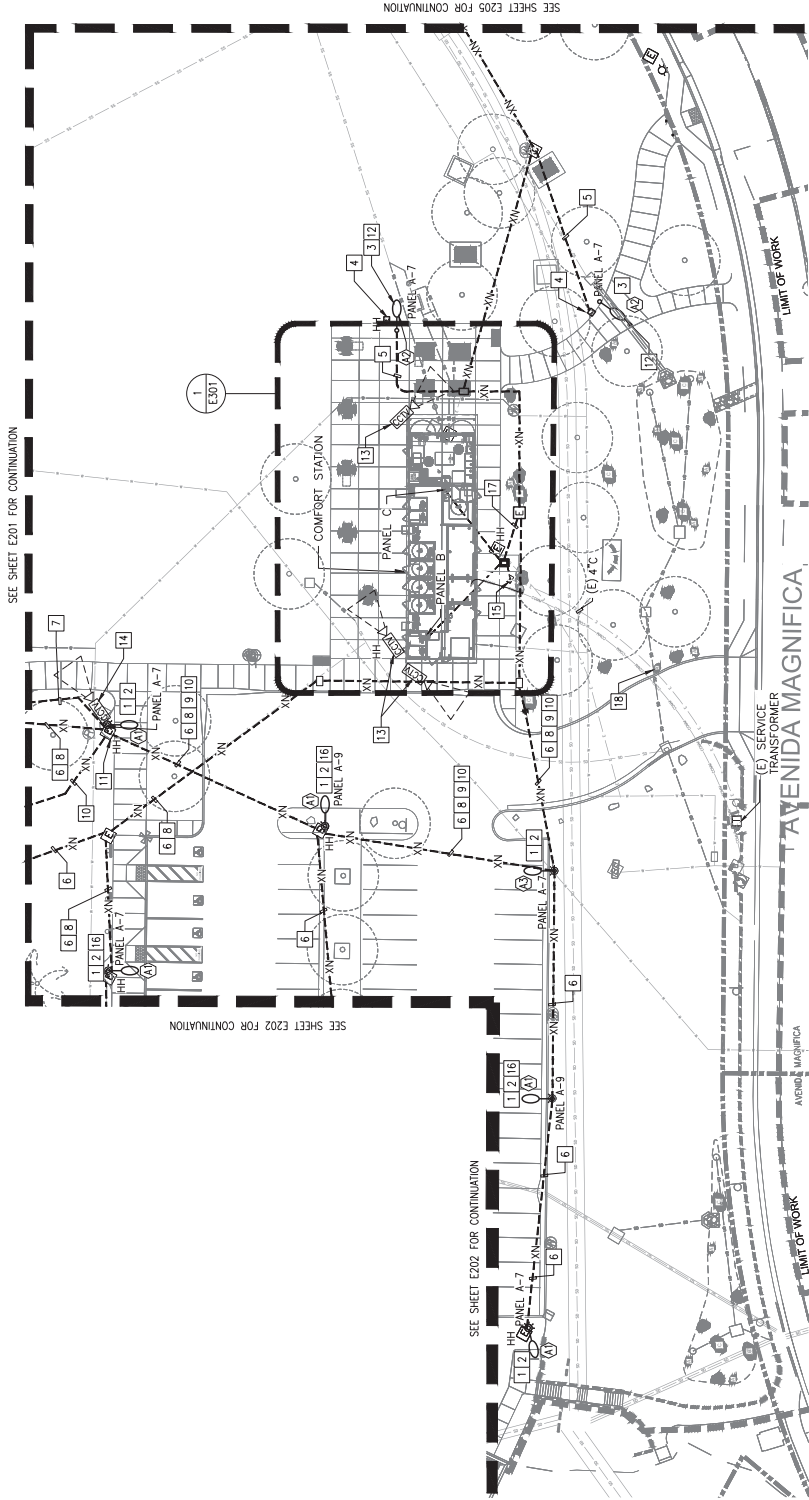
SCALE: 1/2" = 1'-0"

DATE: 01/18/2023  
 BY: JAL/LS, CAL/EP, CA/RY, JJ

**KEYNOTES:**

- 1 PROVIDE POLE MOUNTED LUMINAIRE PER LUMINAIRE SCHEDULE ON E603. PROVIDE 2#12, #12G, 2" C FOR FLAGPOLE TO LUMINAIRE AND SPICE INTO CIRCUIT AND CONTROLS AT JUNCTION BOX AT POLE BASE.
- 2 SAND POLES AND PROVIDE TWO (2) COATS OF RUST INHIBITING PRIMER AND TWO (2) COATS OF POLYESTER TO RECONDITION THE EXISTING LIGHT POLES.
- 3 PROVIDE TYPE A2 LUMINAIRE AND POLE PER LUMINAIRE SCHEDULE ON E603. LOCATE PER DETAIL 3/E502.
- 4 PROVIDE PULLBOX FOR LIGHT POLE PER DETAIL 2/E501. LOCATE PER DETAIL 7/E501.
- 5 TRENCH AND PROVIDE 2#6, #10G, 2" C FOR LIGHT POLES.
- 6 PROVIDE 2#6, #10G IN EXISTING CONDUIT FOR LIGHT POLES.
- 7 TRENCH AND PROVIDE 2#12, #12G, 2" C FOR FLAGPOLE LIGHTING.
- 8 PROVIDE 2#12, #12G IN EXISTING CONDUIT FOR SECURITY CAMERA.
- 9 PROVIDE 2#12, #12G IN EXISTING CONDUIT FOR FLAGPOLE LIGHTING.
- 10 PROVIDE 2#12, #12G IN EXISTING CONDUIT FOR POWER TO HOLIDAY LIGHTING.
- 11 PROTECT EXISTING ELECTRICAL BOX IN PLACE.
- 12 INSTALL POLE FROM WALKWAY PER DETAIL 2/E502.
- 13 TYPE C2 SECURITY CAMERA (MOUNTED ON COMFORT STATION EXTERIOR). REFER TO SHEET E603 FOR SECURITY CAMERA SCHEDULE.
- 14 TYPE C1 SECURITY CAMERA (MOUNTED ON POLE). REFER TO SHEET E603 FOR SECURITY CAMERA SCHEDULE.
- 15 RE-USE AND INTERCEPT THE EXISTING 4" C TO POWER THE METER PEDESTAL 10150 AVENIDA MAGNIFICA.
- 16 REPLACE POLE COVER. SEE 4/E-701 FOR REFERENCE.
- 17 INTERCEPT THE NEW BRANCH CIRCUIT FEEDERS DIRECTLY FROM THE NEW PANEL A TO THE NEW HANDLE.
- 18 ABANDON EXISTING 4" C IN PLACE. PLEASE SEE CIVIL PLANS FOR ADDITIONAL INFORMATION. PROVIDE NEW 4" C, 3/4" O D CONDUIT TO INTERCEPT THE EXISTING 4" C. THE CONTRACTOR TO ADJUST CONDUIT LAYOUT IN FIELD TO AVOID EXISTING TREES.

ABANDON EXISTING 4" C IN PLACE. PLEASE SEE CIVIL PLANS FOR ADDITIONAL INFORMATION. PROVIDE NEW 4" C, 3/4" O D CONDUIT TO INTERCEPT THE EXISTING 4" C. THE CONTRACTOR TO ADJUST CONDUIT LAYOUT IN FIELD TO AVOID EXISTING TREES.



**ELECTRICAL SITE PLAN**  
 SCALE: 1" = 20'-0"

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
 ELECTRICAL SITE PLAN

ENGINEERING & CAPITAL PROJECTS DEPARTMENT	WSP NO. 5-20097
SHEET 74 OF 105 SHEETS	REV NO.
DESIGNED BY: JHOSH GRINI	DATE: 1/21/2022
CHECKED BY: JHOSH GRINI	DATE: 1/21/2022
APPROVED BY: [Signature]	DATE: 1/21/2022
ORIGINAL BY: [Signature]	DATE: 1/21/2022
ADDITIONAL BY: [Signature]	DATE: 1/21/2022
AS-BUILTS	DATE SAVED
CONTRACTOR	DATE CHECKED
DRAWING NO. E203	PROJECT NO. 0100208-74-0



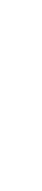
REGISTERED PROFESSIONAL ENGINEER  
 J. HOSH GRINI  
 NO. CT7208  
 CIVIL ENGINEER



**SCHMIDT DESIGN GROUP**  
 100 Sherman St., Suite 5, San Diego, CA 92101  
 TEL: 619.231.1421  
 WWW.SCHMIDTDESIGN.COM



**BBE ENGINEERING, INC.**  
 9900 BALDWIN BLVD., STE. 104  
 SAN DIEGO, CA 92123  
 TEL: 619.598.8000



PROJECT # 20412  
 DINEY B. COBBY AB

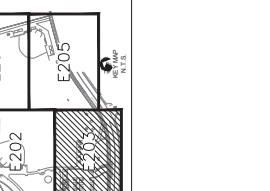
PLT DATE: 01.18.2023



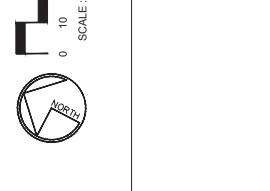
**ELECTRICAL SITE PLAN**  
 SCALE: 1" = 20'-0"

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
 ELECTRICAL SITE PLAN

ENGINEERING & CAPITAL PROJECTS DEPARTMENT	WSP NO. 5-20097
SHEET 74 OF 105 SHEETS	REV NO.
DESIGNED BY: JHOSH GRINI	DATE: 1/21/2022
CHECKED BY: JHOSH GRINI	DATE: 1/21/2022
APPROVED BY: [Signature]	DATE: 1/21/2022
ORIGINAL BY: [Signature]	DATE: 1/21/2022
ADDITIONAL BY: [Signature]	DATE: 1/21/2022
AS-BUILTS	DATE SAVED
CONTRACTOR	DATE CHECKED
DRAWING NO. E203	PROJECT NO. 0100208-74-0

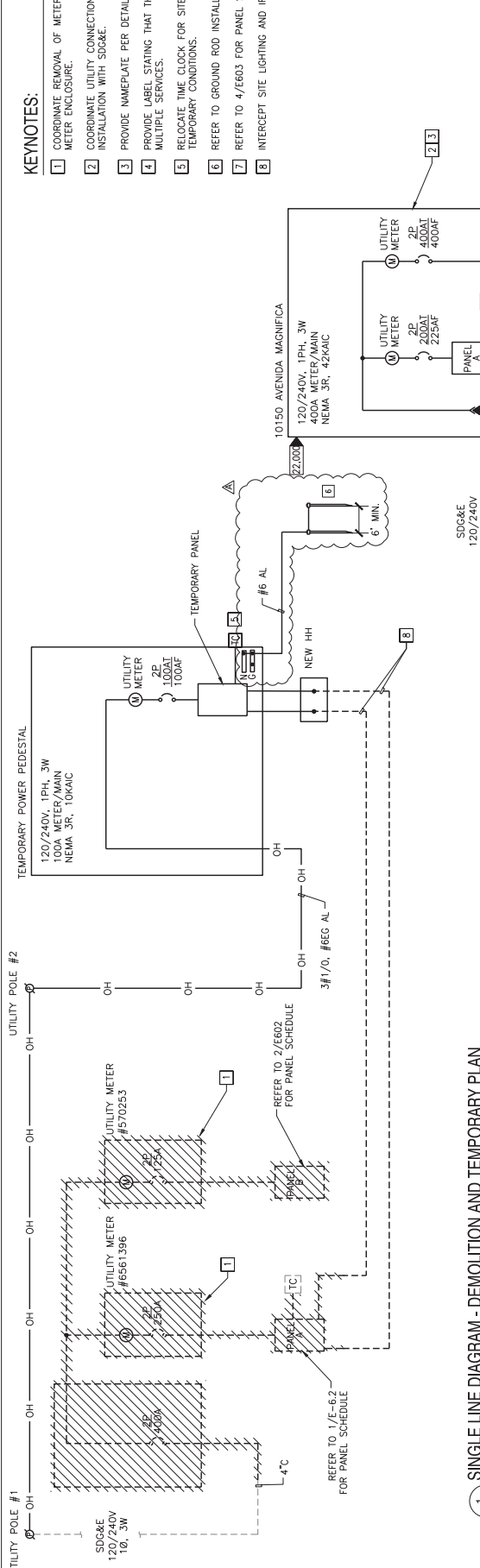


**SCHMIDT DESIGN GROUP**  
 100 Sherman St., Suite 5, San Diego, CA 92101  
 TEL: 619.231.1421  
 WWW.SCHMIDTDESIGN.COM



PROJECT # 20412  
 DINEY B. COBBY AB

PLT DATE: 01.18.2023



- KEYNOTES:**
- 1 COORDINATE REMOVAL OF METER WITH SD&E. DEMOLISH METER ENCLOSURE.
  - 2 COORDINATE UTILITY CONNECTION AND METER PEDESTAL INSTALLATION WITH SD&E.
  - 3 PROVIDE NAMEPLATE PER DETAIL 4/E501.
  - 4 PROVIDE LABEL STATING THAT THE COMFORT STATION HAS MULTIPLE SERVICES.
  - 5 RELOCATE TIME CLOCK FOR SITE LIGHTING CONTROL DURING TEMPORARY CONDITIONS.
  - 6 REFER TO 4/E603 FOR PANEL SCHEDULE.
  - 7 REFER TO 4/E603 FOR PANEL SCHEDULE.
  - 8 INTERCEPT SITE LIGHTING AND IRRIGATION CONTROLS.

1 SINGLE LINE DIAGRAM - DEMOLITION AND TEMPORARY PLAN  
E601 SCALE: NO SCALE

**VOLTAGE DROP SCHEDULE**

DEVICE	FEEDER		BRANCH CIRCUIT		FEEDER	
	VOLTAGE DROP	WIRE SIZE	MAX VOLTAGE DROP	WIRE SIZE	TOTAL VOLTAGE DROP	VOLTAGE DROP
10150 AVENIDA MAGNIFICA	0%	(2)#250kcmil	-	-	0%	0%
PANEL A	0.01%	#4/0	2.95% (Ckt 7)	#6	2.96%	0.01%
PANEL B	0.28%	#4/0	-	-	0.28%	0.27%
PANEL C	0.12%	(2)#250kcmil	24'	-	0.12%	0.12%

**FAULT CURRENT SCHEDULE**

DEVICE	FAULT	AIC RATING	L-VOLTS	
			SIZE	LENGTH
10150 AVENIDA MAGNIFICA	42,000	240V	(2)#250kcmil	
PANEL A	40,489	240V	#4/0	2'
PANEL B	18,913	240V	#4/0	52'
PANEL C	34,285	240V	(2)#250kcmil	24'

4 ELECTRICAL CALCULATIONS  
E601 SCALE: NO SCALE

3 SINGLE LINE DIAGRAM - NEW  
E601 SCALE: NO SCALE

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**

SINGLE LINE DIAGRAM AND CALCULATIONS

SHEET 01 OF 105 SHEETS

ENGINEERING & CAPITAL PROJECTS DEPARTMENT

DATE: 12/21/2022

PROJECT NO: 1992-008

DATE: 12/21/22

APPROVED BY: [Signature]

DATE: 12/21/22

DESIGNED BY: [Signature]

DATE: 12/21/22

CHECKED BY: [Signature]

DATE: 12/21/22

AS-BUILTS: [Signature]

CONTRACTOR: [Signature]

DRAWING NO: E601

DATE COMPLETED: 01/02/2028-01-0

WARNING: 1/2" SCALE: NO SCALE

REGISTERED PROFESSIONAL ENGINEER - CIVIL

NO. 07208

SCHMIDT DESIGN GROUP

100 BROADWAY, SUITE 104  
SAN DIEGO, CA 92102

TEL: 619.231.1421 FAX: 619.231.1422

SCHMIDTDESIGN.COM

CONSULTANT

PROJECT # 20412

DIBNEY BC OKBY AB

DATE: 01.18.2023

**KEYNOTES:**

- 1 RELOCATE IRRIGATION CONTROLLER CIRCUIT TO NEW METER PEDESTAL. REFER TO SINGLE LINE ON E/E601 AND PANEL SCHEDULE ON 1/E603.
- 2 RELOCATE LIGHTING CIRCUIT AND TIME CLOCK TO NEW METER PEDESTAL. REFER TO SINGLE LINE ON E/E601 AND PANEL SCHEDULE ON 1/E603.
- 3 RELOCATE RECEPTACLE CIRCUIT TO NEW METER PEDESTAL. REFER TO SINGLE LINE ON E/E601 AND PANEL SCHEDULE ON 1/E603.
- 4 REFER TO COMFORT STATION VENDOR DRAWINGS FOR BRANCH CIRCUIT BREAKERS AND CIRCUITING REQUIRED.
- 5 EXISTING PANEL A TO BE DEMOLVED.

**4 PANEL C**

ROOM MOUNTING SURFACE FED FROM 10150 AVENIDA MAGNIFICA NOTE		VOLTS 240/120V 2P 3W BUS AMPS 200 NEUTRAL 100%		AC 42,000 MAIN BRK-MLO LUGS STANDARD		
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD VA A B	CKT BKR	CIRCUIT DESCRIPTION	LOAD VA A B
1	20/1	INTERIOR LIGHTING	300	2	90/2 (2) HVAC UNITS	5,000
3	20/1	AIR CURTAIN	6,000	4	20/1 SPACE	0
7	20/2	WATER HEATER	6,000	8	20/1 SPACE	0
9	90/2	(13) DEDICATED RECEPITS	9,750	10	20/1 SPACE	0
11	1	SPACE	0	12	20/1 SPACE	0
13	20/1	SPACE	0	14	20/1 SPACE	0
15	20/1	DATA RM QUAD RECEPTACLE	0	16	20/1 SPACE	0
17	20/1	SPACE	0	18	20/1 SPACE	0
19	20/1	SPACE	0	20	20/1 SPACE	0
21	20/1	SPACE	0	22	20/1 SPACE	0
23	20/1	SPACE	0	24	20/1 SPACE	0
25	20/1	SPACE	0	26	20/1 SPACE	0
27	20/1	SPACE	0	28	20/1 SPACE	0
29	20/1	SPACE	0	29	20/1 SPACE	0

TOTAL CONNECTED KVA BY PHASE 21,000 21,430

CONN VA	CALC VA	CONN VA	CALC VA
300	375 (125%)	12,000	188 A (125%)
360	508 (140%)	45,560	189.8 A (100%)

**2 PANEL C PANEL SCHEDULE**  
E602/ SCALE: NO SCALE

**5 (E) PANEL A**

ROOM MOUNTING SURFACE FED FROM UTILITY NOTE		VOLTS 240/120V 3P 4W BUS AMPS 200 NEUTRAL 100%		AC 65,000 MAIN BRK-200 LUGS STANDARD ISO GND BUS		
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD VA A B C	CKT BKR	CIRCUIT DESCRIPTION	LOAD VA A B C
1	20/1	SPACE	0	2	20/1 WALKWAY LIGHTING	1,200
3	20/1	WOMAN'S HAND DRYER	900	4	20/1 WALKWAY LIGHTING	1,200
7	20/1	IRRIGATION CONTROLLER	200	8	20/1 WALKWAY LIGHTING	1,200
9	20/1	SPACE	0	10	20/1 PARKING LOT LIGHTING	600
11	20/1	SPACE	0	12	20/1 REC. AT BACK STOP	360
13	20/1	SPACE	0	14	20/1 PROVISION	0
15	20/1	SPACE	0	16	20/1 PROVISION	0
17	20/1	SPACE	0	18	20/1 PROVISION	0
19	20/1	SPACE	0	20	20/1 PROVISION	0
21	20/1	SPACE	0	22	20/1 PROVISION	0
23	20/1	SPACE	0	24	20/1 PROVISION	0
25	20/1	SPACE	0	26	20/1 PROVISION	0
27	20/1	SPACE	0	28	20/1 PROVISION	0
29	20/1	SPACE	0	30	20/1 PROVISION	0
31	20/1	SPACE	0	32	20/1 PROVISION	0
33	20/1	SPACE	0	34	20/1 PROVISION	0
35	20/1	SPACE	0	36	20/1 PROVISION	0
37	20/1	SPACE	0	38	20/1 PROVISION	0
39	20/1	SPACE	0	40	20/1 PROVISION	0
41	20/1	SPACE	0	42	20/1 PROVISION	0

TOTAL CONNECTED KVA BY PHASE 2,000 2,460 600

CONN VA	CALC VA	CONN VA	CALC VA
3,600	4,500 (125%)	560	700 (125%)
900	900 (100%)	900	900 (100%)

**2 EXISTING PANEL A PANEL SCHEDULE**  
E602/ SCALE: NO SCALE

**4 PANEL B**

ROOM MOUNTING SURFACE FED FROM PANEL A NOTE		VOLTS 240/120V 2P 3W BUS AMPS 200 NEUTRAL 100%		AC 42,000 MAIN BRK-200 LUGS STANDARD		
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD VA A B	CKT BKR	CIRCUIT DESCRIPTION	LOAD VA A B
1	30/1	EXTERIOR LIGHTING	165	2	20/1 SPACE	0
3	20/1	INTERIOR LIGHTING	420	4	20/1 SPACE	0
5	20/2	(14) DEDICATED RECEPITS	1,260	6	20/1 SPACE	0
7	1	SPACE	0	8	20/1 SPACE	0
11	60/2	(4) WATER HEATERS	6,600	10	20/1 SPACE	0
13	20/1	(1) HAND DRYER - LARGEST MOTOR	840	12	20/1 SPACE	0
15	30/1	(3) HAND DRYERS	2,520	14	20/1 SPACE	0
17	20/1	SPACE	0	16	20/1 SPACE	0
19	20/1	SPACE	0	18	20/1 RECP	0
21	20/2	SPACE	0	20	20/1 SPACE	0
23	1	SPACE	0	22	20/1 SPACE	0
				24	20/1 SPACE	0

TOTAL CONNECTED KVA BY PHASE 8,865 10,800

CONN VA	CALC VA	CONN VA	CALC VA
585	731.3 (125%)	840	1,050 (125%)
2,520	2,520 (100%)	15,720	15,720 (100%)

**3 PANEL B PANEL SCHEDULE**  
E602/ SCALE: NO SCALE

ROOM MOUNTING SURFACE FED FROM 10150 AVENIDA MAGNIFICA NOTE		VOLTS 240/120V 2P 3W BUS AMPS 200 NEUTRAL 100%		AC 42,000 MAIN BRK-MLO LUGS STANDARD		
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD VA A B	CKT BKR	CIRCUIT DESCRIPTION	LOAD VA A B
1	200/2	PANEL B	8,865	2	20/1 SPACE	0
3	20/1	SPACE	0	4	20/1 SPACE	0
5	20/1	SPACE	0	6	20/1 SPACE	0
7	20/1	SPACE	0	8	20/1 SPACE	0
9	20/1	SPACE	1,357	10	20/2 SPACE	0
11	1	SPACE	0	12	20/1 SPACE	0

TOTAL CONNECTED KVA BY PHASE 10,220 12,020

CONN VA	CALC VA	CONN VA	CALC VA
3,164	3,985 (125%)	840	1,050 (125%)
2,520	2,520 (100%)	23,250	96.85 A (100%)

**4 NEW PANEL A PANEL SCHEDULE**  
E602/ SCALE: NO SCALE

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**  
ELECTRICAL SCHEDULES 1

ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
SHEET 02 OF 105 SHEETS

DATE: 12/21/2022  
BY: JHOSH GRINI  
CHECKED: JHOSH GRINI  
DATE: 12/21/2022

APPROVED: [Signature]  
DATE: 12/21/2022

PROJECT NO: 1992-008  
SHEET NO: 02  
DRAWING NO: E602

**SAN DIEGO**  
REGISTERED PROFESSIONAL ENGINEER  
NO. 07208

**SCHMIDT DESIGN GROUP**  
CONSULTANT  
100 Broadway St., Suite 500, San Diego, CA 92102  
TEL: 619.594.8800  
WWW.SCHMIDTDESIGN.COM

PROJECT # 204.12  
DATE: 01.18.2023  
DRAWN BY: CNEY AB



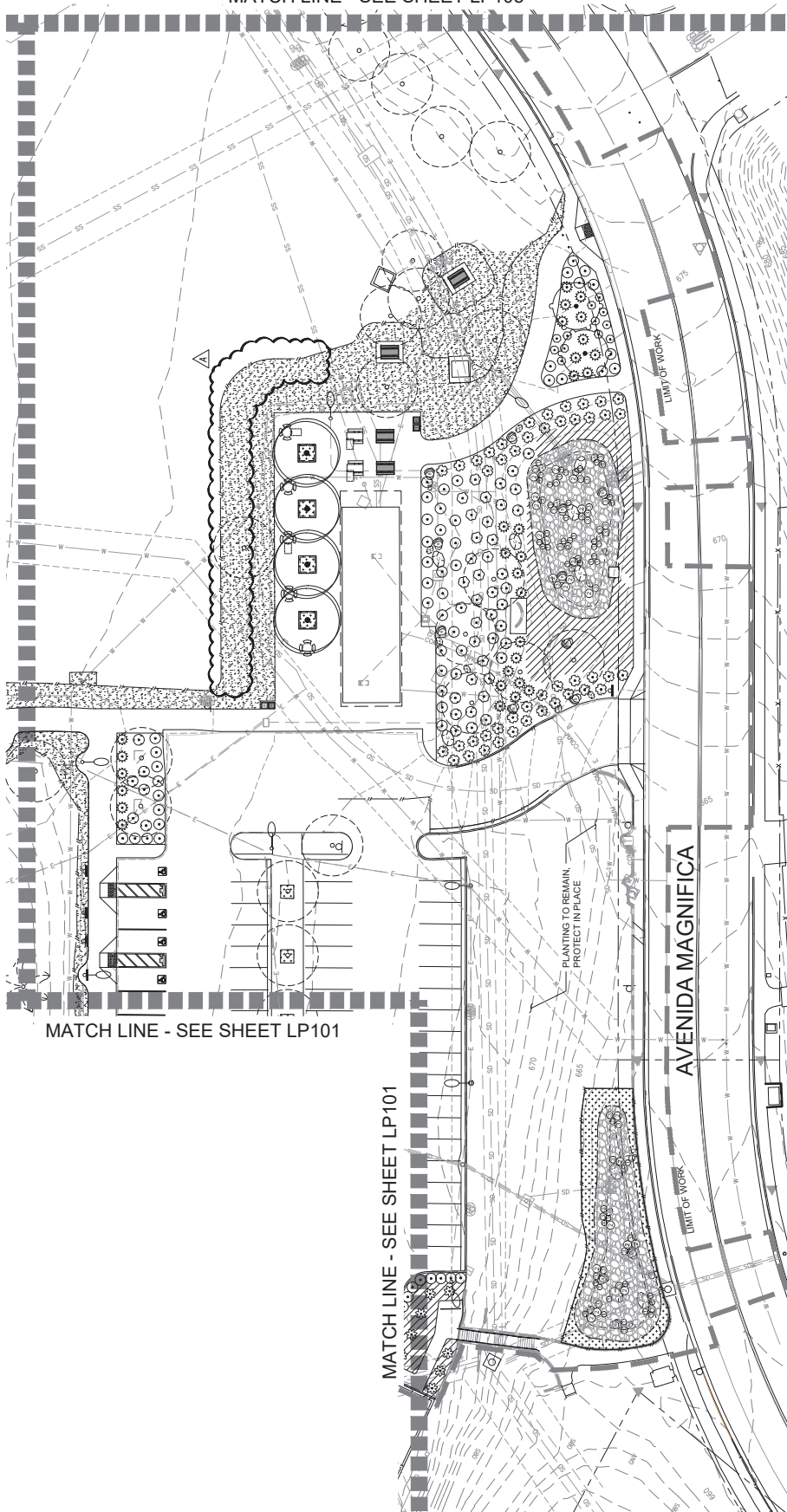


MATCH LINE - SEE SHEET LP102

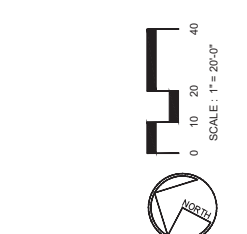
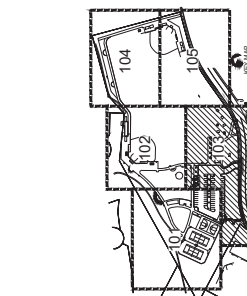
MATCH LINE - SEE SHEET LP101

MATCH LINE - SEE SHEET LP101

MATCH LINE - SEE SHEET LP105



SEE SHEET LP100 FOR LANDSCAPE PLANTING LEGEND AND NOTES  
 SEE SHEET LP101-LP105 FOR LANDSCAPE PLANTING PLANS



PLANTING TO REMAIN, PROTECT IN PLACE

PLANTING TO REMAIN, PROTECT IN PLACE

PLANTING TO REMAIN, PROTECT IN PLACE

**CONSULTANT**

**SCHMIDT DESIGN GROUP**

100 Sherman St., Suite G, San Diego, CA 92104  
 TEL: 619.278.1472 FAX: 619.278.1473  
 WWW.SCHMIDTDESIGN.COM

REGISTERED PROFESSIONAL ENGINEER - CIVIL  
 NO. CT 7208

REGISTERED LANDSCAPE ARCHITECT  
 NO. 17002

REGISTERED PROFESSIONAL ARCHITECT  
 NO. 17002

REGISTERED PROFESSIONAL CIVIL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL ELECTRICAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL MECHANICAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL PLUMBING AND HEATING ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL STRUCTURAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL SURVEYOR  
 NO. 17002

REGISTERED PROFESSIONAL WATER RESOURCES ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL WIND ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL ENVIRONMENTAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL CHEMICAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL METALLURGICAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL NUCLEAR ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL AERONAUTICAL AND NAUTICAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL AGRICULTURAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL BIOMEDICAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL INDUSTRIAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL MARINE ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL PETROLEUM ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL TRANSPORTATION ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL POLYMER ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL FOOD ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL TEXTILE ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL FIBER ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL APPLIED SCIENCE ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL CHEMICAL ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL METALLURGICAL ENGINEER  
 NO. 17002

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REGISTERED PROFESSIONAL TEXTILE ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL FIBER ENGINEER  
 NO. 17002

REGISTERED PROFESSIONAL APPLIED SCIENCE ENGINEER  
 NO. 17002

**ENGINEERING & CAPITAL PROJECTS DEPARTMENT**

**JERABEK PARK IMPROVEMENTS**

**LANDSCAPE PLANTING PLAN**

SHEET 103 OF 105 SHEETS

DATE: 12/21/2022  
 PROJECT NO: 19A2-006  
 DRAWING NO: LP103

APPROVED: [Signature]  
 DATE: 12/21/22

DESIGNED: [Signature]  
 DATE: 12/21/22

CHECKED: [Signature]  
 DATE: 12/21/22

DATE SHOWN: [Signature]  
 DATE COMPLETED: [Signature]

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**

LANDSCAPE PLANTING PLAN

ENGINEERING & CAPITAL PROJECTS DEPARTMENT

SHEET 103 OF 105 SHEETS

DATE: 12/21/2022  
 PROJECT NO: 19A2-006  
 DRAWING NO: LP103

APPROVED: [Signature]  
 DATE: 12/21/22

DESIGNED: [Signature]  
 DATE: 12/21/22

CHECKED: [Signature]  
 DATE: 12/21/22

DATE SHOWN: [Signature]  
 DATE COMPLETED: [Signature]

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**

LANDSCAPE PLANTING PLAN

ENGINEERING & CAPITAL PROJECTS DEPARTMENT

SHEET 103 OF 105 SHEETS

DATE: 12/21/2022  
 PROJECT NO: 19A2-006  
 DRAWING NO: LP103

APPROVED: [Signature]  
 DATE: 12/21/22

DESIGNED: [Signature]  
 DATE: 12/21/22

CHECKED: [Signature]  
 DATE: 12/21/22

DATE SHOWN: [Signature]  
 DATE COMPLETED: [Signature]

PLANS FOR THE CONSTRUCTION OF:  
**JERABEK PARK IMPROVEMENTS**

LANDSCAPE PLANTING PLAN

ENGINEERING & CAPITAL PROJECTS DEPARTMENT

SHEET 103 OF 105 SHEETS

DATE: 12/21/2022  
 PROJECT NO: 19A2-006  
 DRAWING NO: LP103

APPROVED: [Signature]  
 DATE: 12/21/22

DESIGNED: [Signature]  
 DATE: 12/21/22

CHECKED: [Signature]  
 DATE: 12/21/22

DATE SHOWN: [Signature]  
 DATE COMPLETED: [Signature]



## Bid Results

### Bidder Details

**Vendor Name** Whillock Contracting Inc  
**Address** P.O Box 2322  
La Mesa, California 91943  
United States  
**Respondee** Tory M. Whillock  
**Respondee Title** Secretary  
**Phone** 619-579-0700  
**Email** estimating@whillockcontracting.com  
**Vendor Type** CADIR  
**License #** 572217  
**CADIR** 1000001767

### Bid Detail

**Bid Format** Electronic  
**Submitted** 02/02/2023 1:51 PM (PST)  
**Delivery Method**  
**Bid Responsive**  
**Bid Status** Submitted  
**Confirmation #** 317821

### Respondee Comment

### Buyer Comment

### Attachments

File Title	File Name	File Type
Contractors Certification of Pending Actions.pdf	Contractors Certification of Pending Actions.pdf	CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS
Mandatory Disclosure of Business Interest Form.pdf	Mandatory Disclosure of Business Interest Form.pdf	MANDATORY DISCLOSURE OF BUSINESS INTERESTS FORM
Debarment & Suspecsion Cert - Prime Contractor.pdf	Debarment & Suspecsion Cert - Prime Contractor.pdf	PRIME- DEBARMENT AND SUSPENSION CERTIFICATION
SUB Debarment & Suspecsion Cert.pdf	SUB Debarment & Suspecsion Cert.pdf	SUBS - DEBARMENT AND SUSPENSION CERTIFICATION
Subcontractors for Alternates.pdf	Subcontractors for Alternates.pdf	SUBCONTRACTOR LISTING FOR ALTERNATE ITEMS
Bid Bond.pdf	Bid Bond.pdf	Bid Bond

## Subcontractors

Showing 10 Subcontractors

Name & Address	Desc	License Num	CADIR	Amount	Type
<b>Ace Electric, Inc.</b> PO Box 601071 San Diego, California 92160	Electric	835109	1000001519	\$576,200.00	PQUAL, Local
<b>Alvarez And Shaw, Inc</b> 10001 Maine Ave Lakeside, California 92040	Concrete	986171	1000052129	\$854,182.88	CADIR, SDB, DBE, MBE, PQUAL, MALE, LAT, Local
<b>Crown Fence</b> 12118 Bloomfield Ave Santa Fe, California 91790	Fence	1315	1000005330	\$112,246.00	
<b>Donald D Diffenbaugh Construction</b> 14651 Dropseed Terrace Jamul, California 91916	Roofing	337039	1000001279	\$67,500.00	
<b>Kirk Paving, Inc.</b> 8722 Winter Gardens Blvd. Lakeside, California 92040	Paving	749206	1000002341	\$92,700.00	CADIR, Local
<b>Makelele Systems Landscape &amp; Mai</b> PO BOX 2044 Makelele Systems San Marcos, California 92079	Landscape	987557	1000028415	\$240,242.00	MBE, CADIR, MALE, LAT, Local
<b>Public Restroom Company</b> 2587 Business Parkway Minden, Nevada 89423	Toilet	822966	1000005303	\$51,123.00	CADIR
<b>Robertson Recreational Surfaces</b> 2414 West 12th Street, Suite 5 Tempe, Arizona 85281	Rubber	667261	1000002700	\$199,237.50	
<b>Solid Structures, Inc.</b> P.O.Box 848 La Mesa, California 91944	Structural Concrete	758791	1000015100	\$35,150.00	ELBE, Local
<b>Western State Builders Inc</b> 2141 Orange Ave Escondido, California 92029	Shade Structure & Playground	1069677	1000706410	\$106,625.00	CADIR, MALE, CAU, Local

## Line Items

Discount Terms No Discount

Item #	Item Code	Type	Item Description	UOM	QTY	Unit Price	Line Total	Response	Comment
<b>Main Bid</b>							<b>\$6,009,898.00</b>		
1	524126		Bonds (Payment and Performance)	LS	1	\$64,516.00	\$64,516.00	Yes	
2	236220		Building Permits (EOC Type I)	AL	1	\$20,000.00	\$20,000.00	Yes	
3	237990		Specialty Inspection Paid For By the Contractor (EOC Type I)	AL	1	\$20,000.00	\$20,000.00	Yes	
4	237990		Construction of Park Improvements	LS	1	\$5,308,887.00	\$5,308,887.00	Yes	
5	237990		Mobilization	LS	1	\$266,767.00	\$266,767.00	Yes	
6			Field Orders (EOC Type II)	AL	1	\$225,000.00	\$225,000.00	Yes	
7	541330		Traffic Control and Working Drawings	LS	1	\$17,858.00	\$17,858.00	Yes	
8	238210		SDG&E Fee Allowance (EOC Type I)	AL	1	\$40,000.00	\$40,000.00	Yes	
9	541330		SWPPP Development	LS	1	\$16,243.00	\$16,243.00	Yes	
10	237310		SWPPP Implementation	LS	1	\$30,627.00	\$30,627.00	Yes	
<b>Additive Alternate A</b>							<b>\$19,207.00</b>		
11	237310		Slurry Seal Parking Lot (16,630 Sq. Ft - Option 1)	LS	1	\$19,207.00	\$19,207.00	Yes	
<b>Additive Alternate B</b>							<b>\$58,496.00</b>		
12	237310		Mill and Overlay Parking Lot (16,630 Sq. Ft. - Option 2)	LS	1	\$58,496.00	\$58,496.00	Yes	

## Line Item Subtotals

Section Title	Line Total
<b>Main Bid</b>	<b>\$6,009,898.00</b>
<b>Additive Alternate A</b>	<b>\$19,207.00</b>
<b>Additive Alternate B</b>	<b>\$58,496.00</b>
<b>Grand Total</b>	<b>\$6,087,601.00</b>