

CONTRACT DOCUMENTS  
SPECIFICATIONS AND CONSTRUCTION PLANS  
FOR  
PROJECT NO. ITB 824-24  
RAWLEY DUNTLEY PARK FENCE INSTALLATION

in the

CITY OF LANCASTER  
44933 North Fern Avenue  
Lancaster, California 93534

BIDS SHALL BE SUBMITTED ELECTRONICALLY ON THE CITY OF LANCASTER VENDOR PORTAL THROUGH PLANETBIDS. THE LINK TO REGISTER TO BECOME A PROSPECTIVE BIDDER AND ELECTRONICALLY BID ON THIS PROJECT CAN BE FOUND AT THE FOLLOWING WEB ADDRESS:

<https://www.planetbids.com/portal/portal.cfm?CompanyID=42566>

ELECTRONIC BIDS WILL BE RECEIVED PRIOR TO 11:00 A.M. (10:59:59) ON THURSDAY,  
April 04, 2024.

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SONYA PATTERSON  
CITY OF LANCASTER

PART A

NOTICE TO CONTRACTORS

CITY OF LANCASTER  
LANCASTER, CALIFORNIA  
NOTICE TO CONTRACTORS

**PROJECT NO. ITB 824-24**

**Rawley Duntley Park Fence Installation**

The City of Lancaster will receive **ELECTRONIC BIDS ONLY** for PARCS Project No. ITB 824-24, Rawley Duntley Fence Installation, prior to 11:00 a.m. (10:59:59) – according to the (PlanetBids official Bid clock) **Thursday, April 4, 2024**, via the City of Lancaster Vendor Portal through PlanetBids. The Vendor Portal can be accessed at the following address:

<https://www.planetbids.com/portal/portal.cfm?CompanyID=42566>

On that same day, or shortly thereafter, bid results will be posted via PlanetBids. Bids must be completed on this form, entered into the line items section of PlanetBids, and include all forms provided or information requested, in accordance with the Specifications and Construction Plans therefor. Bids are required for the entire work as shown on the Construction Plans and as described in the Bid Schedule and the Specifications.

All work must be completed within **30 calendar** days after the issuance of Notice to Proceed. The Contract Documents, which include the Specifications and Construction Plans, are available on the City of Lancaster Vendor Portal through PlanetBids.

A **mandatory** pre-bid meeting will be held Wednesday, March 27, 2024 at Rawley Duntley Park 3334 W Ave K in Lancaster at 8:30AM. Meeting location will be in the north parking lot by the park sign. Contractors not in attendance or who attend after the 8:30AM start time will not be able to submit proposals for this project. Meeting will start promptly at 8:30AM.

**SB 854**

SB 854 bill signed into law on June 20, 2014, established a new public works contractor registration program to replace prior Compliance Monitoring Unit (CMU) and Labor Compliance Program (LCP) requirements for bond-funded and other specified public works projects. The Department of Industrial Relations (DIR) requires all contractors and subcontractors who bid or perform work on a public works project (as defined under the Labor Code) be subject to a registration and annual renewal fee. Contractors must apply online and meet minimum qualifications to be registered as eligible to bid and work on public works projects. The requirement to list only registered contractors and subcontractors on bids becomes effective on March 1, 2015. The requirement to only use registered contractors and subcontractors on public works projects applies to all projects awarded on or after April 1, 2015. **This project shall comply with the requirement of SB 854.**

Attention is directed to the Revisions to Labor Code Section 4. 1725.5 and Section 5. 1771.1 provided below:

SECTION 4. 1725.5 A contractor must be registered pursuant to this section in order to be qualified to bid on, be listed in a bid proposal pursuant to Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work that is subject to requirements of this chapter.

(a) To qualify for registration under this section, a contractor must do all of the following:

(1) Beginning July 1, 2014, register with the Department of Industrial Relations in the manner prescribed by the department and pay an initial non-refundable application fee of \$300 to qualify for registration under this section and an annual renewal fee on or before July 1<sup>st</sup> each year thereafter. The annual renewal fee shall be in a uniform amount set by the Director of Industrial Relations, and the initial registration and renewal fees may be adjusted no more than annually by the director to support the costs specified in Section 1771.3.

(2) Provide such evidence, disclosures, or releases as are necessary to establish all of the following:

(A) Worker's Compensation coverage that meets the requirements of Division 4 (commencing with Section 3200) and includes sufficient coverage for any worker who the contractor will employ to perform work that is subject to prevailing wage requirements other than a contractor who, is separately registered under this section. Coverage may be evidenced by a current and valid Certificate of Workers' Compensation Insurance or Certification of Self-Insurance required under Section 7125 of the Business and Professions Code.

(B) Where applicable, the contractor is licensed in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(C) The contractor does not have any delinquent liability to an employee or the state for any assessment of back wages, or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. However, for any judgment, order, or determination that is under appeal, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

(D) The contractor is not currently debarred under Section 1777.1 or under any other federal, or state law providing for the debarment of contractors from public works.

(E) The contractor has not bid on a public works contract, been listed in a bid proposal, or engaged in the performance of a contract for public works without being lawfully registered in accordance with this section, within the preceding 12 months, or since the effective date of the requirements set forth in subdivision (f), whichever is shorter. For a contractor found to be in violation of the requirements of this paragraph only, the period

of disqualification shall be waived if: (i) the contractor has not previously been found to be in violation of the requirements of this paragraph within the preceding 12 months; and (ii) the contractor pays an additional non-refundable penalty registration fee of \$2,000.

- (b) Fees received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established pursuant to Section 1771.3 and shall be used only for the purposes specified in subdivision (b) of Section 1771.3
- (c) The term “contractor,” as used in this section, shall include any subcontractor, as defined in Section 1722.1.
- (d) A contractor who fails to pay the renewal fee required under paragraph (1) of subdivision (a) on or before the expiration of any prior period of registration shall be prohibited from bidding on or engaging in the performance of any contract for public work until once again registered pursuant to this section. A contractor who inadvertently fails to pay the renewal fee may retroactively renew its registration by paying an additional non-refundable penalty renewal fee equal to the amount of the renewal fee within 90 days of the date of the renewal fee.
- (e) The requirements of this section shall not apply with respect to any contract, which as a result of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or decision by a court that classifies, after the time at which the body awarding the contract accepts the contractor’s bid or awards the contractor a contract, the work covered by the bid or contract as a “public work,” as defined in this chapter, to which Section 1771 applies, provided that:
  - (1) The body awarding the contract failed to identify as a public work, in the bid specification or in the contract documents that portion of the work that the determination or decision classifies as a “public work.”
  - (2) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. **This project shall comply with the requirement of SB 854.**
  - (3) Within twenty (20) days following service of notice on the awarding body of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or a decision by a court that the contract was for public work as defined in this chapter, the contractor and any subcontractors are registered under this section or are replaced by a contractor or subcontractors who are registered under this section.
  - (4) The requirements of this section shall apply prospectively only to any bid, bid proposal, contract, or work performed after the awarding body is served with notice of the determination or decision referred to in paragraph (2) of this subdivision.
- (f) The requirements of this section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work, as defined in this chapter, entered into on or after April 1, 2015.

SECTION 5. Section 1771.1:

1771.1 (a) No contractor or subcontractor shall be qualified to bid on, be listed in a bid proposal pursuant to Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered to perform public work pursuant to Section 1725.5. It shall not be 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 Sections 10164 or 20103.5 of the public work pursuant to Section 1725.5 at the time the contract is awarded.

(b) Notice of this requirement shall be included in all bid invitations and public works contracts, and no bid shall be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current eligibility to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following requirements are met: (1) the subcontractor is registered prior to the bid opening; (2) within 24 hours after the bid opening the subcontractor is registered and has paid the penalty registration fee specified in paragraph (E) of subdivision (2) of Section 1725.5; or (3) the subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) of this Section shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The DIR shall maintain on its website a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation. However, no contract for public work shall be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. **This project shall comply with the requirement of SB 854.**

Bids will not be accepted unless they are made on a Proposal form furnished in the Contract Documents by the City of Lancaster, entered into the line items section of PlanetBids and submitted electronically via the City of Lancaster PlanetBids Vendor Portal. Each bid must be accompanied by cash, certified check, cashier's check or bidder's bond, made payable to the City of Lancaster for an amount equal to at least 10% of the amount of bid. Bid Security shall be delivered in a sealed envelope to the City Clerk located at 44933 Fern Avenue, Lancaster, CA, **PRIOR TO THE BID OPENING DATE AND TIME OTHERWISE THE BID WILL BE DEEMED NON-RESPONSIVE.** The Bid Security is to be forfeited should the bidder to whom the Contract is awarded fail to enter into the Contract. Bid Bonds are considered part of the Contract Documents and shall meet all requirements in Section B of these specifications and Section 2-4 of the Standard Specifications. The successful bidder will be required to

furnish a Labor and Material Bond in an amount equal to 100% of the Contract price and a Faithful Performance Bond in an amount equal to 100% of the Contract price.

Specifically, the Contract Bonds (Bid Bond, Performance Bond, and Labor and Material Bond) "shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California." Said bonds shall be secured by an "admitted surety insurer" (as defined in the California Code of Civil Procedure Section 995.120, or successor statute) who can either: (i) meet the minimum rating of A-: VII in the latest edition of the Best's Key Rating Guide Property-Casualty; or (ii) provide the following documentation as mandated by the California Code of Civil Procedure Section 995.660, or successor statute:

- (1) The original, or a certified copy, of the unrevoked appointment, power of attorney, bylaws, or other instrument entitling or authorizing the person who executed the bond to do so.
- (2) A certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner.
- (3) Evidence that the certificate of authority of the insurer has not been surrendered, revoked, canceled, annulled, or suspended or, in the event that it has, that renewed authority has been granted.
- (4) Copies of the insurer's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.

Substitution of Securities for any monies withheld by the City of Lancaster to ensure performance under this contract will be permitted in accordance with Section 4590 of the State of California Government Code.

All bids are to be compared on the basis of the estimate of quantities shown in the Bid Schedule. Award of contract will not be made to a contractor who is not licensed in accordance with the provisions of Chapter 9, Division 111 of the Business and Professions Code of the State of California. **The Contractor shall possess the following license in order to qualify for Award of Bid: A or C-13.** Any bidder who feels that a Contractor's license other than that specified qualifies for this project shall submit a written request for the City to consider accepting other qualifying licenses. Written requests must be received no later than 5 days prior to bid opening.

Refer to Part C, Subsection **5-4 LIABILITY INSURANCE** for Insurance Requirements.

The State of California, Department of Industrial Relations, has ascertained the general prevailing rate of wages and employer payments for health and welfare, vacation, pension, and similar purposes applicable to the work to be done. These rates shall be the minimum wage rates for this project. These rates are on file with the City of Lancaster and copies will be made available to any interested party upon request.

Attention is directed to the provisions of Section 1777.5 (Chapter 1411, Statutes of 1968) and Section 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under him.

Section 1777.5, as amended, requires the Contractor or subcontractor employing tradesmen in any apprenticeable occupation to apply to an applicable apprenticeship program that can supply apprentices to the site of the public work and which administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeymen that will be used in the performance of the contract. An apprenticeship program has the discretion to grant to a participating contractor, or contractor association, a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

- (A) When unemployment in the area of coverage by the joint apprenticeship committee has exceeded an average of 15% in the 90 days prior to the request for certificate; or
- (B) When the number of apprentices in training in the area exceeds a ratio of one to five; or
- (C) When the trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis statewide or locally; or
- (D) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

The Contractor is required to make contributions to funds established for the administration of apprenticeship programs if he employs registered apprentices or journeymen in any apprenticeable trade on such contracts.

The Contractor and all subcontractors under them shall comply with the requirements of Section 1777.5 and Section 1777.6 in the employment of apprentices.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

The City of Lancaster reserves the right to reject any and all bids, or delete portions of any and all bids or waive any informality in the bid not affected by law.

By order of the City of Lancaster.



PART B  
INFORMATION FOR BIDDERS

## BID INSTRUCTIONS

### CONTRACT DOCUMENTS

The Contract Documents shall consist of these Bid Instructions together with the Notice to Contractors, Proposal Forms, Contract Forms, Specifications, Construction Drawings and any Addenda issued during the bidding period; all of which are on file and may be obtained as noted in the Notice to Contractors.

### Proposals

Bids to receive consideration shall be made in accordance with the following instructions:

- (a) Bids must be entered into the line items section of PlanetBids in addition to the Bid Schedule forms contained in the Contract documents. All bid forms shall be properly executed with all items filled in, including the longhand signature of all persons signing the Proposal. The forms should be completed without interlineations or alterations. Completed Bid Forms shall be uploaded onto the City of Lancaster Vendor Portal on PlanetBids.
- (b) Bids shall not contain any recapitulation of the work to be done. Alternative proposals will only be considered when specifically requested in the bidding documents.
- (c) Bids shall be accompanied by a certified check, cashier's check or bidder's bond for an amount not less than 10% of the bid, made payable to the Contracting Agency as defined in Section 1 of the General Provisions. Bid Security shall be delivered to the City Clerk in a sealed envelope at 44933 Fern Avenue, Lancaster, CA 93534 prior to the bid opening date and time. Said security shall be given as a guarantee that the bidder will enter into a contract if awarded the work and, in case of refusal or failure to enter into said Contract, such guarantee shall be forfeited to the Contracting Agency. Bid Bonds are considered part of the Contract Documents and therefore must meet the same standards as the Contract Bonds. Specifically, the Contract Bonds (Bid Bond, Performance & Maintenance Bond, and Labor and Material Bond) "shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California." Said bonds shall be secured by an "admitted surety insurer" (as defined in the California Code of Civil Procedure Section 995.120, or successor statute) who can either: (i) meet the minimum rating of A-: VII in the latest edition of the Best's Key Rating Guide Property-Casualty; or (ii) provide the following documentation as mandated by the California Code of Civil Procedure Section 995.660, or successor statute:
  - (1) The original, or a certified copy, of the unrevoked appointment, power of attorney, bylaws, or other instrument entitling or authorizing the person who executed the bond to do so.
  - (2) A certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner.
  - (3) Evidence that the certificate of authority of the insurer has not been surrendered, revoked, canceled, annulled, or suspended or, in the event that it has, that renewed authority has been granted.

- (4) Copies of the insurer's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.
- (d) Before submitting a bid, bidders shall carefully examine the Construction Drawings, read the Specifications and Contract Documents, shall visit the site of the work and shall fully inform themselves as to all existing conditions and limitations of the job site.

The submission of a proposal by the bidder shall constitute the acknowledgment that, if awarded the contract, he/she has relied and is relying on his/her own examination of (a) the site of the work, (b) the access to the site, and (c) all other data, matters, and things requisite to the fulfillment of the work and on his/her own knowledge of existing services and utilities on and in the vicinity of the site of the work to be constructed under the contract, and not on any representation or warranty of the Agency. No claim for additional compensation will be allowed which is based upon a lack of knowledge of the above items.

Each bidder shall thoroughly examine and be familiar with legal and procedural documents, general conditions, specifications, drawings and addenda (if any). The submission of a proposal shall constitute an acknowledgment upon which the Agency may rely that the bidder has thoroughly examined and is familiar with the contract documents. The failure or neglect of a bidder to receive or examine any of the contract documents shall in no way relieve him/her from any obligations with respect to his/her proposal or to the contract.

The bidder shall include the cost of all labor, materials, equipment, supervision, applicable taxes, overhead and profit and any other factors that are necessary to complete the improvement called for on the Construction Drawings in his individual item bid prices.

- (e) Bids shall be **SUBMITTED ELECTRONICALLY via PlanetBids** on or before the day and hour set for the opening of bids in the Notice to Contractors, as published. **PAPER COPIES WILL NOT BE ACCEPTED.** It is the SOLE responsibility of the bidder to see that his bid is received in proper time. Any bid received after the scheduled closing time for receipt of bids will be rejected.
- (f) A proposal may be withdrawn by a written request signed by the bidder. Such requests must be delivered to the Agency's designated official prior to the bid opening hour stipulated in the Notice Inviting Bids. Proposals may not be withdrawn after said hour without forfeiture of the proposal guarantee. The withdrawal of the proposal will not prejudice the right of the bidder to submit a new proposal, providing there is time to do so.
- (g) All items of the Bid Schedule shall be properly and completely filled out, and must also be entered into the line items section of PlanetBids. If there is an inconsistency or conflict between the numbers entered on the Bid Schedule form and the numbers on PlanetBids, the numbers entered on PlanetBids shall govern.

If the unit price and the total amount named by the bidder for any item are not in agreement, the unit price alone will be considered as representing the bidder's intention, and the unit price extension and the totals will be corrected to conform thereto.

Any error in the addition of the amounts constituting the items of the Bid Schedule will be corrected and such corrected total shall be used to determine the successful bidder. All prices or sums shall include all sales and other taxes which may be applicable.

- (h) Bids shall include a completed Form EOI 1 (Certified Evidence of Insurance).
- (i) Bids shall include a completed Non-Collusion Declaration.
- (j) Bids shall include a completed List of Subcontractors.
- (k) Bids shall include a completed Contractor's Industrial Safety Record. All bidders are required to submit information regarding their industrial safety record on the form provided in the Bid Documents. A review of this safety record will be made prior to determination of the lowest responsible bidder. An adverse finding as to the bidder's safety record or any bid submitted which does not include the completed Contractor's Industrial Safety Record form may be sufficient cause for rejection of the bid.
- (l) Bids shall include a completed Bidder's Questionnaire.
- (m) Bids shall include a completed Illness and Injury Prevention Program Certification for Contractors in accordance with S.B. 198.
- (n) Bids shall include a completed Bidders Certificate for all addenda issued.

#### Interpretation of Plans and Documents

If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part of the Construction Drawings, Specifications, or the Contract Documents, or finds discrepancies or omissions therein, they shall submit a written request electronically via PlanetBids "Question and Answer" tab for an interpretation or correction thereof.

Any interpretation or corrections of the Construction Drawings, Specifications, or the Contract Documents will be made only by addendum, duly issued and copy of such addendum(s) will be transmitted electronically through PlanetBids. Neither the Engineer nor the agency will be responsible for any other explanation or interpretation of the documents. The last day for questions will be March 28<sup>th</sup>, 2024.

#### Addenda or Bulletins

Any addenda or bulletins issued during the time of bidding, or part of the documents issued to the bidder, shall be made a part of the Contract. All addenda will be issued through the PlanetBids platform, and it is the bidder's responsibility to monitor PlanetBids for release of the addenda prior to submission. The bidder shall indicate the addenda received on the Proposal form. The bidder shall also digitally acknowledge the Addenda via PlanetBids, and submit a signed version with the bid. If addenda are not signed and submitted with the bid proposal, the bid may be deemed non-responsive and rejected.

#### Sealed Bid Calculations

Prospective bidders are encouraged to submit sealed bid calculations with their bid. The sealed bid calculations will be opened only in cases of discrepancies in the bid and only at the bidder's request. If the bidder is not awarded the contract, the bidder's sealed bid calculations package will be returned.

#### Bidders Interested in More Than One Bid

No person, firm or corporation shall be allowed to make or file, or be interested in more than one bid for the same work, unless alternate bids are called for. However, 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 thereby disqualified from submitting a sub-proposal or quoting prices to other bidders.

#### Instructions to Bidders – Delivery of Proposal

Submission of all supplementary proposal documents not required to be submitted with the Bid Proposal shall be submitted to Owner with fourteen (14) calendar days of Bid Opening, unless otherwise required by the contract documents.

#### Assignment of Contract

No assignment by the Contractor of the contract that is to be entered into hereunder or of any part thereof, or of funds to be received thereunder by the Contractor will be recognized by the awarding authority unless such assignment has had the prior approval of the awarding authority and the Surety has been given due notice of such assignment in writing and has consented thereto in writing.

If the Contractor intends to subcontract any portion of the work bid upon, the bid or offer must state the name and address of each subcontractor who will perform work, labor, or render service to the Contractor in or about the construction of the work, in the amount equal to 1/2 of 1% or more of the Contractor's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of 1/2 of 1% of the Contractor's total bid or \$10,000, whichever is greater.

Said information shall be included on the sheet provided in the Contract Documents. The General Contractor shall perform a minimum of 50% of work and shall be so licensed therefor. All subcontractors shall accordingly be licensed to perform the work for which they are to be responsible therefor.

#### AWARD AND EXECUTION OF CONTRACT DOCUMENTS

SB 854 bill signed into law on June 20, 2014, established a new public works contractor registration program to replace prior Compliance Monitoring Unit (CMU) and Labor Compliance Program (LCP) requirements for bond-funded and other specified public works projects. The Department of Industrial Relations (DIR) requires all contractors and subcontractors who bid or perform work on a public works project (as defined under the Labor Code) be subject to a registration and annual renewal fee. Contractors must apply online and meet minimum qualifications to be registered as eligible to bid and work on public works projects. The requirement to list only registered contractors and subcontractors on bids became effective on March 1, 2015. The requirement to only use registered contractors and subcontractors on public works projects applies to all projects awarded on or after April 1, 2015. **This project shall comply with the requirement of SB 854.**

#### Opening of Bids

Bids will be opened and publicly via PlanetBids at the time set forth in the Notice to Contractors, or shortly thereafter.

#### Award or Rejection of Bids

The award of the Contract, if it be awarded, will be to the lowest responsible bidder complying with these instructions and with the Notice to Contractors. The Contracting Agency, however, reserves the right to reject any or all bids, and to waive any informality in bids received. The City reserves the right to hold the low responsible bid for up to 60 calendar days before awarding.

Unauthorized conditions, limitations, or provisions attached to a proposal will render it irregular and may cause its rejection. The completed proposal forms shall be without interlineations, alteration or erasures. Alternative proposals will not be considered unless specifically requested. No oral, telegraphic, or telephonic proposal, modification, or withdrawal will be considered.

No bidder may withdraw his bid for a period of 60 calendar days after the time set for opening thereof. However, the Contracting Agency will return all proposal guarantees, within 15 calendar days of the execution of Contract, or rejection of the bids, to the respective bidders whose proposal they accompany.

#### Nondiscrimination

In performance of the terms of this Contract, the Contractor shall not engage in, nor permit such subcontractors as he may employ from engaging in, discrimination of race, color, national origin, sex, religion, age, or disability in employment of the provision of services. Violation of this provision may result in the imposition of penalties referred to in Labor Code Section 1735.

#### Workers' Compensation Insurance

The Contractor is required to secure the payment of compensation to his employees in accordance with the provisions of Section 3700 of the Labor Code and before entering into a contract, the bidder to whom Contract has been awarded shall furnish satisfactory evidence that he has secured, for the period of the Contract, full workers' compensation insurance in accordance with the Standard Specifications, from any responsible insurance company authorized to do business in this State and such insurance shall be maintained in full force and effect at his own expense during the life of the Contract. A waiver of subrogation must be provided on behalf of the Certificate holder for Workers Compensation and Employers Liability.

#### Financial Statement

Before entering into a contract, the successful bidder shall furnish a statement of his financial condition and previous construction experience or such evidence of his qualifications as may be required by the Contracting Agency.

#### Agreement and Bonds

The form of Contract which the successful bidder, as Contractor, will be required to execute is included in the Contract Documents and should be carefully examined by the bidder. The Agreement and the Bonds will be executed according to law.

## Bonds

The 10% Bid Bond shall meet the same requirements as the Performance Bond and Labor and Material Bond. The successful bidder, prior to the execution of the Contract, will be required to furnish a Labor and Material Bond in an amount equal to 100% of the Contract price and a Performance Bond in an amount equal to 100% of the Contract price. The Contract Bonds (Bid Bond, Performance & Maintenance Bond, and Labor and Material Bond) "shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California." Said bonds shall be secured by an "admitted surety insurer" (as defined in the California Code of Civil Procedure Section 995.120, or successor statute) who can either: (i) meet the minimum rating of A-: VII in the latest edition of the Best's Key Rating Guide Property-Casualty; or (ii) provide the following documentation as mandated by the California Code of Civil Procedure Section 995.660, or successor statute:

- (1) The original, or a certified copy, of the unrevoked appointment, power of attorney, bylaws, or other instrument entitling or authorizing the person who executed the bond to do so.
- (2) A certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner.
- (3) Evidence that the certificate of authority of the insurer has not been surrendered, revoked, canceled, annulled, or suspended or, in the event that it has, that renewed authority has been granted.
- (4) Copies of the insurer's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.

## Insurance

The successful bidder, prior to execution of the Contract, will be required to furnish insurance as detailed in the General Provisions. Insurance is to be provided by insurers with a Best's rating of no less than A-: VIII.

## Fair Employment and Housing Act

Contractors will not discriminate against any employee for employment because of race, color, sex, sexual orientation, religion, age, ancestry or national origin, physical disability, medical condition, marital status, political affiliation, family and medical care leave, pregnancy leave, or disability leave. Contractor will take affirmative action to ensure that employees are treated during employment without regard to their race, sex, sexual orientation, color, religion, ancestry, or national origin, physical disability, medical condition, marital status, political affiliation, family and medical care leave, pregnancy leave, or disability leave. Such action shall include, but not be limited to, the following: employment; upgrading; demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates or pay or other forms of compensation; and selection for training, including apprenticeship. Contractor shall post in conspicuous places, available to employees for employment, notices to be provided by STATE setting forth the provisions of this Fair Employment section.

Contractor shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code, 1290-0 et seq.), and the applicable regulations promulgated thereunder (Cal. Code Regs., Title 2, 7285.0, et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12900(a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations are incorporated into these Specifications by reference and made a part hereof as if set forth in full. Contractor shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreements, as appropriate.

Contractor will permit access to the records of employment, employment advertisement, application forms, and other pertinent data and records by STATE, the State Fair Employment and Housing Commission, or any other agency of the State of California designated by STATE, for purposes of investigation to ascertain compliance with the Fair Employment section.



PART C  
GENERAL PROVISIONS

## **GENERAL PROVISIONS**

### **SECTION 1 – GENERAL**

#### **1-1 GENERAL**

Subsection 1-1 of the Standard Specifications is supplemented by the following:

The Contractor shall comply with the provisions of the Standard Specifications for Public Works Construction (SSPWC), latest edition, including all subsequent addenda and supplements, hereinafter referred to as "Standard Specifications", as published by BNI Publications, Inc., 990 Park Center Drive, Suite E, Vista, California 92081, phone (760) 734-1113, and including the additions and amendments contained in these documents.

The SSPWC, latest edition, including all subsequent addenda and supplements, are incorporated herein by reference and are intended to govern the relationship of the parties, except as are modified herein or are inconsistent with the provisions hereof.

The Contractor shall additionally comply with the provisions of the California Building Codes (CBC), latest edition, as published by International Conference of Building Officials, along with all other codes, Standards and Specifications utilized by the City of Lancaster during the course of construction.

To the fullest extent permitted by law, the Contractor will indemnify and hold harmless the City, the Project Manager, their agents, consultants, and employees from and against all claims, damages, losses, and expenses, including but not limited to attorney's fees, arising out of or resulting from the performance of the work, provided that any such liability, claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death (including that sustained by Contractor's or subcontractor's employees), or to injury to or destruction of tangible property (other than the work itself) including the loss of use thereof; and (2) is caused in whole or in part by any act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by any negligent act or omissions, whether active or passive, by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist.

The obligations of the Contract under this indemnity and hold harmless agreement shall not apply to (a) liability for damages arising from the sole negligence or willful misconduct of the City, the Project Manager, their agents, consultants, or independent contractors (other than the Contractor) who are directly responsible to the Project Manager, nor the (b) the liability of the City, the Project Manager, their agents, or employees, or consultants, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the City, the Project Manager, their agents or employees, provided such giving or failure to give is the sole cause of the injury or damage.

#### **1-2 TERMS AND DEFINITIONS**

Subsection 1-2 of the Standard Specifications is supplemented by the following:

Whenever the terms listed below appear in the Contract Documents, they shall be defined as follows:

Bid Price - The unit or lump sum amount shown in the Bid Schedule for the work item.

Building Code - California Building Code, latest edition, including all subsequent addenda and supplements (*where specifically called out*) and Lancaster Municipal Code Amendments, thereto.

Caltrans Standard Specifications - Standard Specifications of the State of California Department of Transportation latest edition, including all subsequent addenda and supplements (*where specifically called out*).

Contracting Agency - City of Lancaster - City

City Council - City Council of City of Lancaster

Claim – A written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified. A voucher, invoice, or other routing request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

Days – Calendar Days, unless otherwise noted

Electrical Code - California Electrical Code, latest edition, including all subsequent addenda and supplements (*where specifically called out*) and Lancaster Municipal Code Amendments, thereto

Engineer – Senior Manager-Capital Engineering, Project Manager, or authorized representative of the Senior Manager-Capital Engineering.

Execution of the Contract by the City - Execution of the Contract by the City will be complete when the City issues a Notice to Proceed.

Handbill - A small printed notice personally distributed by hand to individuals identified by the Engineer as specified in PART D. In no event shall handbills be placed in or on any portion of an owner's mailbox.

Mechanical Code - California Mechanical Code, latest edition, including all subsequent addenda and supplements (*where specifically called out*) and Lancaster Municipal Code Amendments, thereto.

Notice of Completion - Notice executed by the City and Recorded with the County of Los Angeles

Recorder giving formal notice of the completion of the work.

Plumbing Code - California Plumbing Code, latest edition, including all subsequent addenda and supplements (*where specifically called out*) and Lancaster Municipal Code Amendments, thereto.

Project Manager – any person or staff designated and authorized by the City of Lancaster to manage Contractor progress, performance, and project details.

Standard Specifications - The Standard Specifications for Public Works Construction, latest edition, including all subsequent addenda and supplements, and the Standard Plans for Public Works Construction, latest edition, including all subsequent addenda and supplements, prepared by the American Public Works Association.

## **1-6 BIDDING AND SUBMISSION OF THE BID.**

### **1-6.2 Subcontractor Listing.**

Subsection 1-6.2 of the Standard Specifications is supplemented by the following:

Pursuant to the provisions in Section 1777.1 of the Labor Code, the Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations web site at [http://www.dir.ca.gov/dir/Labor\\_law/DLSE/Debar.html](http://www.dir.ca.gov/dir/Labor_law/DLSE/Debar.html).

#### Non-Collusion Declaration of Subcontractor

The Contractor shall, upon request, obtain and produce the Non-Collusion Declaration of Subcontractors to the effect that the bid is genuine, and that neither the Subcontractor, nor any person or entity associated with the Subcontractor, has directly or indirectly colluded with any person or entity in regard to the bid. Should these forms be requested they must be completed and notarized by each subcontractor listed.

## **1-7 AWARD AND EXECUTION OF THE CONTRACT.**

### **1-7.1 General.**

Subsection 1-7.1 of the Standard Specifications is supplemented by the following:

#### Award

SB 854 bill signed into law on June 20, 2014, established a new public works contractor registration program to replace prior Compliance Monitoring Unit (CMU) and Labor Compliance Program (LCP) requirements for bond-funded and other specified public works projects. The Department of Industrial Relations (DIR) requires contractors and subcontractors who intend to bid or perform work on public works projects (as defined under the Labor Code) be subject to a

registration and annual renewal fee. Contractors must apply online and meet minimum qualifications to be registered as eligible to bid and work on public works projects. The requirement to list only registered contractors and subcontractors on bids becomes effective on March 1, 2015. The requirement to only use registered contractors and subcontractors on public works projects applies to all projects awarded on or after April 1, 2015.

The award of the contract, if it is awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed. The award, if made, will be made within 60 calendar days after the opening of the bids. The City reserves the right to reject any or all bids; to waive any informality in any bid; or to award the contract to any bidder other than the lowest bidder should it deem in its best interest to do so. The City reserves the right to award a contract on the work and any alternates listed in the bid form in sum total, individually, or in any combination. The City reserves the right to award the contract for part or all of the items on the Bid Schedule.

#### Disqualification of Bidders

More than one bid from any person under the same or different names will not be considered. Reasonable grounds for believing that any person is interested in more than one bid for the work contemplated will cause the rejection of all bids in which such person is interested. If there is reason for believing that collusion exists among any bidders, none of the participants in such collusion will be considered in future bids. Bids in which the price of any item grossly differs from the current market price may be rejected. Bids from Contractors who do not possess the specified license may be rejected. Bids that do not include proof of certification of an individual trained in providing traffic control in construction zones may be rejected.

#### Execution of Contract

The contract, in form and contents satisfactory to the City Attorney, shall be executed and submitted by the successful bidder, together with the bonds and insurance within 14 calendar days after such bidder has received the written contract. No bid shall be considered binding upon the City until the execution of the contract by the City. Failure to execute the contract and file acceptable bonds, insurance policies or certificates, as provided herein, within 14 calendar days, shall be just cause for the annulment of the award, and forfeit of bid guaranty to the City, as liquidated damages. The City may request a complete, notarized financial statement from the Contractor prior to the award of the contract, and will notify the Contractor if said statement is required.

### **1-7.2 Contract Bonds.**

Subsection 1-7.2 of the Standard Specifications is supplemented by the following:

All bonds shall be in the form acceptable to the City Attorney. At execution of the contract, the successful bidders shall furnish two (2) contract bonds as follows:

- a) A Faithful Performance Bond in the amount of 100% of the contract price

- b) A Labor and Material Bond in the amount of 100% of the contract price

The Faithful Performance and Labor and Material bonds shall be submitted on forms furnished by the City. Said bonds shall be secured by an "admitted surety insurer" (as defined in the California Code of Civil Procedure Section 995.120, or successor statute) who can either: (i) meet the minimum rating of A-: VII in the latest edition of the Best's Key Rating Guide Property-Casualty; or (ii) provide the following documentation as mandated by the California Code of Civil Procedure Section 995.660, or successor statute:

- (1) The original, or a certified copy, of the unrevoked appointment, power of attorney, bylaws, or other instrument entitling or authorizing the person who executed the bond to do so.
- (2) A certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner.
- (3) Evidence that the certificate of authority of the insurer has not been surrendered, revoked, canceled, annulled, or suspended or, in the event that it has, that renewed authority has been granted.
- (4) Copies of the insurer's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.

Should any Surety at any time be unsatisfactory to the City, notice will be given the Contractor to that effect. No further payments shall be deemed due or will be made under the contract until a new Surety shall qualify and be accepted by the City.

## **SECTION 2 – SCOPE OF THE WORK**

### **2-2 PERMITS.**

Subsection 2-2 of the Standard Specifications is supplemented by the following:

#### Permits, Applications, Notices and Inspections

No work shall be started within the street right-of-way or on City property until the Contractor has obtained the necessary permits.

All permits, applications, notices and inspections required by the duly authorized governmental agency and servicing utility companies shall be obtained by the Contractor. No-fee permits shall be obtained from the City of Lancaster. All inspections by the governmental agency and/or the servicing utility shall be arranged and applied for by the Contractor and he/she shall deliver all inspection certificates to the Project Manager prior to final acceptance of the work. All fees, including but not limited to permit issuance, inspection, plan check, and charges connected with any permits and/or applications shall be included in the original bid price and shall not be the cause for additional charges or claims by the Contractor.

## Business License

The Contractor shall have a business license to perform work in the City of Lancaster.

## **2-5 THE CONTRACTOR'S EQUIPMENT AND FACILITIES.**

### **2-5.2 Temporary Utility Services.**

Subsection 2-5.2 of the Standard Specifications is supplemented by the following:

#### Recycled Water

When project limits are located, in whole or in part, between 50<sup>th</sup> Street West and 50<sup>th</sup> Street East, Contractor shall not draw water from any potable water fire hydrant (except to extinguish a fire); Contractor shall draw water from recycled water hydrants. With each public contract, the Contractor shall make application for recycled water use to the City of Lancaster Development Services Department Utilities Services Division. If recycled water is unavailable, the Contractor shall obtain a waiver for each contract, in writing, from the City of Lancaster Development Services Department Utilities Services Division allowing the Contractor to obtain permission to draw potable water from the potable water utility owner.

## **2-9 CHANGED CONDITIONS.**

Subsection 2-9 of the Standard Specifications is supplemented by the following:

When the Project Manager and the Contractor fail to agree as to whether an alteration ordered by the Project Manager constitutes a material change or difference in the character of work as therein contemplated, or fail to agree on the compensation to be allowed for such altered work, **the Contractor shall forthwith proceed with the altered work upon written order from the Project Manager.** Pending a settlement of the dispute, the Contractor shall file with the Project Manager within 48 hours after receiving such written notice to proceed, a claim setting forth in detail in what particulars the character of the work was changed and by what amount the unit cost was increased. The failure of the Project Manager to recognize a change in the character of the work when ordering alterations shall in no way be construed as relieving the Contractor of his duty and responsibility for filing a claim as above provided. The Contractor shall receive no additional compensation for such altered work unless he/she files such a claim within 48 hours after receiving notice from the Project Manager to proceed and full settlement shall be made on the basis of the contract unit prices.

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

### **3-3 SUBCONTRACTORS.**

Subsection 3-3 of the Standard Specifications is supplemented by the following:

No subcontract releases the Contractor from the contract nor relieves the Contractor of their responsibility for a subcontractor's work.

Your attention is directed to revisions by the Department of Industrial Relations (DIR) to Labor Code Section 4. 1725.5 and Section 5. 1771.1, whereby each subcontractor must be registered and pay an annual renewal fee per SB 854 in order to engage in the performance of any contract for public works which is subject to requirements of this chapter. This language must be included in all subcontracts.

Each subcontractor must have an active and valid State contractor's license with a classification appropriate for the work to be performed (Bus & Prof Code, § 7000 et seq.).

Before subcontracted work starts, submit a Subcontracting Request form.

Upon request by the Project Manager, immediately remove and not again use a subcontractor who fails to prosecute the work satisfactorily.

### **3-4 AUTHORITY OF THE BOARD AND PROJECT MANAGER.**

Subsection 3-4 of the Standard Specifications is supplemented by the following:

Neither the City of Lancaster, the City Mayor, the Project Manager, nor any other officer or authorized representative of the Agency shall be personally responsible for any liability arising under this Contract.

Any order given by the Project Manager, not otherwise required by the Specifications to be in writing, will, upon request by the Contractor, be given or confirmed by the Project Manager in writing.

### **3-5 INSPECTION.**

Subsection 3-5 of the Standard Specifications is supplemented by the following:

Inspection of the work shall not relieve the Contractor of any of his obligations to fulfill the Contract. Defective work shall be made good and unsuitable materials may be rejected, notwithstanding that such defective work and materials have been previously approved by the Project Manager or included in the quantities for progress payments.

### **3-6 THE CONTRACTOR'S REPRESENTATIVE.**

Subsection 3-6 of the Standard Specifications is supplemented by the following:



The Contractor shall designate in writing before starting work, an authorized representative who shall have the authority to represent and act for the Contractor.

**Said authorized representative shall be present at the site of the work at all times while work is actually in progress on the contract.** No work by subcontractors will be allowed in the absence of said authorized representative, unless previous arrangements are agreed to by the Project Manager. In the event a subcontractor attempts to perform work in the absence of the authorized representative, a **STOP NOTICE** may be issued to the subcontractor.

When work is not in progress and during periods when work is suspended, arrangements acceptable to the Project Manager shall be made for any emergency work which may be required.

### **3-7 CONTRACT DOCUMENTS.**

Subsection 3-7 of the Standard Specifications is supplemented by the following:

The approved project plans shall be supplemented by such working drawings that may be necessary to adequately control the work. All authorized alterations affecting the requirements and information given on the approved Site Plans shall be in writing. No changes shall be made on any plan or drawing after the same has been reviewed by the City, except by its direction. Any shop or working drawings furnished by the Contractor shall be at his own expense and are subject to review, unless review is waived by the Project Manager. All such plans shall be in conformity with the approved Project Plans. Although they were reviewed by the Project Manager, the Contractor shall be responsible for accuracy of dimensions or details.

### **3-12 WORK SITE MAINTENANCE.**

Subsection 3-12 of the Standard Specifications is supplemented by the following:

#### Refuse Collection and Disposal

The Contractor shall comply with Section 13.16 of the Lancaster Municipal Code with regard to waste disposal. Should the Contractor choose to procure the services of a commercial waste hauler, he shall use the City's franchise waste hauler for the removal and disposal of waste.

### **3-13 COMPLETION, ACCEPTANCE AND WARRANTY.**

#### **3-13.1 Completion.**

Subsection 3-13.1 of the Standard Specifications is supplemented by the following:

Until the formal acceptance of the work by the Agency, the Contractor shall have the charge and care thereof and shall bear risk of injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution of from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion

of the work occasioned by any of the above causes before its completion and acceptance and shall bear the expense thereof. The determination to rebuild, repair, or restore shall be made by the Project Manager and his/her decision shall be final. In case of suspension of the work for any cause whatsoever, the Contractor shall be responsible for all materials and shall properly store them if necessary and shall erect temporary protective structures where necessary.

### **3-13.3 Warranty.**

Paragraph 1 of Subsection 3-13.3 shall be amended to read as follows:

The Work shall be warranted by the Contractor against defective materials and workmanship for a period of 20 years. The warranty period shall start on the date the Work was completed as determined by the Project Manager.

Subsection 3-13.3 of the Standard Specifications is supplemented by the following:

Corrective work shall be performed within 2 working days after receiving notice from the Project Manager or within that time as may be allowed by the City. Notice may be by phone or letter to the Contractor. The Contractor will be responsible for defective materials and must replace defective material at their cost.

## **SECTION 4 – CONTROL OF MATERIALS**

### **4-1 GENERAL.**

Subsection 4-1 of the Standard Specifications is supplemented by the following:

Materials and workmanship, unless indicated or specified otherwise, shall be in strict conformity with the Standard Specifications for Public Works Construction, latest edition, and all addenda thereto; nothing in these Specifications is to be construed to permit work below the standards of these ordinances and those of the Occupational and Safety Health Act. Any work found after acceptance of the Contract which does not comply with applicable codes shall be made to conform to the codes.

All materials and equipment shall be new and bear the label of, or be listed by, the Underwriter's Laboratories or the National Fire Protection Association, where applicable. All materials shall be the standard products of manufacturers regularly engaged in the production of such material and shall be the latest approved design.

All materials of the same type shall be supplied by the same manufacturer.

All materials and equipment shall be installed in a secure, neat, and workmanlike manner by competent workmen, and any item not so installed shall be corrected to meet the complete approval of the Project Manager. If at any time, the Contractor believes that he/she cannot secure proper

results through the use of materials and the procedure specified, it shall be his/her obligation to immediately notify the Project Manager in writing, setting forth his decision.

#### Materials Furnished

The Contractor shall furnish all materials required to complete the work except such materials as may be designated in the Special Provisions to be furnished by the City.

#### Cleaning Equipment and Materials

The Contractor shall thoroughly clean all fixtures, apparatus, and equipment installed under his/her contract. Any dirt, rubbish or grease on walls, poles, walks, equipment or fixtures, for which the Contractor is responsible, must be removed by him/her and the premises left in first class condition in every respect. All rubbish resulting from the work shall be removed from the site by the Contractor, from time to time during construction, and/or when so directed by the Project Manager.

#### Removal of Defective or Unauthorized Work

All work that has been rejected shall be remedied or removed and replaced by the Contractor in an acceptable manner and no additional compensation will be allowed him/her for such removal or replacement. Any work done beyond the lines and grades shown on the plans or established by the Project Manager, or any extra work done without written authority, will be considered as unauthorized and will not be paid for. Work so done may be ordered removed at the Contractor's expense. Upon failure on the part of the Contractor to comply with any order of the Project Manager made under the provisions of this article, the Project Manager shall have authority to cause defective work to be remedied or removed and replaced and unauthorized work to be removed and to deduct cost of same from any monies due, or to become due, the Contractor.

#### Graffiti Abatement

All construction equipment, traffic control devices, and the general job site shall be maintained in an essentially graffiti-free state. The General Contractor will be solely responsible for all labor and materials required to maintain this condition. The General Contractor shall have 24 hours in which to rectify any graffiti condition brought to his/her attention in writing by the Project Manager representing the City. Should the graffiti not be removed in the allotted time, a fee of \$500.00 for each 24-hour period will be assessed by the City to the General Contractor until resolution of the situation. If the City determines that the graffiti cleanup is taking an inordinate amount of time, the City shall, at its own discretion, have the right to clean up the graffiti. The Contractor shall pay all costs associated with graffiti cleanup work performed by the City plus accrued penalties. If the Contractor fails to pay for the cleanup, such payment shall be deducted from monthly progress payment, or final payment due the Contractor.

#### Quality Assurance

No deviations from the Contract Documents without specific and written acceptance of the City shall be accepted.

## **4-2 PROTECTION.**

Subsection 4-2 of the Standard Specifications is supplemented by the following:

### Protection of Work and Materials

The Contractor assumes all responsibility for materials, storage, damage to equipment, and safety to all personnel and public, until final acceptance by the Agency. The Contractor will be held responsible for defective material, and if at any time there is defective material obtained, the defective material shall be removed from the worksite and new material(s) shall be obtained.

## **4-3 INSPECTION.**

### **4-3.1 General.**

Subsection 4-3.1 of the Standard Specifications is supplemented by the following:

### Concealment of Work

In order to allow for inspection, and in addition to any inspection required, the Contractor shall notify the Project Manager sufficiently in advance of the permanent concealment of any materials or work.

If any work is concealed or performed without the prior notice specified above, then the work shall be subject to such tests or exposure as may be necessary to prove to the Project Manager that the materials used and the work done are in conformity with the plans and specifications. All labor and equipment necessary for exposing and testing shall be furnished by the Contractor at their expense. The Contractor shall replace, at their own expense, any materials or work damaged by exposure or testing.

## **4-4 TESTING.**

Subsection 4-4 of the Standard Specifications is supplemented by the following:

Except as elsewhere specified, the Agency will bear the cost of testing material and/or workmanship which meet or exceed the requirements indicated in the Standard Specifications and the Special Provisions. The cost of all other tests, including the retesting of material or workmanship that fails to pass the first test, shall be borne by the Contractor.

If, after testing, it is found that sources of supply which have been approved do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from other approved sources. After approval, any material which becomes unfit for use due to improper storage, handling, or any other reason, shall be rejected.

#### **4-6 TRADE NAMES.**

Subsection 4-6 of the Standard Specifications is supplemented by the following:

The designation of a brand name or catalogue number in these specifications is not intended to restrict bidding. It shall be, as approved in writing, at the absolute discretion of the City, however, to determine whether or not any substitute product is in fact equal. Where the Contractor elects to use a substitute item to that named in the specifications or on the plans he shall first submit a written request to the Project Manager and receive the Project Manager's written approval to do so before incorporating the item in the project. Any substitute item not receiving such approval shall be removed.

### **SECTION 5 – LEGAL RELATIONS AND RESPONSIBILITIES**

#### **5-3 LABOR.**

##### **5-3.1 General.**

Subsection 5-3.1 of the Standard Specifications is supplemented by the following:

##### Employment of Apprentices

Attention is directed to the provisions in Section 1777.5 (Chapter 1411, Statutes of 1968) and Section 1777.6 of the California Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under him.

Information on award of contracts is reported to the California Department of Industrial Relations - Division of Apprenticeship Standards in accordance with Section 3098, Chapter 4, Division 3, of the California Labor Code. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards Branch offices.

##### **5-3.3 Payroll Records.**

Subsection 5-3.3 of the Standard Specifications is supplemented by the following:

**All Contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement).**

The Contractor is required to report payroll activities to ensure compliance with Section 5-3.2 of the

Standard Specifications. The City may require the Contractor to also submit certified Payroll Summary Forms upon request, listing each person who is employed on their project by the Contractor and by Subcontractors, their classification and hourly rate.

When requested, certified payroll summaries, shall be submitted to the City. Pay requests will be processed after the City has reviewed the applicable payrolls and found them to be in compliance with California Labor Code.

## 5-4 INSURANCE.

### 5-4.2 General Liability Insurance.

Subsection 5-4.2 of the Standard Specifications is supplemented by the following:

#### Insurance Requirements for Contractors

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

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from, or in connection with, the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Contractor's bid.

Once the apparent low bidder has been identified, the apparent low bidder shall present evidence in writing to the City of Lancaster of the following limits of insurance coverage:

#### **Commercial General Liability**

Each Occurrence \$1,000,000

Per Project General Aggregate \$2,000,000

Including Products/Completed Operations

Including Contractual Liability/Independent Contractors

Including Property Damage

XCU Coverage Must Not Be Excluded

*(Coverage shall be at least as broad as ISO form CG2010 11/85 OR CG2010 07/04*

*AND CG2037 07/04, or an equivalent providing ongoing and completed operations)*

#### **Commercial Automobile Liability**

Combined Single Limit per Accident for

Bodily Injury and Property Damage \$2,000,000

*(Coverage shall be at least as broad as ISO form CA00 01)*

#### **Workers Compensation**

As Required by the State of California

Statutory Limits

**Employer's Liability**

Each Accident	\$1,000,000
Bodily Injury by Disease	\$1,000,000
Each Employee	\$1,000,000

*(A Waiver of Subrogation must be provided on behalf of the Certificate Holder for the Workers' Compensation & Employer's Liability policies)*

- A. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insured's liability.
- B. Any deductibles or self-insurance retentions must be declared and approved by the City. At the City's option, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City insured entities or the insurer shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- C. All insurance shall be primary and non-contributory as respects the City insured entities. Any insurance or self-insurance maintained by the City insured entities shall be in excess of the Contractor's insurance and shall not contribute with it.
- D. Contractor shall furnish the City with Certificates of Insurance and endorsements effecting coverage required by this Agreement. Certificates of insurance shall meet the following requirements:

- 1. Show that the insurance policy has been endorsed to state that coverage shall not be suspended, voided, cancelled, reduced in coverage or in limits except after 30 days' prior written notice (10 days' written notice for non-payment) to the City of Lancaster.
- 2. List in the "Descriptions of Operations/Locations/Vehicles/Special Items" section:

**PROJECT NO. 824-24 Rawley Duntley Fence Installation**

The City of Lancaster, its elected officials, officers, employees, and volunteers are included as additional covered parties, but only insofar as the operations under this contract are concerned.

- 3. List in the "Certificate Holder" section:

The City of Lancaster  
44933 Fern Avenue  
Lancaster, California 93534

- E. Contractor shall include all subcontractors as an insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. Subcontractors are subject to the same insurance requirements as the Contractor.

- F. The coverage provided under this contract shall not contain any special limitations on the scope of protection afforded to the City insured entities.

#### Verification of Coverage

Contractor shall furnish the Agency with certificates of insurance and with original endorsements effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the Agency before work commences. The Agency reserves the right to require complete, certified copies of all required insurance policies, at any time.

#### Subcontractors

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

### **SECTION 6 – PROSECUTION AND PROGRESS OF THE WORK**

#### **6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK.**

Subsection 6-1 of the Standard Specifications is supplemented by the following:

The Contractor shall submit an electronic Project Schedule to the Project Manager for approval at least 48 hours prior to the preconstruction conference. The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Project Manager may withhold approval of progress payments until the Contractor submits the required schedule.

The Contractor shall update the schedule every two (2) weeks and provide the updated schedule to the Project Manager and the Inspector. If, in the opinion of the Project Manager, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Project Manager, without additional cost to the Agency. In this circumstance, the Project Manager may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Project Manager deems necessary to demonstrate how the approved rate of progress will be regained.

Failure of the Contractor to comply with the requirements of the Project Manager under this clause shall be grounds for a determination by the Project manager that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Project Manager may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

In the event the Contractor must modify the Project Work Schedule, a written request to modify the Schedule shall be submitted to the Project Manager for approval at least 48 hours prior to the



intended change prior to commencing on the changed portion of the work. Performing work out of sequence with the approved schedule may result in issuance of a Stop Notice. Contract Working Days will continue to count until the schedule is revised and work sequence is compliant.

### Preconstruction Conference

A Preconstruction Conference will be held for the Contractor, the subcontractors and affected agencies and utilities. The date, time and location of said conference shall be scheduled by the Project Manager. The Contractor shall submit the following forms and/or information 48 hours prior to the preconstruction conference: Emergency Contact Information, Project Construction Schedule, and designation of Project Superintendent.

### Emergency Information

The names, addresses, and telephone numbers of the Contractor and subcontractors, or their representatives, shall be filed with the Project Manager prior to beginning the work.

## **6-2 PROSECUTION OF THE WORK.**

Subsection 6-2 of the Standard Specifications is supplemented by the following:

The Contractor shall conduct his/her operations so as to have under construction no greater length or amount of work than he/she can prosecute properly. Prior to starting any phase of the work, the Contractor shall be prepared and shall have sufficient materials and labor on hand to prosecute the work to completion.

## **6-3 TIME OF COMPLETION.**

### **6-3.1 General.**

Subsection 6-3.1 of the Standard Specifications is supplemented by the following:

### Night, Weekend and Holiday Work

No work shall be performed at night, on Saturdays, Sundays, or on holidays observed by the City of Lancaster, except work pertaining to the public safety, or with the permission of the Project Manager and in accordance with such regulations as he/she shall furnish in writing.

Before performing any work at said times, except work pertaining to the public safety, the Contractor shall submit a written request to the Project Manager 48 hours in advance of the intended nighttime, weekend, or holiday work so that proper inspection may be provided. "Night" as used in this paragraph shall be deemed to include the hours from 5 p.m. to 7 a.m. of the succeeding day. The Contractor will reimburse the City for the inspector's time at the most current

rate determined by the City's Finance Department. At the time of this printing the rate for inspection is \$166.00 per hour straight time, and \$249.00 per hour overtime.

Listed below are the Holidays that will be observed by the City of Lancaster during 2024:

Martin Luther King, Jr. Day	Monday, January 15
Juneteenth	Wednesday, June 19
President's Day	Monday, February 19
Memorial Day	Monday, May 27
Independence Day	Thursday, July 4
Labor Day	Monday, September 2
Veterans Day	Monday, November 11
Thanksgiving Day	Thursday, November 28
Day after Thanksgiving	Friday, November 29
Christmas Eve Day	Tuesday, December 24
Christmas Day	Wednesday, Dec. 25
New Year's Eve Day	Tuesday, December 31

#### **6-4 DELAYS AND EXTENSION OF TIME.**

##### **6-4.1 General.**

The first paragraph of Subsection 6-4.1 of the Standard Specifications is supplemented by the following:

If delays are caused by unforeseen events beyond control of both the Contractor and the Agency, such delay will entitle the Contractor to an extension of time as provided herein, but the Contractor shall not be entitled to damages or additional payment due to such delays.

War, government regulations, labor disputes, strikes, floods, adverse weather necessitating cessation of labor, required "extra work", proper installation of required utilities in street right-of-way prior to paving, or other specific reasons as may be further described in the specifications may constitute such delay.

No extension of time will be granted for a delay caused by the Contractor's inability to obtain materials unless the Contractor furnishes to the Project Manager documentary proof of the inability to obtain such materials in a timely manner in accordance with the sequence of the Contractor's operations and the approved construction schedule.

The Contractor will not be assessed liquidated damages for delay in completion of the project, when such delay is caused by failure of the Agency or the owner of the utility to provide for removal or relocation of existing utility facilities. Notwithstanding any of the provisions in Subsection 402-5 and Subsection 6-4.3 of the Standard Specifications relative to payment to the Contractor for actual loss due to utility delay; the Contractor will be entitled to an extension of time as provided in Subsection 6-4 but will not be entitled to any other compensation for such delay.

**6-5 USE OF IMPROVEMENT DURING CONSTRUCTION.**

Subsection 6-5 of the Standard Specifications is supplemented by the following:

Before taking possession of or using any work, the Project Manager shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Agency intends to take possession of or use. However, failure of the Project Manager to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Agency's possession or use shall not be deemed an acceptance of any work under the contract.

**6-9 LIQUIDATED DAMAGES.**

Subsection 6-9 of the Standard Specifications is supplemented by the following:

The amount of liquidated damages is hereby revised to \$500 per calendar day.

In addition to the liquidated damages specified above, if the Contractor fails to complete the work within the time specified for completion, plus any authorized time extensions, the Agency shall have the right to charge the Contractor all or any part, as it may deem proper, of the actual costs of inspection, supervision and other overhead expenses that are directly chargeable to the project and that accrue after the expiration of such specified time for completion plus authorized extensions. This charge will be in addition to the payment of liquidated damages.

**SECTION 7 – MEASUREMENT AND PAYMENT**

**7-3 PAYMENT.**

Subsection 7-3 of the Standard Specifications is supplemented by the following:

Drawing of Record

Contractor shall maintain a set of drawings on the job site to show all changes in work, dimensions of underground runs, locations, etc. Drawings shall be updated daily. Upon completion of the work, these drawings of record shall be delivered to the Project Manager. The project shall not be submitted for City Council acceptance prior to approval of Drawings of Record ("As Built Drawings"), and retention cannot be paid until 35 days after a "Notice of Completion" has been recorded by the County Recorder's office except such amounts as are required by law.

Taxes

Bidders shall include any and all taxes in their bids.

It shall be the sole responsibility of the bidder to determine the applicability of any and all taxes which may or may not be due under the provisions of these specifications.

### **7-3.2 Partial and Final Payment.**

Subsection 7-3.2 of the Standard Specifications is supplemented by the following:

Regardless of Section 7-3.2 of the General Provisions of the Standard Specifications, 5% will be deducted and retained by the City from each progress payment, and the remainder less the amount of all previous payments, liquidated damages and penalties will be paid to the Contractor.

As between the City and any other party, whether it be the Contractor, his surety, subcontractor or any other party, the City shall have the first priority right to satisfy any and all of its claims, costs, losses, and damages, to the full amount of the retention, which may have been caused by the Contractor in the execution, breach, or omission of his duties hereunder.

Prior to the commencement of the Work, the City shall provide a schedule of deadlines by which the Contractor must submit pay requests. Any pay requests submitted after the deadline has passed will be reviewed for the following payment period and no exceptions to the deadline will be considered. Request for payments are to only be submitted in the format for payment requests designated by the City.

#### Retention of Funds to Ensure Performance

Pursuant to Public Contract Code Section 22300 and upon Contractor's request, the City will make payment of funds retained from progress payments for performance security if the Contractor deposits in escrow with the City Treasurer or with a state or federal-chartered bank acceptable to the City, funds under Government Code Section 16430 or bank or savings and loan certificates of deposit, upon the following terms and conditions:

- A. The Contractor shall bear the expense of the City and the escrow agent, either the City Treasurer or the bank, in connection with the escrow deposit made.
- B. Securities or certificates of deposit shall be of a value of at least 100% of the amounts of retention to be paid to the Contractor pursuant to this Section.
- C. The Contractor shall enter into an escrow agreement satisfactory to the City which agreement shall include provisions governing inter alia:
  1. The amount of securities to be deposited.
  2. The Contractor shall be the beneficial owner of any securities substituted and shall receive any interest of dividends thereon.
  3. The providing of powers of attorney or other documents necessary for the transfer of the securities to be deposited.

4. Conversion to cash to provide funds to meet defaults by the Contractor.
5. The decrease in value of securities on deposit.
6. The termination of the escrow upon completion of the Contract.

D. The Contractor shall obtain the written consent of the surety to the escrow agreement.

#### Final Payment of Retention; Presentment of All Claims; Release of Any Claims Not Presented

Contractor shall, at the time he requests the retention amount or return of the retention securities, present in writing all claims which he may have against the City. Any claims which have not been presented in writing to the City at or prior to such time shall be deemed waived, and in regard thereto, the City is thereby released and forever discharged of any responsibility as to such unpresented claims. For the purposes of this paragraph, an oral presentment shall not be deemed sufficient to constitute a presentment.

#### Release of Retained Funds

The funds retained by the City will be paid to the Contractor 35 days after a "Notice of Completion" has been recorded by the County Recorder's office, except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be authorized by the contract to be further retained.

#### Partial Payments

All pay requests shall be for work completed by the 15<sup>th</sup> day of each month and shall be submitted on or by the 20<sup>th</sup> day of that month. Payment shall be in the amount of the total value of work approved by the Engineer, less retention. Said estimate and payment will not be made when, in the judgment of the Engineer, the total value of the work done since the last estimate amounts to less than \$300. Once pay requests are approved by City staff, they will be forwarded to the Finance Department to be included in the next available payment cycle.

#### Delayed Payments

All monies due the Contractor under the Contract will be paid as required by law, and it is understood that any delay in the preparation, approval and payment of these demands will not constitute a breach of Contract on the part of the Agency.

### **7-5 PAYMENT FOR CHANGES REQUESTED BY THE CONTRACTOR.**

Subsection 7-5 of the Standard Specifications is supplemented by the following:

#### Value Engineering

The State of California Department of Transportation Standard Specifications, latest edition, Subsection 5-1.14, Cost Reduction Incentive, is included in these Specifications by reference herein.

#### Proprietary Names and Substitutions

- a. Whenever any equipment, material, or process is indicated or specified by patent of proprietary name, or by name of manufacturer, such reference is used to establish the type, function, and quality required. Such references shall be deemed to be preceded by the words "equal and similar to." The Contractor may offer any equipment, material, or process for which the Contractor submits data supporting that such are substantially equal to that indicated or specified. Final determination of the acceptability of such substitute items shall rest with the Project Manager. The Project Manager may consider the strength, appearance, durability, reliability, dimension, finish, efficiency, maintainability, service history, life cycle cost, and other characteristics of the proposed substitute in making that determination.
- b. A substitute item shall be a standard, catalogued product of a company regularly engaged in the manufacture of such items. No custom or prototype substitutes will be accepted. The Contractor shall certify that a substitute item will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance, and be suited to the same use as the specified item. Contractor shall identify all differences between the proposed substitute and the specified, and state whether or not acceptance of the proposed substitute will require a change in the Contract Documents to adapt the design to the proposed substitute. Any redesign or changes in the Work resulting from acceptance of a substitute will be at the sole expense of the Contractor. The Contractor shall furnish such data concerning and perform such testing of the proposed substitute item and determine if it is substantially equal. Additional information requested by the Engineer shall be furnished by the Contractor within 7 calendar days of such request.
- c. For purposes of approving substitutions prior to bid opening the Contractor shall submit the necessary paperwork 10 calendar days prior to bid opening. The project shall be bid based on the approved Plans and Specifications. If, and only if, a substitution is approved prior to bid opening, it shall thereby be considered part of the approved Plans and Specifications.
- d. For purposes of approving substitutions as value engineering after bid opening, offers of substitute items shall be made within 25 percent of the total Contract Time after the Notice to Proceed. The Contractor shall allow the Engineer 28 calendar days review time to evaluate substitute items unless otherwise stated in the Specifications. No extension of the Contract Time will be authorized for any circumstance developing from the provisions of this Subsection. Failure to comply with the provisions of this Subsection will be sufficient cause for rejection of a proposed substitute.

## **SECTION 400 – PROTECTION AND RESTORATION**

### **400-1 GENERAL.**

Section 400-1 of the Standard Specifications is supplemented by the following:

Clean-up and Restoration

- (a) Clean-up: The Contractor shall properly clean the work as it progresses and prevent his/her operations from producing dust in amounts damaging to property or annoying persons living in the vicinity.
- (b) Restoration: Any landscaping, fences, and walls disturbed during construction shall be replaced in a professional manner and as nearly as possible to their original condition.
- (c) Payment: Payment for clean-up and restoration shall be included with other items of work.

Protection of Property

All facilities such as utilities, drainage structures, fences, walls, and other structures encountered shall be protected in place and any damage to such facilities shall be repaired or replaced immediately to the satisfaction of the Project Manager. Fences and other structures may be removed only with the permission of the Project Manager.

The Project Manager has attempted to show all pertinent existing underground utilities or substructures; however, it is the Contractor's responsibility to use due caution and to protect all utilities or substructure discovered, whether shown on the Plans or not.

The Contractor shall be responsible for any and all damage resulting from his construction activities. The damage shall be repaired or replaced to the satisfaction of the Project Manager prior to final approval of this project.

Use of Private Property

The Contractor shall not place construction materials, soil, debris or other materials and items such as vehicles and equipment on privately owned property in the vicinity of the project without first having obtained in writing the approval of the owner(s) of those properties. A copy of each such approval form shall be provided to the inspector before the property is used. Any such property shall be restored to the satisfaction of the owner and the City before the project will be accepted. A written sign-off letter from the property owner shall be filed with the City prior to the final project acceptance by the City Council.

**SECTION 402 – UTILITIES**

Section 402 of the Standard Specifications is supplemented by the following:

Location and Protection of Underground Hazardous Utilities

The Contractor is hereby notified that, as called out in the Special Provisions, there are underground utilities within the construction area which may be potentially hazardous if damaged. A hazardous

substance shall be defined as one having the potential for an immediate disaster, such as, but not limited to gasoline, electricity, fuel oil, butane, propane, chemicals, natural gas, or chlorine. Abandoned or inoperative utilities designed to carry hazardous substances shall be declared hazardous until determined otherwise.

During all excavation and trenching operations the Contractor will be required to exercise extreme precaution and protect these utilities from damage. Forty-eight (48) hours prior to any excavation in the proximity of the lines, the Contractor shall request the owners of these utilities, at the owner's cost, to accurately determine the locations and depths of their potentially hazardous lines as follows:

The Contractor shall not trench or excavate within the area where a utility known to carry a hazardous substance exists until the owner is present and its location has been determined by potholing or other proven methods acceptable to the Project Manager at intervals sufficient to determine its exact location.

Full compensation for complying with the above requirements shall be considered to be included in the applicable bid item(s) of work and no additional payments will be made therefore.

## **402-1 LOCATION.**

### **402-1.1 General.**

Subsection 402-1.1 of the Standard Specifications is supplemented by the following:

The Contractor shall obtain a City "no-fee" permit and notify Dig Alert (811) before commencing any excavations in areas where utilities would normally be located. All potholing of gas lines shall be per the Southern California Gas Company Potholing Policy provided in the Appendix.

Underground utilities known to the City are identified in the Special Provisions or on the Plans. By the Contractor calling USA, such and other utilities should be marked on the project site. Should there appear to be discrepancies between the utilities shown on the Plans and those marked by the Utilities, the Contractor should not proceed until verifying the correctness thereof. Where the project is on City property, the operating City Department will mark the substructures following a request by the Contractor.

The Contractor will not be assessed liquidated damages for delay in completion of the project when such delay is caused by failure of the Agency or the owner of the utility to provide for removal or relocation of existing conflicting utility facilities where such removal/relocation is not part of the Contractor's responsibility. Notwithstanding any of the provisions in Subsection 402-5 and Subsection 6-4.3 of the Standard Specifications relative to payment to the Contractor for actual loss due to utility delay; the Contractor will be entitled to an extension of time as provided in Subsection 6-4, but will not be entitled to any other compensation for such delay.

Some existing utility facilities may remain in place and the Contractor will be required to work around and pave up to said facilities. During paving operations, the Contractor shall cooperate with the owners of sleeve type valve covers and raise such covers to grade.



## SECTION 600 – ACCESS

### 600-1 GENERAL.

Section 600-1 of the Standard Specifications is supplemented by the following:

#### Protection of the Public

The following minimum restrictions shall be maintained by the Contractor in the conduct of his work:

The Contractor shall make all provisions necessary to protect the public. The Contractor shall use foresight and shall take such steps and precautions as his operations warrant to protect the public.

Whenever, in the opinion of the Project Manager, an emergency exists for which the Contractor has not taken sufficient precautions for the public safety, the Project Manager will order the Contractor to provide a remedy for the unsafe condition. If the Contractor fails to act on the situation within a reasonable time period, the Project Manager may direct such work to be done and material to be furnished as reasonable and necessary. The cost and expense of said labor and material together with the cost and expense of such repairs as are deemed necessary shall be borne by the Contractor. All expenses incurred by the Agency for emergency repairs will be deducted from the progress payments and the final payment due to the Contractor. The minimum cost to the Contractor for the Agency to provide such remedial measures shall be \$500.00 per calendar day. However, whether or not the Agency does take such remedial measures, the Contractor is not relieved of the full responsibility for public safety.

#### Traffic Control and Public Convenience

The Contractor shall comply with Section 600 of the Standard Specifications and provide safe and continuous passage for pedestrian and vehicular traffic **at all times**. The Contractor shall provide and maintain all necessary flagmen, barricades, delineators, signs, flashers, and any other safety equipment as set forth in the latest version of the California Manual of Uniform Traffic Control Devices or as required by the Project Manager to insure safe and continuous passage of traffic.

It shall be the Contractor's responsibility to maintain sufficient barricades adjacent to the project at all times during the construction to adequately protect the traveling public.

#### Wearing of Reflective Clothing and Hard Hats

All persons working within the City right-of-way shall wear bright orange or lime green safety shirts, vests, or jackets (identifying to motorists that such personnel are part of an organized construction crew). All shirts, vests or jackets worn at night must be reflective. All persons

working within City right-of-way or on City property shall wear hard hats. Should Contractor or subcontractor personnel be found working without required reflective clothing and hard hats, the General Contractor will be assessed \$100 for each individual occurrence.

## **600-2 VEHICULAR ACCESS.**

Section 600-2 of the Standard Specifications is supplemented by the following:

### Temporary Access to Private Property

The Contractor shall make such necessary arrangements and provide temporary access during the construction period as may be required by the owners. Should any owner or tenant contact the City to register a complaint about inadequate access, the Project Manager will immediately notify the Contractor to contact the offended owner or tenant to remedy the situation to the satisfaction of the owner or tenant. If the Project Manager determines that the Contractor has not satisfactorily remedied the access problem within four (4) hours of notification by the Project Manager, the Contractor shall be subject to a \$250.00 fine. The Contractor shall be subject to an additional \$250.00 fine for every four (4) working hour period following the first four (4) hour period, until the Contractor has remedied the access problem to the satisfaction of the owner or tenant, or until the Project Manager has determined that the Contractor has made a reasonable effort.

PART D  
SPECIAL PROVISIONS

## **SPECIAL PROVISIONS**

### **PARCS PROJECT NO. 824-24**

#### **Rawley Duntley Park Fence Installation**

### **GENERAL**

The Standard Specifications for Public Works Construction, latest edition, including all subsequent addenda and supplements, are incorporated herein by reference and are intended to govern, except as modified herein or are inconsistent with the provisions hereof.

The Contractor shall additionally comply during the course of construction with the provisions of the 2019 California Building Code / based on the International Building Code, 2018 Edition, as published by International Conference Building Officials, along with all other codes, standards and specifications adopted by the City of Lancaster.

2022 California Electrical Code / based on the 2020 NEC  
2022 California Mechanical Code / based on the 2021 UMC  
2022 California Plumbing Code / based on the 2021 UPC

### **TIME OF COMPLETION**

All work shall be completed in every detail per the Schedule on Page A-1.

### **DRAWINGS**

Site Plans  
Appendix A

### **PROJECT AREA**

The project is located at the Rawley Duntley Park, 3334 W Ave K, Lancaster CA 93534

### **MEDIA EVENTS**

The General Contractor shall be responsible for providing full cooperation in support of media events. The Project Manager shall notify the Contractor of such events, and the desired level of support from the Contractor, not less than three (3) working days prior to the proposed media event.

## **SCOPE OF WORK AND DESCRIPTION OF THE PROJECT**

### **Project Scope:**

Install wrought iron fencing with 4 pedestrian gates with locking latch that is approved by the City and four vehicle gates with locking latches on the north side of the park. Install 6' tall, 9 gauge chain-link fence and gate on south side of the park

### **Project Scope Details:**

The Scope of the Work includes, but is not limited to:

1. Install new black, powder coated tubular steel framing with 2-inch posts @ 8 feet O.C.
2. Install new black, powder coated tubular steel pickets @ 4 inches O.C
3. Install new black, powder coated tubular steel support posts and footings @ 8 feet O.C.
4. Install four new 12' 6" wide by 6' tall black powder coated tubular steel swinging gates.
5. Install 2 new 6' wide by 6' tall black powder coated tubular gates with locking latches
6. Install 1 new 4' wide black by 6' tall, powder coated tubular gate with locking latch
7. Install 1 new 8' wide by 6' tall chain-link gate with locking latch. Weld the latch and hinges so they do not move (Back of the park)
8. Install 9-gauge chain-link fence (Back of the park)
9. Repair existing concrete as needed
10. Repair and replace existing concrete curb as needed
11. Disposal of demo'd material
12. Provide one approved key-box (knox box), listed in accordance with UL 1037

## **PROJECT SEQUENCING**

Following the opening of bids, the City will contact the low bidder and notify them of the results. The low bidder shall be required to submit the schedule of values, if applicable, for those items identified in the Specifications within 3 days of such notification. The apparent low bidder will be notified with a Notice of Intent to Award and Materials Notice to Proceed as early as fourteen calendar days after the bid opening. Upon receipt of the Notice of Intent to Award, the Contractor shall begin acquiring all necessary contract documents, insurance, and bonds for submittal to the City prior to the Preconstruction Conference. The Contractor shall also prepare and submit any submittals for long-lead critical path items (items taking longer than four weeks to obtain).

The Contractor shall note that the anticipated Notice to Proceed for this project will not occur until **April 2024** and work shall not commence until after the City's Holiday Moratorium, ending **January 3, 2025**. The Contractor shall be ready to commence the day of Notice to Proceed. During this period, the Contractor may be paid the first 50% of the contract lump sum bid price for mobilization, and a corresponding percentage of the bid price for the procuring of long lead bid items.

*With submittal of a bid, the Contractor acknowledges understanding and awareness of the proposed schedule. No bid price adjustments will be permitted.*

Once started, the contractor shall continuously work on the project until completion. Other than for inclement weather, work shall not be discontinued unless notification is provided to the Project Manager at least 72 hours in advance. Such notification of work suspension shall include the exact date when work will be suspended and the date when work will resume.

**PRECONSTRUCTION CONFERENCE**

The Section, "PRECONSTRUCTION CONFERENCE", in the General Provisions is supplemented as follows:

Those subcontractors who do not attend the preconstruction conference will not be allowed to work on the project until attending a preconstruction conference for their particular work, unless otherwise waived by the Project Manager. No delays in the counting of time on the contract will be allowed due to any failure on the part of the prime contractor or subcontractors to arrange for or attend said meeting. The prime contractor shall notify the Project Manager no less than 72 hours in advance of the need for a meeting. The authorized representative of the prime contractor shall attend all subcontractor preconstruction conferences.

**NOTIFICATION**

The Contractor shall notify the Project Manager and all utility companies or agencies that may have facilities in the work area at least 48 hours prior to construction. The Contractor shall also notify the owner/tenants of each property in the work area at least 72 hours prior to construction. The following list of names and telephone numbers is intended for the convenience of the Contractor.

So. Calif. Edison Co.	(661) 726-5617
So. Calif. Gas Co.: Drew Scheffler	(661) 200-0813
Frontier Communications: Lewis Edrozo	(760) 577-5781
Charter Communications: Robert Reihls	(661) 483-3030
Crown Castle: April Flores	(949) 872-4492
Conterra Broadband: Brad Bowman	(805) 758-4343
Underground Service Alert	(800) 422-4133
L.A. County Waterworks District No. 40, Randy Range	(661) 609-8353
L.A. County Sanitation District	(661) 257-4809
Antelope Valley Transit Authority, Geraldina Romo	(661) 729-2278
Lancaster Sanitary Sewer (Emergency)	(661) 723-5985 6:30am-4pm
Lancaster Sanitary Sewer (Emergency)	(661) 510-4362 after hours

**CONTRACTOR MARKUP**

Extra Work

Subsection 7-4 of the Standard Specifications is supplemented by the following:

The Contractor shall not proceed with any extra work until directed in writing by the Project Manager to proceed.

## Payment for Extra Work

Subsection 7-4.2 of the Standard Specifications is supplemented by the following:

Payment for extra work will not be made unless such extra work has been ordered in writing by the Project Manager.

The basis for payment for extra work (unit price, lump sum or time and materials) will be determined by the Project Manager . The Contractor shall prepare prices for the extra work in accordance with the Project Manager's instructions and shall submit said prices to the Project Manager for approval.

Payment for authorized extra work to be paid on a time and materials basis shall be based on the following:

### Labor:

- a) Payment for labor shall be at the rate per the certified payroll, plus benefits as required by the current State of California General Prevailing Wage Rate for the worker classification.
- b) The Contractor's allowable markup for labor surcharge shall be: 20% of the sum of the rate per the certified payroll plus the benefits from prevailing wage.
- c) The Contractor's allowable markup for labor, profit, and overhead shall be: 20% of the total of a) and b) above.

### Equipment:

- a) The rate paid for Contractor owned equipment shall be per Caltrans Labor Surcharge and Equipment Rental Rates (latest edition).
- b) The rate paid for rented equipment shall be the actual rate paid to the rental agency for equipment with a replacement value greater than or equal to \$200.00. For equipment with a replacement value less than \$200.00 no payment shall be made.
- c) The Contractor's allowable markup for equipment shall be 15% of the above rates for profit and overhead.
- d) Daily Extra Work Reports: Section 7-4.4 Daily Reports by Contractor: Standard Specifications shall be supplemented as follows:

The daily report to be submitted by the Contractor to the Project Manager shall be submitted on the Daily Extra Work Report provided by the City. The form requires acknowledgment of equipment, materials, and labor by the Inspector. Said acknowledgment does not constitute approval for payment.

Bonds:

A markup of 1% as provided in Section 7-4.2.4 shall be applied to the total of the extra work when it is demonstrated by the Contractor that an additional cost was incurred for bonding.

Work by Subcontractor

**When all or any part of the extra work is performed by a Subcontractor, the markup established above shall be applied to the Subcontractor's actual cost of such work. A markup of 10 percent on the first \$5,000 of the subcontracted portion of the extra work and a markup of 5 percent on work added in excess of \$5,000 of the subcontracted portion of the extra work may be added by the Contractor.**

**PEDESTRIAN AND WORKER SAFETY**

The Contractor shall comply with Chapter 6D of the MUTCD, latest version, and Public Convenience and Safety requirements set forth in the General Provisions of these Specifications.

Chapter 6D of the MUTCD is supplemented by the following:

Pedestrian Considerations

Advance notification of sidewalk closures shall be provided and maintained by the Contractor.

Payment

All costs associated with providing and maintaining pedestrian and worker safety shall be included with other items of work. No separate payment shall be made.

**DECLARATION OF STATE OF EMERGENCY**

If during the course of the contract for this project, the Director of Emergency Services declares a local State of Emergency in accordance with Title 2, Chapter 2.36 Disaster Council § 236.070 paragraphs B and C of the Municipal Code, the Contractor shall, as directed by the Project Manager, supply on a time and materials basis, in accordance with the specifications, labor, materials, tools, and equipment to help in the effort to protect life and property. Such labor, materials, tools, and equipment may be other than proposed to be used on this project and shall be provided by the Contractor. Use of such labor, material, tools, and equipment shall be tracked on a City "Daily Extra Work Report", and shall be submitted by the Contractor to the Project Manager.



## **INSURANCE AND BONDS**

Contractor Insurance and Bonds shall conform to Part A and B of these Specifications. Contractor shall provide proof of insurance payment upon bid submittal. Payment for Insurance and Bonds shall be at the contract lump sum price as shown in the Bid Schedule. Such payment shall be considered full compensation for furnishing all labor, materials and incidentals for preparing and executing the required Insurance and Bonds as required in these Specifications. Payment will not be considered in the other items of work.

## **MOBILIZATION/DEMobilIZATION**

Payment for mobilization/demobilization shall be at the lump sum price as shown in the Bid Schedule. This includes all costs associated with performing the work as required by the Standard Specifications, the General and Special Provisions, and the Plans, not included in other items of work (50% for startup, and 50% at the completion of the job.) Costs associated with “additional mobilization or demobilization” shall be submitted to the Project Manager and approved in writing or, at the request of the Project Manager, paid on a Time and Materials basis.

## **TRAFFIC CONTROL AND TRAFFIC CONTROL PLAN**

The Contractor shall comply with the Traffic Control and Traffic Control Plan requirements set forth in the General Provisions of these Specifications. It is intended for the Contractor to implement temporary traffic control as necessary for project completion and in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). At any point during construction, if the Temporary Traffic Control does not meet MUTCD guidelines, a Temporary Traffic Control Plan may be required to be submitted by the Contractor at no additional cost to the City.

### **Payment**

All costs associated with providing and maintaining traffic control shall be included with other items of work. No separate payment shall be made.

## **UTILITIES**

Utility adjustments, removals, and relocations shall be in accordance with the Plans and applicable Specifications sections herein and shall be the responsibility of the utility Owner except as noted in the Utility Agreements (if any) included in the Appendix. No separate payment shall be made for coordination of work with Owners.

There shall be no above-ground obstructions in any portion of the sidewalk (where the width, exclusive of the top of curb, is 6 feet or less). Where power/telephone/cable poles, street light standards, fire

hydrants, control boxes, etc., occur in a 5 foot sidewalk, the sidewalk shall be modified per City of Lancaster Standard Plan PW-1. If the geometrics or R/W at the site make it physically impossible to do so, Contractor shall notify the Engineer immediately.

Utility Adjustment and Relocation shall be completed by the Utility Companies.

The following utility companies are responsible for adjusting and relocating their own utilities.

- Southern California Edison Company
- Southern California Gas Company
- Conterra Networks
- Frontier Communication
- Charter/Time Warner Cable
- L.A. County Waterworks District No. 40

#### Coordination

The Contractor shall notify utility companies at least 21 calendar days prior to start of work. The Contractor shall be responsible for all coordination between utility companies and the Contractor to meet the contract schedule and to avoid any conflict. Any delays caused by the utility companies due to lack of coordination by the Contractor shall be at no additional cost to the City. The City shall not be held liable for any utility company coordination delays.

Utility adjustments, removals, and relocations shall be in accordance with the Plans and applicable Specifications sections herein and shall be the responsibility of the utility Owner. No separate payment shall be made for coordination of work with Owners.

#### Adjacent Utilities

Main line utilities and appurtenant facilities within the work zone, and adjacent to the work zone, not included in the scope of work, shall be avoided. Those identified on the Plans as “Avoid Adjacent Utility” are identified for convenience only and may not be all inclusive. It is the responsibility of the Contractor to locate, identify, and be aware of utilities within and adjacent to the work zone.

If, out of an abundance of caution, the Contractor elects to “Protect in Place,” in order to avoid adjacent utility, the Contractor shall furnish and place necessary protection at its expense. No payment shall be made.

#### Water System Relocations and Adjustments

Construction of all water system relocations and adjustments shall be inspected by, and meet the requirements of, Los Angeles County Department of Public Works, Waterworks District No. 40, Antelope Valley. The Special Provisions are found in Section W of these Specifications.

## Payment

Payment for Utilities adjustments, removals, and relocations as specified on the Plans shall be included in other items of work. No separate payment shall be made. Payment for Coordination shall be included with other items of work. No separate payment shall be made.

## **STEEL FENCE AND GATES**

The contractor shall provide labor, materials, equipment and appurtenances necessary for installation of steel fence, chain link fence and gates. Prior to production, Contractor shall field-verify dimensions and provide layout submittal to Project Manager for approval.

Steel fence, pedestrian access gates, swing gates, and rolling gates shall be equivalent to the Ameristar Montage Industrial Classic Line specifications and shall conform to the requirements of fabrication and conditions under ASTM A653/A653M. All steel shall be black, powder coated.

The fence and gate system shall be capable of meeting the vertical load, horizontal load and infill performance requirements for industrial weight fences and gates under ASTM F2408. Fence and gate system shall withstand the wind load requirement of 110 MPH, Exposure C, per City of Lancaster Building and Safety code requirements.

### Steel Fence (Ground Level)

The height of the fence panels located at ground level shall be 8 feet, and shall be installed complete with posts, rails, pickets, foundation, etc. as stated herein and on the Plan. Bottom of picket to ground level shall be 2 inches. Posts and railing shall be 2 inches. Pickets shall be 4 inches apart.

### Steel Pedestrian Gates

Steel pedestrian gates shall be manual and shall have lockable drop bar and gate holdbacks and other hardware for locking capabilities (panic hardware). Pedestrian gates shall be 8 feet tall x 5 feet 7 inches wide. Pedestrian gates shall open 90 degrees and shall have maneuvering clearances complying with Table 11B-404.2.4.1. of the California Building Code. Pedestrian gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the gate to a position of 12 degrees from the latch is 5 seconds minimum. Pedestrian gate spring hinges shall be adjusted so that from the open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum. Reference Section 11B-404.2.8 *Closing Speed* of the California Building Code.

The force for pushing or pulling open a pedestrian gate shall be 5 pounds maximum (reference Section 11B-404.2.9 *Door and Gate Opening Force* of the California Building Code). This force does not apply to the force required to retract latch bolts or disengage other devices that hold the pedestrian gate in a closed position. Pedestrian gate surfaces within 10 inches (254 mm) of the ground measured vertically shall have a smooth surface on the push side extending the full width of the gate (kickplates).

Handles, pulls, latches, locks and other operable parts on pedestrian gates shall comply with Section 11B-309.4. of the California Building Code. Operable parts of such hardware shall be 34 inches (864 mm) minimum and 44 inches (1118 mm) maximum above the finish floor or ground.

The height of pedestrian gates shall be 8 feet, complete with posts, rails, pickets, perforated metal brackets, hinges, etc. as stated herein and per the Plan.

### Steel Vehicle Gates

Steel vehicle gates shall be manual or automatic as indicated on the Plan. Vehicle gates shall have lockable drop bar and gate holdbacks and other hardware for locking capabilities. Vehicle gates shall be 8 feet tall x 23 feet wide. Minimum ¼ inch tension rod chain, rollers, wheels, wheel stops and tightener tube installed on gates. 6 feet wheels to be bolted to the gate, between the wheel plates welded near the ends of the gate bottom rail.

Vehicle gates intended for automatic operation shall be designed, constructed, and installed to comply with the requirements of ASTM F220. Construction of gates shall be of materials that allow manual operation by one person. For additional details, see Gate Detail in attached Site Plan.

See Appendices for recommended details of roller guide and latch.

### Keybox or Knox box

An approved key-box, listed in accordance with UL 1037, shall be provided as required by Fire Code 506. The location of the key-box shall be determined by the Fire Inspector.

### Concrete Footings

Concrete footings for fence posts shall be constructed per Plan details. Portland Cement Concrete shall be class 560-C-2500. Existing utility lines in conflict with the concrete footings shall be protected in place and/or relocated as approved by the Project Manager. Concrete footings shall be a minimum 40" deep by 18 inches wide. Fence post shall be a minimum of 36 inches into footing.

### Anchor Bolts

All anchor bolts shall be fully concealed in the finished installation.

### Payment

Payment for all items under the section **STEEL FENCE AND GATES** shall be at the price included and shown in the Bid Schedule and shall include all costs for furnishing all labor, tools, equipment, and materials for installation and proper operation per Plans and as directed by the Project Manager.

### **INSPECTION AND SYSTEM TESTING**

The complete fence and gate system shall be adjusted to assure it is performing properly. Test gate operators to perform a minimum of ten full cycles and adjust to ensure operation without binding, scraping, or uneven motion.

Gate locks shall be aligned properly to lock and unlock without binding. Test gate lock through a minimum of ten full cycles and verify secure locking.

Inspect that all anchor bolts are fully concealed in the finished installation.

### Test and Explain Safety Features

Ensure that all instructions for mechanical components, safety devices, and gate operator are available to Project Manager immediately after project completion.

### Payment

Payment for Utilities adjustments, removals, and relocations as specified on the Plans shall be included in other items of work. No separate payment shall be made. Payment for Coordination shall be included with other items of work. No separate payment shall be made.

PART E  
CONTRACT DOCUMENTS

## AGREEMENT

THIS AGREEMENT (this “Agreement”) is made and entered into at Lancaster, California, by and between the City of Lancaster, a municipal corporation and charter city (the “Contracting Agency”), and «Contractor» (the “Contractor”).

WITNESSETH: That the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree with each other as follows:

### ARTICLE I

The “Contract Documents” consist of the following: (i) this Agreement and the Notice to Contractors; (ii) the Bid Instructions; (iii) the Bid Security Forms for Check or Bond; (iv) the Accepted Bid; (v) the Performance Bond; (vi) the Payment Bond; (vii) the Non-Collusion Declaration; (viii) the Specifications; (ix) the Construction Drawings; (x) any and all addenda as prepared prior to date of bid opening setting forth any modifications or interpretations of any of the foregoing documents; and (xi) any and all supplemental agreements heretofore or herewith executed amending or extending the work contemplated and which may be required to complete the work in a substantial and acceptable manner. All of the provisions of the Contract Documents are hereby incorporated in and made a part of this Agreement as if fully set forth herein.

### ARTICLE II

For and in consideration of the payments and agreements to be made and performed by the Contracting Agency as set forth in the Contract Documents, the Contractor agrees with the Contracting Agency to do the work and furnish the materials in accordance with the Contract Documents, which work is generally referred to as **Project No. ITB 824-24 Rawley Duntley Park Fence Instillation**, and to furnish at its own cost and expense all tools, equipment, services, labor and materials necessary therefor, to pay all applicable taxes, and to do everything required herein and by the Contract Documents. Substitution of securities for any monies withheld by the Contracting Agency to ensure performance under this Agreement will be permitted in accordance with Section 22300 of the Public Contract Code.

### ARTICLE III

For, and only in the event of, the furnishing of all of the services and materials, the obtaining of all permits and licenses of a temporary nature; the furnishing and removing of all debris and temporary work structures and temporary work installations, tools and equipment, and the doing of all of the work contemplated and embraced in the Contract Documents, also in full payment for all loss and damage arising out of the nature or performance of the aforesaid work during its progress or prior to its acceptance, from the action of the elements, and from any unforeseen difficulties which may arise or be encountered in the prosecution of the work, and for and from all other risks of any description connected with the work, also in full payment for all expenses incurred by or in consequence of the suspension or discontinuance of the work, except such as in the Contract Documents are expressly stipulated to be borne by the Contracting Agency and for well and faithfully completing the work and the whole thereof within the stipulated time and in the manner shown and described in the Contract Documents and in accordance with the requirements of the Engineer of the Contracting Agency under them, the Contracting Agency will pay and the Contractor shall receive in full compensation therefor the prices set forth in the Accepted Bid.

#### ARTICLE IV

The Contracting Agency hereby promises and agrees with the said Contractor to employ, and does hereby employ the Contractor, to provide the materials and to do the work according to the terms and conditions contained and referred to in the Contract Documents for the bid prices filled in on the Bid Schedule, and hereby contracts to pay the same at the time, in the manner and upon the conditions set forth in the Contract Documents, and that the obligations and benefits set forth in the Contract Documents and that the obligations and benefits of this Agreement shall be binding upon and insure to the benefit of the parties hereto and their heirs, executors, administrators, successors and assigns.

#### ARTICLE V

No work, services, material or equipment shall be performed or furnished under this Agreement unless and until a Notice to Proceed has been given in writing to the Contractor by the Contracting Agency which Notice to Proceed may be given by the Engineer of the Contracting Agency as early as within five (5) days from the date of signing this Agreement by the Contracting Agency and the Contractor shall commence work within five (5) working days after the Notice to Proceed is given.

#### ARTICLE VI

All officers, agents, employees, subcontractors, their agents, officers and employees who are hired by or engaged by the Contractor in the performance of this agreement shall be deemed officers, agents and employees and subcontractors of the Contractor and the Contracting Agency shall not be liable or responsible to them for anything whatsoever other than the liability to the Contractor set forth in this Agreement. The Contractor agrees to defend, indemnify, hold harmless, and reimburse the Contracting Agency, its elected officials, officers, employees and volunteers and/or any other injured party for any damage of any nature whether bodily, property, or otherwise caused by itself, its employees, agents, or subcontractors in respect to the operation of this Agreement or the use of any equipment or machinery therefor. The Contractor agrees to defend, indemnify, hold harmless, and reimburse the Contracting Agency, its elected officials, officers, employees and volunteers, for damages occasioned thereto by the negligence of the Contractor, its employees, agents, subcontractors or employees thereof in respect to the operation of this Agreement or the use of any vehicle, equipment or machinery in performing this Agreement, and the Contractor further agrees to hold harmless and defend in all proceedings and courts of law the Contracting Agency, as well as its elected officials, officers, employees and volunteers, in respect to claim or legal proceeding or judgment made, filed or presented against the foregoing by reason of said negligence.

#### ARTICLE VII

The Contractor shall deposit with the Contracting Agency an insurance policy or a Certificate of Insurance which shall evidence the fact that the Contractor has in full force and effect comprehensive bodily injury and other required insurance in amounts indicated in the Contract Documents and that all persons and/or entities have been named as additional insureds as and to the extent required by the Contract Documents. Such policy shall contain a provision that the same cannot be canceled without at least 30 days written notice to the Contracting Agency.



ARTICLE VIII

This Agreement shall enforce the compliance for payment by the Contracting Agency for any authorized extra work to be paid on a Time and Materials basis shall be based upon the most current State of California General Prevailing Wage Rate. Equipment costs shall be paid based upon the State of California Department of Transportation, Division of Construction Labor Surcharge and Equipment Rental Rates (latest edition).

ARTICLE IX

It is expressly understood between the parties to this Agreement that no employee/employer relationship is intended; Contractor is an independent contractor.

IN WITNESS WHEREOF: The Parties hereto have caused this Agreement to be executed the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

CITY OF LANCASTER  
LANCASTER, CALIFORNIA

BY: \_\_\_\_\_  
JASON CAUDLE  
City Manager

\_\_\_\_\_  
CONTRACTOR

Attest: \_\_\_\_\_  
ANDREA ALEXANDER  
City Clerk

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

Approved by Dept. Head:

BY: \_\_\_\_\_  
JEFF HOGAN  
Senior Director – Development Services

and \_\_\_\_\_

Approved As To Form:

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
ALLISON E. BURNS, ESQ.  
City Attorney

\_\_\_\_\_  
LICENSE NO./CLASS/EXP. DATE

CITY OF LANCASTER  
COMMENCEMENT, COMPLETION AND TERM

PROJECT NUMBER AND TITLE: \_\_\_\_\_

CONTRACTOR NAME: \_\_\_\_\_

CONTRACTOR LICENSE NUMBER: \_\_\_\_\_

BASE BID AMOUNT: \_\_\_\_\_

ALTERNATE BID AMOUNT: \_\_\_\_\_

AWARD AMOUNT: \_\_\_\_\_

CONTRACT TIME: \_\_\_\_\_

Time for Commencement and Completion

CONTRACTOR shall commence performance of the work no later than five (5) working days following issuance of Notice to Proceed. It is anticipated that performance of the work will be completed within \_\_\_\_\_ calendar days from commencement.

Term

This Agreement shall become effective and shall be in full force and effect upon the execution of the Agreement by the City and the CONTRACTOR.

\_\_\_\_\_  
Name, Title  
Contractor

\_\_\_\_\_  
Date

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: THAT

WHEREAS, the City of Lancaster, County of Los Angeles, State of California, on «**CouncilMtgDate**», has awarded to «**Contractor**», hereinafter designated as the "Principal," a contract to provide **Rawley Duntley Park Fence Instillation**, per Project No. ITB 824-24, together with appurtenances thereto; and

WHEREAS, said Principal is required under the terms of said contract to furnish a bond for the faithful performance of said contract;

NOW THEREFORE, we, «**Contractor**» as Principal, and «**Surety**» as Surety, are held and firmly bound unto the City of Lancaster, California, hereinafter called the Contracting Agency in the penal sum of one hundred percent (100%) of the amount of «**Dollars**» (\$«**Numeric**») lawful money of the United States of America, for payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, jointly and severally, firmly by these presents.

THE CONDITION OF THE OBLIGATION IS SUCH THAT, if the hereby bonded Principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by and well and truly keep and perform all the undertakings, terms, covenants, conditions and agreements in the said contract and any alteration thereof, made as therein provided, all within the time and in the manner therein designated and in all respects according to their true intent and meaning, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect. The obligation of Surety hereunder shall continue so long as any obligation of Principal remains.

FURTHER, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Contract Document or of the work to be performed thereunder, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or modification of the Contract Documents or of work to be performed thereunder.

IN WITNESS WHEREOF, one (1) original of this instrument, which shall for all purposes be deemed an original thereof, has been duly executed by the Principal and Surety herein named on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

The name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

«**Contractor**» \_\_\_\_\_  
Principal

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

«**Surety**» \_\_\_\_\_  
Surety

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

LABOR AND MATERIAL BOND

KNOW ALL MEN BY THESE PRESENTS: THAT

WHEREAS, the City of Lancaster, County of Los Angeles, State of California, on «**CouncilMtgDate**» has awarded to «**Contractor**», hereinafter designated as the "Principal," a contract for the construction of **Rawley Duntley Park Fence Instillation**, per Project No. ITB 824-24 together with appurtenances thereto, and

WHEREAS, said Principal is required to furnish a bond in connection with said contract providing that if said Principal, or any of his or its subcontractors, shall fail to pay for any materials, provisions, provender, or other supplies or equipment used in, upon or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, the Surety of this bond will pay the same to the extent hereinafter set forth;

NOW THEREFORE, we, «**Contractor**» as Principal, and «**Surety**» as Surety, are held and firmly bound unto the City of Lancaster, California, hereinafter called the "Contracting Agency" in the penal sum of hundred percent (100%) of bid «**Dollars**» (\$«**Numeric**») lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT if said principal, his or its heirs, executors, administrators, successors or assigns, shall fail to pay for any materials, provisions, provender, or other supplies or equipment used in, upon, for or about the performance of the work contracted to be done, or for amounts due under applicable State law for any work or labor thereon of any kind, and provided that the persons, companies or corporations so furnishing said materials, provisions, provender, or other supplies, equipment, appliances or power used in, upon, for or about the performance of the work contracted to be executed or performed, or any persons, company or corporation renting or hiring teams, implements, machinery or power, for or contributing to said work to be done, or any person who performs work or labor upon the same, or any person who supplies both work and material therefor, shall have complied with the provisions of applicable State law, then said Surety will pay the same in or to an amount not exceeding the amount hereinabove set forth, and also will pay in case suit is brought upon this bond, such reasonable attorney's fees as shall be fixed by the court, awarded and taxes as in the above mentioned Statute provided. The bond shall insure to the benefit of any and all persons, companies and corporations entitled to file claims under applicable State law, so as to give a right of action to them or their assigns in any suit brought upon this bond.

FURTHER, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Contract Documents or of the work to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of such change, extension of time, alteration or modification of the Contract Documents or of work to be performed thereunder.

IN WITNESS WHEREOF, one (1) original of this instrument, which shall for all purposes be deemed an original thereof, has been duly executed by the Principal and Surety herein named on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

The name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

«Contractor» \_\_\_\_\_  
Principal

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

«Surety» \_\_\_\_\_  
Surety

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

PART F  
BID DOCUMENTS

PROPOSAL

TO THE HONORABLE MAYOR AND CITY COUNCIL  
CITY OF LANCASTER, CALIFORNIA

The undersigned hereby proposes to perform all work for which a contract may be awarded him and to furnish any and all labor, material, equipment, transportation and other facilities required for:

PROJECT NO 824-24  
Rawley Duntley Park Fence Installation

together with appurtenances thereto, all as set forth on the Construction Drawings and Specifications, and other Contract Documents, and he further proposes and agrees that, if his bid is accepted, he will contract in the form and manner stipulated, to perform all work called for by the Construction Drawings, Specifications, and other Contract Documents, and to complete all such work in strict conformity therewith within the time limits set forth therein, and that he will accept as full payment therefor the unit prices named in the Bid Schedule forming a part thereof. \*A certified check, a cashier's check, properly made payable to the City of Lancaster, a bid bond in favor of the City of Lancaster for

\_\_\_\_\_ Dollars (\_\_\_\_\_)

which amount is not less than 10% of the total amount of his proposal which is attached hereto and is given as guarantee that the undersigned will execute the agreement and furnish the required bonds if awarded the Contract and, in case of failure to do so within the time provided, said check or bid bond shall be forfeited to the City of Lancaster. The face amount of a bid bond shall be considered established.

It is understood and agreed that:

1. The undersigned has carefully examined all the Contract documents which will form a part of the Contract; namely, Notice to Contractors, the Bid Security Forms for Check or Bond, Non-Collusion Declaration, Specifications and Construction Drawings, and all revisions of addenda setting forth any modifications or interpretations of any of said documents.
2. The undersigned has by investigation at the site of the work and otherwise satisfied himself as to the nature and location of the work and fully informed himself as to all conditions and matters which can in any way affect the work or the cost thereof.
3. The undersigned fully understands the scope of the work and has checked carefully all bid prices inserted in this bid and he further understands that the Contracting Agency will in no way be responsible for any errors or omissions in the preparation of this bid.
4. The undersigned will execute the agreement and furnish the required bonds and certificates of insurance within 14 days after notice to the Contractor of award of the contract by the Contracting Agency.

\*Strike inapplicable phrase.

5. The undersigned hereby certifies that this proposal is genuine and not sham or collusive or made in the interest or in behalf of any person not herein named and the undersigned has not directly or indirectly induced or solicited any other bidder to put in a sham bid or any person, firm or corporation to refrain from bidding, the undersigned has not in any manner sought by collusion to secure for himself an advantage over any other bidder.
6. The undersigned will accept an award and enter into a contract for all work scheduled herein on which he submits a bid. The award for such work shall be entirely at the discretion of the Contracting Agency after evaluation of the bids. In the event the bidder to whom the work is awarded fails to enter into a contract and furnish the required bonds therefor within the time provided, the bidder will be liable for forfeiture of 10% of the total bid amount to the Contracting Agency, even though such amount may be less than the face amount of the bid security, check or bond posted with the bid.
7. The undersigned agrees that the quantities given in the Bid Schedule for which unit prices are bid and in other contract documents are approximate only, being given as a basis for the comparison of bids, and the Contracting Agency does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of each or to omit portions of such work, as may be deemed necessary or expedient by the Contracting Agency.
8. The undersigned understands that although the bid will be submitted electronically via the City of Lancaster's PlanetBids Vendor Portal, the Bid Security, along with the appropriate form (F-5, F-6), depending on the type of Bid Security used for the bid, must be delivered in a sealed envelope to the City Clerk prior to bid closing time and date for this project, according to the City Clerks official bid clock.

NOTE: All amounts and totals given in the Bid Schedule will be subject to verification by the Engineer. In case of variation between the unit price and totals shown by bidder, the unit prices will be considered to be his bid.

Addenda No(s). Received \_\_\_\_\_

The undersigned is licensed in accordance with the laws of the State of California providing for the registration of Contractors.

\_\_\_\_\_  
Name of Firm

By \_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Title

\_\_\_\_\_  
Telephone Number

By \_\_\_\_\_  
Signature

\_\_\_\_\_  
License Number/Class/Exp. Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
DIR No.

\_\_\_\_\_  
Title



PROJECT NO 824-24  
Rawley Duntley Park Fence Installation

LIST OF SUBCONTRACTORS

In compliance with the provisions of the Public Contract Code, Section 4104, the undersigned bidder herewith sets forth the name, location and place of business, license number, and phone number of each subcontractor who will perform work or labor or render service to the general contractor in or about the construction of the work or improvement in an amount in excess of 1/2 of 1% of the \*Contractor's total bid, or \$10,000, whichever is greater and the portion and percentage of the work which will be done by each subcontractor.

SUBCONTRACTOR		PORTION OF WORK (PERCENT)
LOCATION AND PLACE OF BUSINESS		TYPE OF WORK
LICENSE NO. _____ DIR NO. _____	EXPIRATION DATE:     /     /	PHONE (     )

SUBCONTRACTOR		PORTION OF WORK (PERCENT)
LOCATION AND PLACE OF BUSINESS		TYPE OF WORK
LICENSE NO. _____ DIR NO. _____	EXPIRATION DATE:     /     /	PHONE (     )

SUBCONTRACTOR		PORTION OF WORK (PERCENT)
LOCATION AND PLACE OF BUSINESS		TYPE OF WORK
LICENSE NO. _____ DIR NO. _____	EXPIRATION DATE:     /     /	PHONE (     )

SUBCONTRACTOR		PORTION OF WORK (PERCENT)
LOCATION AND PLACE OF BUSINESS		TYPE OF WORK
LICENSE NO. _____ DIR NO. _____	EXPIRATION DATE:     /     /	PHONE (     )

SUBCONTRACTOR		PORTION OF WORK (PERCENT)
LOCATION AND PLACE OF BUSINESS		TYPE OF WORK
LICENSE NO. _____ DIR NO. _____	EXPIRATION DATE:     /     /	PHONE (     )

SUBCONTRACTOR		PORTION OF WORK (PERCENT)
LOCATION AND PLACE OF BUSINESS		TYPE OF WORK
LICENSE NO. _____ DIR NO. _____	EXPIRATION DATE:     /     /	PHONE (     )

\*CONTRACTOR MUST PERFORM 50% OR MORE OF THE WORK

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

TO BE SUBMITTED BY EACH BIDDER ON A PRINCIPAL CONTRACT

STATE OF CALIFORNIA )

) ss

COUNTY OF LOS ANGELES )

The undersigned declares:

I am the \_\_\_\_\_

of \_\_\_\_\_  
the party making the foregoing bid.

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

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

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on \_\_\_\_\_ (date), at \_\_\_\_\_ (city), \_\_\_\_\_ (state).

Signed: \_\_\_\_\_

\_\_\_\_\_  
PRINT NAME

\_\_\_\_\_  
Title

BID SECURITY FORM FOR CHECK

NOTE: The following form shall be used when a check accompanies bid.

Accompanying this proposal is a \*certified/cashier's check payable to the order of the City of Lancaster for:

\_\_\_\_\_ Dollars (\_\_\_\_\_)

this amount being not less than 10% of the total amount of the bid. The proceeds of this check shall become the property of said Agency provided this proposal shall be accepted by said Agency through action of its legally constituted contracting authorities, and the undersigned shall fail to execute a contract and furnish the required bonds within the stipulated time; otherwise, the check shall be returned to the undersigned.

\_\_\_\_\_

\_\_\_\_\_  
Bidder

\_\_\_\_\_

\*Strike the inapplicable word.

BID BOND

KNOW ALL MEN BY THESE PRESENTS;

That we, \_\_\_\_\_ as Principal, and \_\_\_\_\_

\_\_\_\_\_, as Surety, are held and firmly bound unto the City of Lancaster, California in the sum of:

\_\_\_\_\_ dollars (\$ \_\_\_\_\_ ),

to be paid to the City of Lancaster, its successors and assigns, for which payment, well and truly made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH:

That if the certain proposal of the above bounded \_\_\_\_\_

\_\_\_\_\_ for the construction of \_\_\_\_\_

\_\_\_\_\_ in strict accordance with the Specifications and Drawings on file at the office of the City Clerk of Lancaster is accepted by the City of Lancaster through action of its legally constituted contracting authorities, and if the above bounded

his heirs, executors, administrators, successors and assigns shall duly enter into and execute a contract for such construction and shall execute and deliver the required Performance Bond and Payment Bond within 14 days after the date of notification by and from the said City of Lancaster that said contract is ready for execution, then this obligation shall become null and void; otherwise, it shall be and remain in full force and virtue.

IN WITNESS WHEREOF, we hereunto set our hands and seals this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

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

NOTE: The standard printed bid bond form of any bonding company acceptable to the City of Lancaster may be used in lieu of the foregoing approved sample bond form, provided the security stipulations protecting the City of Lancaster are not in any way reduced by use of the surety company's printed standard form.

BIDDER'S QUESTIONNAIRE

1. Submitted by: \_\_\_\_\_ Telephone: \_\_\_\_\_  
Principal Office Address: \_\_\_\_\_

2. Type of Firm:  
Corporate \_\_\_\_\_ Other \_\_\_\_\_  
Individual \_\_\_\_\_  
Partnership \_\_\_\_\_

3a. If a corporation, answer these questions:  
Date of incorporation: \_\_\_\_\_ State of incorporation: \_\_\_\_\_  
President's name: \_\_\_\_\_  
Vice-President's name: \_\_\_\_\_  
Secretary or Clerk's name: \_\_\_\_\_  
Treasurer's name: \_\_\_\_\_

3b. If a partnership, answer these questions:  
Date of organization: \_\_\_\_\_ State Organized in: \_\_\_\_\_  
Name of all partners holding more than a 10% interest:

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

Designate which are General or Managing Partners.

4. Name of person holding contractor's license: \_\_\_\_\_

License number: \_\_\_\_\_ Class \_\_\_\_\_ Expiration Date \_\_\_\_\_

5. Contractor's Representative: \_\_\_\_\_

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

Alternate: \_\_\_\_\_

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

BIDDER'S QUESTIONNAIRE

6. List the major construction projects your organization has in progress as of this date:

Owner: (A) \_\_\_\_\_ (B) \_\_\_\_\_

Project Location: \_\_\_\_\_

Type of Project: \_\_\_\_\_

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

Telephone: \_\_\_\_\_

Owner: (C) \_\_\_\_\_ (D) \_\_\_\_\_

Project Location: \_\_\_\_\_

Type of Project: \_\_\_\_\_

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

Telephone: \_\_\_\_\_

7. List at least three construction projects similar in nature to the project defined in these specifications, which your organization has completed within the last 5 years:

Owner: (A) \_\_\_\_\_ (B) \_\_\_\_\_

Project Location: \_\_\_\_\_

Type of Project: \_\_\_\_\_

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

Telephone: \_\_\_\_\_

BIDDER'S QUESTIONNAIRE

Owner: (C) \_\_\_\_\_ (D) \_\_\_\_\_

Project Location: \_\_\_\_\_

Type of Project: \_\_\_\_\_

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

Telephone: \_\_\_\_\_

Owner: (E) \_\_\_\_\_ (F) \_\_\_\_\_

Project Location: \_\_\_\_\_

Type of Project: \_\_\_\_\_

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

Telephone: \_\_\_\_\_

Owner: (G) \_\_\_\_\_ (H) \_\_\_\_\_

Project Location: \_\_\_\_\_

Type of Project: \_\_\_\_\_

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

Telephone: \_\_\_\_\_

8. Have you or your firm or any principal in your firm been adjudged bankrupt in any voluntary or involuntary bankruptcy proceeding within the last 10 years?

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

BIDDER'S QUESTIONNAIRE

9. Have you, your firm, or any principal in your firm been sued by any "owner" or Bonding Company insuring said "owner" for default on a contract within the last 10 years? \_\_\_\_\_

If so, what was the disposition of the lawsuit? \_\_\_\_\_

\_\_\_\_\_

If the lawsuit is still pending, what is the case number? \_\_\_\_\_  
and Court of Jurisdiction: \_\_\_\_\_

10. Have you, your firm, or any principal in your firm been sued by any subcontractor or material supplier for default on a contract within the last 10 years? \_\_\_\_\_

\_\_\_\_\_

If the lawsuit is still pending, what is the case number? \_\_\_\_\_

11. Has any Bonding Company refused to bond you, your firm, or any principal in your firm for a contract within the last 10 years? \_\_\_\_\_ If so, what were the circumstances? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

12. Has a Bonding Company been required to pay on a Bond issued to you, your firm, or any principal in your firm for a contract within the last 10 years? \_\_\_\_\_

If so, what were the circumstances? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

13. Have you, your firm, or any principal in your firm had to submit to binding arbitration to resolve a dispute arising from a contract within the last 10 years? \_\_\_\_\_

If so, what were the circumstances?

\_\_\_\_\_

\_\_\_\_\_



BIDDER'S QUESTIONNAIRE

14. Within the last 10 years have you, your firm, or any principal in your firm been penalized with liquidated damages for failure to complete the terms of a contract within the specified time? \_\_\_\_\_

If so, what were the circumstances?

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

15. Have you, your firm, or any principal in your firm been penalized for failure to pay prevailing wages to any persons performing work under a contract, including subcontractors that worked on your project within the last 10 years? \_\_\_\_\_

If so, what were the circumstances? \_\_\_\_\_

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

16. Provide information regarding your insurance agent(s) who will be providing insurance certificates for this project.

Name of Agent: (A) \_\_\_\_\_ (B) \_\_\_\_\_

Name of Firm: \_\_\_\_\_

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

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

Telephone: \_\_\_\_\_

Type of Insurance: \_\_\_\_\_

17. Provide information regarding the bonding company that will be providing bonds for this project.

Name of Agent: (A) \_\_\_\_\_ (B) \_\_\_\_\_

Name of Firm: \_\_\_\_\_

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

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

Telephone: \_\_\_\_\_

BIDDER'S QUESTIONNAIRE

18. Provide your banking references:

Name of Bank: (A) \_\_\_\_\_ (B) \_\_\_\_\_

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

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

\_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

19. Internal Revenue Service Employer Identification Number: \_\_\_\_\_

20. These specifications state that the lowest responsible bidder will be notified and may be required to submit a notarized financial statement. If you are preliminarily determined to be the lowest responsible bidder, will you be able to submit said financial statement within the specified time?

Yes  No

If not, why? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Signature of Bidder

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

This information must include all construction work undertaken in the State of California by the bidder and any partnership, joint venture or corporation that any principal of the bidder participated in as a principal or owner for the last five calendar years and the current calendar year prior to the date of bid submittal. Separate information shall be submitted for each particular partnership, joint venture corporate or individual bidder. The bidder may attach any additional information or explanation of data which he would like taken into consideration in evaluating the safety record. An explanation must be attached of the circumstances surrounding any and all fatalities.

CONTRACTOR'S INDUSTRIAL SAFETY RECORD

5 Calendar Years Prior to Current Year

	2014	2015	2016	2019	2020	TOTAL	CURRENT YEAR
1. No. of contracts							
2. Total dollar amount of contracts (in thousands of \$)							
*3. No. of fatalities							
*4. No. of lost workday cases							
*5. No. of lost workday cases involving permanent transfer to another job or termination of employment							
*6. No. of lost workdays							

\*The information required for these items is the same as required for columns 3 to 6, Code 10, Occupational Injuries, Summary--Occupational Injuries and Illnesses, OSHA No. 102.

The above information was compiled from the records that are available to me at this time and I declare under penalty of perjury that the information is true and accurate within the limitations of those records.

\_\_\_\_\_  
Name of Bidder (print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
State Contractor's Lic. No. & Classification

\_\_\_\_\_  
City

\_\_\_\_\_  
Zip Code

\_\_\_\_\_  
Telephone

**THE CITY OF LANCASTER**

**S.B. 198 ILLNESS AND INJURY PREVENTION PROGRAM**

**CERTIFICATION FOR CONTRACTORS**

DATE: \_\_\_\_\_

TO WHOM IT MAY CONCERN:

PROJECT NUMBER AND TITLE: \_\_\_\_\_

CONTRACTOR LICENSE NUMBER: \_\_\_\_\_

CONTRACTOR NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

On this date, I, being an authorized agent for the listed Contractor, certify that the listed Contractor has complied with the requirements of S.B. 198 and the standards of Title 8 California Code of Regulations (CCR) General Industry Safety Orders § 3203.

Signed: \_\_\_\_\_

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

Witness: \_\_\_\_\_



**BID SCHEDULE**

**INFORMAL BID NO. 824-24**

**RAWLEY DUNTLEY PARK FENCE INSTALLATION**

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT PRICE\$	TOTAL\$ PRICE
<b>Base Bid</b>					
1.	Insurance and Bond	1	LS		\$ _____
2.	Mobilization and Demobilization	1	LS		\$ _____
4.	Traffic Control and Traffic Control Plan	1	LS		\$ _____
3.	Steel Fence and Gates	1	LS		\$ _____
TOTAL BASE BID AMOUNT					\$ _____

TOTAL BASE BID AMOUNT WRITTEN IN WORDS \_\_\_\_\_

\_\_\_\_\_

**BID SCHEDULE**

**INFORMAL BID NO. 824-24**

**RAWLEY DUNTLEY PARK FENCE INSTALLATION**

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT PRICE\$	TOTAL\$ PRICE
----------	-------------	---------	------	--------------	---------------

NOTE: The quantities shown hereon are estimated and are for a comparison of the bids received. Payment will be based on the actual quantities of materials used on the job. The City reserves the right to increase or decrease the amount of the quantities shown.

If there is a discrepancy between the numerical and written Total Bid Amount, the Total Bid Amount written in words shall prevail.

Pursuant to Section 20103.8 of the California Public Contracts Code, the following method, as indicated by a check mark in the box associated with the statement, shall be used to determine the order of bidders, from lowest to highest. Please note that this method is not used to calculate the bids and does not address issues of responsiveness or responsibility:

- The lowest bid shall be the lowest bid price on the base contract without consideration prices on the additive or deductive items.**
- The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items that were specifically identified in the bid solicitation as being used for the purpose of determining the lowest bid.**
- The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items taken in order from a specifically identified of those items, depending upon available funds as identified in the solicitation.**
- The lowest bid shall be determined in a manner that prevents any information that would identify any of the bidders from being removed to the public entity before ranking of all bidders from lowest to highest has been determined.**

When no box is marked, the default value of the bid award shall be the lowest bid price on the base contract only, without consideration of the prices on the additive or deductive items.

The City of Lancaster reserved the right to add to or deduct from the contract any of the additive or deductive items after the lowest responsible bidder has been determined.

**BID SCHEDULE**

**INFORMAL BID NO. 824-24**

**RAWLEY DUNTLEY PARK FENCE INSTALLATION**

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT PRICE\$	TOTAL\$ PRICE
-------------	-------------	------------	------	-----------------	------------------

PRIME CONTRACTOR:

I DECLARE UNDER PENALTY OF PERJURY THAT ALL INFORMATION PROVIDED AND STATEMENTS MADE IN THESE BID DOCUMENTS ARE TRUE AND ACCURATE.

\_\_\_\_\_  
NAME OF FIRM

\_\_\_\_\_  
SIGNATURE TITLE

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
CITY STATE ZIP

\_\_\_\_\_  
TELEPHONE NUMBER

\_\_\_\_\_  
LICENSE NO./CLASS/EXP. DATE



PART W  
WATER SYSTEM  
SPECIAL PROVISIONS

## IRRIGATION AND LANDSCAPING MATERIALS AND INSTALLATION

### A. IRRIGATION - GENERAL

#### 1. Irrigation Schedules

For the efficient use of water, all irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules meeting the following requirements shall be submitted with the Certificate of Completion.

- a) Irrigation scheduling shall incorporate the use of evapotranspiration data such as those from the California Irrigation Management Information System (CIMIS) weather stations or other validated weather data or soil moisture monitoring systems to apply the appropriate levels of water for different climates. See CIMIS data for Lancaster area in the City of Lancaster Landscape and Irrigation Design Standards.
- b) Overhead irrigation shall be scheduled between 10:00 p.m. and 10:00 a.m. unless weather conditions are unfavorable. If allowable hours of irrigation differ from the local retail purveyor, the stricter of the two shall apply.
- c) For implementation of the irrigation schedule, particular attention must be paid to the irrigation run times emission device, flow rate, and current ETo, so that applied water meets the EAWU. Total annual applied water shall be less than or equal to MAWA.
- d) Using an appropriate controller, an annual irrigation program with monthly irrigation schedules shall be developed and submitted for each of the following:
  - (1) The plant establishment period;
  - (2) The established landscape; and
  - (3) Temporarily irrigated areas.
- e) Each Irrigation Schedule shall include for each station all that apply:
  - (1) Irrigation interval (days between irrigation);
  - (2) Irrigation run times (hours or minutes per irrigation event to avoid runoff);
  - (3) Number of cycle starts required for each irrigation event to avoid runoff;
  - (4) Amount of applied water scheduled to be applied on a monthly basis;
  - (5) Application rate setting;
  - (6) Root depth setting;
  - (7) Plant type setting;
  - (8) Soil type;
  - (9) Slope factor setting;
  - (10) Shade factor setting; and/or

(11) Irrigation uniformity or efficiency setting.

## 2. Permits and Fees

The Contractor shall obtain and pay for any and all necessary permits and fees as required.

## 3. Manufacturer's Directions

Manufacturer's directions and detailed drawings shall be followed in all cases where the manufacturers of articles used furnished directions covering points not shown in the drawings and specifications.

## 4. Ordinance and Regulations

All local, municipal, state laws, and rules and regulations governing or relating to any portion of irrigation and landscaping work are hereby incorporated into and made a part of these design standards; and their provisions shall be carried out by the Contractor. Anything contained in these design standards shall not be construed to conflict with any of the above rules and regulations or requirements of the same. However, when these design standards call for or describe materials, workmanship, or construction of a better quality, higher standard, or larger size than is required by the above rules and regulations, the provisions of these design standards and drawings shall take precedence.

## 5. Explanation of Drawings

Due to the scale of drawings, it is not possible to indicate all offsets, fittings, sleeves, etc., which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of its work and plan its work accordingly, furnishing such fittings, etc., as may be required to meet such conditions. Drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting, and architectural features.

## 6. Contacting Responsibilities

- a) It is the responsibility of the Contractor to familiarize himself with all grade differences, location of walls, and utilities. The Contractor shall repair or replace all items damaged by its work. Contractor shall coordinate its work with other contractors for the location and installation of pipe sleeves and laterals under roadways and paving, etc.
- b) Contractor shall be responsible for locating and staking all sewer, utility, and water main lines prior to beginning work. Contractor shall be responsible for any damage or replacement of said utilities. Any digging in areas where public type utility substructures may exist requires an Underground Service Alert (USA). The alert must be obtained at least forty-eight (48) hours prior to digging. USA's telephone number is (800) 422-4133.

This will allow such utilities to mark their facilities to minimize interference and disruption of service.

- c) Contractor shall not willfully install the irrigation system as shown on the drawings when it is obvious in the field that unknown obstructions, grade differences, or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions or differences should be brought to the attention of the owner. In the event this notification is not performed, the Contractor shall assume full responsibility for any revisions necessary.
- d) The intent of the design is to provide adequate water coverage to plant material to insure survival. As part of the scope of work, Contractor shall provide any additional heads, special nozzles, or patterns to achieve proper coverage with a minimum of overspray, at no additional cost to the owner.
- e) After all new sprinkler pipelines and risers are in place and connected, all necessary diversion has been completed, and prior to installation of sprinkler heads, the control valves shall be opened and a full head of water used to flush out the system.

## **B. IRRIGATION – SUBMITTALS**

### **1. Materials List**

The Contractor shall furnish the articles, equipment, materials, or processes specified by name in the drawings and specifications. No substitution will be allowed without prior written approval by the City.

Equipment or materials installed or furnished without prior approval of the City may be rejected and the Contractor required to remove such materials from the site at its own expense.

Manufacturer's warranties shall not relieve the Contractor of its liability under the guarantee. Such warranties shall only supplement the guarantee.

### **2. Records and As-Built Drawings**

The Contractor shall provide and keep up-to-date complete “As-Built” drawings indicating locations, sizes, and kinds of equipment installed. Prints for this purpose may be obtained from the Architect at cost. This set of drawings shall be kept on the site and shall be used only as a record set.

These drawings shall also serve as work progress sheets and the Contractor shall make neat and legible annotations on a daily basis as the work proceeds, showing the work as actually installed. These drawings shall be available at all times for inspection and shall be kept in a location designated by the City.

Before the date of the final inspection, the Contractor shall turn over all information recorded on the "As-Built" prints to the Engineer of Work.

The Contractor shall dimension from two (2) permanent points of reference (building corners, sidewalk, or road intersections, etc.) the location of the following items:

- a) Connection to existing water lines;
- b) Connection to existing electrical power;
- c) Gate valves;
- d) Routing of sprinkler pressure lines (dimension maximum 100' along routing);
- e) Significant changes in routing of lateral lines from those indicated on plans;
- f) Sprinkler control valves;
- g) Routing of control valves;
- h) Quick coupling valves; and
- i) Other related equipment as directed by the City.

### **C. IRRIGATION – MATERIALS**

Use only new materials on drawings, specified herein, or approved equals.

#### **1. PVC Pressure Mainline Pipe and Fittings**

The Contractor is cautioned to exercise care in handling, loading, unloading, and storing of PVC pipe fittings. All PVC pipe is to lie flat so as not to subject it to undue bending or concentrated external load at any point. Any section of pipe that has been dented or damaged will be discarded and, if installed, shall be replaced with new piping. Pipe and fittings shall not be stored in direct sunlight.

- a) Rubber gasket type pressure main line piping for sizes 3" and larger shall be Ring-Tite PVC Schedule 40.
- b) Pipe shall be made from NSF approved Type I, Grade I, PVC Compound conforming to ASTM Resin Specifications D1784. All pipe must meet requirements as set forth in Federal Specifications PS-22-70, with an appropriate standard dimension (S.D.R.) (Ring-Tite Pipe).
- c) Ring-Tite PVC fittings shall be fabricated from Schedule 40, 1-2, II-I NSF solvent weld PVC fittings conforming to ASTM Testing Procedure D-2466 and PVC Ring-Tite bell adapted using solvent and solvent welding procedures recommended by the manufacturer.
- d) Fabrication shall be performed at the manufacturer's plant location or at an authorized distributor shop location. Field fabrication of Ring-Tite fittings will not be allowed.
- e) Solvent welded type pressure main line piping for sizes 2" and larger shall be PVC Class 315.

- f) Pipe shall be made from NSF approved Type I, Grade I PVC Compound conforming to ASTM Resin Specifications D1788. All pipe must meet requirements as set forth in Federal Specification PS-22-70, with an appropriate standard dimension (S.D.R.) (Solvent-weld Pipe).
- g) Pressure main line piping for sizes 1½” and smaller shall be PVC Schedule 40 with solvent welded joints.
- h) Pipe shall be made from NSF approved Type I, Grade I PVC Compound conforming to ASTM Resin Specification 1785. All pipe must meet requirements as set forth in Federal Specification PS-21-70 (solvent weld pipe).
- i) PVC solvent weld fittings shall be Schedule 40, NSF approved, conforming to ASTM Test Procedure D2466.
- j) Solvent cement and primer for PVC solvent weld pipe and fittings shall be of type and installation methods prescribed by the manufacturer.
- k) All PVC must bear the following markings:
  - (1) Manufacturer's name;
  - (2) Nominal pipe size;
  - (3) Schedule or class;
  - (4) Pressure rating psi;
  - (5) NSF (National Sanitation Foundation) approval.;
  - (6) Date of extrusion;
  - (7) U.P.C. Shield Logo (IAPMO approval); and
  - (8) All fittings shall bear the manufacturer’s name or trademark, material designation, size, applicable I.P.S. schedule, and NSF seal of approval.

## 2. PVC Non-Pressure Lateral Piping

- a) Non-pressure buried lateral line piping shall be PVC schedule 40 with solvent weld joints.
- b) Pipe shall be made from NSF approved, Type I, Grade II PVC Compound conforming to ASTM Resin Specification D1784. All pipes must meet requirements set forth in Federal Specification PS-22-70 with an appropriate standard dimension ratio.
- c) Except as noted in Paragraph 1 of PVC Pressure Main Line Pipe and Fittings, all requirements for non-pressure lateral line pipe and fittings shall be the same as for solvent weld pressure main line pipe and fittings as set forth in said section.

## 3. Brass Pipe and Fittings

- a) Where indicated on the drawings, use red brass screwed pipe conforming to Federal Specification WW-P-351.
- b) Fittings shall be red brass conforming to Federal Specification WW-P 460.

#### 4. Galvanized Pipe and Fittings

- a) Galvanized pipe and fittings shall not be allowed under any circumstances without prior written approval from the City.

#### 5. Copper Pipe and Fittings

- a) Copper pipe shall be Type "K", hard tempered ASTM B88 and fittings shall be wrought solder joint type in accordance with ASNI-B 16-22.
- b) Joints shall be soldered with silver solder, 45% silver, 15% copper, 16% zinc, 24% cadmium and solidus at 1,125 F and liquidus at 1,145 F, conforming to ASTM B206 and Federal Specification QQB 00655.

#### 6. Thrust Blocks

- a) Concrete thrust blocks for all specified piping shall be the size and type required by the manufacturer's installation guide.
- b) Form thrust blocks in such a manner to prevent any concrete from coming in contact with the pipe. Solid pipe shall be between thrust block and the fitting to prevent direct contact of thrust block and fitting.
- c) Thrust blocks shall be installed on all pressure lines over 1½" in diameter whenever pressure line changes direction. Thrust blocks are required at backflow prevention device.

#### 7. Quick Coupling Valves

- a) Quick coupling valves shall have a two-piece brass body designed for working pressure of 150 psi operable with quick coupler.
- b) Quick coupling valves shall be 1" in size and shall be equipped with a locking vinyl cover.
- c) Quick coupling valves shall be secured using metal spikes.

#### 8. Backflow Prevention Units

- a) Backflow preventers shall be a reduced pressure type and shall be of a size as indicated on the drawings. All sprinkler irrigation systems shall require backflow prevention. All backflow prevention units shall be as set forth by local codes, the Los Angeles County Health Department, and Water District. The device shall be installed at least twelve inches (12") above grade measuring from the bottom of the device. (Current Los Angeles County Codes and Inspections required).
- b) Wye strainers at backflow prevention units shall have a bronzed screwed body for sizes 2" and smaller and 125 lb. cast iron flange body for sizes 2 " and larger. All wye strainers shall have a minimum 30 mesh screen and shall be similar to Bailey #100B or approved equal. Wye strainer shall not have a hose bib and shall be installed as per standard details. Smaller mesh screens may be required as necessary.
- c) Backflow prevention devices shall have a minimum size equal to the size of the water meter.

- d) The backflow device shall be wrapped/winterized.
- e) The backflow prevention device must be tested and certified by the Los Angeles County Department of Health Services - Cross Connections and Water Pollution Control Program and a copy of the test report submitted to the City.
- f) No concrete shall be within 4" of piping.

#### 9. Gate Valves/Ball Valves

- a) Gate valves 2½" and larger shall be iron body, bronze stem, flanged, full port, resilient seat, or wedge shut-off which can be serviced from the top while the valve is in line.
- b) Gate valves 4" and larger shall have 2" square operating nut, with arrow cast in metal indicating direction of opening.
- c) Gate valves 4" and larger shall have ends compatible with pipe in which they are being installed.
- d) Ball valves 2" and smaller shall be 200 psi SWP bronze ball valve with a stainless steel ball and handle.
- e) Ball valves 2" and smaller shall have threaded ends.
- f) All gate and ball valves shall be installed per standard details.

#### 10. Control Wiring

- a) The electrical system shall be installed in accordance with the National Electrical Code most recently adopted by the City. Connections between the automatic controllers and the electric control valves shall be made with direct burial copper wire AWG-U.F. 600 volt. Pilot wires shall be a different color wire for each automatic controller. Pilot wires for single controller installations shall be black, 14 gauge minimum.  
  
Common wires shall be white with a different color stripe for each automatic controller. Common wires shall be installed in accordance with valve manufacturer's specifications and wire chart. In no case shall wire size be less than #14.
- b) Wiring shall occupy the same trench and shall be installed along the same route as pressure supply or lateral lines wherever possible.
- c) Where more than one (1) wire is placed in a trench, the wiring shall be taped together at intervals of ten (10) feet.
- d) An expansion curl should be provided within three (3) feet of each wire connection and at each change in direction. Expansion curls shall be formed by wrapping at least five (5) turns of wire around a one-inch diameter pipe, then withdrawing the pipe.
- e) All splices shall be made with waterproof connectors.
- f) Field splices between the automatic controller and electrical control valves will not be allowed without prior approval of the City.



- g) Where additional stations remain on controller, up to two (2) additional wires may be required by the City. These wires shall be pulled to the farthest point in the project and coiled in a pull box for future use.

#### 11. Smart Controller Specification

- a) All irrigation controllers shall meet the Irrigation Association's protocol for Smart Controllers (SWAT protocol report, [www.irrigation.org](http://www.irrigation.org)).
- b) The performance standard for the Smart Water Irrigation Technologies (SWAT) protocol product report shall be 100% Adequacy and 0% Excess scores in order for the City to maximize water use efficiency and runoff reduction.
- c) The SWAT reported technology shall include an automated "scheduling engine" that changes irrigation schedules as weather changes without the need for people interactions.
- d) The SWAT reported technology shall have sufficient independent "field" tests and studies that validate the SWAT bench test protocol report.
- e) The SWAT reported technology shall be specifically tested for runoff reduction by an independent agency study that validates success in controlling non point-source water pollutants.
- f) The SWAT reported technology shall utilize real-time localized weather data that establishes daily ET for the varied City microclimates; ET data must match/conform to the State and Federal accepted Penman Montieth ET equation data, and may not be based on historical ET, single weather sensors, or individual non-government maintained weather collection devices that will need ongoing maintenance.
- g) Training/Product Service: Approved controllers/manufacturers shall include training (City staff, contracted landscapers) and be able to perform ongoing customer service in order to achieve long-term water conservation and runoff goals.

#### 12. Electric Control Valves

- a) The electric control valve shall be a normally closed, 24-volt, 60 cycle valve.
- b) The valve shall have a slow uniform closure to eliminate water hammer or chatter.
- c) All valves shall have a manual flow adjustment.
- d) Valve shall be pressure rated to 150 psi.

#### 13. Outdoor Automatic Controller Enclosure

- a) The outdoor controller enclosure shall be of appropriate size to adequately house specified controller, be made of weather resistant and collision resistant 12 gauge hot rolled steel, and finished with weather resistant medium green epoxy paint. Lockable hinged doors shall be equipped with full length stainless steel gasket hinges.

#### 14. Control Valve Box (only for in-ground valves)

- a) If in-ground valves are used, an irrigation valve box must be used. The valve box shall be large enough for easy access to the valves.

#### 15. Sprinkler Heads

##### a) General

- 1) All sprinkler heads shall be of the same size, type, and shall deliver the same rate of precipitation with the diameter (or radius) of throw, pressure, and discharge as shown on the plans.
- 2) Spray heads shall have a screw adjustment.
- 3) Riser nipples for all sprinkler heads shall be the same size as the riser opening in the sprinkler body. Riser nipples shall be PVC Schedule 80.
- 4) All sprinkler heads of the same type shall be of the same manufacturer.
- 5) All sprinkler heads shall have low precipitation rate and a spray angle less than 10 degrees.

##### a. Type "A" Pop-Up Lawn Spray

- I. Pop-up lawn spray heads shall have a minimum 6" pop-up nozzle piston with a stainless steel retraction spring. The sprinkler body shall be manufactured of a corrosion resistant material such as high strength, ultra-violet, and impact resistant plastic.
- II. Nozzles for 6" pop-up lawn spray sprinklers shall be of plastic construction and shall be adjustable.

##### b. Type "B" Pop-Up Shrub Spray

- I. Pop-up shrub spray heads shall have a minimum, 18" pop-up nozzle piston with a stainless steel retraction spring. The sprinkler body shall be manufactured of a corrosion resistant material such as high strength, ultra-violet, and impact resistant plastic.
- II. Nozzles for 18" pop-up spray heads should be used within low growing ground cover areas only, and shall have an adjustable radius.

##### c. Type "C" Bubbler

- I. Bubblers to be pressure compensating type, pre-set gallonage.

#### 16. Drip Systems

- a) Valves used in drip irrigation applications shall be designed to operate at minimal flow rates. Valves shall be Rain Bird PEB, or approved equal.
- b) Pre-set pressure regulators may be used and are to be sized to the manufacturer's recommended pressure setting for the emitters being used.
- c) Pressure regulators will be installed after the remote control valves.

- d) All drip components will have filtration after each remote control valve for mixed systems. Filters will be compatible with the brand of drip components being used and with fine enough mesh screen to filter all objectionable foreign material. Filters must be easily accessible for cleaning.
- e) The number and size of emitters will be as per manufacturer's recommendation for size of plants to be irrigated.
- f) All emitters will be pressure compensating.
- g) All emitter tubing will be staked to the ground.
- h) Separate drip systems will be used for plants of differing water requirements (hydrozones).
- i) All drip lateral lines shall be PVC Schedule 40 or Class 200 pipe.
- j) Multi-outlet emitters used for shrubs and ground covers will be placed in 6" round valve boxes.
- k) Bubblers used in drip irrigation applications shall be Rain Bird 1401 bubblers, or approved equal. Bubblers shall be non-adjustable. Flow rate will be determined based on needs.
- l) Bubblers will be underground only, in 3" perforated pipe

#### 17. Booster Pump

- a) Pump shall be equipped with tapped holes for pressure gauges on suction and discharge posts of pump.
- b) All fittings shall be brass.
- c) Suction line assembly shall be sized the same as the pump suction inlet.
- d) All pumps shall be equipped with a pump panel within 10 feet of pump location. Pump panel shall be housed in a lockable, weatherproof enclosure with the following components:
  - (1) HOA (Hand, Off, Automatic) switch. "Hand" position shall be spring loaded to return to "Off" position;
  - (2) 24 volt transformer; and
  - (3) Minimum run timer with settings from 0-10 minutes.
- e) Irrigation plan submittals shall include a complete detailed drawing of pump assembly and all electrical installation from electric meter through panel and to pump motor.
- f) All booster pumps and electric panels shall have a slump stone, or approved equal, block wall installed around them for anti-vandalism as well as aesthetic purposes.

#### 18. Swing Joints

- a) Swing joints shall be PVC only with Teflon tape.

## **D. IRRIGATION-INSTALLATION PROCEDURES**

### **1. Site Conditions**

- a) Exercise extreme care in excavating and working near existing utilities. Contractor shall be responsible for damages to utilities which are caused by its operations or neglect. Check existing utilities drawings for existing utility locations. Call out mark-out crews for each utility.
- b) Coordinate installation of sprinkler irrigation materials, including pipe, so there shall be no interference with utilities or other construction, or difficulty in planting trees, shrubs, and ground covers.
- c) Carefully check all grades to satisfy itself that it may safely proceed before starting work on the sprinkler irrigation system.

### **2. Water Supply**

- a) Sprinkler irrigation system shall be connected to water supply points of connection as indicated on the drawings.
- b) Contractor is responsible for minor changes by actual site conditions.

### **3. Trenching**

- a) Dig trenches straight and support pipe continuously on bottom of trench. Lay pipe to an even grade. Trenching excavation shall follow layout indicated on drawings and as noted.
- b) Provide a minimum of 18" of cover for all pressure supply lines 1½" and smaller.
- c) Provide a minimum cover of 12" for all non-pressure lines.
- d) Provide a minimum cover of 18" (or directly below mainline where possible) for all control wiring.

### **4. Backfilling**

- a) The trenches shall not be backfilled until all required tests are performed. Trenches shall be carefully backfilled with the excavated materials approved for backfilling, consisting of earth, loam, sandy clay, sand, or other approved materials, free from large clods of earth or stones. Backfill shall be compacted in landscaped areas to a dry density equal to adjacent undisturbed soil in planting areas. Backfill will conform to adjacent grades without dips, sunken areas, humps, or other surface irregularities.
- b) If settlement occurs, all subsequent adjustments in pipe, valves, sprinkler heads, lawn or plantings, or other construction necessary, the Contractor shall make all required adjustments.

### **5. Trenching and Backfill Under Paving**

- a) Generally, piping under existing walks may be accomplished by jacking or boring; but where any cutting or breaking of sidewalks and/or concrete is necessary, it shall be done and replaced by the Contractor as part of the contract cost.

- b) Provide for a minimum cover of 18" between the top of the sleeve and the bottom of the aggregate base for all pressure and non-pressure piping installed under asphaltic concrete paving. All sleeves under paving shall be Schedule 40 PVC. Sleeves shall be installed under all paving/concrete areas. Provide sleeve a minimum of 2 times the diameter of water pipe for irrigation pipe, 1" sleeve for wires.
- c) All control wire installed where mainline is not called for shall be installed in Schedule 40 PVC conduit.

#### 6. Automatic Controller

- a) Install as per manufacturer's instructions. Remote control valves shall be connected to controller in numerical sequence as shown on the drawings.
- b) Installer must be certified by the manufacturer to install their ETo Timers.

#### 7. High Voltage Wiring for Automatic Controller

- a) 120 volt power connection to the automatic controller.
- b) All electrical work shall conform to local codes, ordinances, and authorities having jurisdiction.
- c) Timers installed outdoors must be direct wired.

#### 8. Remote Control Valves

- a) Install as per manufacturer's instructions.
- b) Install where shown on drawings and details.
- c) Valves to be located in planters.

#### 9. Lawn Sprinkler Heads

- a) Install the sprinkler heads as designated on the drawings. Sprinkler heads to be installed shall be equivalent in all respect to those itemized on plans and in details.
- b) Spacing of heads shall not exceed the maximum indicated on the drawings. In no case shall the spacing exceed the maximum recommended spacing by the manufacturer for wind speeds at 3-5 miles per hour.
- c) Heads shall be placed around the perimeter of the turf areas directing spray into the turf area. Use full head sprays to water the middle of lawn areas. Irrigation efficiency shall be uniform and meet or exceed 85 percent.
- d) Sprinklers shall not be installed any closer than two inches from hard surface edges and lawn edges.
- e) The cap height of pop-up sprinklers, mounted in turf areas, should be at grade level, to avoid damage to lawn mowers. There should be no depression around sprinkler heads.
- f) All sprinkler heads shall be set perpendicular to finished grades unless otherwise designated on the plans.

- g) The Contractor shall flush and adjust all sprinkler heads for optimum performance and to prevent overspray onto walks, roadway, and buildings as much as possible.
- h) If it is determined that adjustments in the irrigation equipment are needed to provide proper and more adequate coverage, the Contractor shall make such adjustments prior to planting. Adjustments may also include changes in nozzle sizes and degrees of arc as required.

#### 10. Shrub Sprinkler Heads

- a) Install the sprinkler heads as designated on the drawings. Sprinkler heads to be installed shall be equivalent in all respect to those itemized on plans and in details.
- b) Spacing of heads shall not exceed the maximum indicated on the drawings. In no case shall the spacing exceed the maximum recommended spacing by the manufacturer for wind speeds at 3-5 miles per hour.
- c) Sprinklers shall face away from the house and hard surfaces to prevent water spray on house and hard surfaces.
- d) Sprinklers shall not be installed any closer than two inches from hard surface edges and lawn edges.
- e) The cap height of pop-up sprinklers shall be at finished grade plus height of mulch. There should be no depression around sprinkler heads.
- f) All sprinkler heads shall be set perpendicular to finished grades unless otherwise designated on the plans.
- g) The Contractor shall flush and adjust all sprinkler heads for optimum performance and to prevent overspray onto walks, roadway, and buildings.
- h) If it is determined that adjustments in the irrigation equipment are necessary to provide proper and more adequate coverage, the Contractor shall make such adjustments prior to planting. Adjustments may also include changes in nozzle sizes and degrees of arc as required.

#### 11. Drip Irrigation Systems

- a) Installation will be as per manufacturer's recommendation, unless otherwise required by the City.

#### 12. Existing Trees

- a) Where it is necessary to excavate adjacent to existing trees, the Contractor shall use all possible care to avoid injury to trees and tree roots. Excavation in areas where 2" and larger roots occur shall be done by hand. All roots 2" and larger in diameter, except directly in the path of pipe or conduit, shall be tunnelled under and shall be heavily wrapped with burlap to prevent scarring or excessive drying. Where a ditching machine is run close to trees having roots smaller than 2" in diameter, the wall of the trench adjacent to the trees shall be hand trimmed, making clean cuts. Trenches adjacent to trees should be filled within twenty-four (24) hours; and where this is not possible, the side of the trench adjacent to the tree shall be kept shaded with burlap or canvas.

### 13. Inspection Schedule for Irrigation

- a) Contractor shall be responsible for notifying the City 24 hours (one working day) in advance for all inspections.
- b) No work shall be backfilled until appropriate inspections and tests have been completed and approved by the City.
- c) No irrigation inspection will commence without "As-Built" drawings. In the event the Contractor calls for an inspection without "As-Built" drawings, without completing previously noted corrections, or without preparing the system for inspection, no inspection will be made. Work will be redone at the Contractor's expense.

### 14. Clean-Up

- a) Clean-up shall be made as each portion of work progresses. Refuse and excess dirt shall be removed from the site, all paving shall be broomed or washed down, and any damage sustained shall be repaired to original conditions.

## **E. LANDSCAPING MATERIALS**

### 1. Plant Materials

- a) Nomenclature - The scientific and common names of plants specified shall conform with the approved names given in "Sunset New Western Garden Book" published by Lane Publishing Co. (latest Edition).
- b) Labeling - Each group of plant materials delivered to the site shall be clearly labeled as to species, variety, and nursery source.
- c) Quality and Size
  - 1) Plants shall be in accordance with the California State Department of Agriculture's regulation for nursery inspections, rules and grading.
  - 2) All plants shall have a normal habit of growth and shall be sound, healthy, vigorous, and free of insect infestations, plant diseases, sun scalds, fresh abrasions of the bark, or other objectionable disfigurements.
  - 3) Tree trunks shall be sturdy and well "hardened off". All plants shall have normally well developed branch systems and vigorous and fibrous root systems which are not root or pot bound. In the event of disagreement as to condition of root system, the root condition of the plants furnished by the Contractor in containers will be determined by removal of earth from the roots of not less than two plants of each species or variety. Where container grown plants are from several sources, the roots of not less than two plants of each species or variety from each source will be inspected. In case the sample plants inspected are found to be defective, all plants will have to be replaced.
  - 4) The size of the plants will correspond with that normally expected for species and variety of commercially available nursery stock or as specified in the drawings. The minimum acceptable size of all plants, measured before pruning with the branch in

normal position, shall conform with the measurements, if any, specified on the drawings in the list of plants to be furnished.

- d) Rejection or Substitution - All plants not conforming to the requirements herein specified shall be considered defective and such plants, whether in place or not, shall be marked as rejected and immediately removed from the site of work and replaced with new plants. The plants shall be of the species, variety, size, and condition specified on the drawings.
- e) Pruning - At no time shall the tree or plant materials be pruned, trimmed, or topped prior to delivery. Main leaders shall not be cut or removed.
- f) Protection - All plants at all times shall be handled and stored so that they are adequately protected from drying out, wind burn, or any other injury.

## 2. Topsoil

- a) Topsoil shall consist of a natural, fertile, friable, sandy loam soil. The topsoil shall be free from subsoil, refuse, heavy roots, clay lumps, stones larger than 1" in size, noxious weeds, sticks, brush, liner material, and other deleterious substances.

## 3. Soil Amendments

- a) Soil amendments shall be a wood or bark product. The soil amendment shall not contain any bio-waste, noxious weeds, or weed seeds, pathogens, herbicides, or other chemicals that could inhibit plant growth.
- b) Soil amendments shall be nitrified to prevent soil nutrient problems.

## 4. Sod Pre-plant Fertilizers

- a) Approved pre-plant fertilizers: Ammonium Phosphate Sulfate (16-20-0), Triple 16 (16-16-16), Triple 15 (15-15-15).
- b) Apply at the manufacturer's and/or sod provider's recommendation.

## 5. Tree/Shrub Pre-plant Fertilizers

- a) Two-year time release fertilizer tablets.
- b) Minimum tablet size is 20 grams.
- c) Apply at the following rates: 1 per 1 gallon, 2 per 5 gallon, 5 per 15 gallon.

## 6. Tree Ties

- a) Tree ties shall be installed per City standard details. The tree shall be fastened to the stakes with a No. 12 BWG galvanized iron wire covered with a new rubber garden hose in a manner which permits tree movement and supports the tree. Two (2) double ties shall be used near the top of the main tree trunk and near the middle of the main tree trunk.



## 7. Tree Stakes

- a) Ten foot tree stakes shall be 2" diameter schedule 40 galvanized steel. Stakes shall be 10' long for all trees, and shall be driven into soil a minimum of 24" depth and a minimum distance of 12" from the tree trunk.

## 8. Trunk Guards/Root Barriers

- a) Trunk guards shall be installed at base of all trees planted in turf areas.

## 9. Mulch

- a) Mulch is of a material as designated on the plans. All planters shall have added mulch and no bare ground. Mulch shall be at least 2 inches deep. The soil mulch shall not contain any bio-waste, noxious weeds or weed seeds, pathogens, herbicides, or other chemicals that could inhibit plant growth. Mulch shall be free of dirt and any other foreign material.

## 10. Sod

- a) Sod shall be fully mature, well maintained, and a variety of either 100% Tall or Hybrid Fescue mixture, or Hybrid Bermuda. The sod shall be free of all other grasses or weeds, and shall be evenly cut with a conventional sod cutting machine. All material shall be from the same growing ground and delivered fresh to the job site.

## **F. LANDSCAPE - INSTALLATION PROCEDURES**

*Landscape installation shall not commence prior to April 1. Prior to start, Contractor shall request authorization to commence landscape work. Authorization shall be in the form of a "Notice to Proceed with Landscape Installation" issued by the City.*

### 1. Grading and Soil Preparation

- a) All rough grading, mounding, and irrigation shall be completed prior to soil preparation.
- b) Rototill entire landscape area (planters and sod) to a minimum depth of 6 inches to remove construction compaction.
- c) Rototill in 3 cubic yards of soil amendment per 1,000 square feet of landscape area.
- d) Planting areas shall be free of all weeds (plants not specified in planting areas), stones, stumps, roots or other debris 1" in diameter or larger for a minimum of 6 inch depth.
- e) Soil shall be graded to a smooth and even surface conforming to required finish grade. Finish grade adjacent to walks, paved areas, curbs, manholes, clean outs, valve boxes, and similar features shall be 1" below the surface in turf and 2" below the surface in ground cover/shrub areas. Grades between such features shall be carefully sustained and blended to eliminate abrupt changes.
- f) Soil shall be graded to prevent water from running towards the home or patio and to prevent standing water near the home.

- g) Planting areas to receive sod shall sustain a finish grade of such depth that installed sod shall be flush with finish surfaces (walks, paved areas, etc.).
- h) All planting areas shall have a finish grade conforming to approved plans and specifications after full settlement has occurred.

## 2. Ground Cover

- a) Ground cover plants shall be grown in flats. Flat grown plants (rooted cuttings) shall remain in those flats until transplanting. The soil of the flat shall contain sufficient moisture so that it will not fall apart when lifting the plants.
- b) To avoid drying out, plantings shall be immediately sprinkled after planting until the entire area is soaked to the full depth of each hole. Evenly spread approved mulching material in the area planted with ground cover to a depth of 2".

## 3. Planting of Trees Shrub and Vines

### a) Excavation for Planting

- 1) Excavation for planting shall include the stripping and staking of all acceptable topsoil encountered within the areas to be excavated for trenches, tree holes, plant pits, and planting beds.
- 2) All excavated holes shall have vertical sides with roughened surfaces. The holes shall be, in all cases, large enough to permit handling and roots or root balls.
- 3) Excess soil generated from the planting holes may be distributed on the site and amended as specified in general soil preparation.

### b) Planting

- 1) No more plants shall be distributed in the planting area on any day than can be planted and watered on that day.
- 2) Plants shall be removed in such a manner that the ball of earth surrounding the roots is not broken, and they shall be planted and watered as herein specified immediately after removal from the container.
- 3) Acceptable topsoil which was salvaged during the digging of planting holes may be used for backfill.
- 4) After the plant has been placed, backfill shall be added to the hole to cover approximately one-half the height of the root ball. At this stage, water shall be added to the top of the partly filled hole to thoroughly saturate the root ball and adjacent soil.
- 5) Use Best 20-10-5 two-year time release fertilizer tablets, or equal, at the following rates: 1 per 1 gallon, 2 per 5 gallon, 3 per 15 gallon.
- 6) After the water has completely drained, the remainder of the hole shall then be backfilled.

- 7) After backfilling, a temporary earthen basin shall be constructed around each plant. Each basin shall be a depth sufficient to hold at least 6" of water. Basins shall be extended 6 inches from the edge of the root ball of each individual plant.
- 8) Immediately after planting apply water to each tree and shrub.
- 9) Plant basins shall be irrigated at least twice over two days prior to removing the berm and applying mulch.

#### 4. Turf

- a) After preparation of soil in accordance with the section "Grading and Soil Preparation", the areas to be planted to lawn shall be rolled, raked, and floated to finish grade by any acceptable method with the finish grade being smooth and even, free of rocks and clods, and reasonably well firmed. Prior to planting, the surface of the area shall be sufficiently loose and viable to receive sod.
  - 1) Pre-fertilization – Just prior to the planting of turf, evenly broadcast appropriate fertilizer as specified by manufacturer's recommendation.
  - 2) Sod - Lay sod in one direction only, with close fitting butt joints. The ends of each strip shall be staggered to eliminate continuous joining.

#### 5. Compliance With The Certificate Of Completion

- a) The project applicant shall:
  - 1) Prior to backfilling, have a licensed landscape architect, certified irrigation auditor, or licensed landscape contractor conduct a preliminary field observation of the irrigation system;
  - 2) Upon project installation, have a licensed landscape architect or licensed landscape contractor conduct a final field observation for the approval of the certificate;
  - 3) Upon project installation, have a certified irrigation auditor conduct a landscape irrigation audit as required under Title 8, Chapter 50 of the Lancaster Municipal Code (Lancaster Water Efficient Landscape Ordinance) and described in these design standards.
  - 4) Submit the signed Certificate of Completion to the City for approval;
  - 5) Receive the Certificate of Occupancy or equivalent from the City; and
  - 6) Submit copies of the approved Certificate of Completion to the local retail water purveyor and the property owner or his/her designee.

### **G. LANDSCAPE - MAINTENANCE PROCEDURES**

#### **PART 1 - GENERAL**

##### **1.1 SCOPE OF WORK:**

- A. Furnish all labor, material, equipment and services required to maintain the landscape in an attractive condition as specified herein.
- B. Maintenance Period Duration: 180 days
- C. Related Work Specified In Other Sections:
  - 1. Landscape Planting
  - 2. Landscape Irrigation

1.2 QUALITY ASSURANCE:

- A. Work Force: Contractor's representative shall be experienced in landscape maintenance and shall have received an education in ornamental horticulture.

1.3 START OF MAINTENANCE PHASE:

- A. The Maintenance Period shall not start until all elements of construction, planting, and irrigation for the entire project are completed to the satisfaction of the Engineer or his Representative.
- B. The Maintenance Period shall not start until all Record Drawings have been completed by the Contractor, per these Specifications, and submitted to the City.
- C. The Contractor shall request an observation to begin the Maintenance Period after all planting and related work have been completed in accordance with the contract documents. If such criterion is met to the satisfaction of the Engineer, a field notification will be issued to the Contractor from the City, to establish the effective beginning date of the Maintenance Period. The City has the ultimate authority in setting the beginning date for the Maintenance Period.
- D. Maintenance period shall start upon receipt of this field notification from City denoting starting date.
- E. Provisions:

- 1. Reduction of Contract Retention

Upon receiving written notification from the City that the contract improvements have been accepted and that the landscape maintenance period can begin, the Contractor may file a written request to have the contract

compensation retention reduced from 10% to 5% for the duration of the landscape maintenance period. Any requests for reductions in the retention amount will be considered only if the City is assured that the Contractor is meeting all other contract requirements and that enough funds are secured to meet the requirements of the Public Contract Code.

## 2. Weekly Activity Report

The Contractor shall complete a weekly activity report and submit it to the Engineer for all maintenance activities during the entire landscape maintenance period for the duration listed in Section G, 1.1.B herein. The report shall be prepared on the Contractor's letterhead, addressed to the Engineer, and shall include the following information, as a minimum:

The dates of the week (Sunday to Saturday).

A brief description of activities and the specific dates of those activities.

The names of the individuals performing the activities.

Describe any improvements (irrigation and/or plant material) that required replacement.

A sample Weekly Activity Report is contained in the appendix of these Specifications to assist the Contractor in preparing his bid.

It is imperative that the Contractor prepare and submit the Weekly Activity Reports to the Engineer in a timely manner. Failure by the Contractor to submit all Weekly Activity Reports for a given pay period may result in the City withholding payment for that month's landscape maintenance.

### 1.4 MAINTENANCE PERIOD:

- A. The Contractor shall continuously maintain all areas involved in this contract during the progress of the work and during the Maintenance Period until final acceptance of the work by the City.
- B. Improper maintenance or possible poor condition of any plantings during or at the end of the scheduled maintenance period may cause postponement of the final completion date of the contract. Project maintenance shall be continued by the Contractor until all work is acceptable to the City.
- C. In order to execute the maintenance work, the Contractor shall furnish sufficient men and adequate equipment to perform the work during the Maintenance Period.
- D. Projects will not be segmented into separate Maintenance Phases unless specific work phases are indicated with the contract documents.

- E. Any period of time the Contractor fails to adequately maintain plantings, replace unsuitable plants, and perform weed control or other work, as determined by the City, that time will not be credited to the plant maintenance period.
- F. The Contractor's maintenance period shall be extended to the City's satisfaction should the provisions within these plans and specifications not be fulfilled to the City's satisfaction.

1.5 GUARANTEE AND REPLACEMENT:

- A. All plant material installed under the contract shall be guaranteed against any and all poor, inadequate or inferior materials and/or workmanship for a period of one year for trees, and ninety (90) days for shrubs and groundcovers. The entire irrigation system shall be guaranteed for materials and workmanship for a period of one year. These guarantees for both planting and irrigation shall begin from the date of final acceptance by City Council.

1.6 FINAL PROJECT SUBMITTALS:

- A. Prior to the date of final observation at the end of the Maintenance period, the Contractor shall deliver to the City the "Landscape and Irrigation Guarantee" as required. All other submittals as incorporated in the Irrigation and Planting Specifications shall also be completed prior to final acceptance.

PART 2 - PRODUCTS

2.1 MATERIALS:

- A. All materials used shall conform to either landscape specifications and other sections or shall otherwise be acceptable to the City. All materials shall conform to all codes applicable to herbicides and pesticides. The City shall be given a monthly record of all herbicides, insecticides and disease control chemicals used.

PART 3 - EXECUTION

3.1 MAINTENANCE:

- A. Maintenance shall be performed weekly and conform to the following standards:
  - 1. All areas shall be kept free of debris and all planted areas shall be weeded and cultivated. Edging, replacement of mulch, trimming, fertilization, spraying and pest control, as may be required, shall be included in the maintenance period.

2. The contractor shall be responsible for maintaining adequate protection of the entire project area. Damaged areas caused by erosion, tire damage, vandalism, graffiti, pests, animals or other damage as deemed by the City shall be repaired at the Contractor's expense.
3. All sidewalks, paved areas and other areas adjacent to the planting areas shall be cleaned of all debris, soil, or other materials at all times. Street gutters shall be included within the debris/siltation removal program.

### 3.2 IRRIGATION SYSTEMS

#### 1. General

- a. Contractor shall properly and completely maintain the irrigation system. A balanced water program shall be maintained to ensure proper growth until final acceptance of the work. Plants which cannot be watered efficiently with the irrigation system shall be watered by means of a hose.
- b. The maintenance period for the irrigation system will begin and run concurrent with the plant maintenance.
- c. Coordinate watering schedule with City of Lancaster Department of Public Works (661) 723-6227.

#### 2. General

- a. Once at three months, lateral lines shall be flushed out after removing the last sprinkler head or two at each end of the lateral. All heads are to be adjusted as necessary for unimpeded coverage.
- b. Weekly, Contractor shall adjust his watering schedule equal to the application rate each area is capable of receiving based on topography, soil type, plant material, season or weather climatic factors. The Engineer shall be given a key to controller and instructions on how to turn off the system in case of emergency.
- c. Monthly, all valve boxes shall be checked for soil invasion and cleaned out.
- d. Monthly, all screens in backflow preventer strainers shall be checked and cleaned as necessary.
- e. Contractor will be responsible for trimming and making necessary adjustments to riser height as growth rates indicate.
- f. All systems shall be personally observed during operation cycle at

least once per week to verify effectiveness of sprinkler operation.

- g. Hours of scheduled operation will be programmed to minimize disease occurrence of plant material and reduce possible nuisance from sprinkler operation to pedestrians or vehicles. This shall be checked weekly.

3. Maintenance

- a. Any repairs necessary to keep the system operating in its intended designated state shall be made by the Contractor in accordance with the original details or as directed by the Engineer.
- b. Contract shall furnish his own hoses, nozzles, sprays and controller keys as required.
- c. Any damages to system caused by Contractor's operations shall be repaired without charge. Repairs shall be made within one (1) watering period.
- d. Heads shall be of the exact type as previously installed. Substitution will be allowed only with prior written approval of the Engineer.

4. Watering Schedule Guidelines

Exact amount of moisture replacement shall be governed by current weather conditions, soil type, plant material type, and other environment and cultural factors.

3.3 TREE AND SHRUB CARE:

- A. Watering: Maintain a large enough water basin around plants in groundcover areas so that enough water can be applied to establish moisture through the major root zone. When hand-watering, use a water wand to break the water force. Use mulches to reduce evaporation and frequency of watering.

B. PRUNING:

1. Trees:

- a. Prune trees to select and develop permanent scaffold branches that are smaller in diameter than the trunk or branch to which they are attached which have vertical spacing of from 18" to 48" and radial orientation so as not to overlay one another; to eliminate diseased or damaged growth; to eliminate narrow v- shaped branch forks that lack strength; to reduce toppling and wind damage by thinning out crowns;



to maintain growth within space limitations; to maintain a natural appearance; to balance crown with roots.

- b. Under no circumstances will stripping of lower branches ("raising up") of young trees be permitted. Lower branches shall be retained in a "tipped-back" or pinched condition with as much foliage as possible to promote caliper trunk growth (tapered trunk). Lower branches can be cut flush with the trunk only after the tree is able to stand erect without staking or other support. Stubbing of major branches will be unacceptable.
- c. Evergreen trees shall be thinned out and shaped when necessary to prevent wind and storm damage. The primary pruning of deciduous trees shall be done during the dormant season. Damaged trees or those that constitute health or safety problems shall be pruned at any time of the year as required.

2. Shrubs:

- a. The objectives of shrub pruning are the same as for the trees. Shrubs shall not be clipped into balled or boxed forms unless such is required for the design.
- b. All pruning cuts shall be made to lateral branches or buds or flush with the trunk. "Stubbing" will not be permitted.

- C. Staking: Remove stakes as soon as they are no longer needed. Stakes are to be inspected to prevent girdling of trunks or branches and to prevent rubbing that causes bark wounds. Trees found damaged shall be replaced at Contractor's expense.
- D. Weed Control: On a weekly basis, keep basins and areas between plants free of weeds. Use recommended legally approved pre-emergent herbicides and removal by hand. Avoid frequent soil cultivation that destroys shallow roots. Use mulches to help prevent weed seed germination. Avoid post-emergent herbicides in groundcover areas, which may kill rooted cuttings.
- E. Insect Control: Maintain a reasonable control with approved materials.
- F. Disease and Pest Control: The Contractor shall be responsible to control all diseases and pests during the Maintenance Phase. All disease and pest control materials and methods shall be at the direction of a licensed disease and pest control operator. The City shall approve all methods and materials to be used for disease and pest control. Upon approval, the Contractor shall implement the control measures exercising extreme caution in using pesticides and taking all

steps necessary to ensure the safety of the public. The Contractor shall control gophers in the planted area by trapping only.

G. FERTILIZATION:

1. Fertilize all planting areas with the following materials. Very first application to be within 90 days from completion of planting. Repeat applications shall be every 120 days thereafter. Thoroughly irrigate after fertilizing.
  - a. Early Spring and Fall - 16-20-0 @ 6 lbs. per 1000 S.F. unless otherwise noted in agronomic recommendations.
  - b. All other times of the year – use sulfur coated urea @ 5 lbs. per 1000 S.F.
  - c. Other recommendations as indicated in agronomic soil analysis
2. Avoid applying fertilizer to the root ball and base of main stem; rather, spread evenly under plant to drip line.

- H. Replacement of Plants: Replace any dead, dying and missing plants immediately during the Maintenance Period with plants of a size, condition and variety matching the original plants at Contractor's expense. Notes shall be made on the Weekly Activity Reports on the status of dead, dying, and missing plant material.

3.4 GROUNDCOVER AND SOD:

- A. Weed Control: Control weeds, preferably with pre-emergent herbicides, but also with post-emergent systemic herbicides. Hoe weeds as little as possible since this may result in plant damage.
- B. Watering: Water enough that moisture penetrates throughout root zone and only as frequently as necessary to maintain healthy growth. Attention shall be given to plant material type, water requirements, solar orientation and topographical variances when setting watering times.
- C. Remove trash weekly, or more often as necessary.
- D. Edge groundcover to keep in bounds and trim top growth as necessary to achieve an overall even appearance.
- E. Replace dead and missing plants immediately at Contractor's expense.

- F. At a minimum, turf will be mowed once per week, and trash and debris will be picked up weekly. Contractor is to submit schedule of work, including fertilization schedules prior to beginning maintenance.
- G. At the end of the maintenance period, furnish and apply Best's 16-6-8 Turf Supreme per manufactures recommendation.

3.5 IRRIGATION SYSTEM:

- A. Contractor shall check all systems for proper operation. Lateral lines shall be flushed when debris is present in lines.
- B. Set and program automatic controllers for seasonal water requirements. Give City's representative a key to controllers and instructions on how to turn off system in case of emergency.
- C. Repair all damages to irrigation system at Contractor's expense. Repairs shall be made within one watering period.

3.6 FINAL ACCEPTANCE:

- A. Contractor shall be aware that the landscape shall be in a vigorous and thriving condition prior to final acceptance. All plant material which may still be under stress from the Construction Phase shall at this time be rejected and replaced by healthy and vigorous plant material at the direction of the City prior to final acceptance.
- B. All plant material shall have new growth trimmed neatly and in conformance to the specifications prior to final acceptance.

SPECIAL PROVISIONS FOR WATER SYSTEMS

SECTION W-1 SUBMITTALS

Shop drawings and samples of manufacturers' literature.

1. Submit in accordance with the Standard Specifications for Public Works Construction (SSPWC) (Subsection 2-5.3, Shop Drawings).
2. Submit materials required by Section W-53, "Corrosion Protection".

SECTION W-2 MATERIALS, MATERIAL SAMPLING AND TESTING

Refer to list of materials, usually Sheet 2 of the Plans. Use only those sections on the following pages which apply to the project.

Material Sampling and Testing shall be in accordance with Section 4, "Control of Materials" in SSPWC.

SECTION W-3 DUCTILE-IRON PIPE

Ductile-iron pipe to be furnished and installed under these Specification shall be of nominal size shown on the plans.

Ductile-iron pipe shall comply with ANSI/AWWA C150/A21.50 and C151/A21.51 and Subsection 207-9 of the SSPWC.

Ductile-iron pipe may be used for water working pressures (WWP) up to and including 350 psi and shall meet the following minimum thickness class and thickness:

<u>PIPE SIZE</u> <u>(DIAMETER)</u>	<u>WALL THICKNESS</u> <u>(INCHES)</u>	<u>THICKNESS</u> <u>CLASS</u>
4"	0.26"	51
6"	0.25"	50
8"	0.27"	50
10"	0.29"	50
12"	0.31"	50
14"	0.33"	50
16"	0.34"	50
18"	0.35"	50

Pipe joints shall be rubber gasket push-on type or mechanical joint. Joint design, rubber gaskets, lubricant, and bolts shall comply with ANSI/AWWA C111/A21.11.

The internal surface of ductile-iron pipe shall be lined with a uniform thickness of cement mortar and sealed with an asphaltic coating in accordance with ANSI/AWWA C104/A21.4.

The outside surfaces of ductile-iron pipe shall be coated with a minimum 1-mil thick asphaltic coating application in accordance with ANSI/AWWA C151/A21.51.

SECTION W-4 POLYETHELENE ENCASEMENT

Ductile-iron pipe and adjoining fittings shall be encased in a polyethylene encasement in accordance with the requirements of ANSI/AWWA C105/A21.5.

SECTION W-5 FIELD LOCK GASKETS

Where field lock gaskets are shown to be required on the plans, ductile-iron pipe and fittings shall be installed utilizing locking-type joint gaskets. The joint locking shall be accomplished by the use of stainless steel locking segments molded into the gasket. Locking joints that cannot be disassembled without destruction of the bell joint shall not be used. Locking gaskets shall be installed in accordance with the manufacturer's recommendation.

SECTION W-6 STEEL WATER PIPE - 4" DIAMETER AND LARGER

All pipe to be furnished and installed in accordance with this Standard shall consist of steel cylinders having a minimum thickness of 10 gauge (U.S. Standard), and having the following outside diameters to correspond with the nominal diameters shown on the plans:

<u>NOMINAL DIAMETER SHOW ON PLANS</u>	<u>OUTSIDE DIAMETER OF STEEL CYLINDERS</u>
4"	4-1/2"
6"	6-5/8"
8"	8-5/8"
10"	10-3/4"
12"	12-3/4"
14"	14"
16"	16"
18"	18"
20"	20"

(See Plans)

Joints, outlets and special sections shall be as shown on the Plans and as specified.

Except for Schedule 40, pipe manufacture shall be in accordance with the latest edition of any of the following reference specifications:

ANSI/ASTM A 139  
API 5 L  
API 5 LX

ANSI/AWWA C200

The minimum tensile strength shall be 45,000 psi.

Minimum yield strength of 30,000 psi.

Schedule 40 steel pipe: Manufacture shall be in accordance with the latest edition of any of the following reference specifications:

ANSI/AWWA C200  
ANSI/ASTM A 53  
ANSI/ASTM A 120  
ANSI/ASTM A 139

API 5L  
API 5LX

Dimensions and thicknesses shall comply with ANSI B 36.10.

Automatic resistance welded cylinders used for pipe sections shall be welded in accordance with the applicable specifications, and shall be hydrostatically tested to 400 psi or higher, if required by the applicable specifications, using a recording pressure gauge. Cylinders shall be individually marked for identification. Pressure record curves for each shall be similarly marked on the record chart and mailed to the Agency, or a certification as applicable under Section W-2, "Materials, Material Sampling and Testing", shall be furnished to the Agency.

#### SECTION W-7 YARD PLUMBING (CUSTOMER HOUSE LINE RECONNECTIONS)

Where an existing water meter is moved or a new water meter installed, the Contractor shall install the customer house line reconnection between the water meter and the existing yard plumbing. Customer house line reconnections shall be of the same material and not less than the same diameter as the existing customer house line. A compression coupling may be used to complete the connection to the existing house line.

Galvanized steel pipe shall comply with ANSI/ASTM A 120 or ANSI/ASTM A 53, Schedule 40. Fittings shall be galvanized malleable iron, banded, 150 psi water working pressure. Polyethylene pipe shall be SDR-7. PVC pipe shall be Schedule 80. Copper tubing shall be type "K" in accordance with Section W-27, "Copper Water Tubing and Pipe".

A lever-handle bronze customer ball valve, 200 psi water working pressure, shall be installed on the customer side of the meter in accordance with Standard Drawing W-5, and Section W-31, "Ball Valves".

#### SECTION W-8 CEMENT-MORTAR LINING AND COATING OF STEEL WATER MAIN AND STEEL FITTINGS

Cement-Mortar lining and coating shall be in accordance with the applicable sections of the AWWA Standard Specifications for Cement-Mortar Protective Lining and Coating for Steel Water Pipe, ANSI/AWWA C205, with the following exceptions:

Section 2.1.3, "Ribbon Mesh Reinforcement" shall not apply.

Section 3.1, "Cleaning Surfaces" of the referenced AWWA Standard shall not apply. The following shall apply: The interior and exterior surfaces of all pipe to which cement mortar will be applied shall be cleaned immediately before the mortar is applied. Loose scale, loose rust, and all accumulations of dirt or debris shall be removed to the satisfaction of the Agency Inspector. Oil and grease shall be

removed by a volatile solvent. The exterior and interior surfaces of the pipe shall be cleaned by grit blasting if, in the opinion of the Agency Inspector, it is deemed to be necessary.

Section 4.2, "Thickness" shall not apply. The following shall apply instead: The cement-mortar lining thickness shall be no less than the following: 5/16" for nominal pipe sizes 4" through 12", 3/8" for nominal pipe sizes 14" through 18" and 1/2" for nominal sizes over 20".

Section 5.3, "Thickness" shall apply. All cement-mortar coating shall be 3/4" in thickness (no minimum tolerances).

Section 5.4 "Equipment". All pipe shall be coated by machines as specified in Section 5.6 "Application of Mortar Coating" of ANSI/AWWA C205.

Section 5.5.2, "Spiral Hire" shall apply except that the wire reinforcing shall be held as near taut as permits uniform midcoating thickness embedment while the cement-mortar coating is being applied.

Section 6, "Handling" shall apply except that should any portion of lining or coating of the pipe become damaged, the pipe section will be rejected by the Agency.

When a curing compound is used to facilitate curing of the cement mortar-lining, the curing compound shall be applied to the cement mortar immediately after placing the mortar. The curing time of cement mortar so cured shall be 7 days. Curing compound used shall be in conformance with Section 2.5 of ANSI/AWWA C205.

The cement-mortar lining shall reach a minimum compressive strength of 3,000 psi at 28 days.

One test sample shall be taken per each 25 lengths of water main lined, but no less than 3 test samples per contract. The test samples shall be cured with and under curing conditions identical to the pipe lining from which they were taken.

Field lining will not be accepted as conforming to ANSI/AWWA C205.

#### SECTION W-9 FABRICATED FITTINGS

Fabricated fittings shall be of the material, size, joint type, and pressure class indicated on the plans. Bends, tees, crosses, reducers, and other fittings fabricated from special section of pipe in accordance with Subsection 207-10.2.7 of SSPWC, may be used instead of the below-described "standard" fittings unless otherwise prohibited on the plans.

#### SECTION W-10 FLANGED FITTINGS

Flanged fittings shall be either butt-welding type (with companion weld-on flanges), cast or ductile iron, malleable iron, steel or gray iron, conforming in all respects to ANSI B16.1 or B-16.2. Fittings to be installed in soil or concrete shall have the flanges flat or plain-faced.

#### SECTION W-11 CAST-IRON AND DUCTILE-IRON RUBBER-RING FITTINGS (PUSH-ON JOINTS)

Fittings for use with cast-iron or ductile-iron pipe shall comply with ANSI/AWWA C110/A21.10 and C111/A21.11. The rubber ring recess within the bell shall be free of all coating runs and sand pits. Fittings utilizing locking rubber ring joints which cannot be disassembled without destruction of the bell shall not be used.

#### SECTION W-12 CAST-IRON AND DUCTILE-IRON MECHANICAL-JOINT FITTINGS

Fittings shall conform to ANSI/AWWA C110/A21.10 and C111/A21.11.

#### SECTION W-13 WELDING FITTINGS

Fittings shall conform to ANSI B-16.9. Minimum thickness, shall be Schedule 40 unless otherwise indicated.

#### SECTION W-14 SCREWED FITTINGS

All cast-iron screwed fittings shall comply with MSI B-16.4.

#### SECTION W-15 WELDING FLANGES

Flanges shall be either forged steel flanges complying with ANSI B-16.5 and ANSI/ASTM A-181, or if shop made, cut from steel plate complying with ANSI/AWWA C207 and dimensioned in accordance with ANSI B-16.5. Flanges installed below ground shall be flat or plain-faced.

#### SECTION W-16 LININGS AND COATINGS FOR FITTINGS

Unless indicated otherwise on the plans, protective linings and coatings shall be applied to all fittings as follows:

Fittings fabricated from special sections of pipe in accordance with Subsection 207-10.2.7 of SSPWC shall be cement-mortar lined and cement-mortar coated as set forth in Section W-8, "Cement-Mortar Lining and Coating of Steel Water Main and Steel Fittings".

Welding fittings shall be cement-mortar lined and cement-mortar coated as set forth in Section W-8, "Cement-Mortar Lining and Coating of Steel Water Main and Steel Fittings".

Cast-iron fittings shall be cement-mortar lined and cement-mortar coated as set forth in the previous section for "Cement-Mortar Lining and Coating of Steel Water Main and Steel Fittings". The cement-mortar lining shall be given an asphaltic seal coat in accordance with ANSI/AWWA C104/A21.4. Cast iron and cast-steel fitting shall first be exterior coated with enamel or the manufacturer's other recommended coating and then cement mortar coated in accordance with Section W-8 for "Cement-Mortar Lining and Coating of Steel Water Main and Steel Fittings".

Ductile-iron fittings shall be cement-mortar lined in accordance with Section W-8, "Cement-Mortar Lining and Coating of Steel Water Main and Steel Fittings". Ductile-iron fittings shall only be coated with enamel, asphaltic material or the manufacturer's recommended coating.



Fittings lined and/or coated in the field will not be accepted as conforming to ANSI/AWWA C104/A21.4 or C205.

#### SECTION W-17 FLEXIBLE COUPLINGS, ADAPTORS, ETC.

Flexible couplings (including transition, reducing, etc.), and adaptors (including flange-to-bell, flange-coupling, etc.) shall be designed for not less than the same WWP as the water main to which they connect. All flanges, bells, sleeves, etc., shall be of the same pressure class and appropriate size and shape as the water main or fitting to which they connect. Sleeves shall have tapered ends to facilitate entry of the connecting pipe. Gaskets, rubber rings, and other minor items recommended by the manufacturer for proper assembly and operation of the couplings and adaptors shall be included. Bolts installed underground shall be protected against corrosion in accordance with Section W-53, "Corrosion Protection".

Unless indicated to the contrary on the plans, cast-iron couplings and adaptors shall be installed underground. Steel couplings and adaptors shall be installed above ground or in vaults or meter boxes.

Couplings and adaptors shall be protected with a coating system identical to adjoining pipe and fittings. If adjoining pipe and fittings are not protected, couplings and adaptors shall be coated in accordance with Section W-53, "Corrosion Protection", or protection shall be as indicated on the plans.

Couplings and adaptors manufactured by the following companies are acceptable: R.H. Baker & Company, Smith-Blair, Dresser, or approved equivalent.

#### SECTION W-18 FLANGE GASKETS

Gaskets for use with flat-faced flanges shall be full-faced or drop in. Gaskets for flanged joints shall be asbestos composition, 1/16" thick. Gaskets shall be furnished with bolt holes punched in them. Acceptable gaskets are:

Calplico Inc., or approved equivalent.

#### SECTION W-19 FLANGE BOLTS

Stud bolts and nuts may be used for all flanges instead of bolts and nuts.

Carbon steel bolts and bolt nuts shall comply with ANSI/ASTM A 307 entitled, "Specification for Carbon Steel Bolts and Studs, 6000 psi Tensile".

Carbon steel stud bolts shall comply with ANSI/ASTM A 193, Grade B7, entitled "Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service." Carbon steel stud nuts shall comply with ANSI/ASTM A 194, Class 2H, Oil Quenched, entitled "Specification for Carbon and Alloy Steel Nuts for Bolts for High-Pressure and High-Temperature Service".

Stainless steel bolts, studs, and nuts shall conform to AISI Specification, Type 304 18-8 with a yield point of 50,000 psi.

Bolt heads, nuts, and studs shall be American Standard heavy unfinished hexagonal dimensions. Threads shall be National Coarse Thread Series Class 2 fit. Threads above 1" in size shall be No. 8 pitch thread series.

Stud bolts and bolts shall be of a length so that after assembly the threaded end shall extend not less than one or two threads and not more than 3/4" beyond the nut.

Hollow bolts and nuts for standard fire hydrant risers installed appurtenant to the fire hydrant breakoff block connecting the Class 150 welding flange to the Class 125 threaded cast-iron flange will be furnished by the Agency at no cost to the Contractor.

Bolting shall be tightened with a torque wrench to within either the least upper limits allowed by the designers of the various components being bolted, or limits determined by the Contractor at his own expense which will safely withstand hydraulic test pressures and other forces.

Bolts or stud bolts shall not be used to pull flanges into alignment.

Underground bolting shall be protected against corrosion in accordance with Section W-53, "Corrosion Protection".

#### SECTION W-20 VALVES

Valves shall be of the size, joint type, and pressure class shown on the plans. Manufacturer's drawings of valves to be furnished shall be submitted to the Agency in accordance with Section 4-1, "Submittals", and shall show a schedule of parts and materials of which they are made and shall show sufficient detail to serve as a guide in the disassembly of the valves, in ordering parts, and for verifying that the valves comply with these Specifications.

Flanges on all valves shall be flat-faced.

#### SECTION W-21 GATE VALVES 2-1/2" AND SMALLER

Valves shall be bronze, double disc, bronze wheel handle, nonrising stem, full opening, and shall have internal pipe threads.

#### SECTION W-22 GATE VALVES 3" AND LARGER (DOUBLE DISC)

Valves shall comply with ANSI/AWWA C500 as modified herein and shall have iron or steel bodies, double discs, parallel seats, all bronze internal parts, epoxy resin interior lining, and counterclockwise opening.

Valves installed aboveground in well drained areas shall be OS and Y type, furnished with hand wheels.

Valves installed below grade shall have nonrising stems, O-ring stem seals, and 2" square operating nuts on vertical stems. The operating nuts shall be between 24" and 36" below finished grade and shall be protected by valve boxes and caps as provided in Section W-26, "Valve Boxes and Caps". The use of approved valve stem extensions is permitted.

Hydrostatic tests shall be performed after application of epoxy resin interior lining. Minimum hydrostatic test pressure for the required WWP shall be as follows:

<u>WWP (psi)</u>	<u>TEST PRESSURE (psi)</u>
175 and less	300
200	350
250	400
Greater than 250	1.5 x WWP

When flanged ends are furnished, the dimensions shall be ANSI Class 125 for WWP below 250 psi and ANSI Class 250 for WWP of 250 psi and above, unless otherwise designated.

Cast iron shall meet the requirements of with ANSI/ASTM A 126, Class B.

Discs, seat rings, and other internal parts, except the stems, shall be made of ANSI/ASTM B 62 bronze (85-5-5-5). The discs of valves designed for greater than 350 WWP may be bronze mounted iron.

Stems shall be made of "Ni-Vee", "NDZ" or other bronze of equal strength and corrosion resistance and shall have a minimum tensile strength of 60,000 psi; minimum yield strength of 30,000 psi; and not over 5% zinc or over 2% aluminum.

Valve ends may be one of the following as required by the plans: Flange ends shall be flat-faced for 200 psi working water pressure and shall conform in dimension and drilling to ANSI B16.1 for 125 pound cast iron flanges. Ring-tite ends shall have the bell shaped to receive a rubber gasket and spigot of Class 200 asbestos-cement pipe manufactured in accordance with ANSI/AWWA C400. Push-on type ends shall have the bell shaped to receive a push-on type joint rubber gasket and spigot of ductile-iron pipe manufactured in accordance with ANSI/AWWA C151/A21.51.

The exterior of below ground valves shall be coated twice with "Tarsel Bitumastic 505", fusion bond epoxy, or approved equivalent. The exterior of above ground valves shall be coated twice with red chromate, or approved equivalent primer.

After all irregularities, burrs, and grease have been removed and immediately after surfaces to be coated have been sand blasted to white metal, followed by air blowing to remove dust, a 10 mil or thicker coat of holiday free, high impact, nonshattering, high adhesion, tasteless, odorless, nontoxic epoxy resin shall be evenly applied on all interior waterway ferrous metal surfaces of the valves, according to the manufacturer's instructions and ANSI/AWWA C550. The epoxy resin shall be either "Scotchcote No. 302" or "Keysite 740", or an approved equivalent.

The following are acceptable when manufactured in accordance with these Specifications:

A.P. Smith, Darling, Eddy-Iowa, Kennedy, M & H Mueller, Pacific States, Rensselaer, American-Clow, Stockham, and Traverse City, or approved equivalents.

The following information will be shown on the list of materials:

Number, size, WWP, end types, whether flat or raised face if flanged, whether OS and Y or NRS, and a description of any special requirements such as bypass size and mounting, position indicator, gears and cases, tracks and rollers, and any deviations from the above standard requirements for flanges, operating nuts, hand wheels, etc.

A statement of the gate valve manufacture shall be delivered to the Agency for all valves.

#### SECTION W-23 GATE VALVES 4" THROUGH 12" (RESILIENT-SEATED)

Resilient-seated gate valves finished and installed under these Specifications shall comply with ANSI/AWWA C509 as augmented and modified herein and shall have iron or steel bodies, solid wedge, resilient seat, epoxy resin interior lining, nonrising stem, and counterclockwise opening.

Stem seal shall incorporate two O-rings. Thrust bearing washer shall be located at the thrust collar to reduce friction.

Valves shall be furnished with a 2" square, cast iron operating nut. The operating nut shall be between 24" and 36" below finished grade and shall be protected by a valve box and cap. The use of approved valve stem extension is permitted.

The wedge shall be cast iron or ductile iron, with guide bars or channels for controlled movement, and may have a bronze stem nut cast integrally. The wedge shall be ruggedly constructed for resistance to deflection. Rubber seats shall be bonded or mechanically attached to the wedge. The wedge shall be fully encapsulated. If bonded, the method used for rubber to metal shall be in accordance with ANSI/ASTM D 429. The peel strength shall not be less than 75 psi. If mechanically attached, devices and hardware used to retain the resilient seat shall be of a corrosion resistant material. The wedge shall be accurately machined to receive the resilient seat.

Cast iron shall meet the requirements of ANSI/ASTM A 126, Class B. Ductile iron shall meet the requirements of ANSI/ASTM D 395, Grade 65-45-12.

Rubber for the valve seat shall be new, natural or synthetic, and of a compound designed for water service application and shall be resistant to microbiological attack, copper poisoning, and ozone attack.

Rubber seat compounds shall have a maximum compressive set value at 18% when tested in accordance with ANSI/ASTM D 395, Method B for 22 hours at 158°F. Reclaimed rubber shall not be used.

Stems shall be made of "Ni-Vee", "NDZ" or other bronze of equal strength, corrosion resistant, and shall have a minimum tensile strength of 60,000 psi, minimum yield strength of 30,000 psi, and not over 5% zinc or over 2% aluminum.

Valve ends may be one of the following as required by the plans: Flange ends shall be flat-faced for 200 psi working water pressure and shall conform in dimensions and drilling to ANSI B16.1 for 125 pound cast-iron flanges. Ring-tite ends shall have the bell shaped to receive a rubber gasket and spigot of Class 200 asbestos-cement pipe manufactured in accordance with ANSI/AWWA C400. Push-on type ends shall have the bell shaped to receive a tyton joint rubber gasket and spigot of ductile-iron pipe manufactured in accordance with ANSI/AWWA Standard C151/A21.51.

The exterior of below ground valves shall be coated twice With "Tarsel Bitumastic 505" or approved equivalent. The exterior of aboveground valves shall be coated twice with red chromate, or equivalent primer.

After all irregularities, burrs, and grease have been removed and immediately after surfaces to be coated have been sand blasted to white metal, followed by air blowing to remove dust, a 10 mil or thicker coat of holiday free, high impact, nonshattering, high adhesion, tasteless, odorless, nontoxic epoxy resin shall be evenly applied on all interior waterway ferrous metal surfaces of the valves, according to the manufacturer's instructions and ANSI/AWWA C550. The epoxy resin shall be either "Scotchcote No. 302" or "Keysite 740", or an approved equivalent.

Each valve shall be tested hydrostatically after application of epoxy resin interior lining at the specific WWP of 200 psi and at the fully hydrostatic test pressure of 400 psi.

All valves are to be new and of the latest design.

The following named valves or approved equivalents are acceptable when manufactured in accordance with these Specifications:

Clow Corporation, Stockham, Kennedy Valve, Darling, American AVK, U.S. Pipe or approved equivalent.

The following information will be shown on the list of materials:

Number, size, WWP, end types, whether flat or raised face if flanged, whether OS and Y or NRS, and a description of any special requirements such as bypass size and mounting, position indicator, gears and cases, tracks and rollers, and any deviations from the above standard requirements for flanges, operating nuts, hand wheels, etc.

A Statement of the Resilient-Seated Gate Valve Manufacture shall be delivered to the Agency for all valves.

#### SECTION W-24 PLUG VALVES

Plug valves (sizes 6" through 12", except as noted) shall be of the tapered plug type, with a positive pressure sealant system providing for direct application of unseating pressure to the smaller end of the plug in all operating positions. Sealant groves shall be arranged so as to completely surround the ports with the plug in the closed position and to prevent bypassing of sealant pressure to the line fluid passages in any position of the plug. The valves shall be designed for a minimum WWP of 400 psi and 500 psi for Nordstrom, Figure Nos. 1489 and 1589, respectively, and factory tested under a hydrostatic pressure of at least 800 psi and 1000 psi for Nordstrom, Figure Nos. 1489 and 1589, respectively. Flanges shall conform to ANSI Class 250 standard dimensions for flat-faced flanges utilizing full-faced gaskets. Valve bodies shall be ANSI/ASTM A 126, Class B, gray iron, Venturi pattern with tapered plug and malleable iron, rolled plate or forged steel cover, flexible diaphragm under cover gasket and a bolted resilient fixed adjustment gland assembly with O-ring seals and utilizing gland deflection to allow plug unseating when pressurized sealant is injected. The tapered bearing area of the plug shall be coated with a dry film lubricant, polyflouride or approved equivalent, permanently bonded to the metal surface.

Valves shall be furnished for buried service with a worn gear operator, totally enclosed in a submersible ductile-iron gear housing with a 2" operating nut in lieu of handwheel. Also, valves shall be furnished with a lubricant pipe extension with a swivel fitting to assure that the lubricant pipe is always vertical.

After all irregularities, burrs, and grease have been removed and immediately after surfaces to be coated have been sand blasted to white metal, followed by air blowing to remove dust, a 10 mil or thicker coat of holiday free, high impact, nonshattering, high adhesion, tasteless, odorless, nontoxic epoxy resin shall be evenly applied on all interior waterway ferrous metal surfaces of the valves, according to the manufacturer's instructions and ANSI/AWWA C550. The epoxy resin shall be either "Scotchcote No. 302" or "Keysite 740", or an approved equivalent.

Plug valves shall be Nordstrom Valves, Inc., Figure No. 1489 for 400 WOG, size 8" and larger valves; and Figure No. 1589 for 500 WOG, size 6" and larger valves, or approved equivalent in accordance with these Specifications.

All valves are to be new and of latest design.

Where the WWP values indicate that Class 125 flanges may be used, plug valves, Nordstrom Valves, Inc., Figure No. 1169 for 200 WOG, sizes 10" and 12", or approved equivalent in accordance with these Specifications, shall be used.

The valves shall be designed for a minimum WWP of 200 psi and factory tested under hydrostatic pressure of at least 400 psi. Flanges shall conform to ANSI Class 125 (cast iron) standard dimensions for flat-faced flanges utilizing full-faced gaskets. All the previously stated portions of the Specifications relating to plug valves are applicable, except where there are specific references relating to Figure Nos. 1489 and 1589.

Each of the above-mentioned valves require two valve boxes and extension sleeves and covers to protect the operating nut and lubricant pipe in accordance with Section W-26, "Valve Boxes and Caps".

Plug valves (4" size only) shall be designed for a minimum WWP of 500 psi and factory tested under a hydrostatic pressure of at least 1000 psi. Flanges shall conform to ANSI Class 250 standard dimensions for flat-faced flanges utilizing full-faced gaskets. Valve bodies shall be ANSI/ASTM A 126, Class B, gray iron, regular pattern with tapered plug and malleable iron, rolled plate or forged steel cover, flexible diaphragm under cover gasket and a screwed, fixed adjustment gland assembly with O-ring seals and utilizing gland deflection to allow plug unseating when pressurized sealant is injected. The tapered bearing area of the plug shall be coated with a dry film lubricant, polyfloride, or approved equivalent, permanently bonded to the metal surface.

Valves shall be furnished with a high head extension for buried service. The operating extension consists of a length of 1-1/2" standard steel pipe with 2" square operating head welded to the top and a 2" square wrench socket welded to the bottom.

The sealant extension consists of a special sealant fitting and check valve assembly, a suitable length of pipe, and reducers and bushings when required; enclosed within the operating extension and threaded into the valve itself.

After all irregularities, burrs, and grease have been removed and immediately after surfaces to be coated have been sand blasted to white metal, followed by air blowing to remove dust, a 10 mil or thicker coat of holiday free, high impact, nonshattering, high adhesion, tasteless, odorless, nontoxic epoxy resin shall be evenly applied on all interior waterway ferrous metal surfaces of the valves, according to the manufacturer's instructions and ANSI/AWWA C550. The epoxy resin shall be either "Scotchcote No. 302" or "Keysite 740", or an approved equivalent.

Plug valve shall be Nordstrom Valves, Inc., Figure No. 525 or approved equivalent in accordance with these Specifications.

All valves are to be new and of the latest design.

This valve requires only one valve box with extension sleeve and cover.

The following information will be shown on the list of materials for all valves:

Number, size, WWP, end types, whether flat or raised face if flanged, whether OS and Y or NRS, and a description of any special requirements such as bypass size and mounting, position indicator, gears and cases, trucks and rollers, and any deviations from the above standard requirements for flanges, operating nuts, hand wheels, etc.

A statement of the plug valve manufacture shall be delivered to the Agency for all valves.

#### SECTION W-25 FIRE HYDRANT VALVES (HEADS)

All 6" x 4" x 2-1/2" fire hydrant valves (heads) shall be all bronze and shall have a 6" iron pipe standard (IPS) screwed inlet. The hydrant outlets shall have individual valves for the control of each outlet. All 4" and 2-1/2" outlets shall have National Standard fire house threads and shall have plastic caps with attached steel chain. A 2" IPS threaded bronze-plugged additional outlet shall be provided in the top of each head. The following 6" x 4" x 2-1/2" fire hydrant valves (heads) are acceptable:

James Jones Company Series J-3708, Long Beach Iron Works B-110 or approved equivalent.

#### SECTION W-26 VALVE BOXES AND CAPS

Unless otherwise indicated on the Plans or Standard Drawings a valve box shall be provided for every main line, flushout, and fire hydrant valve installed below ground. Valve boxes as shown on Standard Drawing W-15 shall be galvanized split-telescoping steel cylinders with sharply flared top shoulder.

Valve boxes shall be centered on the valve operating stem and shall be of sufficient and continuous length to prevent adjoining backfill material from interfering with valve operation.

Valve boxes shall be carefully installed to prevent entry of solid material. The interior of valve boxes shall be cleaned out of all material to the level 2" below the bottoms of exposed portion of the valve stem. Valve boxes shall be kept covered at all times except as necessary and care shall be taken to prevent entry of solid materials into the valve box when uncovered.

The following valve boxes are acceptable:

Parkson, Inc., Valve Box Sleeve; Western Water Works Supply Company, Valve Box, or approved equivalent.

Each valve box shall be fitted with a valve box cap. Valve box caps shall be cast iron loosely fitted inside the top of the valve box and marked "Water" on top, as shown on Standard Drawing W-15.

The tops of valve boxes in paved areas or areas soon to be paved shall be adjusted to snugly retain the cap, the top of which shall be flush with finish grade.

The tops of valve boxes and caps in untraveled areas shall be adjusted to ground surface. If the traveled surface is ungraded or graded earth, the valve box cap shall be set 6" below ground surface and covered with a plug of asphaltic concrete until such time that grade is restored.

The following valve box caps are acceptable:

Rich Manufacturing Company, Figure 930; Reliable Iron Foundry; Parkhurst No. 6-ID-4; or approved equivalent.

#### SECTION W-27 COPPER WATER TUBING AND PIPE

Copper water tubing shall be seamless type K, soft annealed, unless otherwise stated on the Plans and made in accordance with ANSI/ASTM B 88. Copper tubing of 1-1/2" and 2" shall be delivered in approximately 20' straight lengths; no coiled tubing shall be used for 1-1/2" or 2" sizes. Regular or standard size copper pipe shall be seamless and made in accordance with ANSI/ASTM B 42 and B 251.

#### SECTION W-28 COPPER TUBING PIPE FITTINGS

The following applicable type fittings may be used on copper tubing and copper pipe:

Brass fittings for flared copper tubing which shall comply with ANSI B16.26, bronze or brass fittings with compression-type joints which shall have all bronze metal parts, body threaded and flared, with gasket retainer and rubber gasket. (Compression-type fittings may be used only where approved by the Agency and where Joint separation due to high water pressure is positively prevented, independent of pipe to soil friction.)

Wrought copper solder fittings made in accordance with ANSI B16.22 and ANSI/ASTM B 75, or cast-bronze solder fittings made in accordance with ANSI B16.88.

Threaded bronze fittings made in accordance with ANSI B16.15 and B16.17.

Red brass Schedule 40 pipe shall comply with ANSI/ASTM B43.

#### SECTION W-29 CORPORATION STOPS

Stops shall be all bronze, round, with inlet for IPS thread for steel pipe; and outlet for copper service pipe. For use with service connection clamps, stops shall have the inlet threaded to match the clamp threads. The following are acceptable:



Ford F-700, James Jones Company No. J-1505, Mueller Company No. H15025, Hays Manufacturing Company No. 5204, or approved equivalent.

### SECTION W-30 ANGLE METER STOPS

All angle meter stops shall be bronze, round, equipped with padlock wings, inlet for flared copper water service pipe, and outlet for meter coupling or meter flange. Valves shall be hydro-tested to 300 psi.

The following 1" angle meter stops are acceptable: James Jones Company, No. J-1525; Ford KV 23-4444, or approved equivalent.

For 1-1/2" and 2" service, the following are acceptable: James Jones J-1525F, Ford FV 23-6664 (1-1/2"), Ford FV 23-7774 (2"); or approved equivalent.

### SECTION W-31 BALL VALVES

One inch ball valves shown Installed on the customer's side of the meter shall be Ford Meter Box Series B-13-444, complete with HH34 high-lever handle, or approved equivalent.

One and one-half Inch ball valves shall be Ford Meter Box Series BF-13-666, complete, with HH67 high-lever handle, or approved equivalent.

Two-inch ball valves shall be Ford Meter Box Series BF-13-777, complete, with HH67 high-lever handle, or approved equivalent.

### SECTION W-32 SERVICE CONNECTION CLAMPS

Service Connection Clamps for use on asbestos-cement pipe shall be all bronze.

On steel pipe (in lieu of weld-on couplings), where permitted by the plans or by the Engineer, ductile or malleable-iron service clamps (with flat steel balls) shall be used.

Service Connection Clamps for use on ductile-iron or cast-iron pipe shall be double strap ductile or malleable-iron. Installation on ductile-iron, cast-iron and steel pipe shall be followed by application of protective coating on both pipe and clamp, in accordance with Section W-53, "Corrosion Protection". Clamps shall have flattened strap or straps and molded neoprene gaskets. When tapping ductile-iron, cast-iron or steel pipe, the threaded outlet for the clamp or weld-on threaded outlet shall be one size larger than the thread, or the corporation stop and a nylon dielectric bushing shall be installed to protect the copper service pipe from electrical grounding with the water pipe.

The following double-strap service clamps are acceptable: (bronze) James Jones Company J979, Mueller H-16102 to H16116, Smith-Blair Type 323, or approved equivalent; (Iron) Rockwell No. 313, Mueller H-10496 to H10516, or approved equivalent.

### SECTION W-33 INSULATING BUSHINGS

Insulating bushings for use on service connection clamps or weld on couplings shall be a nylon dielectric bushing, with a heavy hexagon head type I.P.S.

Insulating bushings shall be as manufactured by Corrosion Control Products Co.; Mayco, or approved equivalent.

#### SECTION W-34 WATER METER BOXES

Water meter boxes shall be concrete, rectangular in shape with rounded corners and beveled edges throughout with a slot provided in the bottom of each end of the box for the water service pipe and the house lateral. Boxes shall have a reinforced concrete, cast iron or steel cover with an insert hinged cast-iron or steel reading lid.

Inside dimensions of water meter boxes shall be as indicated on the Plans or Standard Drawings. Meter boxes shall be manufactured by the following:

Brooks Products, Inc. No. 38H for 3/4" x 1" and 1" water meters and No. 66H for 1-1/2" and 2" water meters; Fraser Cement Products Company, or approved equivalent.

#### SECTION W-35 CONCRETE, CEMENT MORTAR, AND CEMENT GROUT

Concrete, cement mortar, and cement grout shall comply with Section 201 of SSPWC. Cement mortar shall be Class "E" as described in Subsection 201-5 of SSPWC. Cement grout shall be Class "A" as described in said Subsection 201-5.

#### SECTION W-36 PAINT

The District will provide, at no cost to the Contractor, sufficient "Forest Green" and "Fire Hydrant Medium Yellow" paint for the finish coatings for above ground appurtenances where required. Coatings are to be applied by the Contractor in accordance with Section W-63, "Painting of Exposed Metal Surfaces".

Paint furnished by the Contractor shall be delivered to the job in sealed containers bearing labels identifying the manufacturer and the brand, or other approved means of identifications of type and quality.

Stored paints and liquids shall be kept covered and precautions taken for prevention of fire. Empty or open paint containers, soiled or oily rags, shall be removed from the site at the end of each day's work.

Paint shall be subject to the approval of the Agency.

Compliance with South Coast Air Quality Management District and the United States Environmental Protection Agency Rules and Regulations is the responsibility of the Contractor.

#### SECTION W-37 WATER METERS

LOS ANGELES COUNTY WATERWORKS DISTRICTS  
SPECIFICATIONS FOR COLD WATER METERS

### 3/4" TO 2" DISPLACEMENT TYPE

Water meters shall be the warm-climate type as indicated on the plans or specified. Main cases and register housings shall be bronze.

Meters shall be guaranteed to operate under a WWP of 149 psi without leakage or damage to any part. Meters shall be guaranteed against defects in materials and workmanship for a period of one year after installation. Defective parts shall be replaced without charge upon return of such defective parts to the manufacturer.

Water meters shall comply with ANSI/AWWA C700 entitled, "Specification for Cold Water Meters, a Displacement Type". Water meters shall be equipped with a straight reading register of not less than six indicating digits, reading from left to right in cubic feet. The four left hand number wheels shall have black numerals on white wheels. The remaining two number wheels shall have white numerals on black wheels. The register shall also have a round dial (test hand dial) divided into not less than ten equal parts of one or ten cubic feet, depending on meter size. Meters shall read from the inlet side.

The register and intermediate gear train shall be mounted in a sealed container and driven by magnets. The register shall not be directly driven and shall not use a stuffing box.

Each meter shall be tested by the vendor. Vendor shall supply certification of tested meters by serial number, upon demand of the Agency.

Meter and parts shall be available locally and the manufacturer's representative shall operate a parts and service department in Southern California.

Meters 3/4", 3/4-1/2" x 1", or 1" shall be supplied with one bronze meter coupling tail piece and two rubber gaskets. NOTE: Paper, leather or plastic gaskets are not acceptable.

All 1-1/2" and 2" meters shall have flange connections on the main case, supplied with two bronze companion flanges and all necessary bolts, nuts and rubber gaskets.

## LOS ANGELES COUNTY WATERWORKS DISTRICTS

### List of Acceptable Cold Water Displacement Type Meter Manufacturers

1. Vendor - Sensus Technologies, Inc.  
1632 Sierra Madre Circle  
Placentia, California 92670  
Phone: 714) 666-0200

Meter - Model: 3/4" x 1", 1", 1-1/2" and 2" SR straight  
reading in cubic feet, all bronze, magnetic driven

2. Vendor - Neptune Meter Company  
11725 Willake Street  
Santa Fe Springs, California 90670  
Phone: (213) 948-4428

Meter - 3/4 x 1", 1", 1-1/2", and 2" Trident - 10, split case  
straight reading in cubic feet, all bronze, magnetic driven

### SECTION W-38 TAPPING TEES AND TAPPING SLEEVES AND CROSSES

Design of tapping tees and crosses has to provide all features necessary for tapping a water main under pressure without loss of water or interruption of flow in the main.

Tapping tees and crosses shall be of sufficient length to provide support and reinforcement to the pipe being tapped to withstand existing and proposed line pressures and prevent leakage.

The following types of tapping sleeves or crosses are acceptable:

1. Steel Pipe: A three piece, fabricated welding sleeve
2. Cast-Iron Pipe - Mechanical Joint
3. Asbestos-Cement Pipe - Mechanical Joint

Three-piece Fabricated Welding Sleeve: Steel used for the welding sleeve shall have the same classification and properties as pipe to be tapped. The outlet nozzle part and the two sleeve parts shall be uncoated and unlined. Sleeve parts shall form a complete encasement of the tapped portion of the water main. Sleeve parts shall be an upper and lower half with each half having a semi-circular cutout for the outlet nozzle.

Mechanical Joint Type: Designated with totally confined end and side gaskets. Gaskets shall prevent leakage under pressure conditions for which water main is designed.

Tapping sleeves manufactured by the following companies, or equivalent design, are acceptable:  
Mueller Company, American-Darling Valve and Manufacturing Company, Ludlow Rensselaer Valve

Manufacturing Company, Inc., Rich Valve Company, Eddy-Iowa Division of Clow, Inc., A.P. Smith Company.

#### SECTION W-39 FIELD QUALITY CONTROL

Test all water mains, fire hydrants, and service connections, from valve to valve, up to the water meter for pressure and leakage at 200 psi for 4 hours in accordance with the Plans.

Test plumbing on private property, where necessary, in accordance with Building and Safety permits and regulations.

#### SECTION W-40 GENERAL CONSTRUCTION REQUIREMENTS

Install water mains and appurtenances per SSPWC, Part 3 - Construction Methods.

Make all interconnections of new water mains to the existing water system under observation of the Agency Inspector.

The Agency Personnel will operate all gate valves on the existing system upon 2 days advance notice by the Contractor.

Remove pavement in accordance with provisions of excavation or encroachment permit applicable to these Specifications, or Subsection 300-1.3 of SSPWC if no permit is required.

#### SECTION W-41 TRENCH EXCAVATION

Work shall not begin until sufficient labor, equipment, and materials are on hand to continue the work without delay.

Use of trench digging machinery will be permitted except in places where machine operation will cause damage to trees, buildings, or existing structures above or below ground, in which case hand methods shall be employed.

The trenches and other excavations shall be kept entirely free of water while pipe is being laid and until concrete poured has had its final set.

Length of trench opening in public roads subject to road excavation permit shall be limited by the excavation permit. Length of trench in all other rights-of-way shall only be limited by the provisions of necessary access by the residents of the area to their homes and properties.

#### SECTION W-42 TRENCH WIDTH

Width will vary with and depend upon the pipe diameter, depth of the trench and the nature of the excavated materials encountered, but in any case shall be ample to provide at least 6" of select backfill material to be subsequently placed on each side of the pipe and appurtenances and to permit the pipe to be laid and jointed properly and for the backfill materials to be placed and compacted properly.

Minimum width of unsheeted trench shall be 18" for water mains less than 8" in diameter. For mains 8" in diameter or larger, width shall be at least 1' greater than the nominal diameter of the pipe. The maximum clear width of the trench shall be not more than 2-1/2' greater than the pipe diameter or the pipe at any fitting, valve or structure on the water main unless the Contractor provides additional bedding.

#### SECTION W-43 TRENCH DEPTH

Except where necessary to slope water main upward to join an existing water main, trench depth shall allow for a minimum cover of 42" for 10" diameter and smaller pipe. The minimum cover shall be 48" for 12" and larger pipe.

The above-mentioned minimum covers shall be increased, if necessary, to meet the cover requirements of the applicable excavation permit and as required on the Plans.

Depth shall also be such that at least a 6" thickness of "select" material as described in Section W-60, "Bedding", either already exists in the trench bottom as native material or subsequently has been deposited in the trench by the Contractor, shall underlie the pipe. Where select material naturally exists in the trench bottom, the Contractor need not overexcavate the 6" that would have been necessary had rock, caliche, etc., existed. All such overexcavation shall not be the basis of extra work to the contract.

Trench bottom, where existing at less than 90% relative compaction, shall be densified by the Contractor to at least said 90% for a depth of at least 12".

#### SECTION W-44 PIPE INSTALLATION

Handling of materials, laying, blocking, and jointing of pipe shall be in accordance with ANSI/AWWA C603 and C600, where applicable. Pipe and accessories shall be handled with care to avoid damage. All damaged pipe shall be replaced at Contractor's expense. The interior of all pipe and accessories shall be kept free from dirt and foreign matter at all times.

Where the material naturally occurring in the trench bottom does not conform to the requirements of "select" material as defined in Section W-60, "Bedding", the Contractor shall overexcavate as provided in Section W-43, "Trench Depth" and shall deposit bedding meeting the requirements of said "select" material to a minimum thickness (after compaction) of 6" below the pipe. The Contractor shall compact said deposited bedding to 90% relative compaction.

Depressions in the trench bottom shall be due to accommodate valves, fittings, pipe bells, etc., in order that the pipe barrel uniformly rests on the trench bottom.

#### SECTION W-45 PIPE CUTTING

Cutting shall be done in a neat and workmanlike manner, without damage to the pipe and pipe lining and so as to leave a smooth end.

#### SECTION W-46 JOINTING: CAST-IRON, DUCTILE-IRON PIPE

Pipe shall be jointed as indicated on the plans or, if not indicated, shall be jointed with rubber-ring joints (push-on joints) as allowed by these Specifications. Where indicated and required by the Plans, joints shall use locking-type gaskets as described in the section for field lock gaskets.

Lead caulking shall not be used unless approved in writing by the Agency. Joints shall be assembled in accordance with Section 9b and 9c of ANSI/AWWA C600. Joints not properly made shall be re-made until acceptable to the Agency.

#### SECTION W-47 JOINTING: ASBESTOS-CEMENT PIPE

Asbestos-cement pipe shall be jointed as indicated on the plans or, if not so indicated, jointed with either cast-iron rubber-ring fittings (push-on joints) as allowed by these Specifications, or asbestos-cement sleeves as recommended by the pipe manufacturer. Joints not properly made shall be re-made until acceptable to the Agency. No caulked joints shall be installed on asbestos-cement pipe. Maximum deflection of joints shall be that recommended by the pipe manufacturer.

#### SECTION W-48 WELDING

All shop and field welding, whether manual or by machine, shall be as specified herein. Welds to fabricated pipe shall be made in accordance with the requirements of the applicable reference specifications under which the pipe is fabricated and/or as amended herein.

Welds specified herein, or shown on the plans, shall conform to the contours shown on these Plans or indicated by standard welding symbols on such Plans. Welds shall develop a tensile strength equal to that of adjoining parent metal.

Finished weld bead shall be centered in the seam, and the finished joints shall be reasonably smooth and free from depressions, cut edges, burrs, irregularities, and valleys. Each deposited layer of welded material shall be thoroughly wire brushed, and all slag, scale, and other loose material shall be removed before any additional weld metal is applied. Fillet welds shall have full penetration into the corner of the fillet and shall be obtained with a minimum cutting back of the edge of the outside sheet. Fillet welds shall be of the size specified herein or shown on the plans, and in any case, shall have a thickness of not less than that of the thinnest member to be joined.

Welds considered by the Agency Inspector to be deficient in quality, or made contrary to any mandatory provisions of these Specifications, shall be removed by chipping or cutting and re-made.

Weld metal shall be removed throughout its depth to expose clean base metal, but in no case shall the chipping or cutting extend into the base metal beyond the depth of weld penetration.

Caulking of welds will not be permitted. Tack welds shall be removed if required by the Agency Inspector.

Weld test specimens taken from materials fabricated for the work of these Specifications shall be taken in accordance with the respective reference Specifications under which the Particular item is being fabricated and as required by Section 4-2, "Materials, Material Sampling and Testing". Said specimens

shall be furnished to the Agency Engineer or his Inspector to enable the Engineer to ascertain that welds of the proper quality are being made. The furnishing of specimens in insufficient time so as to cause delay in the fabrication of materials shall not be cause for a time extension nor extra cost item to the contract.

The Agency Engineer shall have the right to request and witness the making of weld test specimens by a welder when, in the opinion of the Agency Engineer, a satisfactory weld is not being made. Specimens shall be furnished by the Contractor and a weld of the type in question shall be made. The weld specimen shall then be submitted to a testing laboratory approved by the Engineer and subject to the appropriate test to determine the character of the quality in question. The expense of said test shall not be borne by the Contractor. If more than one test is to be performed, additional specimens shall be furnished by the Contractor as required. The requirements of this provision shall not be cause for a time extension nor extra cost item to the contract.

#### SECTION W-49 QUALIFICATIONS FOR WELDING OPERATORS

Manual welders shall be qualified in accordance with the latest revision of Section IX of the ASME Boiler Construction Code entitled, "Welding Qualifications" or under the Standard Qualification Procedure of the American Welding Society.

All welding operators shall be qualified under paragraph U-69 of ASME Code for Unfired Pressure Vessels, or Paragraph 4.451 of API-ASME Code for Unfired Pressure Vessels for Petroleum Liquids and Gases, or under the Standard Qualification Procedure of the American Welding Society.

#### SECTION W-50 WELDING FILLER MATERIAL

Electrodes for manual welding shall conform to the American Welding Society Standards. All welding electrodes shall be subject to the approval of the Agency Engineer.

#### SECTION W-51 WELDING EQUIPMENT

Contractor's equipment for welding and flame cutting shall be designed and manufactured in a condition to permit qualified welding operators to follow the procedure and obtain the results described in these Specifications.

#### SECTION W-52 THRUST DEVICES

A reaction or thrust backing of plain concrete or reinforced concrete shall be installed at all fittings in accordance with Standard Drawing W-21 (except blind flanged outlets on water main), at all dead ends, at all valves (except fire hydrant valves, and any valve solidly connected to another valve in the line of pipe where the other valve is already furnished with a reaction), and as shown on the Plans.

The backings shall be designed by the Contractor in accordance with conditions encountered in the trench to prevent movement of valves, fittings, or dead-end plugs, caps or adjacent pipe sections when subjected to the hydrostatic test pressure.

The repair or replacement of pipe and appurtenances damaged during such test due to insufficient backfill or thrust devices shall be at the Contractor's expense.



Thrust backing shall be formed so that the concrete clears all bolts and is only in contact with the bearing surface of the valve, plug, or fitting to be restrained.

Thrust blocks for caps or plugs shall be poured separately from thrust blocks for adjacent fittings, and shall be formed, using 45 pound tar paper so that they can be removed in the future without disturbing the adjacent block.

### SECTION W-53 CORROSION PROTECTION

All materials furnished and installed under these Specifications shall be protected, insofar as is reasonable, from corrosion. All portions of major items of work shall be lined and coated as specified herein and as shown on the Plans or Standard Drawings. Adjoining appurtenances shall be similarly lined and coated unless otherwise specified.

Items which are used underground and it is not possible to replace or repair the coating specified for that item, including carbon steel bolts and nuts, shall be given a heavy field coat of hot asphalt enamel and wrapped with an electrical insulating tape or given a coating acceptable to the Agency. Prior to any such placing or repair, a description of the materials to be used and method of using such shall be submitted to the Agency for their approval.

Carbon steel flange bolts, straight flexible coupling bolts, flange coupling adapter bolts, and similar carbon steel bolts, studs, washers, and nuts used underground shall be coated as follows when installed adjacent to the following type of pipe:

<u>TYPE OF PIPE</u>	<u>TYPE OF PROTECTION</u>
Cement-mortar coated steel pipe	Cement-mortar coating, 1" thick
Asphalt-mastic coated steel pipe	Cement-mortar coating, 1" thick
Ductile-iron pipe or Cast-iron pipe	Cement-mortar coating, 1" thick or Polyethylene encasement where called for on the Plans.
Asbestos-cement pipe	Cement-mortar coating, 1" thick

Valve bonnet bolts shall be protected according to ANSI/AWWA C500 and enclosed in the polyethylene encasement.

### SECTION W-54 CONSTRUCTION PLUGS

If required for performing the field pressure and leakage tests, each section of water main between main line valves shall be provided with two 1-1/2" construction plugs. These plugs shall be installed so that one exists immediately adjacent to each valve at the end of a water main section, so that when the valves are closed, all air can be released from the water main section between the valves, the water main section can be flushed, the water can be sampled, pressure can be applied, and water can be added to the water main section.

Plugs shall be offset from the valve end of the water main section and shall be a 1-1/2" screw plug installed at the top of the water main using a double strap service clamp or a weld-on coupling. Plugs shall be left uncovered until samples taken by the Agency result in approval of the work. The plugs, couplings, or straps, shall then be covered with 2" of the same kind of material as the water main is coated with before backfilling.

#### SECTION W-55 FIRE HYDRANTS

Fire hydrants shall be of the wet barrel type, as shown on Standard Drawings W-8 and W-9. The barrel above ground shall be Schedule 40 iron pipe threaded spool fitted at the concrete break-off block with a cast-iron pipe threaded break-off flange (ANSI B16.1) and at the top with a 6" x 4" x 2-1/2" all bronze fire hydrant head with a 6" IPS screwed inlet.

Hollow bolts and nuts for connecting the Class 150 welding flange to the Class 125 threaded cast-iron flange on the above ground riser at the concrete break off block will be furnished by the Agency at no cost to the Contractor upon his request to the Agency Inspector.

Fire hydrant risers shall be plumb.

Fire hydrant lateral underground pipe runs shall maintain 30" minimum cover below gutter flow line or, where gutter grades have not been established, 36" below center of street and may slope downward from the water main.

Where the ground slopes up from the water main to the fire hydrant riser, fire hydrant lateral runs shall be installed horizontally. The Contractor shall furnish and install additional field welded spools, cast-iron fittings, and appurtenances as determined needed in the field to meet these requirements.

All tees and elbows underground shall be fitted with underground concrete thrust blocks as shown on Standard Drawings W-8 and W-9. A breakoff concrete block 36" square and 12" deep shall be centered on the riser flush with the ground surfaces, sidewalk finished and sloped to drain away from the underground riser slip-on welding flange.

Fire hydrants shall be pressure tested for leakage at the same time duration and pressure as the adjacent water main section between main line valves.

Fire hydrants shall be installed at the locations shown on the Plans.

#### SECTION W-56 WATER SERVICES

All water services shall be of the type, diameter, size, length, and at the locations indicated on the Plans and Standard Drawings, or as staked out in the field with the approval of the Inspector.

In no case shall a service or other tap be made in a main within 36" of a bell, coupling, joint, or fitting, or within 36" of another service or other tap.

Two individual services may be installed in the same trench, excavated approximately along a projection of the lot line common to two lots. In such case, the service taps at the main shall be not less than 3'

apart and shall have a minimum 10° angle change along the pipe. Each service shall terminate in a curb stop 2' from its respective side of the common lot line.

To determine the connection requirements for connecting the service pipe to the water main, see Standard Drawings W-5, W-7, or W-36.

On ferrous metal service clamps and steel couplings, the outlet size shall be one pipe size larger than the corporation stop to permit insertion of a dielectric insulating bushing. An insulating bushing shall be inserted in the service clamp or coupling and the corporation stop shall be inserted in the bushing with not more than 40 foot/pounds of torque. The bushing threads shall engage inside and outside to overlap so that no part of the bushing is in tension.

A concrete meter box shall be considered a part of the water service and shall be furnished and installed by the Contractor. This box shall be set as indicated on Standard Drawings W-5 and W-7.

All water service connections installed concurrently with the water main construction shall be simultaneously flushed, tested, and disinfected in accordance with Section W-64, "Field Pressure and Leakage Test". After the test, the curb stops shall remain closed for all purposes except flushing and sampling until after the work is acceptable to the Agency following the laboratory bacteriological examination "negative" report on all samples taken. No customer connection shall be made without approval of the Agency. The Agency will furnish locks to lock each curb stop, where needed.

#### SECTION W-57 INSTALLATION OF TAPPING TEES, TAPPING VALVES SLEEVES AND TAPPING CROSSES

Tapping tees, sleeves and crosses shall be installed according to the manufacturer's recommendations, and provide a leakproof branch connection to an existing water main under pressure without loss of water or interruption of flow in the main.

#### SECTION W-58 INSTALLATION OF A FABRICATED THREE-PIECE WELDING SLEEVE

After removing the coat from the area to be tapped, the outlet nozzle of the sleeve shall be first welded to the pipe to be tapped. Then the 2 sleeve halves shall be welded to the pipe to be tapped and along the semicircular cutouts to the outlet nozzle.

The completed tapping sleeve shall be coated the same way as the tapped pipe. The outlet nozzle shall be either cement or epoxy-lined.

Installation of mechanical joint tapping tee shall closely follow the manufacturer's recommendations.

The Contractor shall furnish and install on the branch outlet of each tapping sleeve or cross, tapping valves of the same size as the tapping sleeve, as shown on the Plans. With the exception of seat rings and body ends, the general design and construction of the tapping valve shall be identical to the type gate valve described in Section W-20, "Valves." The valve shall be designed and built to withstand all strains incident to tapping and service connections and withstand a pressure of 200 psi.

After completion of the assembly, the Contractor shall provide suitable thrust blocks behind the tapping assembly to prevent any movement. (See Standard Drawing W-21 and Section W-52, "Thrust Devices".

All underground bolts used in this assembly, except bolts adjacent to the valve bonnet, shall be encapsulated with 1,000 psi cement mortar described in Section W-53, "Corrosion Protection".

Gate valves, as described in Section W-20, "Valves", may also be used in lieu of tapping valves, if accepted by the Agency and if the necessary adapters for the tapping tool are provided by the Contractor.

Valve installation procedures shall be in accordance with the recommendation of the manufacturer.

Tapping valves manufactured by the following companies, or approved equivalents, are acceptable:

Mueller Company, Darling Valve Manufacturing Company, Ludlow Rensselaer Valve Manufacturing Company, Inc., Eddy-Iowa Division of Clow, Inc., U.S. Pipe Division of Smith Valve and Hydrant, Rich Valve Company.

### SECTION W-59 TAPPING TOOLS

The tapping of the existing water main under pressure ("hot tapping") shall be performed with hand operated or motor driven tools designed for that purpose and for the tapping tee and tapping valve assembly installed on the water main.

Tapping tools manufactured by Mueller Company, or approved equivalent, are acceptable.

After tapping the existing water main, the tapping valves shall be left closed and operated only under the supervision of Agency personnel during testing. The tapping coupons shall be preserved and delivered to the Agency Inspector.

### SECTION W-60 BEDDING (BACKFILL)

Pipe joints should remain exposed if possible until satisfactory completion of the pressure and leakage test. Upon successful completion of tests, the exposed joints or coupling shall be backfilled with material appropriate for the respective depths as specified in Subsection 306-1.3 of SSPWC.

The Contractor shall take proper precautions to prevent floating of the pipe when using water densification methods. The Contractor shall repair damage to floated pipe and appurtenances, including restoring displaced pipe to grade and re-mortaring interior displaced joints in steel water mains through hand holes as described in Section W-64, "Field Pressure and Leakage Test".

"Bedding" material in Subsection 306-1.2.1 of the SSPWC shall be the following described "select" material:

Select material shall be fine granular material naturally produced by the disintegration of rock and shall be free of organic matter, mica, loam, clay, and other detrimental substances. Select material shall be of such size that all will pass 3/4" square opening screen and that at least 80% by weight will pass a No. 8 standard sieve. Select material shall contain sufficient fine particles such that interstices between larger particles will be reasonably filled with fine particles.

Material existing in trench excavated material and which is suitable for use as select material shall be used before importing other select material. Should the material excavated from the trench or which is available within the work area not meet the above requirements for select material, the Contractor shall import select material, at no extra cost to the Agency.

The Contractor shall make up the loss of any 6" and larger material with suitable material from other sources at no extra cost to the Agency.

No material shall be borrowed from the rights-of-way to make up for deficiencies for the acceptable trench backfill unless approved by the Agency.

#### SECTION W-61 BACKFILL AND TRENCH RESURFACING IN TRAVELED AREAS

The temporary bituminous resurfacing shall be a minimum of 2" thick and shall be maintained by the Contractor for a minimum of 30 days. The temporary resurfacing shall be replaced within 60 days of placement with permanent resurfacing.

When a mechanically compacted backfill is placed from one foot above the top of pipe to the surface, the above requirement for placing temporary mix will not be required and the permanent base and pavement section may be placed after the relative compaction has been approved.

The permanent trench resurfacing shall be constructed by the Contractor. Permanent asphalt concrete pavement shall be C2-AR-4000 and shall be as shown in the trench resurfacing pavement requirements of this section.

Full compensation for complying with the above requirements, including the construction, maintenance, and removal of any temporary pavement, shall be considered as included in the prices bid for the various items of work.

The trenching, excavation, backfill and resurfacing of streets that are damaged during the installation/relocation of water mains and appurtenances shall be performed according to the City of Lancaster Street Opening and Restoration Regulations and corresponding detailed Standards EP-1 through 4 and the new Bid Schedule showing corrected items.

#### SECTION W-62 COMPACTION TESTS IN TRAVELED AREAS

Traveled area trench backfill shall not be deemed completed until compaction tests are successfully passed. The tests of successfully passed will be performed by the Agency at no cost to the Contractor. If the compaction test fails the first time, additional compaction tests will be performed, at the nominal cost paid by the Agency and reimbursed by the Contractor.

The Contractor shall assist the Agency and the commercial testing laboratory in making excavations and repairing excavations necessary to take compaction test samples.

#### SECTION W-63 PAINTING OF EXPOSED METAL SURFACES

The exterior metal surfaces of all steel pipe, fittings, valves, fire hydrants, barricades, and other appurtenances above ground or in vaults, except where otherwise indicated on the Plans, Standard

Drawings or in these Specifications, shall be prepared and painted as follows to protect such surfaces from corrosion, or to blend with or to stand out against their background after all welding, brazing, or adjusting is completed:

Exposed iron or steel surfaces shall have all rust, scale, dirt, oil, grease, etc., removed by scrapers, wire brushes, or sand blasting to the satisfaction of the Agency and then cleaned with mineral spirits. Final cleaning with mineral spirits shall be done not less than 30 minutes nor more than 3 hours before the application of paint.

Galvanized surfaces to be painted shall be etched with a weak acid solution, or a solution of 8 ounces of copper acetate in one gallon of water or two pounds of copper sulphate in one gallon of water. The surfaces so treated shall be thoroughly rinsed with clean water and dried.

Surfaces shall be clean and perfectly dry when paint is applied. Exterior painting shall not be done when the temperature is below 40°F, nor in rainy, damp, or excessively windy weather.

Paint shall be applied by brushing, or shall be sprayed on to obtain a uniform and evenly applied finish, free from brush marks, runs, sags, crawls, or other defects.

No paint shall be applied to copper or brass, except fire hydrant heads and then not on any threads or operating stems.

Fire hydrants, including appurtenant pipe barricades, shall be protected on the above ground exterior portions with two coats of zinc-rich primer, Rustoleum or approved equivalent, and two finish coats of yellow paint.

Remaining appurtenances, including flushouts, air release vacuum valves, and appurtenant pipe barricades shall be protected with two coats of zinc-rich primer, Rustoleum or approved equivalent, and two finish coats of forest green paint.

The Contractor shall furnish all tarps, dropcloths, masking, etc., to protect all nearby objects from damaged or discoloration by the painting work.

The Contractor shall remove all misplaced paint, such as, but not limited to, spatter on factory finished equipment or concrete work before final acceptance of the work.

#### SECTION W-64 FIELD PRESSURE AND LEAKAGE TEST

Facilities installed by the Contractor shall be hydrostatically tested upon completion of the laying, jointing, and necessary backfilling and thrust blocking, including a 7 day minimum cure of all cement mortar and concrete or a 2 day cure of all cement mortar and concrete made with high early strength portland cement.

Water shall not be turned into the pipe until the mortar has cured for a minimum of 2 days.

Prior to applying test pressure, each completed section of pipeline shall be completely filled with water using the total available pressure, and allowed to stand 48 hours to allow the pipe lining to obtain sufficient water by absorption and trapped air to escape. The pressure shall thereupon be increased to

and maintained as constantly as possible at the required test pressure for the duration of the test as shown on the plans.

Each section of water main between main line valves shall be individually pressure tested for 4 hours. Each section tested shall include all fire hydrants up to the fire hydrant head, all service connections up to the meter stop, all blind flanges, plugs, thrust blocks, and all air vacuum release valves. If there are no convenient permanent outlets required in the design of the section, the Contractor shall furnish and install construction plugs, as described in Section W-54, "Construction Plugs", to facilitate exhausting air and applying and reading test pressure to the section. Any leakage observed, including leakage through main line valves (which shall be turned off during the test) shall be repaired before proceeding with the test.

Allowable leakage shall be computed for each section tested by the formula:

$$Q = \frac{0.5 \text{ cnd (p)}}{1850} \quad \text{wherein}$$

Q = gallons of water per hour added to the section being tested

n = number of joints in main line section being tested

d = nominal diameter of main line section being tested, in inches

p = test pressure of the main line section being tested, in psi

c = 0.50 for rubber ring bell and spigot joints

c = 0.75 for rubber ring mechanical (compression) joints

c = 0.25 for flanged joints

c = 0 for welded joints (including butt strap joints)

Test pressure for section of pipe being tested shall be as indicated on the Plans.

Leakage shall be determined in the presence of the Agency Inspector by measuring the number of gallons required to be injected to maintain test pressure during the test period.

The Contractor, at his own expense, shall do all work necessary to locate and repair leaks or other defects which may develop during the test. The Contractor shall perform all excavation, backfill, pavement removal, pavement replacement, and other work necessary to secure the required water tightness. If the Agency's interconnection valve should fail to pass the test of the new sections beyond, the Agency will repair, at its own expense, the existing sections affected to meet the test requirements.

Steel pipe joints which are determined to have moved during the field pressure test shall be repaired. Such repair shall consist of reinstalling the coating and lining systems so that they are continuous,

including field installation of a handhole to facilitate making lining repairs and fillet welding around the bell with the aid of a welding ring. Said handhole shall consist of a 4" tap into the pipe over which is welded a 4" half coupling having internal threads. After the interior mortar joint and lining are repaired and cured, the half coupling shall be fitted with an iron plug (threaded) and the joint and handhole shall be pressure tested. The exterior coating system shall be extended to cover the handhole and plug.

No section of water main will be accepted until and unless the leakage from each section of water main tested is less than the above-computed quantity of leakage.

The Contractor shall furnish a certificate certifying before and after the test as to the accuracy of the pressure gauge and the volumetric measuring device.

The Contractor shall provide all necessary piping, calibrated pressure, and volumetric gauges, filling and air exhaust lines, pressure pumps, power, labor, transportation, and other equipment and labor necessary to fill, test, or empty the pipeline section being tested.

#### SECTION W-65 DISINFECTION OF WATER MAINS

The Contractor shall be responsible for disinfection of all new work. All pipes, before being placed in service, shall be successfully disinfected in accordance with the provisions of ANSI/AWWA C651, "Disinfecting Water Mains", except that the chlorine residual shall not be less than 50 ppm remaining in the water after 24 hours standing in the pipe. The task of collecting the water samples shall be performed by Agency staff. The samples shall be handled only by Agency Staff and the Agency shall be responsible for the transportation and delivery of the sample(s) to the Agency's Bacteriological Laboratory for analysis.

After the Contractor has achieved the required chlorine residual over the required 24 hour period, the Contractor shall flush and chlorinate water until the water in the line is equal in quality to that of the source supply. All new or required pipe shall be thoroughly flushed before and after chlorination. The Agency will be responsible for collecting samples in the new work as well as samples from the source for comparison purposes.

If the analysis of the samples from the new work is reported "Positive" by the Agency's Laboratory, then the Contractor shall repeat the flushing and disinfection process, and new samples shall be collected by the Agency for analysis. The process shall be repeated until bacteriological reports of the analysis are reported as "negative".

The Contractor shall not connect the new work to the existing system until the samples from the new work are reported as "negative" and until permission to proceed is obtained from the Agency.

#### SECTION W-66 STREET REPAIRS

All repairs to paving, subgrade, shoulders, drainage structures, cut-banks, fill-banks, and striping on roads shall be performed at the Contractor's expense and shall comply with the requirements of the County of Los Angeles Department of Public Works excavation permit or the excavation or encroachment permit of the issuing agency, and with Subsection 306-1.1.5 of the SSPWC.

#### SECTION W-67 DISPOSAL OF MATERIALS AND CLEANUP



All materials removed from excavations in streets, trails, roadways, and easements shall be laid alongside the trench and kept trimmed up so as to cause as little inconvenience as possible to the public. Reasonable access shall be provided to all fire hydrants, gate valves, meters, and private driveways; and access equal to or better than that used before commencement of construction shall be provided during and after construction whereby storm and waste water can flow in the natural drainage channels, street drains, and private road and trail drains without interruption.

All materials removed from excavations in streets, roadways, and rights-of-way and not required for backfilling, shall be promptly removed and disposed of by the Contractor.

No surplus material shall be dumped on private property unless written permission signed by the owner of the property is furnished to the Agency.

Surplus pipeline material, tools, and temporary structures shall be removed by the Contractor. All dirt, rubbish, and excess earth from excavations shall be hauled to a dump provided by the Contractor, and the construction site shall be left clean, to the satisfaction of the Agency and the property owners.

#### SECTION W-68 TRENCH RESURFACING PAVEMENT REQUIREMENTS

Pavement replacement requirements shall be in accordance with the City of Lancaster encroachment permit.

#### SECTION W-69 STANDARD PLANS AND DETAILS

The latest editions of the following Standard Plans, drawings, and details are hereby included:

Standard Plans of the Los Angeles County Waterworks Districts:

W-1	W-22
W-2	W-35
W-3	W-36
W-5	W-46
W-8	W-49
W-15	W-50
W-21	

## SECTION W-70 DISTRICT INSPECTOR COORDINATION

In addition to the requirements outlined in the Standard Specifications, the Contractor is to facilitate coordination of customer service connection and meter replacements to ensure the completion of the work in accordance with District standards and procedures. Payment for such coordination shall be considered incidental to the payment for customer service connections and meter installation.

The District Inspector, or District's agent, shall complete a meter exchange report for each meter changed. The Contractor shall not remove any meter or install any meter until the Agency Inspector has completed the report. Contractor shall be responsible for ensuring the appropriate level of coordination to ensure that service connections, meters and meter exchanges are performed without delay. The District Inspector's reports shall be used as a basis for ensuring proper meter installation and location. The Contractor is advised to coordinate with the District Inspector to ensure a full payment for all work completed.

## SECTION W-71 MEASUREMENT

The relocation of water line will be measured by each location (station and nominal size) called for in these Specifications.

## SECTION W-72 PAYMENT

The work prescribed in these water line relocations will include but is not limited to the providing of material, labor and equipment necessary for the following operations: traffic control, initial depth check, welding and assembling, installation, closing and connection, testing and disinfection, backfill and resurfacing.

## APPENDIX

281' of 6' high by 8' long wrought iron fence panels



(2) 6' wide by 6' tall walk thru gates



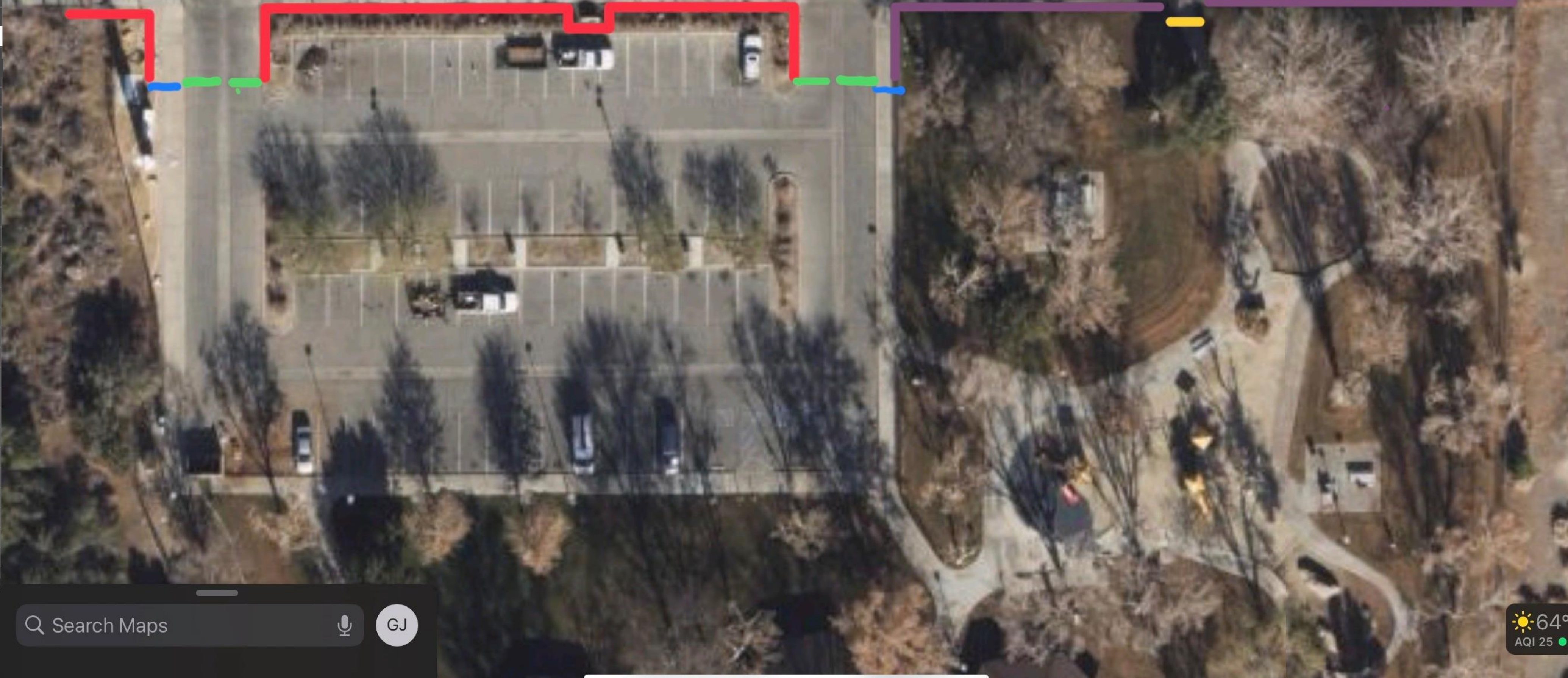
(4) Drive thru gates 12' 6" by 6' tall



(1) 4' wide by 6' tall walk thru gates

Remove existing wrought iron fence and install 223' of 6' high by 8' long wrought iron fence panels,

W AVENUE K





5' Wide by 6' tall chain link fence (9 gauge)

8' Wide by 6' tall chain link gate (9 gauge)



W AVENUE K-4

