

Bid No. 7348

All Prospective Vendors submitting a bid must be subscribed to the listing for the bid prior to the bid opening. If the Vendor is not listed on the Electronic Bidders List the bid package will not be considered or accepted. Only bids submitted to the Purchasing office located on the 6th floor of City Hall and time stamped before the deadline will be accepted.

Bids are to be submitted to the Purchasing office located on the 6th floor of City Hall, 3900 Main Street, Riverside, CA no later than November 4, 2015 before 2:00pm. The time and date are fixed and extensions will not be granted. Bids not received before the bid event time will not be accepted.

Reminder: Bids are to be submitted via hard copy ONLY.

The front of all submittals must be addressed and labeled as follows:

Bidder's Name & Address

City of Riverside; Purchasing Dept.
Attn: Art Torres (Bid No. 7348)
3900 Main Street
Riverside CA 92522

Bid No.: 7348
Due: 11/04/2015
Before: 2:00pm
Project: 2014-2015 CDBG Street Improvements, ADA Footpath Improvements



REQUEST FOR BIDS

BID NO. 7348

DUE: Before 2:00 P.M.

DATE November 4, 2015

**2014-2015 CDBG Street Improvements, ADA Footpath
Improvements and Jackson Avenue Parkway Landscape and
Irrigation Improvements from SR-91 to Magnolia Avenue**

The City of Riverside Public Works Department has determined bidders shall hold a valid Class "A" or a Class "C-8" State of California Contractor's license in good standing.

**BID BOND OR CASHIERS CHECK
IS REQUIRED WITH THIS BID**

All Bids are to be submitted via hard copy only. Bidding will close exactly at the time set forth in the Notice Inviting Bid. All Prospective Vendors submitting a bid must submit a signed and notarized original bid bond before Bid Event time.

All applicable forms required to be completed per the bid documents, shall be submitted as part of the bid response prior to bid event date and time. **The Bid Schedule and Subcontractors List, including Subcontractor name, license, description, and dollar value of work to be performed, shall be submitted via the supplied forms. Electronic copies of pricing and subcontractor information will not be accepted as a viable bid.**

BID BOND NOT RECEIVED PRIOR TO THE HOUR INDICATED WILL BE REJECTED.

Proposal Bonds not received prior to the time and the date set forth in the Notice Inviting Bids, shall be declared late. The bidder shall have sole responsibility for its timely submittal.

Proposal Guaranty in the form of a Cashier's check or Certified check must be submitted to the Purchasing Services Manager, at 3900 Main Street, Riverside, CA 92522, prior to the hour and the date stated above.

BID NO. 7348

CITY OF RIVERSIDE NOTICE INVITING BIDS

2014-2015 CDBG Street Improvements, ADA Footpath Improvements and Jackson Avenue Parkway Landscape and Irrigation Improvements from SR-91 to Magnolia Avenue

The City of Riverside Public Works Department has determined bidders shall hold a valid Class "A" or a Class "C-8" State of California Contractor's license in good standing.

Bid due date: November 4, 2015, Before 2:00 P.M.

Place: Submit Bid Bond along with all other required documents to the Purchasing Division at: 3900 Main Street, Riverside, CA 92522. Proposal Guaranty in the form of a Cashier's check or Certified check must be submitted to the Purchasing Services Manager, at 3900 Main Street, Riverside, CA 92522, prior to the hour and the date stated above.

Vendors must subscribe at the following website in order to download plans, specifications, and be placed on the electronic bidders' list as well as to receive addendums and notifications when issued.

<http://www.riversideca.gov/bids>

All bidders and sub-bidders will be required to comply fully with the following: 1) City of Riverside Resolution No. 13346, and subsequent amendments thereto specifying the current prevailing rate of per diem wages for each craft, classification or type of workman, which schedules are on file in the State of California web site address www.dir.ca.gov/DLSR/PWD 2) Successful bidder will obtain City of Riverside Business Tax Certificate, if they do not already hold one.

Pursuant to Section 22300 of the Public Contract Code of the State of California, the contractor will be permitted to substitute those securities set forth in said sections for any monies withheld to ensure performance of the contract.

A proposal guarantee in the form of a Bid Bond in the amount of 10% of the total bid must be submitted prior to the hour and the date stated above. Proposal Guarantee in the form of a Cashier's check or Certified check must be submitted to the Purchasing Services Manager, at 3900 Main Street, Riverside, CA 92522, prior to the hour and the date stated above.

Bid prices shall be firm for 90 days from date of proposal opening to permit staff evaluation and City Council award. Upon award, prices quoted will be in effect for the term of the contract.

The City Council reserves the right to waive any irregularities or informalities and further reserves the right to reject any or all bids.

ART TORRES, C.P.M.
Purchasing Services Manager



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CITY OF RIVERSIDE
FINANCE/PURCHASING DIVISION
3900 Main Street, Riverside, CA 92522

INSTRUCTIONS AND CONDITIONS

IMPORTANT

ALL BIDS MUST BE SUBMITTED VIA HARD COPY ONLY. BID PROPOSAL GUARANTY AND SUPPORTING DOCUMENTS MUST BE SUBMITTED TO THE PURCHASING DIVISION. BID PROPOSAL GUARANTY AND SUPPORTING DOCUMENTS NOT SUBMITTED AND TIME STAMPED BEFORE THE HOUR INDICATED WILL BE REJECTED. IN THE EVENT THE BID SECURITY IS IN THE FORM OF A CASHIER'S CHECK, SAID CHECK MUST BE DELIVERED TO PURCHASING SERVICES MANAGER AT 3900 MAIN STREET, RIVERSIDE, CA 92522 BEFORE THE DEADLINE TO SUBMIT THE BID.

WE ARE PLEASED TO ISSUE THE ENCLOSED BID SPECIFICATIONS FOR YOUR CONSIDERATION

1. Bids will be rejected unless prices are submitted on the supplied form for the exact item(s) requested in the bid specifications.
2. The City of Riverside, Purchasing Division, will not honor any explanation or change in the bid documents unless a written addendum has been issued.
3. All bids must identify bidder's firm name and be submitted by a responsible officer or employee.
4. The City Council reserves the right to reject any and all proposals and to waive any informalities related thereto.
5. It is the intention of the City of Riverside to evaluate and make recommendation for award as indicated; however, the City does reserve the right to increase or decrease quantities or to remove items before award to remain within the limitations of the availability of approved funds. The apparent low Bidder will be notified prior to recommendation for award if such adjustments are deemed necessary.
6. We hope you will participate in our public bid openings and obtain the results.
7. Prices quoted by the Bidder shall be exclusive of Federal Excise taxes pursuant to exemption of political subdivisions of a State by Federal Law.
8. Prices quoted by the Bidder shall mean total cost to the City, F.O.B. delivered to Riverside.

ART TORRES, C.P.M.
Purchasing Services Manager

NOTICE INVITING BIDS
(Bid No. 7348)

SPECIAL PROVISIONS
STANDARD DRAWINGS
AND
PROPOSAL FORMS

To Accompany Plans *M-480, M-481, XL-732, R-4338, R-4339, R-4340, R-4341, R-4342, R-4343*

for

**2014-2015 CDBG Street Improvements, ADA Footpath Improvements and
Jackson Avenue Parkway Landscape and Irrigation Improvements from
SR-91 to Magnolia Avenue**



Issued By

PUBLIC WORKS DEPARTMENT

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SPECIAL PROVISIONS

INTRODUCTION: The format of these Special Provisions follows that of the 2012 Edition of the "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" which is, by reference, included within the Contract Documents of this project. (See Section 2-5.1.1 herein.) These Special Provisions supplement, modify and take precedence over the Standard Specifications. The Standard Specifications are hereby amended and supplemented as follows:

PART 1 GENERAL PROVISIONS

SECTION 1 TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

1-2 TERMS AND DEFINITIONS

Agency/City or State	The City of Riverside.
Base Course	The layer(s) of pavement placed between the surface course and the subgrade.
Board	The City Council of the City of Riverside.
Director	Director of Public Works for the City of Riverside.
Engineer	The City Engineer or his designee
Inspector	The representative of the Engineer who is assigned to inspect conformance of the work in accordance with Plans and Specifications.
Overlay	A supplemental surface course placed on an existing pavement to improve its surface conformation or to increase its strength.
Private Engineer	(If applicable) The engineer who has prepared and has signed the Plans.
Right-of-Way	Includes City of Riverside Public Rights-of-Way and City of Riverside Public Easements.
Sewer Lateral	House Connection Sewer.

Standard Plans	City of Riverside Standard Drawings for Construction
Surface Course	The top layer of pavement designed to provide structural value and/or a surface resistant to traffic abrasion.
Traveled Way	That portion of the roadway reserved for the movement of vehicles for the general public, exclusive of shoulders and auxiliary lanes. Where traffic has been diverted or restricted to certain lanes, with the approval of the Engineer, these diversions or restricted lanes become the traveled way.

1-3 ABBREVIATIONS

ARHM-GG	Asphalt Rubber Hot Mix- Gap Graded
DGAC	Dense Graded Asphalt Concrete
R & R	Remove and Replace
Std. Specs.	Standard Specifications

The abbreviations shown on Standard Drawing No. 2 may also apply.

1-5 SYMBOLS

The symbols shown on Standard Drawing No. 1 may also apply.

SECTION 2 SCOPE AND CONTROL OF THE WORK

2-1 AWARD AND EXECUTION OF CONTRACT

2-1.1 Scope of Project. The project entails street maintenance improvements at various locations throughout the city. The proposed work includes construction of concrete sidewalks, curb and gutter, wheelchair ramps, and rehabilitation of the existing asphalt pavement as shown on the contract plans. Additionally, the project will construct new ADA wheelchair ramps and reconstruct existing non-standard ADA accessible wheelchair ramps at various locations.

The project also includes design and installation of new irrigation, modification of existing irrigation, and new landscaping for the parkway on the east side of Jackson Avenue from SR 91 to Magnolia Avenue.

2-1.2 Examination of Site of Work, Proposal Forms, Plans and Specifications. The bidder is required to carefully examine the site of work, Proposal Forms, Plans and Specifications for the work contemplated. The submission of a proposal shall be considered conclusive evidence that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality and

quantities of work to be performed and materials to be furnished, and as to the requirements of all the Contract Documents.

2-1.2.1 Contractor Customer Service Standards. The Contractor shall at all times represent the City in a professional, friendly, efficient and cost-effective manner, and will be required to comply with the requirements of the enclosed City of Riverside Contractor Service Standards Acknowledgment, which is hereby made a part of these Special Provisions.

2-1.3 Addenda. Any addenda issued during the time of bidding shall be acknowledged on the proposal pages and will be made a part of the contract.

2-1.4 Proposal Form and Submittal. The proposals shall be submitted on the attached Proposal Forms. The proposals shall give the unit and total prices. In the event the unit price and total amount for any items are not in agreement, the unit price shall govern and the totals will be corrected by the Engineer to conform thereto. The bidder shall fill in all blanks on the Proposal Forms.

If the proposal is made by an individual, the individual shall sign his or her full name and give his or her post office address; if made by a partnership, it shall be signed with the partnership name by one of the partners, who shall sign his or her own name and, in addition, the name and address of each partner shall be given; if it is made by a corporation, it shall be signed by a duly authorized officer, or officers, attested by the corporate seal and the name of the state under the laws of which the corporation was incorporated, and names and titles of all officers of the corporation shall be given. If the bid is made by a joint venture, the bid shall be signed by a representative of one of the joint venture firms. Additionally, the bid shall include a copy of the resolution or agreement empowering the representative to execute the bid and bind the joint venture.

Bid Submittal

Pricing and subcontractor information must be submitted on the forms provided. All required documents such as the Non-Collusion Declaration and the Standards Acknowledgment and any bid security must be supplied as signed originals.

Please note that bids are accepted in hard copy only. Bids may be submitted by mail or in person but must be time stamped by the Purchasing office before the due day/time. All packages must be addressed as follows:

City of Riverside; Purchasing Dept.
Attn: Art Torres (Bid No. 7348)
City Hall, 6th Floor
3900 Main Street
Riverside, CA 92522

Addenda & Notifications

Any addenda issued during the time of bidding shall be acknowledged by signing each addendum, which will be made part of the contract. Addenda notifications will be provided to those subscribed to the Electronic Bidder's List via email.

Proposal Information and Submittal (Bid)

All prospective bidders submitting a bid package must be subscribed to the Electronic Bidder's List for that bid. If the bidder is not listed on the Electronic Bidder's List by subscribing at www.riversideca.gov/bids then the bid package will be declared non-responsive and given no further consideration. Additionally, the bid package must be submitted using the same company name as used to subscribe to the Bid on the Electronic Bidder's List.

Proposals not received and stamped "received" prior to the hour and the date set forth in the Notice Inviting Bids, shall be declared late and returned unopened to the bidder. The bidder shall have sole responsibility for its timely delivery.

2-1.4.1 California Labor Code. Contractor is aware of and stipulates that Contractor will also comply with the following sections of the California Labor Code:

- a. Section 1775 prescribing sanctions for failure to pay prevailing wage rates;
- b. Section 1776 requiring the making, keeping and disclosing of detailed payroll records and prescribing sanctions for failure to do so;
- c. Section 1777.5 prescribing the terms and conditions for employing registered apprentices;
- d. Section 1810 providing that eight hours of labor shall be a day's work; and
- e. Section 1813 prescribing sanctions for violations of the provisions concerning eight-hour work days and forty-hour work weeks.
- f. No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

Registration can be accomplished through the DIR website by using this link:

<http://www.dir.ca.gov/Public-Works/PublicWorks.html>

2-1.5 Proposal Guaranty. All proposals shall be accompanied by a bidder's bond executed by a corporate surety admitted to engage in such business in the State of California, with an A:7 rating, for an amount equal to at least ten percent of the amount of its proposal. No proposal shall be considered unless such proposal guaranty is received by the proposal submission deadline. Proposals submitted without a proposal guarantee shall be declared non-responsive and will not be further considered. The bidder shall have sole responsibility for the timely delivery of its proposal guarantee. If a bid bond will not be submitted, the City will accept a cashier's or certified check made payable to the City of Riverside—said check must be delivered to the Purchasing Services Manager (6th floor) at 3900 Main Street, Riverside CA 92522 prior to the submission deadline. Late checks will not be accepted.

2-1.6 Withdrawal of Proposals. Any proposal may be withdrawn prior to the hour and date set forth in the Notice Inviting Bids. The timely withdrawal of a proposal shall not prejudice the right of a bidder to file a revised proposal.

2-1.7 Disqualification of Bidders. More than one proposal from an individual, a firm or partnership, a corporation or an association under the same or different name will not be considered.

If there is a reason for believing that collusion exists among the bidders, none of the participants in such collusion will be considered in awarding the Contract. In order to comply with Public Contract Code Section 7106 the Contractor shall certify to non-collusion when submitting the bid. The proposal provides this declaration, which must be completed and signed.

Proposals in which the prices are obviously unbalanced may be rejected. If the experience or financial background of the Contractor is inadequate or past performance has been unsatisfactory the proposal may be rejected.

2-1.7.1 Contractor's License. The work requires an "A" or a "C-8" License.

The City's standard requirement that bidders must be properly licensed to perform the work of the project at the time their bid proposals are submitted is suspended for this federally-funded project by the provisions of Section 20103.5 of the California Public Contract Code, which states:

In all Contracts subject to this part where federal funds are involved, no bid submitted shall be invalidated by the failure of the bidder to be licensed in accordance with the laws of this state. However, at the time the Contract is awarded, the Contractor shall be properly licensed in accordance with the laws of this state. The first payment for work or material under any Contract shall not be made unless and until the Registrar of Contractors verifies to the agency that the records of the Contractors' State License Board indicate that the Contractor was properly licensed at the time the Contract was awarded. Any bidder or Contractor not so licensed shall be subject to all legal penalties imposed by law, including, but not limited to, any appropriate disciplinary action by the Contractors' State License Board. The agency shall include a statement to that effect in the standard form of prequalification questionnaire and financial statement. Failure of the bidder to obtain proper and adequate licensing for an award of a Contract shall constitute a failure to execute the Contract and shall result in the forfeiture of the security of the bidder.

2-1.8 Rejection of Proposals. Proposals may be rejected if they show any alterations of form, additions not called for, conditional or alternative bids uncalled for, incomplete proposals, erasures, or irregularities of any kind; however, the City reserves the right to waive irregularities. The City also reserves the right to reject all proposals and shall not be liable for any expenses or costs incurred by bidders in preparing their proposals.

2-1.9 Award of Contract. The Contract, if awarded, will be to the lowest responsive and responsible bidder whose proposal complies with all the requirements prescribed. Such award, if made, will be within **ninety (90)** days after the opening of the proposals. After the opening of the proposals, each proposal will be evaluated by the Engineer for any bid item adjustments stipulated by the bidder on the Bid Item Adjustments Form included in the Bid Proposal and for correctness of arithmetic. The proposals requiring corrections will be corrected by the Engineer in accordance with the provisions of Section 2-1.4, and those requiring adjustments, will be adjusted by the Engineer in accordance with the

provisions of the Bid Item Adjustments Form. All proposals, including any adjustments and/or corrections, will then be compared to each other and with the Engineer's cost estimate on the basis of the total of all basic bid items.

Plan No. M-481 for the Jackson Street landscaping and irrigation improvements identifies three separate phases of work which includes "Phase 1," "Phase 2," and a "Future Phase." This project WILL construct the improvements identified for "Phase 1" and these bid items are identified as the "Base Jackson Bid" on the Engineer's estimate and Proposal forms. This project is also being advertised to receive bids to complete "Phase 2" and these bid items are identified as the "Optional Jackson Bid" on the Engineer's estimate and Proposal forms. However, depending on fund availability, the improvements identified in "Phase 2" MAY NOT be constructed and eliminated from this project. The improvements identified as the "Future Phase" WILL NOT be constructed with this project. The basis for awarding this project will be for the lowest responsive bid which INCLUDES the costs to complete "Phase 1" and "Phase 2."

Prior to the award of the Contract, if requested, the Contractor shall submit to the City a financial statement and resume of previous work of a similar nature.

The Contract, if awarded, will be awarded to the Lowest Responsible Bidder. All Bids will be compared to each other and to the Engineer's Estimate. The award of the Contract will be made by City Council at a scheduled meeting.

2-1.10 Execution of Contract Agreement. The Contract Agreement (a sample of which is attached to these Special Provisions) shall be signed by the successful bidder and returned, together with the Contract Bonds and insurance, within fifteen (15) calendar days from the date the City mails, or by other means delivers, the Contract Documents to the successful bidder. No Contract shall be binding upon the City until the Documents are fully executed by the Contractor and the City.

Failure to execute and return the Contract Agreement and acceptable bonds and insurance as provided herein within the above-specified time limit may be just cause for the City to rescind the award and forfeit the proposal guaranty.

2-1.11 Return of Proposal Guaranties. Within ten (10) days after the award of the Contract, the City Clerk will return all the proposal guaranties accompanying the proposals which are not to be further considered in making the award. All other proposal guaranties will be held until the Contract Documents have been fully executed, after which all proposal guaranties, except those forfeited, will be returned to the respective bidders.

2-1.12 Bid Protest Procedures. Protestant may file a written protest with the City's Purchasing Services Manager no more than five calendar days following the posting of bid results on the City's website. The written protest must set forth, in detail, all grounds for the protest, including without limitation all facts, supporting documentation, legal authorities and arguments in support of the grounds for the protest. All factual contentions must be supported by competent, admissible and credible evidence. Any matters not set forth in the written protest shall be deemed waived. Any protest not conforming to this procedure shall be rejected as invalid.

The Purchasing Services Manager shall review the merits and timeliness of the protest and issue a written decision to the Protestor within 7 calendar days of receipt of the protest. The decision of the Purchasing Services Manager may be appealed to the Assistant City Manager/CFO.

The Protestor may appeal the decision of the Purchasing Services Manager to the Assistant City Manager/CFO by filing a letter of appeal within 10 calendar days of the date of the Purchasing Services Manager's decision. The letter of appeal should be addressed to the Assistant City Manager/CFO and shall set forth, in detail, all grounds for the appeal, including without limitation all facts, supporting documentation, legal authorities and arguments in support of the grounds for the appeal. All factual contentions must be supported by competent, admissible and credible evidence. Any matters not set forth in the letter of appeal shall be deemed waived. Any letter of appeal not conforming to this procedure shall be rejected as invalid.

The Assistant City Manager/CFO shall review the merits and timeliness of the letter of appeal and issue a written decision to the Protestor within 7 calendar days of receipt of the letter of appeal. The decision of the Assistant City Manager/CFO is final. However, this decision is reviewable under California Code of Civil Procedure Section 1094.5 et seq. The time in which judicial review of the decision must be sought shall be governed by California Code of Civil Procedure Section 1094.6 or as such section may be amended from time to time.

The Protestor may appeal the decision of the Assistant City Manager/CFO to the appropriate federal agency in accordance with its established appeal procedures when the subject project is federally funded.

2-2 ASSIGNMENT

2-2.1 Contractor Indebtedness. Indebtedness incurred for any cause in connection with this work must be paid by the Contractor and the City is hereby relieved at all times from any indebtedness or claim other than payments under terms of the Contract. The Contractor will indemnify and hold harmless the City and its officers and employees from any loss, demand, damages, claims or actions arising from or in connection with said indebtedness.

2-3 SUBCONTRACTS

2-3.2 Self Performance.

The following Bid Items have been designated as "**Specialty Items**": **Signing & Striping**

2-3.4 Prompt Payment to Contractors.

The prime Contractor shall pay each subcontractor under the prime contract for satisfactory performance of its contract no later than Seven (7) days from the receipt of each payment the prime contractor receives from the City. The prime contractor agrees further to return retainage payments to each subcontractor within 30 days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the City.

2-4 CONTRACT BONDS

Performance and Payment Bonds are required. The amount of each Bond shall be 100% of the Contract Price. See Section 2-4 of the Standard Specifications for other details.

Listing of bonding companies in U.S. Department of Treasury Circular 570 is not required, but the corporate surety must be authorized to issue the bonds in the State of California with a policy holder's rating of A or higher and a Financial Class VII or larger. For information to bidders, attached to these Special Provisions are forms for Performance Bond and Payment Bond. These forms, in lieu of bonding company forms, must be used. The forms will be delivered to the Contractor with the Contract Agreement.

Each bond which is subscribed by an out-of-state bonding company shall contain the name, address and telephone number of an agent located in the State of California who is authorized to act for the bonding company.

2-4.1 Substitution of Bonds for Landscape Work. The "Payment Bond" and "Performance Bond" specified in Section 2-4 shall cover all of the work including plant establishment. It is expected that the plant establishment work will be completed within the one- year guarantee period of the Bonds, provided the plant establishment period is not extended. If an extension of the plant establishment period becomes necessary such that the date of completion of the plant establishment work would preclude release of the Bonds within the one year period, the Contractor, at the Contractor's option, may substitute sureties (in forms and amounts as acceptable to the City) to guarantee the landscape work and obtain the release of the larger Bonds on the entire project. To exercise such an option, the Contractor shall contact the Engineer and request that an appropriate landscape agreement and bonds be prepared. Upon receipt and City's approval as to form of the executed agreement and substitute surety bonds for the landscape work, the primary Contract Bonds may be released provided no other obligations are outstanding. The amount of the substitute bonds shall be determined by the Engineer.

2-5 PLANS AND SPECIFICATIONS

2-5.1.1 Standard Specifications. The work embraced herein shall be done in accordance with the provisions of the STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2012 Edition, written by Public Works Standards, Inc., insofar as the same may apply, which specifications are hereinafter referred to as the Standard Specifications, and as modified herein. Said Standard Specifications shall not apply to Section 314 (in Part 3), and Part 7 of these Special Provisions. The work performed under Section 314 (in Part 3), and Part 7 of these Special Provisions shall be done in accordance with the State Standard Specifications and the State Standard Plans.

Where reference is made to the "Standard Plans", the City of Riverside "Standard Drawings for Construction" shall apply.

Where reference is made to the "State Standard Specifications", the 2010 Edition of the State of California, Department of Transportation STANDARD SPECIFICATIONS shall apply.

Where reference is made to the "State Standard Plans", the State of California, Department of Transportation STANDARD PLANS dated 2010 shall apply.

2-5.3.2 Working Drawings. Working drawings, when required, need not be reproducible unless specified herein. A minimum of four copies shall be submitted for approval by the Engineer.

2-5.3.3 Shop Drawings. Shop drawings, when required, need not be reproducible unless specified herein. A minimum of four copies shall be submitted for approval by the Engineer.

2-9 SURVEYING

2-9.2 Survey Service. The expense to the Contractor for the replacement of survey stakes shall be at the rate of \$200 per hour including travel time.

The minimum notice to be given by the Contractor to the Engineer for scheduling construction staking is 4 working days. If more time is necessary, it will be determined during the preconstruction conference.

All grade sheets will be issued by the Engineer at Engineer's office at 3900 Main Street, Riverside, California.

The Contractor shall be responsible for preserving all survey monumentation during the construction phase. If any monumentation will be disturbed or destroyed due to the construction, it will be the Contractor's responsibility to notify the Engineer two working days in advance so that the monument(s) may be tied out and their original positions reestablished by the City Surveyor to perpetuate the controlling monumentation.

No survey work will be provided for the removal and replacement of any concrete improvements with the exception of when the grade of curb and gutter is less than 0.4% or when the curb and gutter lengths are fifty (50) feet or greater. The Engineer shall determine the need for construction stakes to obtain the grade.

2-11 INSPECTION

2-11.1 Inspection Scheduling. Inspection will be provided based on regular eight-hour working days, Monday through Friday, excluding City holidays, generally from 7:00 AM to 3:30 PM (including 30 minutes for lunch). When the Contractor's operations or public safety requires inspection beyond the regular eight-hour working days, the cost of the additional inspection shall be borne by the Contractor and shall be deducted from any payments due the Contractor.

If and when the Contractor wishes to perform any work which would require inspection beyond the regular eight-hour working days, the Contractor shall submit a written request to the Engineer no less than two working days before the planned start of such work.

2-11.2 City Holidays. City holidays will be observed on the following days and no work shall be completed by the Contractor unless prior written approval from the City Engineer:

January 1st	New Years Day
Third Monday in January	Martin Luther King Jr's Birthday
Third Monday in February	President's Day
Last Monday In May	Memorial Day
July 4th	Independence Day
First Monday in September	Labor Day
Second Monday in October	Columbus Day
November 11	Veteran's Day
Fourth Thursday in November	Thanksgiving Day
The day following Thanksgiving Day	
December 25	Christmas Day

If a holiday falls on a Saturday, it will be observed on the preceding Friday. If a holiday falls on a Sunday, it will be observed on the following Monday.

The Contractor shall provide Riverside Public Utilities Inspectors a minimum of two working days of notification for inspections.

SECTION 3 CHANGES IN WORK

3-2 CHANGES INITIATED BY THE AGENCY

3-2.2 Contract Unit Prices.

Sections 3-2.2.2 and 3-2.2.3 of the Standard Specifications are hereby revised only for the bid Items listed below:

- a) Asphalt Pavement (DGAC) - For Additional Removal Areas If Needed
- b) Cold-Milling Type CM2, 0.15' Min. Depth - For Additional Removal Areas If Needed
- c) Type VII Wheelchair Ramp – May replace Type II-A or Modified Type I “T”

3-2.2.1.1 General. Should the actual quantity of an item of work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications, vary from the Bid quantity, no adjustment to the payment will be made per 3-2.2.2 or 3-2.2.3 of the Standard Specifications. The bid item will be utilized on an as needed basis and at the discretion of Engineer.

3-3 EXTRA WORK

3-3.2 Payment.

3-3.2.1 General. When the price for the extra work cannot be agreed upon, the City will pay for the extra work as provided in Subsections 3-3.2.2 and 3-3.2.3 as amended herein. The labor, materials and equipment used in the performance of such work shall be subject to the approval of the Engineer.

3-3.2.2 Basis for Establishing Costs.

(a) **Labor.** The Contractor will be paid the cost of labor for the workers (including foremen when authorized by the Engineer) used in the actual and direct performance of the work. The cost of labor, whether the employer is the Contractor, subcontractor, or other forces, will be based upon the actual paid wages plus a labor surcharge as specified herein.

Labor Surcharge - To the actual wages, as defined above, will be added a labor surcharge as set forth in the California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" which is in effect on the date the work is performed. At the printing of these Special Provisions, the labor surcharge is **12%** for straight time and **12%** for overtime work.

(b) Materials. Not amended.

(c) Tool and Equipment Rental. The Contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" which is in effect on the date upon which the work is performed. These rental rates shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Move in and out or minimum charges, other than the hourly rate, shall not apply to equipment available from the work force already on the job site.

When owner-operated equipment is used to perform extra work to be paid for on a force account basis, the Contractor will be paid for the equipment and operator, as follows:

Payment for the equipment will be made at the rental rates listed for such equipment in the Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" which is in effect on the date upon which the work is performed.

Payment for the cost of labor will be made at the rates paid by the Contractor to other workers operating similar equipment already on the project or, in the absence of such other workers, at the rates for such labor established by collective bargaining agreements for the type of workers and location of the work, whether or not the owner-operator is actually covered by such an agreement.

Copies of the "Labor Surcharge and Equipment Rental Rates" publication are available online at:

<http://www.dot.ca.gov/hq/construc/equipmnt.html>

(d) Other Items. Not amended.

(e) Invoices. Submission of an invoice under this sub-section (e) does not entitle contractor to any additional compensation beyond that set forth in the Labor Surcharge and Equipment Rental Rates in effect on the date the work is performed.

3-3.2.3 Markup.

(a) Work by Contractor. A markup of 15 percent shall be added to the Contractor's costs for labor, materials, and equipment rentals and shall constitute the markup for all overhead and profits. In addition to this markup, 1 percent shall be added to the Contractor's costs as compensation for bonding.

(b) Work by Subcontractor. When any of the extra work is performed by a Subcontractor, the markup established in 3-3.2.3(a) of these Special Provisions shall be applied to the Subcontractor's costs as determined under 3-3.2.2. An additional 3 percent markup shall be added to the final Subcontractor's cost, which constitutes reimbursement for all the Contractor's administrative costs, including overhead.

3-3.3.1 Daily Reports for Extra Work. The daily report specified in Section 3-3.3 of the Standard Specifications shall include only that work which is included in the Contractor's claim for extra work.

3-4 CHANGED CONDITIONS. Section 7104 of the Public Contract Code requires the following provisions for any project, which involves digging trenches or other excavations that extend deeper than four feet below the surface. These following provisions are hereby extended to apply to all public works projects:

a) The Contractor shall promptly, and before the following conditions are disturbed, notify the Engineer, in writing, of any:

1. Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, and that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of law;

2. Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids; and

3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

b) In response to the Contractor's written notice, the Engineer shall promptly investigate the conditions, and if the Engineer finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the Contract.

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

3-5 DISPUTED WORK

In any case where the Contractor believes extra compensation is due the Contractor for work or materials not clearly covered in the Contract, or not ordered by the Director as "extra work", the Contractor shall notify the Director in writing of the Contractor's intention to make claim for such extra compensation before the Contractor begins the work on which Contractor bases the claim. If such notification is not given, or the Director is not afforded proper facilities by the Contractor for keeping strict account of actual cost, then the Contractor shall be deemed to have waived the claims for such extra compensation. Such notice by the Contractor, and the fact that the Director has kept account of the cost as aforesaid, shall not in any way be construed as proving the validity of the claim. The validity of the claim must be determined by the Director. If the Director determines that the claim is well founded, it shall be allowed and paid for as "extra work"; if the Director determines that the claim is not well founded, it shall be disallowed and not paid.

3-6 UNAUTHORIZED WORK

Work done beyond the lines and grades shown on the Plans, work done in the absence or without the knowledge of the Director or any alleged extra work done without the City's written authorization, will be considered as unauthorized and at the expense of the Contractor and will not be measured or paid for by the City. The Contractor may be required to remove such unauthorized work at no expense to the City, as determined by the Director.

3-7 NOTICE OF POTENTIAL CLAIM

The Contractor shall not be entitled to the payment of any additional compensation or extension of time unless the Contractor has given the Engineer a written Notice of Potential Claim as required herein. Compliance with this Section 3-7 shall not be a prerequisite as to matters within the scope of the protest provisions in Section 6-7, "Time of Completion," or the notice provisions in Section 3-4, "Changed Conditions," nor to any claim which is based on differences in measurements or errors of computation as to Contract quantities.

Contractor shall submit the written Notice of Potential Claim to the Engineer prior to the time that the Contractor performs the work giving rise to the potential claim for additional compensation and/or time.

Contractor's written Notice of Potential Claim shall be submitted on the appropriate form furnished by the City, and shall be certified with reference to the California False Claims Act, Government Code Sections 12650 - 12655. A copy of the Notice of Potential Claim form is contained in these Special Provisions. The notice shall set forth the justification for the additional compensation, as well as a breakdown of the estimated costs. Within 15 calendar days of completing the affected work, the Contractor shall submit substantiation of the Contractor's actual costs. Failure to do so shall be sufficient cause for denial of any claim subsequently filed on the basis of the Notice of Potential Claim.

The intention of this section is to bring differences between the parties to the attention of the Engineer as early as possible, in order to expedite resolution. Contractor waives its right to any additional compensation and/or extension of time for any claim not submitted in accordance with this section.

Upon request by City, Contractor shall make available for inspection and copying, any and all documents or records in Contractor's possession which pertain to the potential claim.

This provision does not relieve Contractor of the requirement to present a statutory claim in accordance with California Government Code sections 905 and 910, and Public Contract Code Section 20104.

SECTION 4 CONTROL OF MATERIALS

4-1 MATERIALS AND WORKMANSHIP

4-1.1 General.

4-1.1.1 Suppliers Sources. The Contractor shall notify the Engineer in writing within 5 days after City approval of the Contract of the proposed suppliers and sources for material to be incorporated into the project.

4-1.4.1 Materials and Conditions to be Tested. The Contractor shall be responsible for controlling the quality of the material entering the work and of the work performed, and shall perform testing as necessary to ensure control. The test methods used for quality control testing shall be as determined by the Contractor. The results of the testing shall be made available to the Engineer upon request. These tests are for the Contractor's use in controlling the work and will not be accepted for use as acceptance tests.

Full compensation for performing quality control tests and making the results available to the Engineer shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

The City may perform quality assurance testing at the discretion of the Engineer. The Contractor shall provide reasonable access and time to the Engineer to perform quality assurance testing. The cost of retesting any portion of the work or materials, which have failed the initial quality assurance test

taken by the City, shall be borne by the Contractor.

4-1.6 Trade Names or Equal. The Contractor may offer any material, process, or equipment considered to be equivalent to that indicated in the Contract Documents. The substantiation of offers shall be submitted prior to award of Contract.

After bid opening, Bidders being further considered shall submit all substitution proposals fully documented for consideration by the Engineer within five (5) working days after bid opening. Submittal of substitution proposals more than five (5) working days after bid opening may be grounds for rejection of the proposal on the basis of late submission, at the discretion of the Engineer. Bidders being further considered shall also submit catalog cuts and specification information on the materials and/or equipment as specified for the Contract. Documentation shall be sufficient to allow for a thorough comparative check of the proposed substitution versus the specified item. It shall be the Bidder's responsibility to show all products proposed for substitution are equal to the items specified.

Proposed substitutions will not be evaluated until after award of Contract. Award of the Contract and Bidders' bids are to be based on items as specified. Within thirty-five (35) calendar days following contract award, City will evaluate the proposed substitutions and shall advise Contractor whether such substitution is approved or not.

SECTION 5 UTILITIES

5-1 LOCATION

5-1.1 Utility Marking/Coordination. The Public Works Department will not issue a construction permit as referenced in Section 7-5.1 of these Special Provisions for any work involving excavation for underground facilities unless the applicant has been provided an inquiry identification number by Underground Service Alert of Southern California.

The Contractor shall tie-out the location of any utility facility with a minimum of two reference points prior to paving and shall mark its location on the street with paint after paving. Payment for tie-out work shall be included in the unit prices for paving.

SECTION 6 PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK

6-1.1.1 Construction Schedule. The Contractor shall submit a construction schedule to the Engineer at the preconstruction conference. During the construction the Contractor shall review and update the schedule weekly. Rescheduling any work under this Contract shall not be permitted to allow the Contractor the ability to accommodate another contract, even with the City.

6-1.2.1 Commencement of Work.

The contract time shall commence on the date specified in the Notice to Proceed.

6-3 SUSPENSION OF THE WORK

6-3.3 Stage III Smog Episode. No work shall be done on a day for which a Stage III smog episode is forecast as defined by the Air Quality Management District (AQMD). The Contractor will not be entitled to any delay damages for such a suspension, but an automatic time extension will be granted. When AQMD predicts that a Stage III episode level will be reached the following day, an announcement containing the specifics will generally be provided by 2 p.m. on the day the prediction is made.

6-7 TIME OF COMPLETION

6-7.1.1 Specified Contract Time. The Contractor shall complete the work within **Sixty (60)** working days after the commencement date specified in the Notice to Proceed.

6-8 COMPLETION, ACCEPTANCE, AND WARRANTY

When, in the judgment of the Public Works Director, the work has been completed in accordance with the Plans and Specifications and is ready for final acceptance, the Director may accept the work as complete. Upon acceptance of the work, the Director will notify the City Clerk and the City Attorney of the completion thereof, and the City Clerk will file a Notice of Completion with the County Recorder. The date of the Director's acceptance of the work will be the date when the Contractor is relieved from responsibility to protect and maintain the work. The warranty period of the Work shall commence on the date the Notice of Completion is filed with the County Recorder.

6-9 LIQUIDATED DAMAGES. The following Liquidated Damages are applicable to the completion of this project. All liquidated damages indicated shall not be construed as a penalty, and may be deducted from payments due Contractor if such incidents occur:

1. Liquidated damages shall be assessed in the amount of **\$2,500 per calendar day** that exceeds the number of working days designated for this Contract under Section 6-7, Time of Completion.

SECTION 7 RESPONSIBILITIES OF THE CONTRACTOR

7-2 LABOR

7-2.2.1 Prevailing Wages/Certified Payrolls. A schedule of prevailing wage rates as published by the California Department of Industrial Relations for the types of work to be done under these Special Provisions is on file in the office of the City Clerk, City Hall, 3900 Main Street, Riverside, which schedule is open for inspection to any interested party on request. The Contractor and all

subcontractors shall pay not less than these rates. The Contractor shall submit weekly certified payrolls of all workers employed on this project.

If the Contractor has not submitted satisfactory payrolls for the period during which the work included in the Contractor's payment request was performed, the City will retain an amount equal to 10 percent of the estimated value of the work performed (exclusive of Mobilization) from that payment. This retention shall not exceed \$10,000 nor be less than \$1,000. Retentions for failure to submit satisfactory payrolls shall be additional to all other retentions provided for in the contract. The retention for failure to submit payrolls for any work period will be released for payment only after all the satisfactory payrolls for which the retention was made are submitted. Payment of the retention will be made on the next monthly payment due the contractor after the satisfactory payrolls are received by the City.

Attached to these Special Provisions is a set of federal prevailing wage rates obtained from the granting agency. On this project, the Contractor and subcontractors are required to pay either the federal wage rates or the current wage rates published by the California Department of Industrial Relations, whichever is higher.

The possibility of wage increases is one of the elements to be considered by the Contractor in determining Contractor's bid. No additional compensations will be made for any increases in prevailing wage rates in excess of those set forth in the Contract. However, if the job is prolonged as a result of construction change order(s) or delayed by the City beyond the specified days in the Time of Completion, reimbursements may be made for increases in prevailing wage rates, but only for the working days beyond that stipulated in Section 6-7.

7-3 LIABILITY INSURANCE

7-3.1 Insurance Requirements.

- a. Secure and Maintain Insurance. Prior to City's execution of the Agreement, Contractor shall secure, and shall thereafter maintain without lapse of coverage until completion of the Contract, such commercial general, automobile, and professional liability insurance as shall protect Contractor from claims for damages for personal injury, including accidental death, as well as from claims for property damage which may arise from or which may concern operations under the Contract, whether such operations be by or on behalf of Contractor, any Subcontractor or anyone directly or indirectly employed by, connected with or acting for or on behalf of any of them.
- b. Provide Certificates of Insurance. Prior to the City's execution of the Agreement, Contractor shall submit an original certificate of insurance to the Public Works Department verifying the General Commercial Liability and Automobile Liability insurance in the required limits with the required provisions as stated below.
- c. Provide Additional Insured Endorsement. Prior to the City's execution of the Agreement, Contractor shall submit an Additional Insured Endorsement to the Public Works Department. Contractor must use the attached Additional Insured Endorsement form

provided by the City, or one that is substantially similar to and approved by the City Attorney [i.e. ISO CG 2010 (11/85)].

7-3.2 Proper Insurance Company. All liability insurance shall be issued by an insurance company or companies authorized to transact liability insurance business in the State of California with a policy holder's rating of A or higher and a Financial Class VII or larger.

7-3.3 Coverage. Coverage shall be at least as broad as the following:

- a. Commercial General Liability. Insurance Services Office Commercial General Liability Coverage (occurrence Form CG 0001). This coverage shall include:
 - i. Manufacturers and Contractors liability,
 - ii. Broad form property damage in any case where the Contractor has any property belonging to the City in the Contractor's care, custody, or control,
 - iii. Owners and Contractors' protective liability,
 - iv. Blanket contractual liability,
 - v. Products and completed operations coverage, and
 - vi. Coverage for collapse, explosion, and excavation.

- b. Automobile Liability. Insurance Services Office Automobile Liability Coverage (Form CA 0001), covering Symbol 1 (any auto). This coverage shall include:
 - i. Coverage for owned, non-owned, and hired automobiles

7-3.4 Limits. The Contractor shall maintain limits no less than the following:

- a. Commercial General Liability. One million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) aggregate for bodily injury (including death), personal injury and property damage, unless otherwise authorized by the City's Risk Manager, or his designee.

If Commercial General Liability insurance or other form with a general aggregate limit or products-completed operations aggregate limit is used, either the general aggregate limit shall apply separately to the work (with the ISO CG 2503, or ISO CG 2504, or insurer's equivalent endorsement provided by the City) or the general aggregate limit and products-completed operations aggregate limit shall be twice the required occurrence limit.

- b. Automobile Liability. One million dollars (\$1,000,000) per occurrence for bodily injury (including death), and property damage for each accident/incident, unless otherwise authorized by the City's Risk Manager, or his designee.

- c. No Limitation on Indemnification. These minimum amounts of coverage shall not constitute any limitation or cap on Contractor's indemnification obligation.

- d. Builder's Risk/Installation Floater Insurance. Contractor acknowledges that the City retains its own builder's risk policy. Unless otherwise set forth in the special provisions, Contractor shall obtain their own builder's risk insurance. In any event, should an event occur that is caused by the negligence or willful misconduct of the Contractor or its agents, employees, subcontractors, hiree's or invitees, in which City must make a claim under its builder's risk policy, Contractor shall be responsible for the City's deductible.

7-3.5 Required Provisions.

- a. Policies shall include premises/operations, products, completed operations, independent contractors, owners and contractors' protection, explosion, collapse, underground hazard, broad form contractual, personal injury with employment exclusion deleted, and broad form property damage.
- b. The policy shall be endorsed to waive any right of subrogation against the City, and its Subconsultants, employees, officers, agents and directors for work performed under this Contract.
- c. The policy shall specify that the insurance provided by Contractor will be considered primary and not contributory to any other insurance available to the City of Riverside.
- d. The policy shall include the following provision:

"Solely as respects WORK done by and on behalf of the named insured for the City of Riverside, it is agreed that the City of Riverside and its officers, employees and agents are added as additional insured under this policy."
- e. If policies are written on a claims made basis, the certificate should so specify and the policy must continue in force for one year after completion of the project. The retroactive date of the coverage must also be listed.

7-3.6 Expiration, Cancellation or Material Change. The policies shall not be canceled unless thirty (30) days prior written notification of intended expiration, cancellation or material change has been given to the City of Riverside by certified or registered mail.

7-3.7 Deductibles and Self-Insured Retentions. Any deductible or self-insured retention must be declared to and approved by the City of Riverside. The City reserves the right to either approve, reduce, or eliminate such deductibles or self-insured retentions.

7-4 WORKERS' COMPENSATION / EMPLOYER'S LIABILITY INSURANCE

7-4.1 General. The Contractor and all subcontractors shall insure (or be self-insured), under the applicable laws relating to workers' compensation insurance, all of their employees performing the work, in accordance with the "Workers' Compensation and Insurance Act", Division IV of the Labor Code of the State of California and any Acts amending thereof.

7-4.2 Insurance Requirements.

- a. Secure and Maintain Insurance. Prior to City's execution of the Agreement, Contractor shall secure, and shall thereafter maintain without lapse of coverage until completion of the Contract such workers' compensation and/or employer's liability insurance.
- b. Provide Certificates of Insurance. Prior to the City's execution of the Agreement, Contractor shall submit an original certificate of insurance, or self-insurance, to the Public Works Department verifying that Workers' Compensation insurance is in effect in the required limits with the required provisions as stated below, or that Contractor is self-insured for such coverage.

If Contractor has no employees, a certified statement to that effect shall be submitted to the Public Works Department, acknowledging that if Contractor does employ any person a certificate of insurance shall be submitted as provided in this section.

- c. Workers' Compensation Certification. Contractor shall comply with Labor Code Section 1861 by signing and filing the Workers' Compensation Certification, contained in the Contract Documents, with the City Attorney.

7-4.3 Proper Insurance Company. All worker's compensation/employer's liability insurance shall be issued by an insurance company or companies authorized to transact insurance business in the State of California with a policy holder's rating of A or higher and a Financial Class VII or larger.

7-4.4 Limits. Statutory limits are required for Workers' Compensation. Employer's Liability shall be no less than one million dollars (\$1,000,000).

7-4.5 Required Provisions.

- a. The policy shall be endorsed to waive any right of subrogation against the City, and its Subconsultants, employees, officers, agents and directors for work performed under this Contract.

7-4.6 Expiration, Cancellation or Material Change. The policy shall not be canceled unless ten (10) days prior written notification of intended expiration, cancellation or material change has been given to the City of Riverside by certified or registered mail.

7-5 PERMITS

7-5.1 City Construction Permit. No work shall be started within the street right-of-way or on City property until the Contractor has obtained a construction permit from the Public Works Department.

7-5.2 Local Licenses. The Contractor shall obtain and pay for all licenses necessitated by the Contractor's operations. Prior to starting any work, the Contractor shall be required to have a City of

Riverside Business Tax Registration valid for the life of the Contract; subcontractors shall also have Business Tax Registrations valid for the time they are engaged in the work.

7-6 THE CONTRACTOR'S REPRESENTATIVE

The superintendent is required to attend the Preconstruction Conference.

The City may suspend the work if a superintendent is not present during construction.

The superintendent will be required to meet with the Engineer on a daily basis. The purpose of these daily meetings is to ensure adequate coordination and discussion between the Engineer and Contractor during construction. Arrangements for the daily meeting will be discussed at the Preconstruction Conference.

The Superintendent shall meet with the Engineer within forty-five (45) minutes of notification of the superintendent or superintendent's office. For each incident of failure to comply with this requirement liquidated damages will be assessed **as described in Section 6-9 of these Special Provisions.**

An incident is described as follows:

The Engineer shall notify the Superintendent by phone to meet with the Engineer at a specific location at one of the project sites. An incident shall have occurred when the Superintendent fails to meet with the Engineer at the specified location within 45 minutes of said notification. The Contractor shall provide to the City at the Preconstruction Conference no more than two (2) phone numbers at which the Superintendent can be contacted during working hours. The City shall attempt to notify the Superintendent of a desired field meeting by calling the provided number(s). Failure of the Superintendent or Superintendent's office to answer either number after three (3) contact attempts at each number within a ten minute period shall also be considered an incident. Any changes to the contact phone numbers shall be provided to the Engineer in writing.

7-8 WORK SITE MAINTENANCE

7-8.1.1 General. The generation of dust shall be controlled as required by the Air Quality Management District. Grading activities shall cease during periods of high winds (greater than 25 MPH). Trucks hauling soil, dirt, sand or other emissive materials shall have their loads covered with a tarp or other protective cover as determined by the Engineer.

7-8.4.2 Storage in Public Streets and Right-of-Way. Construction equipment and materials shall not be stored in public streets and right-of-way. If the Contractor does not adhere to this requirement, the Contractor shall be subject to liquidated damages **as described in Section 6-9 of these Special Provisions.**

Excavated material, except that which is to be used as backfill in the adjacent trench, shall not be stored in public streets and right-of-way unless otherwise specified in these Special provisions or approved by the Engineer. Immediately after placing backfill, all excess material shall be moved from the Work site.

7-8.4.3 Storage of Equipment and Material on Private Property. If the Contractor wishes to use private property as a Construction Yard, then prior to any staging, storing, or parking of any Contract equipment and/or materials on said private property, the Contractor shall comply with the following requirements:

- a. The Contractor must provide the Engineer a site map for review indicating the proposed location of the Construction Yard;
- b. The location of the Construction Yard must be approved by the Engineer and written approval must be provided to the Contractor by the Engineer;
- c. The Contractor shall submit to the Engineer a copy of the written agreement with the legal owner of the affected property to be used as a Construction Yard;
- d. Within the Construction Yard itself, the Contractor must comply with the Best Management Practices for storm water protection as required by the Contract documents and current Public Works Standard Drawings for construction.
- e. The Contractor shall also not deliver or remove any equipment or material outside the Contract construction hours specified. If the Contractor does not adhere to this requirement, the Contractor shall be subject to liquidated damages **as described in Section 6-9 of these Special Provisions.**

7-8.6 Water Pollution Control.

7-8.6.2.1 Best Management Practices. The Contractor must follow and implement the Best Management Practices (BMPs) required by the attachment to these Special Provisions titled "Best Management Practices for Typical Construction Activities".

Contractor shall provide copies of certification that the superintendent or foreman has attended a Stormwater Pollution Prevention course within the last 12 months. Any work requiring the placement of BMP's shall not begin until this certification is provided to the Engineer.

7-8.6.5 Payment. The Contractor's cost of implementing the required BMP's for all project activities shall be included with other items of work.

Any BMP required to protect storm water quality shall be installed within 24 hours of the time Contractor is notified by the Engineer or regulatory agencies to install such BMP's.

7-8.7.1 Drainage Control. Special attention is directed to possible flood hazards, and/or nuisance water such as irrigation and other runoff. The Contractor shall be responsible for all injuries or damages to any portion of the work and/or any private or public property occasioned by these causes and shall make good such injuries or damages at no cost to the City prior to the completion and acceptance of the work.

7-10 PUBLIC CONVENIENCE AND SAFETY

7-10.1 Access. The Contractor shall provide traffic control and schedule the construction work based on the following criteria and constraints:

1. No reduction of the traveled way width shall be permitted before **7:00 a.m.** nor after **3:30 p.m.** on any street unless prior approval in writing is obtained from the Director of Public Works. During operations that require lane reduction, the Contractor shall provide and maintain two twelve-foot-wide lanes to provide one thru lane in each direction at all times. The Contractor shall also not store construction equipment within any public streets and right of way outside the previously specified hours. The Contractor shall also not deliver/remove any equipment or material to/from the Construction Yard or work area outside the previously specified hours.
2. Access to all properties shall be maintained at all times and not impact their daily operations. If necessary, the Contractor shall construct driveways in phases or in a manner to ensure no disruption to accessibility, including installing steel plating if necessary.
3. The Contractor shall provide and maintain traffic control during all construction activities in accordance with the Work Area Traffic Control Manual Handbook (WATCH). If the Contractor cannot provide and maintain traffic control as required, then the Engineer may direct the Contractor to provide, maintain, and update a full traffic control plan as described in Section 7-10.2.2 of these Special Provisions.
4. The Contractor shall provide traffic control for the protection of the City survey crew while providing construction staking services within grading areas for the project.
5. The Contractor shall be responsible to obtain all replacement gate valve, pull box, and/or water meter boxes when directed by the Engineer **as described in Sections 301-1.7.1 and 303-5.9 of these Special Provisions.**
6. The City may install Public Notification signs at locations adjacent to the project limits. The Contractor is responsible to protect, maintain and move these signs as necessary. At the completion of the project, the Contractor is responsible to carefully remove any signs from the posts, remove posts from ground without cutting, carefully remove any concrete from the posts, repair the post hole, bind the posts, coordinate with the Engineer for transportation to the City Corporation Yard and transport signs and posts to the location determined by the Engineer without damage. If signs are damaged and deemed unusable, the cost of replacement signs shall be reduced from payment.
7. No reduction of the traveled way width shall be permitted on **12th and 13th Street from Howard Avenue to Park Avenue and Howard Avenue and Park Avenue from 12th Street to 14th Street during the time frame listed below** unless prior approval in writing is obtained from the Director of Public Works.

- a. Mondays, Tuesdays, Wednesdays, Thursdays before 8:15 a.m. nor after 2:30 p.m.
- b. Fridays before 8:15 a.m. nor between 12:00 p.m. and 1:00 p.m.

8. No reduction of the traveled way width shall be permitted on **Potomac Street from Madison Street to San Rafael Way and Mt. Vernon Street from Madison Avenue to End of Street during the time frame listed below** unless prior approval in writing is obtained from the Director of Public Works.

- a. Mondays, Tuesdays, Thursdays, and Fridays before 8:30 a.m. nor after 2:30 p.m.
- b. Wednesdays before 8:30 a.m. nor between 1:20 p.m. and 2:00 p.m.

9. No reduction of the traveled way width shall be permitted on **Jackson Avenue between SR 91 and Magnolia Avenue during the time frame listed below** unless prior approval in writing is obtained from the Director of Public Works.

- a. Monday through Friday before 8:15 a.m. nor after 3:15 p.m.

10. No reduction of the traveled way width shall be permitted on **Jones Avenue from Hole Avenue to Wells Avenue during the time frame listed below** unless prior approval in writing is obtained from the Director of Public Works.

- a. Mondays, Wednesdays, Thursdays, and Fridays before 8:10 a.m. nor after 2:20 p.m.
- b. 1st and 3rd Tuesday before 8:10 a.m. nor between 1:00 p.m. and 1:30 p.m.

11. No reduction of the traveled way width shall be permitted on **Sunnyslope Avenue, Easy Street, Nebraska Avenue, Bogart Avenue and Bushnell Avenue from Bogart Avenue to Mitchell Avenue during the time frame listed below** unless prior approval in writing is obtained from the Director of Public Works.

- a. Monday through Friday before 7:45 a.m. nor after 2:15 p.m.

12. The Contractor is required pave the roadway after the commencement of Cold Milling (Types CM2 and CM3) work; pour concrete after the commencement of excavation work for all new sidewalks, driveways, driveway match-ups, pedestrian ramps, and/or curb and gutter; and/or complete the asphalt repair for the open slots within the allotted time requirements **as described in associated sections within Part 3 of these Special Provisions.**

7-10.1.1.2 Pedestrian Access. The Contractor shall provide and maintain a minimum 5-foot-wide path for pedestrian traffic through the construction site. If a path through the construction site and within street right of way is not possible, the Contractor shall lay out and maintain a safe and direct pedestrian path around the construction site within the public right of way. The pedestrian path shall be approved by the Engineer.

7-10.2.2 Traffic Control Plan (TCP).

7-10.2.2.1 General. If required by the Engineer, the Contractor shall prepare and maintain a traffic control plan. The plan shall be prepared, stamped and signed by either a licensed Traffic Engineer or a Civil Engineer. The preparation of the plan shall be in accordance with the latest edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD) and the State Standard Specifications. The plan(s) shall be to scale, typically 1"=40' or 1"=50' and shall follow Caltrans Plan Preparation Manual, latest edition. The plan shall reflect existing signing and striping, curbs, lane widths, raised medians, etc. The Contractor, at the pre-construction meeting, shall submit two full size bond plan sets for review. Work shall not commence without an approved traffic control plan.

7-10.2.2.2 Payment. Payment for "Traffic Control and Access" shall be made at the Contract lump sum price and shall include, but not be limited to, the preparation, printing, maintenance and required updates of the traffic control plan along with the installation, maintenance, and removal of all required traffic control items, including all signing, posting, lane delineation, barriers, trench plates and flaggers required to complete the project. Payment shall also include the cost to furnish and install any item as described in Section 7-10.1 through 7-10.2.2.1 of these Special Provisions unless specifically included in a separate bid item.

7-10.2.3 Street Closures, Detours, Barricades. For convenience to the Contractor to comply with the other provisions of this section, the following telephone numbers are listed:

Police Department.....	(951) 826-5700
Fire Department	(951) 826-5321
Traffic Engineering Division	(951) 826-5366
Traffic Signal Maintenance	(951) 351-6096
Street Light Repair	(951) 351-6005
City Electric, Water (After hours)	(951) 687-0791
American Medical Response Ambulance Service.....	(951) 684-5520
RTA.....	(951) 684-0850
Street Superintendent.....	(951) 351-6127
Riverside Schools.....	(951) 788-7134
Alvord Schools.....	(951) 351-9325
Special Services Transportation.....	(951) 687-8080
AT&T (Emergency).....	(951) 811-2121
Gas Company (Emergency).....	800-427-2200
Gage Canal Office.....	(951) 780-1333
Verizon Wireless (24-7 Repairs)	800-483-2000
Sherman Indian High School.....	(951) 276-6325

The Contractor is not relieved of the responsibility of notifying the various departments and agencies, if these telephone numbers are changed.

The Contractor will not be permitted to close any road without prior written permission from the Public Works Director. The Contractor will be required to submit for approval a "Road Closure and Traffic Control Plan" that has been prepared by either a licensed Traffic or Civil Engineer. If a full

closure is required, submittal of the plan shall be at least five (5) working days prior to the start of work. Partial traffic control plan shall be submitted at least two (2) working days prior to the start of work. The plan shall indicate the location and type of signs and barricades to be utilized. The adequacy of the signing shall be determined by the Engineer. Prior to preparation of the Plan, the Contractor is advised to discuss the proposed Plan with the Engineer.

No work (except for emergencies) that requires lane closures shall be allowed on the day before a City Holiday unless specifically approved by the Public Works Director in advance.

The Contractor shall notify the Inspector 48 hours prior to any change in the approved Traffic Control Plan. In case of a full closure, the Contractor shall provide barricades and reflectorized "Road Closed to Through Traffic" signs at the intersections immediately in advance of all such closures at all such closures, at entrances to the closures, and at all detour route signing. Detour signs shall be posted on wood or metal posts. Signs shall not be posted on any tree, utility pole or traffic signs.

Construction signs, barricades, and their applications shall conform with the most current issues of the State of California Business and Transportation Agency, Department of Transportation, Division of Operations "Uniform Sign Chart" and the "Manual of Traffic Controls" for Construction and Maintenance Work Zones.

7-10.4.6 Public Safety During Non-Working Hours. Public safety at or in the affected vicinity of the jobsite is the Contractor's responsibility at all times. If, in the absence of the Contractor, the Engineer determines that an unsafe condition exists at or in the affected vicinity of the jobsite, the Engineer will endeavor to notify the Contractor to correct the unsafe condition. However, the Engineer reserves the right to direct City forces to perform any functions Engineer may deem necessary to ensure public safety. If such procedure is implemented the Contractor will bear all expenses incurred by the City. In all cases the judgment of the Engineer shall be final in determining whether or not an unsafe situation exists.

7-10.6 Public Notification of Construction. The construction schedule required under Section 6-1.1 of these Special Provisions shall allow ample "on-street" parking for affected people, within a reasonable distance from their homes and businesses. Requests for changes to the schedule shall be submitted by the Contractor to the Engineer at least 48 hours prior to the scheduled operation to be changed.

The Contractor shall provide a construction advisory letter, subject to the approval of the City Engineer, to all affected residences and businesses adjacent to the work site a minimum of 7 days and maximum of 14 days prior to construction in each area of the project (see sample letter included in Part 10 of these Special Provisions). The letter shall indicate the duration of the proposed construction and state if alternate parking arrangements will be necessary. Projects that have multiple locations shall have a separate letter for each location and distribution for each area shall be **7 to 14 days prior to** construction beginning in the area. The City Inspector shall be notified 48 hours in advance of letter distribution and shall be on site during distribution of letter (**Letters shall not be placed in mailboxes**).

In addition, the Contractor shall provide another construction advisory letter, subject to the approval of the Engineer, to all affected residences and businesses adjacent to the work site a minimum

of 48 hours prior to construction on each street. The letter shall indicate the duration of the proposed construction and also state if alternate parking arrangements will be necessary.

"Temporary No Parking Signs" shall be posted for a continuous 48 hour period in advance of the work. These signs shall read "Temporary Tow-Away Zone, No Parking, RMC 10.12.080(b), (c); CVC 22651 (l), (n)". A sample will be provided at the Preconstruction Conference. The signs shall be placed no more than 100 feet apart on each side of the street and at shorter intervals if conditions warrant. The Contractor shall provide the signs and will be responsible for adding the dates and hours of closure to the signs. All signs shall be removed within 24 hours after the effective date. If the date of closure is changed, the Contractor will be responsible for reposting the signs in accordance with the above requirements.

At least (2) public notification signs shall be installed at each project site by the City. Signs shall be posted a minimum of one week prior to commencement of construction.

SECTION 8 FACILITIES FOR AGENCY PERSONNEL

8-1 GENERAL

Facilities for City personnel will not be required.

SECTION 9 MEASUREMENT AND PAYMENT

9-2 LUMP SUM WORK

9-2.1 Payment Schedule. The Contractor shall submit a payment schedule for all lump sum bid items. The schedule shall be submitted in accordance with Section 9-2 of the Standard Specifications.

9-3 PAYMENT

9-3.1.1 Payment. Payment for the Various items of the Bid Sheets, as further specified herein shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of work specified and shown on the drawings, including all appurtenances thereto, and including all costs of compliance with the regulations of public agencies having jurisdiction, including Safety and Health requirements of the California Division of Industrial Safety and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). No separate payment will be made for any item that is not specifically set forth in the Bid Sheet(s), and all costs therefore shall be included in the price named in the Bid Sheet(s) for the various listed items of work.

The City of Riverside payment process is through an electronic transfer process. Contractors or Suppliers must be set up for this payment process in order to be compensated for materials and/or services.

9-3.2 Partial and Final Payment.

From each progress estimate, 5 percent will be deducted and retained by the Agency, and the remainder less the amount of all previous payments will be paid.

9-3.2.1 Final Pay Quantities. When the estimated quantity for a specific portion of the work is designated on the Plans, in these Special Provisions or on the Proposal Forms as a final pay quantity by being marked by an (“F”) adjacent to the bid item involving that portion of the work, the estimated quantity for that portion of the work shall be considered the final quantity for which payment will be made, unless the dimensions of that portion of the work are changed on the Plans by the Engineer or that portion of the work is eliminated. If the dimensions of that portion of the work are revised and the revision results in an increase or decrease in the estimated quantity of that portion of the work, the final quantity for payment will be revised in the amount represented by the changes in dimensions. If that portion of the work is eliminated, the final pay quantity designated for that portion of the work will be eliminated.

The estimated quantity for such specific portion of the work shall be considered as approximate only and no guarantee is made that the quantity which can be determined by computations, based on the details and dimensions shown on the Plans, will equal the estimated quantity. It shall be the bidder’s responsibility to judge, based on the details and dimensions shown on the Plans and observation at the jobsite, the accuracy of the estimated quantity, making adjustments to the bid prices as the bidder feels necessary. No later allowance or adjustment in payment will be made in the event that any quantity based on subsequent computations or measurements does not equal the estimated final pay quantity.

When portions of an item have been designated on the Plans as final pay quantities, portions not so designated will be measured and paid for in accordance with the applicable provisions of these Special Provisions and the Standard Specifications.

In case of discrepancy between the quantity shown on the Plans as a final pay quantity and the quantity of the same item shown on the Proposal Forms, payment will be based on the quantity shown on the Proposal Forms.

9-3.4 Mobilization.

9-3.4.1 Payment. Payment for mobilization includes cost for preparing and maintaining the construction schedule and any required updates, cost for the construction advisory letter, and maintenance and removal of the public notification signs required under Section 7-10.6 of these Special Provisions.

9-3.5 Progress Payments. Progress payment requests shall be processed in accordance with the provisions of Public Contract Code Section 20104.50, which is summarized as follows:

- (a) Upon its receipt of Contractor's written payment request, City shall review it as soon as practicable to determine whether it is a proper payment request. If City determines that it is not a proper payment request suitable for payment, City shall return it to Contractor as soon as practicable, but not later than seven days after its receipt, together with a document setting forth in writing the reasons why it is not proper.
- (b) If City fails to make a progress payment within thirty days after it receives an undisputed and properly submitted payment request from Contractor, City shall pay interest on the correct amount thereof at the legal rate set forth in Subdivision (a) of Section 685.010 of the Code of Civil Procedure.
- (c) The number of days available to City to make a payment without incurring an interest obligation thereon shall be reduced by the number of days by which the City exceeds the seven day return requirement of (a) above for return of an improper request.
- (d) A "progress payment" includes all payments due under the Contract, except that portion of the final payment which is designated as retention earnings, and a payment request shall be considered properly executed if funds are available for payment thereof and payment is not delayed due to an audit inquiry by City's financial officer.

9-3.6 Retention Payment. City's payment to Contractor of the retention amounts withheld from progress payments made during the performance of the Work, and Contractor's disbursement thereof to Contractor's subcontractors, shall be subject to the requirements of Public Contract Code Section 7107, the Stop Notice withholding laws of the State of California and other provisions of the Contract. City's payment obligations under Section 7107 are summarized herein; by executing the Contract Agreement, Contractor will be confirming knowledge of and responsibility for disbursement of the retention payment to Contractor's subcontractors.

- (a) Within sixty days after the date of completion of the Work, City shall pay the undisputed and unencumbered portion of the retention amount to Contractor. If City disputes any portion of the amount Contractor demands, City will withhold from its payment an amount not exceeding 150% of the disputed amount.
- (b) If City fails to pay the undisputed and unencumbered portion of the retention amount due Contractor within sixty days after the date of completion of the Work, City shall pay Contractor a charge of 2% per month on the amount improperly withheld in lieu of any other interest amount otherwise payable by operation of law. In any lawsuit brought for collection of amounts alleged to be wrongfully withheld by City, the prevailing party shall be entitled to attorney's fees and costs.

- (c) "Completion" for purposes of this Section means any of the following events:
- (1) Occupation, beneficial use and enjoyment of the Work by City, excluding testing, startup and commissioning activities, accompanied by Contractor's cessation of labor thereon;
 - (2) Acceptance of the Work by City;
 - (3) Contractor's cessation of labor for a continuous period of 100 days or more due to factors beyond Contractor's control; or
 - (4) Contractor's cessation of labor for a continuous period of 30 days or more if and after City records a notice of cessation of work or notice of completion.

9-4 FINAL PAYMENT AFTER FINAL ACCEPTANCE

After the work has been accepted by the Public Works Director, as provided in Section 6-8 of the Special Provisions, payments will be made to the Contractor subject the following:

The Engineer will make a proposed final estimate in writing of the total amount payable to the Contractor. Within 30 calendar days of receipt of the proposed final estimate, Contractor shall submit written approval of the proposed final estimate, or a written statement of all claims arising under or by virtue of the contract. No claim will be considered that was not included in the written statement of claims, nor for which a Notice of Potential Claim was required, under Section 3-7 of Special Provisions.

Upon Contractor's approval of the proposed final estimate, or if the Contractor fails to file a claim within the specified period, the Engineer will process a request for final payment. City's issuance of a final payment shall bar Contractor's right to any claim arising out of the contract.

If the Contractor files a claim within the specified period, the City will review and make a final determination of such claim, in accordance with Section 3-5 of the Special Provisions and/or other applicable sections. Claims submitted by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of those claims.

The Contractor is required to track and record all changes made throughout the completion of the project and shall submit a complete red-lined copy of the construction plans to the Engineer for review of those changes indicated. If necessary, the Contractor shall address any comments and resubmit the red-lined plans. Upon approval by the Engineer, the Contractor shall submit 2 hard copies and 1 electronic PDF copy of the final approved red-lined plans. A Notice of Completion and/or Final Payment will not be released until the approved red-lined plans are received as described. The cost of the work and materials to provide the approved red-lined construction plans shall be included in the cost for Mobilization.

END OF PART 1.

PART 2 CONSTRUCTION MATERIALS

203-6 ASPHALT CONCRETE

Where dense graded asphalt is being constructed in two layers or more, the Asphalt Concrete pavement for the base course shall be B-PG-64-10. When dense graded asphalt is being constructed in a single layer and for a finishing course or Asphalt Concrete overlay, the Asphalt Concrete pavement shall be C2-PG-64-10.

END OF PART 2.

PART 3 CONSTRUCTION METHODS

300-1 CLEARING AND GRUBBING

300-1.3 Removal and Disposal of Materials. Clearing and grubbing shall be performed wherever construction is to be performed. Clearing and grubbing includes removal and disposal of all above-ground material including, but not limited to, abandonment of conduits and structures, demolishing of structures as required, and vegetation including small trees less than 6" in diameter.

Prior to cutting any service systems, such as sprinklers, the Contractor shall test the system and make necessary adjustments to keep the remaining irrigated areas serviced.

Traffic signs to be salvaged shall be delivered to the City of Riverside storage facility. The Contractor shall call the Street Services Division at 351-6127 for delivery location and instructions.

Disposition of other existing signs shall be as shown on the plan(s) and/or as directed by the Engineer. This may include temporary sign relocations due to construction or stockpiling of signs at the job site. The Contractor will be responsible for maintaining the condition of all signs specified herein.

If an existing sign post is not suitable for reinstallation and a replacement is not available from salvaged sign posts, then its replacement will be considered as Extra Work and paid for in accordance with these Special Provisions and the Standard Specifications.

Mail boxes and posts within the construction area shall be salvaged and temporarily set in an upright condition where easily accessible for mail delivery and accessible by the property owner. Posts and boxes shall be reinstalled in final position by the Contractor as shown. Broken posts shall be replaced by the Contractor at Contractor's cost. Replaced posts shall be, at the option of the Contractor, 4" x 4" redwood or 2" galvanized steel pipe.

If the Contractor encounters existing asphalt material extending onto the PCC gutter, and the gutter is not proposed to be overlaid, then the Contractor shall be required to remove the overlay in such a manner that damage to the gutter will not occur. If, in the opinion of the Engineer, the existing gutter's flow or riding characteristic have been altered by the AC removal, the Contractor, at Contractor's expense, shall make repairs to restore the gutter quality to its original state. Payment for AC removal from gutter shall be included in the Contract lump sum price for Clearing and Grubbing.

300-1.3.2 Requirements.

(d) Signal Detector Frame and Foundation. Signal detector frame and foundation shall be removed and the remaining void shall be backfilled and compacted with residue AC from cold milling operations or crushed aggregate base to the level of the existing grade. Additional AC may have to be placed as a leveling course to provide a smooth ride across the detector removal areas. The Contractor shall be responsible for the lawful disposal of the removed items. Removal of frame and foundation shall be considered as part of Clearing and Grubbing.

300-1.4 Payment. The Contract lump sum price for Clearing and Grubbing shall be considered full compensation for all work described under Section 300-1, "Clearing and Grubbing" of the Standard Specifications and these Special Provisions. Trees greater than 6 inches in diameter which are to be removed or relocated will be paid for separately.

300-2 UNCLASSIFIED EXCAVATION

300-2.1 General. This project is expected to generate excess excavated material including the volume of all existing surface and below-surface improvements including, but not limited to, AC pavement, turf, root systems and irrigation materials. The lawful disposal of all excess material generated by this project is the Contractor's responsibility.

300-2.9 Payment. Payment for Unclassified Excavation shall be at the Contract unit prices and shall include any necessary fill and compaction required by the Plans and Standard Specifications and hauling and lawful disposal of excess material.

301-1 SUBGRADE PREPARATION

301-1.6.1 Schedule and Tolerances of Manhole Adjustment. Sewer and storm drain manhole frames and covers shall be raised to the finished grade by the Contractor within 48 hours of final paving. The Contractor shall raise the tops of all frames and covers to range from flush to 1/4" above the finished grade of the immediately adjacent pavement. All manhole frames and covers adjusted to grade by Contractor shall be cleaned.

301-1.6.2 Riverside Public Utilities (RPU) - Water Manholes and Valve Boxes. At the option of the City, the Contractor shall adjust water manhole frames and covers and water gate valve covers to range from flush to 1/4" above the finished grade of the adjacent pavement. All dirt and debris are to be removed from the valve box to a depth of 6" below the operating nut.

Adjustment of water gate valve covers installed after March, 1983 (cap & liner type) shall be in accordance with STD. DWG. C.W.D. - 515. On water gate valve covers installed prior to March, 1983 (frame & lid type); if the frame skirt is raised above the existing gate box material (steel pipe), the gate box material should be extended as required. This extension must match the existing steel pipe O.D. & I.D. and must be secured with at least (3) equally spaced one inch welds OR the Contractor may choose to replace the Frame & Lid with a Contractor supplied Cap & Liner. If a Cap & Liner is used, the Contractor must drill a 1/4" hole in the new cap, 3/8" inside the interior ring on the cap surface. A Contractor supplied 1/4" x 1-1/2" brass roundhead screw must be installed and the existing gate tag (with copper wire) inserted on the inside of the cap, then held on with a 1/4" brass washer and nut. The top of all water valve covers shall be painted in accordance with Riverside Public Utilities Water Division Specification No. 205.

Marking Paint - Lead Free
Aerovoe Pacific - #203 Blue
Ground Traffic Coating - VOC<66%

Valve boxes smaller than (8) inches in diameter shall be replaced with 8" gate box material and a "cap & liner" type gate valve cover, in accordance with Riverside Public Utilities Water Division Specification No. 205. Any valve box found to be corroded, bent or otherwise previously damaged, making adjustment impractical or not feasible, shall be replaced. The inspector shall determine at the time of construction if the valve boxes in question shall be adjusted or replaced. The City will furnish new gate box materials and "caps and liners" for valve box replacements, however the Contractor shall be responsible for obtaining the materials from the City Corporation Yard to the Project site. Arrangements for obtaining these materials from the City's Corporation Yard at 8095 Lincoln Avenue shall be made through the Inspector 15 working days prior to scheduled installation.

Two foot by two foot rectangular valve covers marked "Riverside Water Company" will be adjusted to grade by the City.

301-1.6.3 Riverside Public Utilities - Electric Vaults and Manholes. At the option of the City, the Contractor shall adjust electric manhole vault frames and equipment covers so the top ranges from flush to 1/4 inch above the finished grade of the adjacent pavement. All electric manhole and equipment covers adjusted to grade by the Contractor shall be cleaned. Adjustments shall be in accordance with Riverside Public Utilities Electric Division Drawings UGS-053, UGS-062, UGS-435, and UGS-541. All work shall be accomplished in the presence of the Electric Operations representative. The Contractor shall notify the Electric Superintendent of the City Electric Division at 351-6373, two working days in advance of adjustment for scheduling of the representative.

Riverside Public Utilities electric facilities shall be designated as follows:

Manholes use Drawings UGS-062 and UGS-435
Vaults use Drawings UGS-053 and UGS-541

Since electric manholes and vaults contain energized cable and equipment, the Contractor shall use workers that have been properly trained in applicable electrical safety and work procedures to make the manhole and vault adjustments.

Except for the gate box and valve box materials as noted, the Contractor shall provide all the necessary tools, equipment, and materials necessary to perform all awarded adjustments.

301-1.7.1 Payment for Manhole and Valve Cover Adjustments. Payment for adjusting storm drain and sewer manhole frames and covers to finished grade will be made at the Contract unit price for adjusting sewer or storm drain manhole to grade.

Payment for tying out all the covers as stipulated in Section 5-1.1 of these Special Provisions, shall be considered as included in the Contract unit price of the surfacing material used adjacent to the cover and no additional compensation will be made therefor.

Payment for adjusting water or electric manhole frames and covers, vault frames, equipment covers, and water gate valve covers, if made part of the Contract, shall be made at the respective contract unit prices for each item. These payments shall be considered full compensation for all labor, tools, equipment, and materials required to adjust the utility facility.

Payment for adjusting and/or replacing water gate valve, pull box, and /or water meter boxes, if necessary, shall be included in the associated bid item. This payment shall be considered full compensation for all labor, tools, and equipment required to replace the gate valve box and cover with City furnished materials. Payment shall also include the Contractor obtaining the City furnished item from the City's Corporation Yard located at 8095 Lincoln Avenue.

Payment for painting utility covers as specified in these Special Provisions shall be included in the cost of adjusting or installing the item which requires painting.

301-1.8 Traffic Signal Pullbox Adjustments.

Adjustment of traffic signal pullboxes to grade will be subject to the following requirements:

1. The Contractor shall grout the bottom of existing pullboxes that are to remain in place and that are not already grouted with material specified in Section 86-2.06 of the State Standard Specifications. The Contractor shall remove all grout that does not meet the material specifications of Section 86-2.06 of the State Standard Specifications and the Contractor shall excavate within the pullbox to proper depth prior to grouting;
2. The Contractor shall adjust all conduits as necessary so the conductors do not touch the pull box lid. In addition, a minimum clearance of 3" between the top of all conduits and the bottom of the traffic pullbox lid shall be maintained; and,
3. The Contractor shall replace "in-kind" any traffic pullbox damaged as a result of his operations except that the minimum size replacement will be a No. 5 pullbox as described on State Standard Plan ES-8. Plastic Type No. 5 pullboxes will not be permitted.

302-1 COLD MILLING OF EXISTING PAVEMENT

302-1.1.1 Cold Milling Types. All pavement cold milling shall be performed after the removal and replacement work has been completed.

"Cold Milling – Type CM1" shall be performed in areas designated on the Plans and shall have a minimum width of 10' unless otherwise indicated on the plans. Width shall be measured from the existing gutter lip or the longitudinally joint line. Cold milling shall be 0.12' below the existing pavement.

"Cold Milling – Type CM2" shall be performed in areas designated on the Plans. The milling shall be 0.15' deep minimum unless otherwise indicated on the plans. Where the CM2 milling exceeds 0.15', the asphalt shall be replaced within in 24 hours after the commencement of the milling. Where the CM2 milling exceeds 0.20 the asphalt shall be replaced utilizing a minimum of 2 lifts (0.10' minimum per lift) with the following criteria: the base course lift(s) shall be completed the same day as the completion of the CM2 milling; and upon completion of the base course replacement pavement, the

milled areas may only be 0.10' minimum to 0.15' maximum below the original asphalt surface elevations, unless otherwise indicated on the plans.

302-1.11 Measurement. "Cold Milling – Type CM1" shall be measured by the linear foot for the specified width indicated on the Plans. "Cold Milling – Type CM2" shall be measured by the square foot for the milling depth noted on the Plans.

302-1.12 Payment. Payment for "Cold Milling – Type CM1" shall be the Contract unit price per linear foot for the specified width indicated on the bid proposal. Payment for "Cold Milling – Type CM2" shall be made on a square foot basis for the milling depth indicated on the bid proposal. Payment for "Cold Milling – Type CM2 - For Additional Removal Areas If Needed" shall be made on a square foot basis for the milling depth indicated on the bid proposal or the remaining depth of the existing AC pavement after the first cold milling. This item shall be used only if determined by the Engineer to be necessary.

302-5 ASPHALT CONCRETE PAVEMENT

302-5.2 Pavement Preparation. Pavement preparation shall consist of the following:

1. All cracks greater than 1/8" but less than 1/2" in width shall be routed to a minimum width of 1/2" and to a depth of 3/4" to 1" deep.
2. All cracks greater than 1/2" in width shall be routed to a depth of 3/4" to 1".
3. Seven days prior to the crack routing operation, all cracks with existing weeds or grasses shall be treated with a contact herbicide such as Monsanto RoundUp or City approved equal and to the manufacturer's recommendation. Prior to the application of any sealant, all cracks shall be completely cleaned of deleterious material using a blower or an air compressor. All wedged-in materials that are not readily removed by air should be removed by gouging or plowing. In addition, the street surface shall be completely cleaned of all pavement preparation debris by a power-driven street sweeper or other suitable means at the end of each work day.
4. After cleaning and routing but prior to the application of any sealant all cracks shall be treated with a selective pre-emergent herbicide such as ACME Industrial Products Barrier 50W Dichlobenil Herbicide or City approved equal and to the manufacturer's recommendation.
5. All cracks less than 1" in width shall be filled with a Crafcro Polyflex Type 3 Sealant or approved equal. Application shall be with a Heated Joint Seal Machine Crafcro Model BC-220 or City approved equal and to the manufacturer's recommendation. These may be obtained from Crafcro Inc., P.O. Box 20133, Phoenix, Arizona 85036. This treatment method shall be called "Crack Fill."
6. All cracks greater than 1" in width shall be filled with PG 64-16 asphalt concrete. This treatment method shall be called "Crack Repair."

7. All "alligator" cracked areas of the pavement shall be removed to a depth specified by the Engineer as described in Section 300-2 of these Special Provisions and replaced with DGAC. Replacement DGAC shall be described as "Construct DGAC Pavement" on the Plans and in these Special Provisions.
8. Performing traffic control for all work described above unless otherwise unless otherwise included in the bid item for "Traffic Control and Access."

Payment for all required "Crack Fill" and "Crack Repair" shall be at the Contract unit price per linear foot of street centerline and shall include full compensation for all labor, materials, tools, equipment and incidentals required for crack treatment.

302-5.5.1 Methods of Distribution and Spreading. A paving machine that picks up the asphalt concrete material from a windrow then spreads the material to a specified thickness may be used. However, the Engineer may require the Contractor to use a paving machine which accepts the asphalt concrete material directly from the delivery truck, at no additional cost to the City, if the temperature of the asphalt concrete in the windrow cannot be maintained above the lower temperature limit specified in Section 302-5.5 of the Standard Specifications, or if the windrow blocks access to any driveway or side street for more than fifteen minutes prior to the paving machine spreading the asphalt concrete material.

The Engineer reserves the right to suspend delivery of AC to the jobsite to ensure the AC placement operations are completed and the full traveled way is opened to traffic prior to the time limits specified in Subsection 7-10.1 of these Special Provisions.

302-5.7.1 Pavement Joints. Where new pavement joins an existing pavement, the surface will be inspected for smoothness of the seam between the two surfaces. When a six feet long straightedge is laid across the seam between "new" and "old" pavement, the surface shall not vary more than 0.03 feet from the lower edge. At join lines along new concrete gutters or where the existing asphalt pavement has been removed, the finished surface shall not vary more than 0.00' to 0.05' higher than the concrete surface that is being joined. On existing or proposed bike routes the finished surface shall not exceed 0.02' above the gutter lip.

302-5.9.1 Payment. Payment for asphalt concrete pavement shall be made on a per ton basis. This payment shall be full compensation for all labor, tools, equipment, materials, and traffic control to place and compact asphalt concrete within the limits shown on the plans. Payment for areas requiring additional removal and replacement shall be included in the bid item for "Asphalt Pavement (DGAC) – For Additional Removal Areas if Needed." The "Removal Areas" are not indicated on the plans and shall be determined by the Engineer during construction, if necessary.

Payment for matchup of all existing AC driveways, AC flow line reconstruction, AC berms and/or walkways shall be included in "Asphalt Pavement (DGAC)." This payment shall be full compensation for all labor, tools, equipment and materials to complete the work.

303-1 CONCRETE STRUCTURES

303-1.11 Payment. Payment for concrete structures shall be the Contract unit price for each structure constructed in place and shall include, but not be limited to, full compensation for structure excavation and backfill, concrete removals, concrete, steel reinforcement and miscellaneous hardware. Payment for the concrete used to join proposed and existing pipes shall be included in other items.

303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, PEDESTRIAN RAMPS, AND DRIVEWAYS

303-5.1.4 General Requirements. In areas where mail delivery is curbside, the Contractor shall provide openings in the sidewalk for the installation of posts for mail boxes. The openings shall be 6 inches square or 6 inch diameter round. The center of the opening shall be 16 inches from the curb face, adjacent to the driveway on the far side related to normal vehicle traffic directions.

The Contractor shall preserve the existing City Inspector Stamps located within the sidewalk panels, curbs, gutters, cross gutters, driveways, or sidewalk ramps marked for removal and replacement as directed by the Engineer. Contractor shall saw cut enough to nearest score line and remove entire concrete block and reinstall. The stamped blocks shall be placed within the newly poured concrete sidewalk panels in the same vicinity. Stamps to be preserved will be marked by the Inspector with the Contractor present before the start of construction.

Where curb and gutter is to be removed and replaced, the Contractor shall also remove a minimum of 12" of existing pavement to facilitate the setting of forms and compaction of backfill. Paving replacement shall be 6" full depth AC. The unit price paid for removal and replacement of C&G shall also include full compensation for all removal and replacement of AC adjacent to the gutter. If the inspector gives permission to the Contractor to leave existing asphalt in place and pour the gutter directly against existing AC the City will deduct 15% from the unit price of C&G removal and replacement.

Curb and gutter shall be poured independent (separate) of driveways, pedestrian ramps and sidewalks.

When the grade of C&G is less than 0.4%, the Contractor, at no additional cost, shall place (2) #3 reinforcing bars in the gutter. Construction stakes for curbs with flatter grades than 0.4% shall be every 12.5'.

Where new or replacement curb and gutter lengths are fifty (50) feet or greater, the Engineer will determine the need for construction stakes for grade.

The Contractor shall take measures to prevent graffiti, footprints, tire marks, etc., in the fresh concrete. The Contractor shall be responsible for all markings.

On projects with sidewalk construction, the Contractor, unless otherwise instructed, shall grade the parkway and slopes as shown on Standard Drawing No. 325.

On projects with median hardscape construction, the Contractor shall provide a 3" diameter blockout in the concrete at each median nose that is at least 4 feet wide for installation of traffic signs. This shall be accomplished by embedding a 3" PVC pipe in the concrete 2 feet 6 inches from the curb face at the median nose.

For the construction of concrete spandrels the curb returns will be counted as C&G with a gutter 2 feet wide. Only the remainder of the spandrel will be paid for as cross gutter and spandrel. No additional payment will be made for the extra thickness of concrete in the curb and gutter portion.

When pedestrian ramps are proposed to be constructed within existing concrete spandrels, the Contractor shall sawcut the spandrel to construct the new pedestrian ramp per the City standard drawings including any modifications indicated on the plans.

No mortar finish coat shall be required for curbs.

New sidewalk constructed in areas of existing sidewalk shall be scored to match the existing score pattern. Failure to score the sidewalk appropriately shall be cause for rejection.

On projects with pedestrian ramp construction, the AC pavement shall be placed flush with the concrete gutter along the pedestrian ramp. Removal and replacement of curb, gutter and sidewalk for pedestrian ramps shall be to the nearest joints. Sections less than 5' in width/length shall be removed and replaced as directed by the Engineer. The PCC retaining curb shall be poured monolithic with the adjacent sidewalk or pedestrian ramp.

It is the Contractor's responsibility to mark the approximate saw cut limits for the construction of pedestrian ramps including asphalt pavement areas. The City's Inspector shall review the marked limits before any removals. If the Inspector requests additional removals, then the Contractor must adjust the limits as necessary.

No survey work or staking will be provided by the City for pedestrian ramps, curb, gutter, driveway, and sidewalk construction or replacement unless determined necessary by the Engineer.

The City will not be responsible for additional move-ins needed to remove enough of the existing improvements to construct the proposed improvements.

303-5.5.2 Curb. The face and top of curb shall be carefully troweled to a smooth and even finish. The top of curb shall be finished with a transverse slope toward the gutter and the edges rounded in accordance with Standard Drawing No. 200. The troweled surface shall be finished with a fine-hair broom applied parallel with the line of work. The edge of the concrete at all expansion joints shall be rounded to a 1/4" radius. Joints shall conform with Subsection 303-5.4 of the Standard Specifications.

Application of class "B" mortar to face of curb is not required. Stamping of Contractor's name and the year shall not be performed.

303-5.7.1 Reasons for Rejection.

1. Transverse cracks through the C&G, exceeding 0.01 foot in width at any point.
2. Vertical displacement exceeding 0.01 foot, or which causes water to pond in the gutter for a distance exceeding 2 feet.
3. Serious or extensive surface imperfections.
4. Graffiti, footprints, tire marks, etc., in the fresh concrete. The Contractor shall be responsible for prevention of all markings.
5. Transverse cracks causing 5 feet or less of C&G to be "floating," or unattached to other C&G.
6. Cracks causing 25 square feet or less of sidewalks, approaches, cross gutters, or aprons to be "floating," or unattached to other approaches, cross gutters, or aprons.

Rejected concrete work shall be removed by means of a sawcut at a score line. If no score line exists, the minimum removed area or unscored area left in place shall be 25 square feet and the minimum width shall be 4 feet.

303-5.9 Measurement and Payment. Payment for sidewalk or driveway shall also include payment for removal of existing walk and relocation of existing sprinklers, if any, to the back of the proposed sidewalk. Payment for sidewalk and driveways shall also include adjusting of pull boxes and water meter boxes; a new box will be supplied by the City if the pull box or water meter box is damaged or not per current City standard specifications. However, the Contractor is responsible for obtaining the City furnished item from the City's Corporation Yard located at 8095 Lincoln Avenue. Payment for sidewalk shall also include compensation for any parkway and slope grading. Where curbs or curb and gutters are transitioning in dimensions or type, the length of transition shall be divided into two equal lengths and each half will be paid for as its adjacent type. Payment for depressed curb and gutter per City Std. 302 shall be included in the cost of Concrete Curb and Gutter per City Std. 200. The Contractor shall pour all new concrete within five (5) calendar days upon commencement of any removals for the above-described work. If the Contractor does not adhere to this requirement, the Contractor shall be subject to liquidated damages **as described in Part 1, Section 6-9 of these Special Provisions.**

Payment for PCC pedestrian ramp construction shall include payment for the removal and replacement of curb, gutter, sidewalk (to the nearest joint), any sidewalk match ups, ramp, landing, pavement removal and replacement (to comply with the maximum 5% cross fall) and any landscaping and irrigation repair, adjustment or replacement as necessary. Payment also includes construction of retaining curb, as necessary, to protect any existing improvements at the direction of the Engineer for any type of ramp regardless if retaining curb is shown or not shown on the standard drawing. Payment for wheelchair ramp construction shall also include adjusting of pull boxes and water meter boxes when they are located with any portion of the wheelchair ramp; a new box will be supplied by the City if the pull box or water meter box is damaged or not per current City standard specifications. However, the

Contractor is responsible for obtaining the City furnished item from the City's Corporation Yard located at 8095 Lincoln Avenue. **Payment shall also include cost to furnish and install truncated domes per City Standard 304.** When constructing a new ramp adjacent to an existing concrete spandrel, the existing spandrel shall be protected in place and sawcut as necessary to construct new ramp, unless otherwise noted. Payment for constructing depressed curb and gutter when constructing a Type VII Pedestrian Ramp shall not be included in the cost of the pedestrian ramp, but shall be included in the cost of Concrete Curb and Gutter per City Std. 200. Payment for Type VII Wheelchair Ramp shall include construction of the new wheelchair ramp per Pedestrian Ramp Type VII Drawing in Part 10 of these Special Provisions. Payment for Type VII Wheelchair Ramp shall include the cost to furnish and install truncated domes per City Standard 304. Payment for Type VII Wheelchair Ramps shall also include the cost to reconstruct driveways, driveway matchups, relocation of mailboxes out of driveway wings and any sawcutting required to facilitate constructing the new driveway and driveway matchup. The Contractor shall pour all new concrete within five (5) calendar days upon commencement of any removals for the above-described work.

Payment for curb and gutter shall be at the Contract unit price per linear foot for the curb height indicated on the plans. If the proposed curb and gutter is to replace existing damaged curb and gutter, then no curb height will be indicated and the Contract unit price per linear foot shall include the cost to reconstruct the curb and gutter to match all the dimensions of the existing curb and gutter at all locations indicated on the plans. Payment shall also include the steel reinforcement per the standard drawings, when required.

Temporary resurfacing shall be required only at times and locations determined by the Engineer during construction. Payment for temporary resurfacing shall be included in the bid item requiring temporary resurfacing in place and shall include full compensation for furnishing, placing, maintaining, removing, and disposing of such temporary materials.

When completing any concrete improvements adjacent to existing asphalt pavement, the Contractor shall repair the open asphalt slot created within five (5) calendar days after commencement of any removals. The cost for utilizing permanent asphalt pavement shall be included in the bid item requiring the open slot repair. At the option of the Contractor, the Contractor may provide temporary asphalt, as described previously, to complete this work, however no additional compensation shall be provided to complete either or both the permanent and/or temporary asphalt work described herein.

When an existing irrigation system is disrupted and/or the existing landscaping is damaged and/or removed to remove and replace any of the existing concrete work described, the Contractor shall repair/modify the existing irrigation system to provide adequate irrigation coverage and replace the existing landscaping, in-kind, within 48 hours after the initial associated disruption and/or removal. Sod shall be utilized to replace any removed and/or damaged grass coverage. No additional compensation will be provided to modify the existing irrigation and/or replace the existing landscaping for areas receiving existing concrete repair as described herein.

SECTION 308 – LANDSCAPE AND IRRIGATION INSTALLATION

308-1 GENERAL

Refer to the Landscape Division Specifications and Guidelines **as described in Part 10 of these Special Provisions.**

308-5 IRRIGATION SYSTEM INSTALLATION

Recycled water pipe shall be purple color coded integrally stamped or marked as “Caution-Recycled Water-Do Not Drink” and “Peligro: Aqua Impura- No Beber” or use vinyl wrap or use recycled water warning tape.

Tag for recycled water shall be on all recycled meters, air/vacuum relief valves, valves, pressure reducing valves, pumps, pump control valves, etc., shall be tagged, labeled or painted indicating that the devices are on recycled water and color coded purple (Pantone #522). 12” minimum clearance between ground and water control devices.

All recycled water irrigation box covers and lids shall be color coded Pantone #522; name plate shall be manufactured in purple UV resistant CO-Polymer plastic. The name plate shall be attached with tamper proof rivets concrete or steel covers shall be painted top and bottom with Pantone #522.

308-5.1.1 Water Service. The City will be responsible for paying for the cost for the installation of new water meter(s); however, the Contractor shall be responsible for all other incidental fees necessary, including connection fees to install the meters in place subject to the approval of Riverside Public Utilities. Contractor shall be responsible for all water costs throughout the maintenance and plant establishment period.

Coordination is required for the proposed pipeline installer to avoid digging up the newly paved road and must allow 8 weeks for the City to install the meter.

308-6 MAINTENANCE AND PLANT ESTABLISHMENT

Disease and Pest Control: Throughout the tree and plant warranty period, all plants and trees shall be maintained in a disease and pest free condition. A licensed pest control operator shall be retained by Contractor to recommend and apply all pesticides, herbicides, and fungicides. Exterminate gophers, moles, and all other rodents, and repair damage.

308-8 Payment. Payment for “Design, Furnish & Install Irrigation System” shall be at the lump sum Contract unit price and shall include all improvements indicated in the construction drawings and all coordination with the landscape division for their approval (Excludes payment of city fees for water meter installation). City will install the water meter but the Contractor is responsible for coordination with the Riverside Public Utilities, completing applications, and paying connection fees which shall be reimbursed by the City. Payment shall also include the Contractor’s full compensation for all labor, materials, tools, equipment and incidentals to install the irrigation system, including the water connection service, based on the requirements of the

project plans and these Special Provisions and subject to the requirements and approval of the City's Public Works and Riverside Public Utilities Departments. Payment shall include all water line sleeves crossing driveways for proposed water meter and battery operated valves.

Payment for "Soil Preparation/Fine Grading" and "Mulch, 2" Layer" shall be made at the contract unit prices per square foot and shall include full compensation for all labor, materials, tools, equipment, and incidentals required to complete the work. All work shall be completed as shown per plans and as described in the Standard Specifications and these Special Provisions.

Payment for all trees, shrubs, and groundcover shall be made at the contract unit price for each associated item planted and shall include full compensation for all labor, tools, materials, equipment, incidentals required to complete all planting work as shown per plans and as specified in the Standard Specifications and these Special Provisions. The payment shall include a plant warranty period of a MINIMUM of ninety (90) consecutive calendar days required for shrub and tree plantings. This warranty period is independent of the construction period. The Contractor shall also pay for all water costs, including the existing controllers covered irrigation areas, throughout the ninety (90) consecutive calendar day warranty period.

314 TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS

Striping and pavement markings shall conform to Section 84 "Traffic Stripes and Pavement Markings" of the State Standard Specifications.

Pavement markers shall conform to Section 85 "Pavement Markers" of the State Standard Specifications.

Unless otherwise noted, Thermoplastic paint shall be utilized for the project. All cat-tracking shall be in place within 48 hours from the completion of asphalt overlay and/or rubberized emulsion-aggregate slurry application. Unless otherwise approved by the engineer; once cat-track is complete, a request for cat-track approval shall be forwarded to the project manager or inspector. Contractor shall allow 2 working days for cat-track approval. Once cat-track is approved, striping installation shall commence within 2 working days, except in cases where loop detectors are required or slurry has been installed. In cases where loops are required, loops installation is to commence within 2 working days of cat-track approval and striping work shall commence within 2 working days of loop install completion. However, in areas where slurry is installed, a minimum of 7 days shall lapse between slurry and striping installation.

The thermoplastic material shall be applied by extrusion method in a single uniform layer. Stencils shall be used when applying thermoplastic material for pavement markings. The pavement surface to which thermoplastic material is applied shall be completely coated by the material and the voids of the pavement surface shall be filled.

If green bicycle lane pavement markings is specified it shall consist of preformed thermoplastic markings. The markings shall be PreMark ViziGrip, or approved equal, and must be a resilient light green color thermoplastic product. The must contain glass beads and abrasives in an alternating pattern.

The markings must be resistant to the detrimental effects of motor fuels, lubricants, hydraulic fluids etc. Lines, legends and symbols are capable of being affixed to bituminous and/or Portland cement concrete pavements by the use of the normal heat of a propane torch.

The markings must be capable of conforming to pavement contours, breaks and faults through the action of traffic at normal pavement temperatures. The markings shall have resealing characteristics, such that it is capable of fusing with itself and previously applied thermoplastic when heated with the torch. The markings shall not have minimum ambient and road temperature requirements for application, storage, or handling. The PreMark Vizigrip material must be composed of an ester modified rosin resistant to degradation by motor fuels, lubricants etc. in conjunction with aggregates, pigments, binders, abrasives, and glass beads which have been factory produced as a finished product, and meets the requirements of the current edition of the Manual on Uniform Traffic Control Devices for Streets and Highways. The thermoplastic material conforms to AASHTO designation M249-79 (98), with the exception of the relevant differences due to the material being supplied in a preformed state.

The Light Green Pigment color shall be manufactured with appropriate pigment to ensure that the resulting color complies with the Light Green color as specified in the FHWA Memorandum dated April 15, 2011: Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes (IA-14)

If paint (2 coats) is specified it shall consist of painting traffic stripes and pavement markings, including applying glass beads. The material and application of the paint materials shall conform to the provisions of Section 84-3, "Painted Traffic Stripes and Pavement Markings", of the State Standard Specifications.

Temporary pavement delineation, including but not limited to raised flexible reflective tabs and/or reflective adhesion tape, shall be installed and maintained by the Contractor during or between construction stages and operations for the purpose of providing traffic control and public safety. The specific type or method of temporary pavement delineation used by the Contractor shall be approved by the Engineer prior to application. Installation and maintenance of all temporary pavement delineation shall not be considered as "extra work". Payment for temporary pavement delineation shall be considered as included in the Contract price(s) paid for the other Contract items unless specifically identified as a separate Contract item. Temporary and/or permanent pavement delineation performed by the Contractor at the direction of Engineer for reasons or circumstances beyond the Contractor's control (excluding weather related construction delays) shall be considered as "extra work".

When using raised flexible reflective tabs or reflective adhesion tape for temporary pavement delineation along the direction of travel (longitudinal lines), temporary stripes shall be placed on the pavement surface at a 6 inch or 12 inch offset left of the proposed permanent pavement stripe. Prior to the application of the permanent stripe the Contractor shall remove the tabs or tape from the pavement surface. Removals must be coordinated with the labor force (Contractor's) performing the permanent pavement delineation.

When reflective adhesive tape is used for lane delineation, a minimum of 3-foot strip of tape shall be placed at 12-foot intervals (gaps) regardless of the posted speed for the zone requiring temporary striping. When raised reflective tabs are used for lane delineation, the tab spacing shall not exceed 24 feet. Raised flexible reflective tabs shall not be utilized for limit lines (stop bars) or crosswalks without prior approval of the Engineer.

When temporary pavement delineation is needed on a roadway surface that has been grinded, temporary paint shall be utilized. Said temporary pavement delineation must match the alignment, spacing, color, and paint requirements of the permanent pavement delineations. Contractor must maintain the visibility of the temporary paint and re-apply new coats as deemed necessary by the Engineer.

When temporary pavement delineation is needed on a roadway surface that has been slurried, the Contractor shall not use reflective adhesion tape or temporary paint. The Contractor shall use raised flexible reflective tabs that follow the alignment of the permanent paint. Prior to the application of the permanent stripe the Contractor shall remove the tabs from the pavement surface. Removals must be coordinated with the labor force performing the permanent pavement delineation.

Traffic stripes shall be measured by the linear foot without deduction for gaps in the broken traffic stripes. Striping details having double stripes consisting of two 4-inch-wide yellow stripes separated by a 3-inch-wide gap is measured as a single traffic stripe. Pavement markings shall be measured by the area covered in square feet.

Payment for striping and pavement marking installation shall be made at the respective contract unit prices and shall include furnishing all labor, material, tools, equipment, traffic control, and incidentals necessary to apply the striping and pavement markings as shown on the plans and/or as directed by the engineer.

Pavement markers shall be placed in conformance with the provisions in Section 85, "Pavement Markers," of the State Standard Specifications. Attention is directed to "Traffic Control System For Moving Lane Closure on Multilane Highways" (Standard Plan T16) of the State Standard Plans regarding the use of moving lane closures during placement of pavement markers. The Contractor shall furnish the Engineer certificates of compliance for the pavement markers in conformance with the provisions in Section 85-1.01B, "Submittals", of the State Standard Specifications.

Pavement markers associated with striping details shall be included and paid for in the respective unit price paid for the striping detail and no additional payment shall be made therefor. Individual pavement markers, with the exception of the two-way blue reflective markers, not associated with a striping detail shall be measured and paid for by the respective unit price. Full compensation for removing pavement markers, when no longer required, shall be considered as included in the contract unit price paid for striping.

The Contractor shall be required to furnish and install Stimsonite Model 88AB Two-Way Blue Reflective Markers as shown on the City of Riverside Public Utilities Department Standard Drawing CWD-700. Payment for the Stimsonite Model 88AB Two-Way Blue Reflective Markers shall be included in the payment for striping and no additional payment shall be made therefor.

315 ROADSIDE AND STREET NAME SIGNS

315-1 Placement of Roadside Signs. Roadside sign(s) shall include installation of sign panel(s), fastening hardware, back braces, straps and saddle brackets, and frame assemblies for multiple

sign panels. A roadside sign includes a traffic sign with 1 or more sign panel(s) attached to a supporting structure. A supporting structure is typically 1 or 2 posts, a signal standard, or street light standard.

The sign must not be chipped or bent. Traffic sign face shall be 3M Diamond Grade DG3 Reflective Sheeting (ASTM XI) with protective graffiti film. All warning signs shall have a fluorescent yellow background and school signs shall have a fluorescent yellow-green background. Sign and/or post installation shall be per City of Riverside Standard Drawing No. 664.

Payment.

- a. A roadside sign consisting of 1 post with attached sign panel(s) is paid for as 1 “Install Roadside Sign (One Post).”
- b. Roadside sign panel(s) attached via strap and saddle bracket method or attached to an existing post is paid for as 1 “Install Roadside Sign (No Post).”
- c. Relocated sign panel(s) onto an existing signal or light standard is paid for as 1 “Relocate Sign (No Post).”
- d. Relocated sign panel(s) which require a new post is paid for as 1 “Relocate Sign (One Post).”
- e. Sign(s) identified for removal shall include removal of sign panel(s) and post(s)/foundation(s) if applicable, and shall be paid as “Remove Sign.”

315-2 Placement of Street Name Signs. Street Name Signs shall include installation of sign panels (both streets), breakaway signpost system if applicable and fastening hardware to provide a complete street name sign unit. The street name sign installation shall be per City of Riverside Standard Drawing No. 662.

Payment.

- a. Street name sign shall consist of street name sign panel(s) (both streets), fastening hardware and breakaway signpost system, as noted on the plan or in the field by the engineer or his representative, shall be paid for as “Install Street Name Sign.”
- b. Street name sign identified for removal shall include removal of sign panel(s) and post(s)/foundation(s) if applicable, and shall be paid as “Remove Sign.”

END OF PART 3.

PART 7

TRAFFIC SIGNALS, LIGHTING AND ELECTRICAL SYSTEMS

7-1.01 Description. Furnishing and installing and modifying traffic signals, highway lighting, flashing beacons and sign illumination, and payment therefore shall conform to the provisions in Section 86 “Signals, Lighting and Electrical Systems,” of the State Standard Specifications and these Special Provisions (See Section 2-5 herein).

Traffic signal and lighting work is to be performed at the following locations:

1. Twelfth Street at Market Street – Plan No. XL-732 (Sheet 1)
2. Park Avenue at Fourteenth Street – Plan No. XL-732 (Sheet 2)
3. Howard Avenue at Fourteenth Street – Plan No. XL-732 (Sheet 2)
4. Jones Avenue at Hole Avenue – Plan No. XL-732 (Sheet 5)

7-2 VEHICLE DETECTION

DETECTORS. Detectors shall conform to the provisions in Section 86-5, “Detectors”, of the State Standard Specifications and these Special Provisions.

The Caltrans TEES specification requirement for detectors is amended with the following additional requirements. Detector units are not required to be listed on the Caltrans QPL but compliance with TEES design criteria will be part of the evaluation process. Detector units shall be two channel rack mount with an LCD or LED display of operational parameters. Programming shall be by front panel mounted momentary contact switches. Detector timing is not required, but may be supplied and will not be subject to front panel programming requirements. Output shall be “solid state”. Currently evaluated and acceptable products are: RENO A&E Type C; EBERLE DESIGN Inc Type LMD222 or LMD 602t; or City Approved Equal.

Detector loop configuration shall be Type D for the front loops nearest to the limit line/crosswalk for all lanes including bicycle lanes. Bicycle lanes shall have Type C loops. Detector loop configuration shall be Type E for the remaining detector loops.

Loop wire shall be Type 2.

In lieu of terminating the detector loop conduit stub-outs as indicated in the Standard Plans, said stub-outs shall terminate at the edge of the gutter; depth shall be below the bottom of the gutter. The lead-in sawcuts shall accommodate this depth providing a smooth transition to the conduit stub-out.

Potholes for detector loop stub-outs shall be capped with asphalt over silica sand.

Hot-Melt Rubberized Asphalt Sealant shall be used for detector loop installation. No

exceptions.

It shall be the responsibility of the Contractor to layout and mark the pavement surface for all detector loop installations. Loop layout(s) shall be approved by the Traffic Engineer or his representative 48 hours prior to saw cutting.

As directed by the Traffic Engineer, loop lead-in cable and loop wire leads shall be marked to identify the area and/or lane of detection served.

Where curb (PCC) exists and/or is to be constructed as a part of this project, the alignment of the detector loop conduit stub-out(s), new or existing, shall be permanently marked on the curb face and gutter, as directed by the Traffic Engineer.

Loop stubouts shall be sized per Caltrans ES-5E and be constructed of schedule 40 PVC electrical conduit.

7-2.08 Conductors, Cable, and Wiring. Conductors and wiring shall conform to the provisions in Section 86-2.08, "Conductors" and Section 86-2.09, "Wiring" of the State Standard Specifications and these Special Provisions.

In lieu of individual conductors for vehicle and pedestrian signals and pedestrian push buttons, signal cable shall be installed and shall conform to the provisions of Section 86-2.08D, "Signal Cable" of the State Standard Specifications. Installation shall be as follows:

1. A 12-conductor cable shall be installed from the cabinet to each pole unless otherwise indicated on the plan(s).
2. A 3-conductor cable (pedestrian push button) shall also be installed from the cabinet to each pole. An additional 3-conductor cable must be provided if two pedestrian push buttons are located on the same pole.
3. No splices will be allowed for the installation of the conductors for Items 1 and 2 above.
4. Each conductor and cable shall be identified in the controller cabinet.
5. Other required cables, detectors and interconnect, and conductors for luminaires, I.I.S.N.S., vehicle preemption and signal service shall be installed as indicated in the Conductor Schedule.
6. Conductor identification for signal phasing shall be as directed in the field by the Traffic Engineer or his representative.

The third paragraph in Section 86-2.08, "Conductors" of the State Standard Specifications is amended to read:

The Contractor shall be responsible to install the number of conductors and/or cable(s)

needed to operate the electrical system(s). Omissions in the conductor schedule or unnumbered conduit runs shall not constitute "Extra Work". This also pertains to conductors for future phases indicated on the plan(s) for installation.

Conductors for each inductive detector loop shall be Type 2.

If a "C" shaped compression connector is used for splicing, the conductors shall also be soldered.

Splicing for signal modifications as specified in Subsection 86-2.09D, "Splicing and Terminations," of the State Standard Specifications will not be allowed unless otherwise indicated on the contract plan(s).

For splicing commons, the ends of the conductors shall be crimped and soldered to secure connections.

The minimum insulation thickness, at any point, for USE, RHH or RHW wire shall be 1.0mm for conductor sizes No. 14 to No. 10, inclusive, and 1.3 mm for No. 8 to No. 2, inclusive. The minimum insulation thickness, at any point, for Type THW and TW wires shall be 0.69 mm for conductor sizes No. 14 to No. 10, inclusive, 1.02mm for No. 8 and 1.37mm for No. 6 to No. 2 inclusive.

Notice shall be given, 48 hours in advance, to the City prior to any splicing. All final splicing shall be done in the presence of the Engineer or his representative.

FUSED SPLICE CONNECTORS. Fused splice connectors as specified in Section 86-2.095, "Fused Splice Connectors", of the State Standard Specifications will be required; the fuse shall be rated at 10 amperes.

7-2.10 Bonding and Grounding. Bonding and grounding shall conform to the provisions in Section 86-2.10, "Bonding and Grounding", of the State Standard Specifications and these Special Provisions.

Equipment grounding conductors will not be required in conduit containing loop lead-in cables only.

7-3 PAYMENT

Payment for traffic signals and lighting shall conform to the provisions in Section 86-8.01, "Payment", of the State Standard Specifications and these Special Provisions.

Payment for detector loops, detector splices per pull box, detector channel cards, and detector loop cable shall be made at the contract unit price and shall include furnishing all labor, mobilization, material, tools, equipment, traffic control, and incidentals necessary as described in the Caltrans Standard Plans and as directed by the Traffic Engineer or his representative.

PART 10

STANDARD DRAWINGS, DETAILS, AND MISCELLANEOUS SPECIFICATIONS

PUBLIC WORKS ENGINEERING STANDARD DRAWINGS

TITLE	DRAWING NO.
THE LATEST PUBLIC WORKS STANDARDS MAY BE DOWNLOADED FROM THE FOLLOWING SITE: http://www.riversideca.gov/pworks/drawings.asp	Internet

RIVERSIDE PUBLIC UTILITIES STANDARD DRAWINGS

TITLE	DRAWING NO.
THE LATEST PUBLIC UTILITIES ELECTRIC STANDARDS MAY BE DOWNLOADED FROM THE FOLLOWING SITE: http://www.riversideca.gov/utilities/elec-ugconstruction.asp (the standards approved in 2009 shall be used for this project)	Internet
THE LATEST PUBLIC UTILITIES WATER STANDARDS MAY BE DOWNLOADED FROM THE FOLLOWING SITE: http://www.riversideca.gov/utilities/water-ugconstruction.asp (the standards approved in 2009 shall be used for this project)	Internet

CALTRANS STANDARD PLANS

TITLE	DETAIL NO.
THE LATEST CALTRANS STANDARDS MAY BE DOWNLOADED FROM THE FOLLOWING SITE: http://www.dot.ca.gov/hq/esc/oe/project_plans/HTM/stdplns-US-customary-units-new06.htm (the 2010 standards shall be used for this project)	Internet

MISCELLANEOUS DRAWINGS, NOTES, AND SPECIFICATIONS

TITLE	LOCATION
Existing Pavement Section Summary Report by Converse Consultants Dated 7/10/2015	Attached
Public Works Landscape Division Specifications and Guidelines	Attached
Hunter Battery Pack Controller/Valve Specifications	Attached
Stabilized D.G Specifications	Attached
Specification No. 205 for Water Distribution Systems (Pages 31, 32, 41, and 45)	Attached
Public Works Pedestrian Ramp Type VII Drawing	Attached
Best Management Practices for Typical Construction Activities	Attached
Sample Public Notice Letter	Attached
Notice of Potential Claim Form	Attached
Exhibit "F" - Federal Funding Accountability And Transparency Act (FFATA)	Attached
HUD Requirements	Attached



Converse Consultants

Converse Project No.: 15-81-187-01

Summary Report
2015/2016 Arterial Streets Maintenance - Phase 1
City of Riverside Public Works Department

Location:	B	Total Samples:	4
Street/Plan:		Total R-Values:	1
Limits:		Updated:	7/17/2015

Core/Boring No.	Date	Location	AC Thickness (in)	AB Thickness (in)	Depth Foreign Materials (geotextiles, etc.)	Soil Classification	Moisture Content (%)	R-Value	Site Condition	Field Notes
B1	7/7/2015	See Attached Map	4.0 / 3.0	0.0	4.0					4.0" AC / 3.0" Macadam with cobble-sized rock.
B2	7/7/2015	See Attached Map	4.0 / 3.0	0.0	4.0					4.0" AC / 3.0" Macadam with cobble-sized rock.
B3	7/7/2015	See Attached Map	4.0	0.0						
B4	7/7/2015	See Attached Map	4.5 / 3.0	0.0	4.0					4.5" AC / 3.0" Macadam with cobble-sized rock.
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								

AB - Aggregate Base
 AC - Asphalt Concrete



Converse Consultants

Converse Project No.: 15-81-187-01

Summary Report 2015/2016 Arterial Streets Maintenance - Phase 1 City of Riverside Public Works Department

Location: Street/Plan:	C	Total Samples:	4
Limits:		Total R-Values: Updated:	1 7/10/2015

Core/Boring No.	Date	Location	AC Thickness (in)	AB Thickness (in)	Depth Foreign Materials (geotextiles, etc.)	Soil Classification	Moisture Content (%)	R-Value	Site Condition	Field Notes
C1	7/7/2015	See Attached Map	10.0	4.0						Core broke at 2.0".
C2	7/7/2015	See Attached Map	4.5 / 3.0	0.0	4.5					4.5" AC / 3.0" Macadam with cobble-sized rock.
C3	7/7/2015	See Attached Map	2.0	4.0	2.0					
C4	7/7/2015	See Attached Map	2.5	3.0	2.5					
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								

AB - Aggregate Base
AC - Asphalt Concrete



Converse Consultants

Converse Project No.: 15-81-187-01

Summary Report 2015/2016 Arterial Streets Maintenance - Phase 1 City of Riverside Public Works Department

Location: Street/Plan:	D	Total Samples:	2
Limits:		Total R-Values: Updated:	1 7/10/2015

Core/Boring No.	Date	Location	AC Thickness (in)	AB Thickness (in)	Depth Foreign Materials (geotextiles, etc.)	Soil Classification	Moisture Content (%)	R-Value	Site Condition	Field Notes
D1	7/7/2015	See Attached Map	4.0	0.0						Bottom of core broke.
D2	7/7/2015	See Attached Map	2.5	0.0						
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								

AB - Aggregate Base
AC - Asphalt Concrete



Converse Consultants

Converse Project No.: 15-81-187-01

Summary Report
 2015/2016 Arterial Streets Maintenance - Phase 1
 City of Riverside Public Works Department

Location: Street/Plan:	E	Total Samples: Total R-Values:	1 1
Limits:		Updated:	7/10/2015

Core/Boring No.	Date	Location	AC Thickness (in)	AB Thickness (in)	Depth Foreign Materials (geotextiles, etc.)	Soil Classification	Moisture Content (%)	R-Value	Site Condition	Field Notes
E1	7/8/2015	See Attached Map	1.5 / 1.5	0.0	1.5					1.5" AC / 1.5" Macadam
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								

AB - Aggregate Base
 AC - Asphalt Concrete



Converse Consultants

Converse Project No.: 15-81-187-01

Summary Report
 2015/2016 Arterial Streets Maintenance - Phase 1
 City of Riverside Public Works Department

Location: Street/Plan:	F	Total Samples:	3
Limits:		Total R-Values: Updated:	1 7/10/2015

Core/Boring No.	Date	Location	AC Thickness (in)	AB Thickness (in)	Depth Foreign Materials (geotextiles, etc.)	Soil Classification	Moisture Content (%)	R-Value	Site Condition	Field Notes
F1	7/8/2015	See Attached Map	5.5	7.0						
F2	7/8/2015	See Attached Map	6.5	6.0						
F3	7/8/2015	See Attached Map	7.0	3.0						
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								

AB - Aggregate Base
 AC - Asphalt Concrete



Converse Consultants

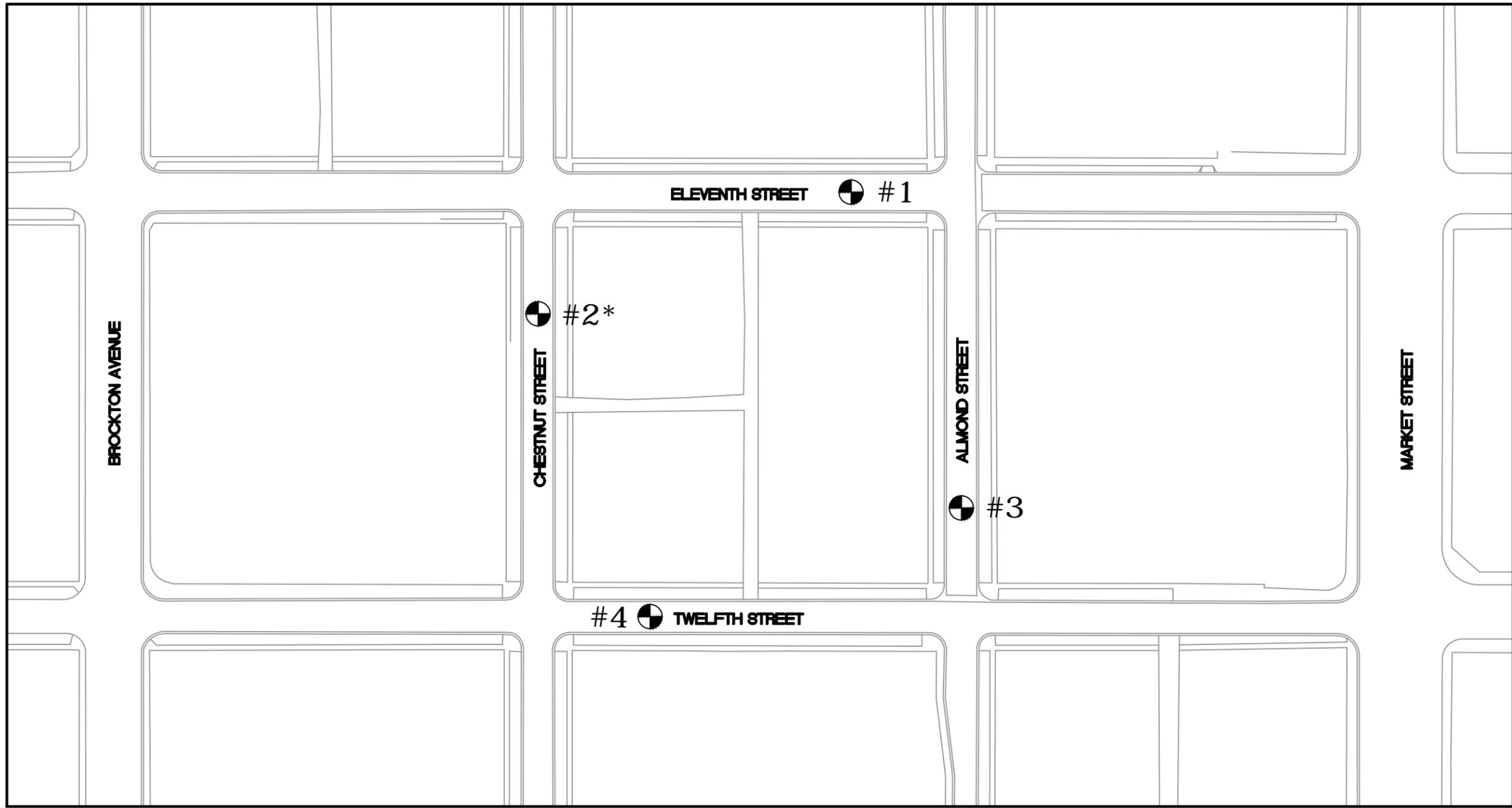
Converse Project No.: 15-81-187-01

Summary Report 2015/2016 Arterial Streets Maintenance - Phase 1 City of Riverside Public Works Department

Location: Street/Plan:	G	Total Samples:	4
Limits:		Total R-Values: Updated:	1 7/10/2015

Core/Boring No.	Date	Location	AC Thickness (in)	AB Thickness (in)	Depth Foreign Materials (geotextiles, etc.)	Soil Classification	Moisture Content (%)	R-Value	Site Condition	Field Notes
G1	7/8/2015	See Attached Map	3.0	0.0				-		
G2	7/8/2015	See Attached Map	3.5	0.0						
G3	7/8/2015	See Attached Map	3.0	0.0						
G4	7/9/2015	See Attached Map	5.5	0.0						Core broke.
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								
		See Attached Map								

AB - Aggregate Base
AC - Asphalt Concrete



LEGEND:

- # – CORE LOCATION NUMBER
- (*) – CORE LOCATION WITH "R" VALUE



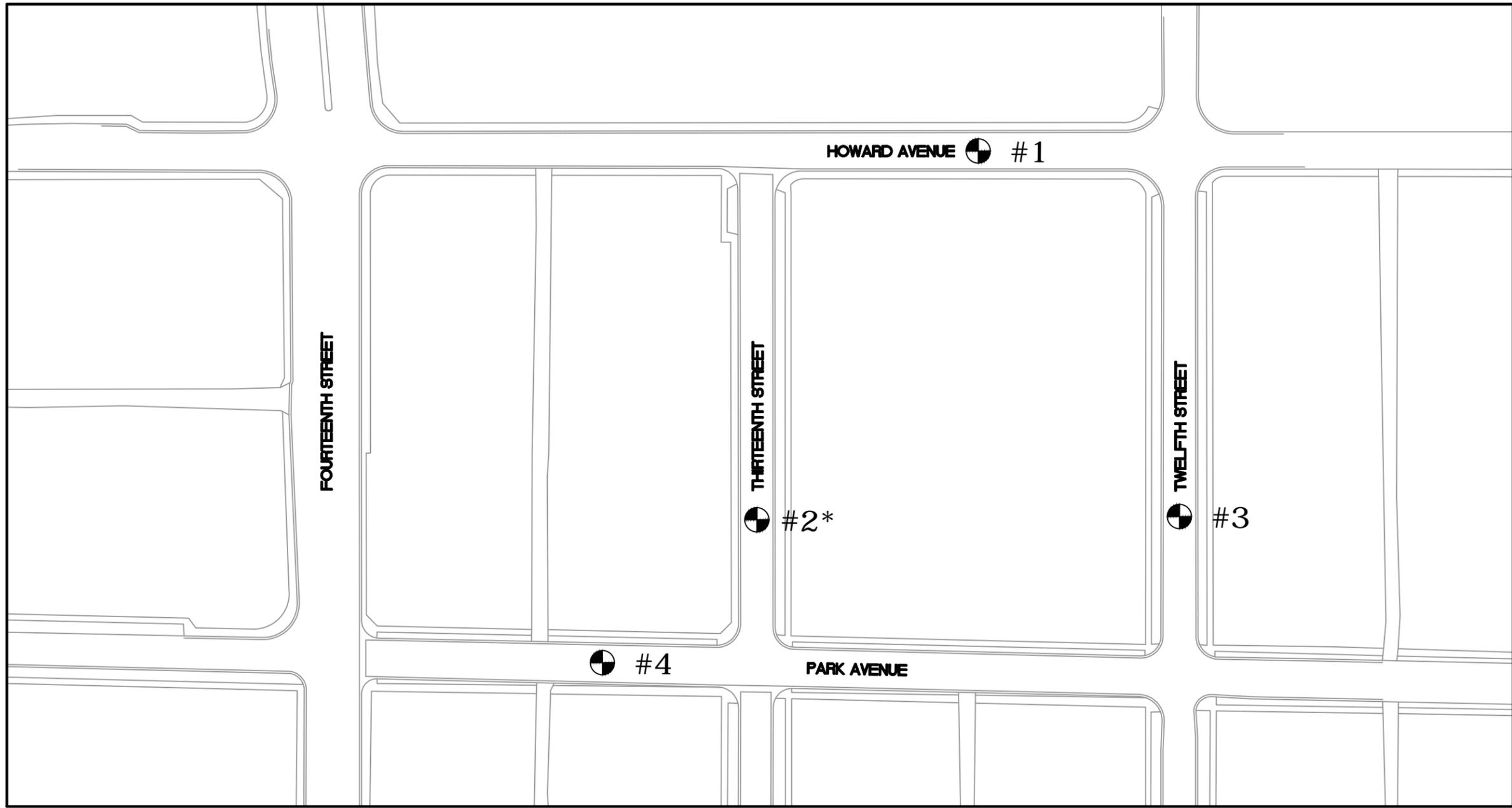
LOCATION "B" - CORE LOCATIONS

2014-2015 CDBG - WARD 1
 STREET IMPROVEMENTS FOR
 ELEVENTH, TWELFTH, CHESTNUT
 AND ALMOND STREETS

R-4338

SHEET 2 OF 2

SCALE: NOT TO SCALE



LEGEND:

- # - CORE LOCATION NUMBER
- (*) - CORE LOCATION WITH "R" VALUE



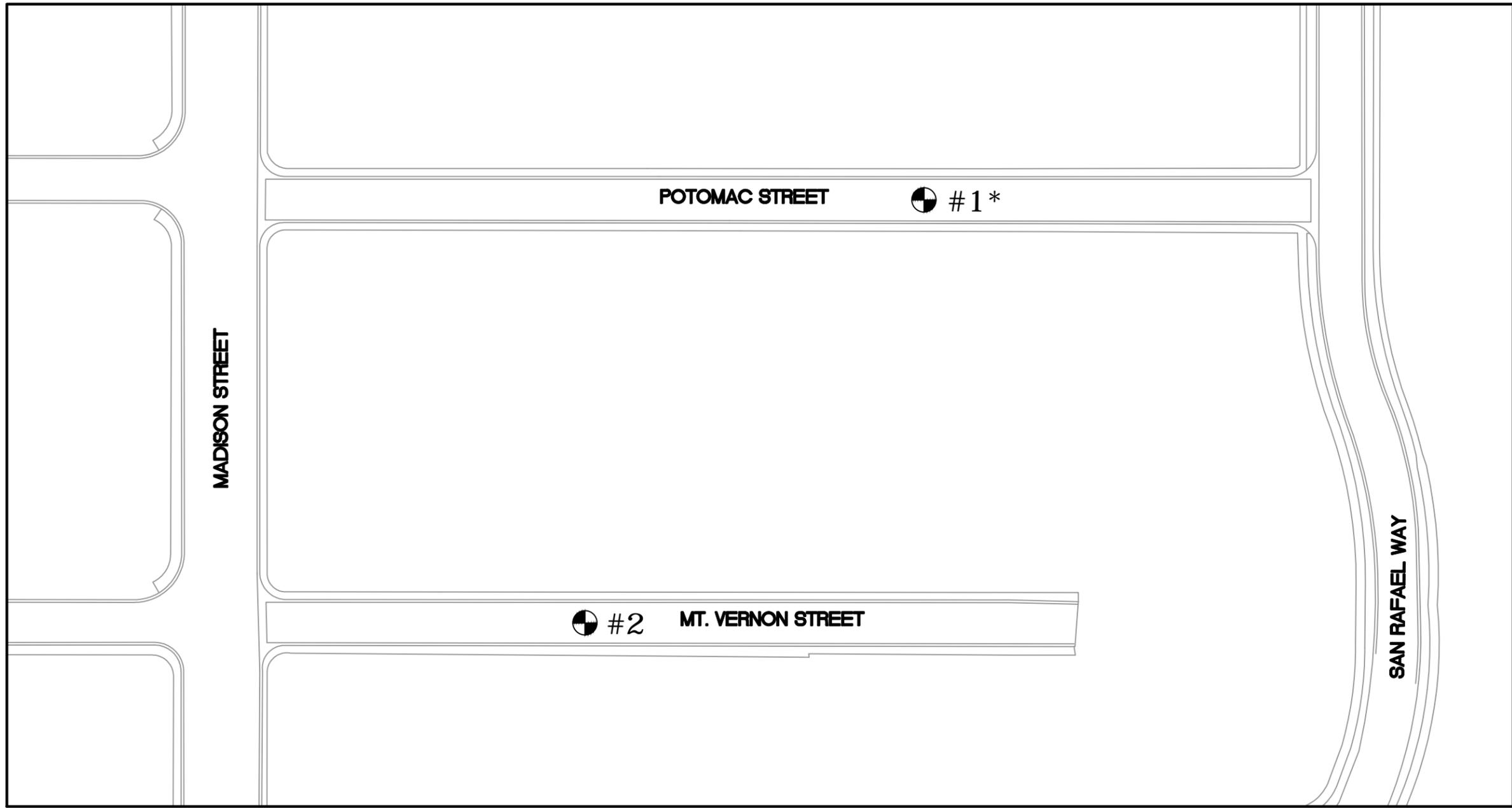
LOCATION "C" - CORE LOCATIONS

2014-2015 CDBG - WARD 2
 STREET IMPROVEMENTS FOR TWELFTH STREET,
 THIRTEENTH STREET HOWARD AVENUE AND PARK
 AVENUE

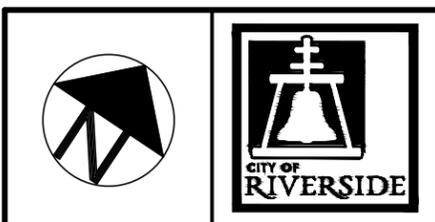
R-4339

SHEET 2 OF 2

SCALE: NOT TO SCALE

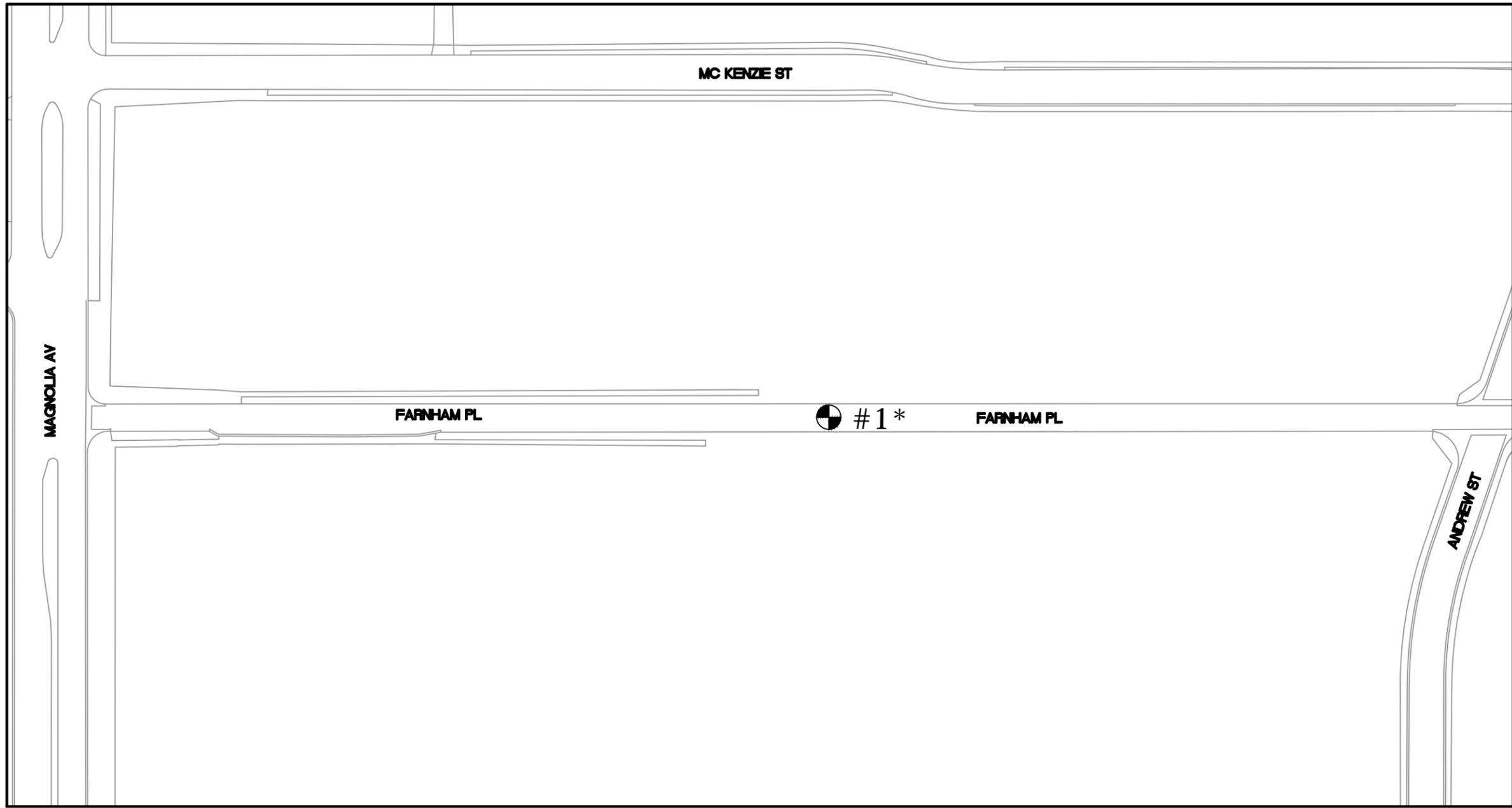


LEGEND:
 # – CORE LOCATION NUMBER
 (*) – CORE LOCATION WITH "R" VALUE



LOCATION "D" - CORE LOCATIONS
 2014-2015 CDBG - WARD 3
 STREET IMPROVEMENTS FOR POTOMOC STREET
 AND MT. VERNON STREET

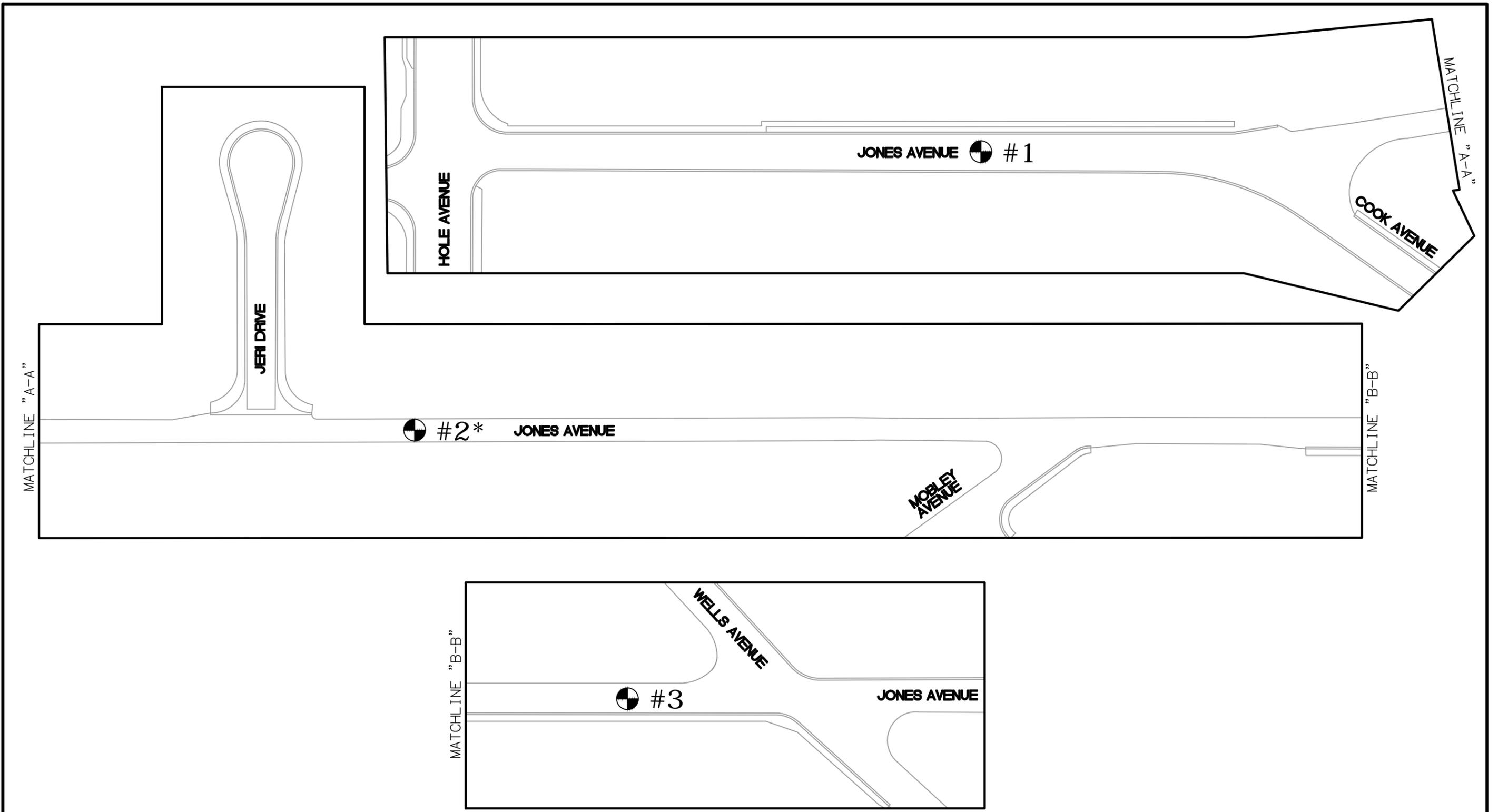
R-4340
 SHEET 2 OF 2
 SCALE: NOT TO SCALE



LEGEND:

- # - CORE LOCATION NUMBER
- (*) - CORE LOCATION WITH "R" VALUE

		LOCATION "E" - CORE LOCATION	R-4341
		2014-2015 CDBG - WARD 5 STREET IMPROVEMENTS FOR FARNHAM PLACE FROM MAGNOLIA AVENUE TO ANDREW STREET	SHEET <u>2</u> OF <u>2</u> SCALE: NOT TO SCALE



LEGEND:

- # - CORE LOCATION NUMBER
- (*) - CORE LOCATION WITH "R" VALUE



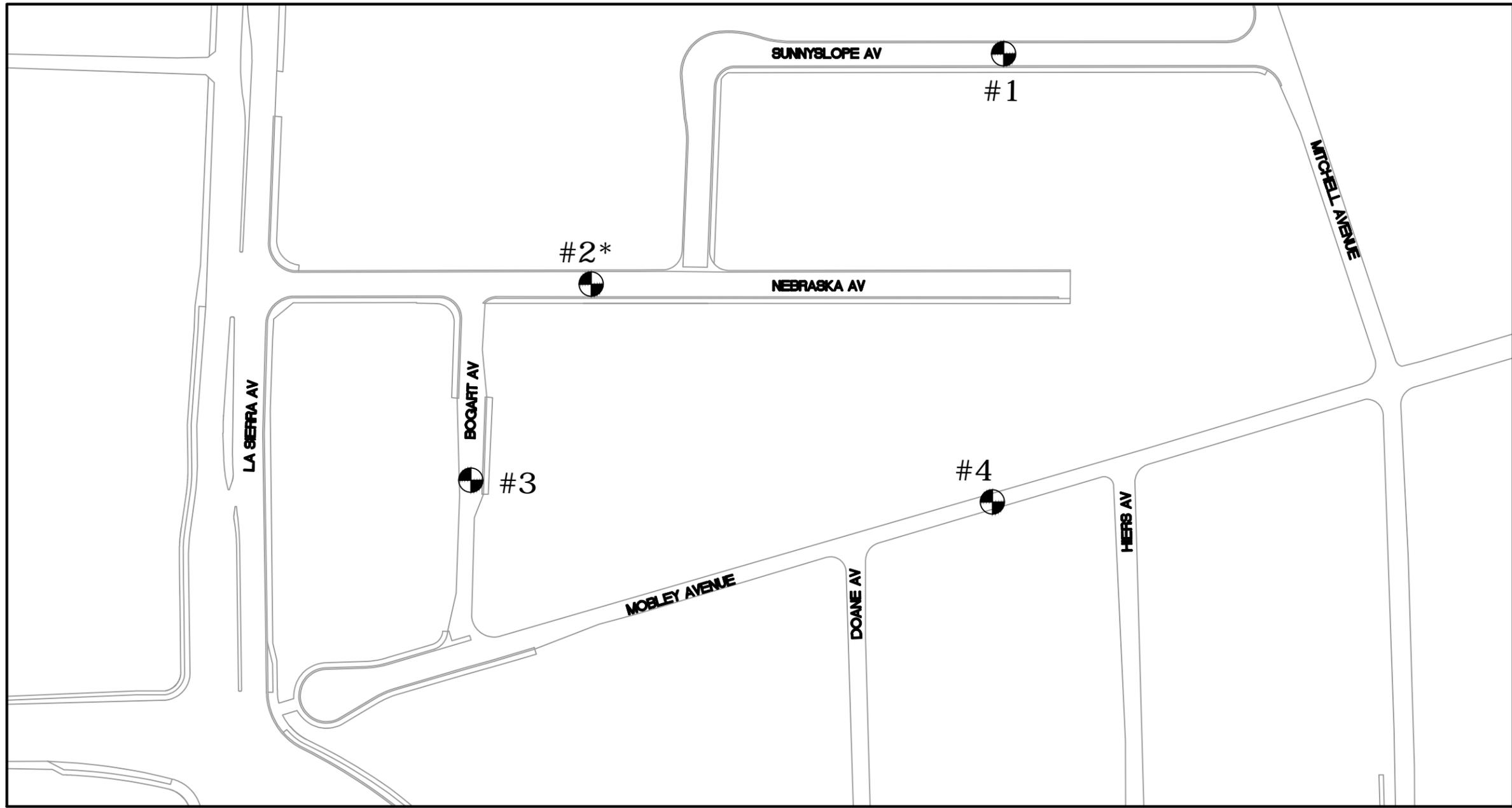
LOCATION "F" - CORE LOCATIONS

2014-2015 CDBG - WARD 6
STREET IMPROVEMENTS FOR JONES AVENUE FROM WELLS
AVENUE TO HOLE AVENUE

R-4342

SHEET 2 OF 2

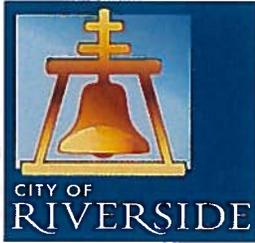
SCALE: NOT TO SCALE



LEGEND:

- # - CORE LOCATION NUMBER
- (*) - CORE LOCATION WITH "R" VALUE

		<p>LOCATION "G" - CORE LOCATIONS</p> <p>2014-2015 CDBG - WARD 7</p> <p>STREET IMPROVEMENTS FOR SUNNYSLOPE AVENUE, EASY STREET, NEBRASKA AVENUE, BOGART AVENUE AND BUSHNELL AVENUE</p>	<p>R-4343</p> <p>SHEET <u>2</u> OF <u>2</u></p> <p>SCALE: NOT TO SCALE</p>
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CITY OF RIVERSIDE

PUBLIC WORKS LANDSCAPE SPECIFICATIONS AND GUIDELINES

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SECTION I

PLAN PREPARATION

I-1. GENERAL

- A. Standard Sheet Size/Title Blocks: Plans for public landscapes shall be prepared on a standard sheet size of 24" x 36" using the City Standard Public Works Title Block as available through Riverside Blueprint and/or the City's website.
- B. Maintenance Responsibilities: All areas proposed to be maintained by the City, whether within the dedicated rights of way or in public landscape easements, shall be noted on the plans.
- C. Delineate Planting Areas: All plans shall delineate the project area, distinguishing building coverage and paved surfaces from landscape planting areas.
- D. Drawing Scale: Plan scale(s) used for irrigation plans shall be of the maximum size of 1" = 20'-0" or as otherwise determined to be acceptable by the City's plan checker, based on the legibility of the plan when reduced for controller chart purposes.
- E. City Approval of Revisions: Once plans are approved by the Public Works Department, any revisions to approved plans shall also be subject to approval by the Department, and approval thereof shall be recorded in an appropriate revision block on each sheet with approval initials and date by the City official approving the change. The revisions approval block shall identify the revision by "delta number" (triangle within which the revision number is identified), and all revisions on each corresponding sheet shall be marked with the respective "delta number" and the area of the change shall be "clouded" or "bubbled" to indicate the extent of the change.

I-2. TITLE SHEET The first sheet of each set of plans shall include the following information:

- A. Project Information: Title sheet shall clearly show the Project Title, to include project name, tract/parcel map number, and the type of plans (e.g. Median Landscape, Parkway Landscapes, Trails, etc.).
- B. Developer: Show development firm name, address, telephone number, FAX machine number, E-mail address, and project representative's name and telephone number with extension number, if different than the firm's office number.
- C. Location Map: Provide a location map clearly showing nearest arterial intersection, street names, north arrow, and project location.
- D. Vicinity/Key Map: Provide a Vicinity/Key Map (either separately, or if scale permits, doubling as the vicinity map) showing the following:
 - 1) Street configuration (showing curb alignments) within and/or adjacent to the tract or project.
 - 2) Street names.
 - 3) North arrow.
 - 4) Match line, as applicable.
 - 5) Project limits
- E. Plan Index: Provide an Index of all Sheets within the full set of plans.
- F. General Notes: Incorporate the appropriate version of General Notes for Public Landscape Construction as provided by the City Plan Checker in the initial Public Landscape Plan Check.
- G. Summary of Landscape Quantities:
 - 1) Grand total square footage (horizontal measure) of all landscape areas within the project limits (includes decorative pavement & trails surfaces) _____ SF
 - a) Subtotal square footage of 2:1 slope areas _____ SF
 - b) Subtotal square footage of plantings by type:

- i) Turf _____ SF
- ii) Groundcover _____ SF
- c) Decorative pavement _____ SF
- d) Decomposed granite pavement _____ SF
- 2) Numbers of specimen trees (i.e. 24" box size or greater, 10' Brown Trunk or larger) listed by size _____ EA
- 3) Total linear feet of planter "edges" where "edge trimming" is required (includes both sides of concrete mow curb separating groundcover areas from mown turf) _____ LF

H. Maintenance Responsibilities:

- 1) Total square feet of all areas to be maintained by the City _____ SF
- 2) Total square feet of all areas to be maintained by an Association or other private entity (i.e. someone other than the City) _____ SF

I-3. ALL SHEETS: All sheets in the set (including the first sheet) shall bear the following information:

A. Title Block: From left to right along the bottom margin shall include:

- 1) Dig Alert Logo & contact number.
- 2) Bench Mark Information.
- 3) Registered Landscape Architect's seal including license number, date of expiration and signature.
- 4) Landscape Architect's firm name, address, telephone and FAX numbers, E-mail address, name and signature of plan preparer, and date plans were prepared.
- 5) Revisions Block.
- 6) City Approvals Block.
- 7) Project Title.
- 8) Sheet Title.
- 9) Plan number as assigned in the public landscape plan check process. This number is to be displayed in the lower right hand corner of each sheet with text reading horizontally within the Plan Number box provided.
- 10) Sheet number (formatted as "Sheet ___ of ___").
- 11) Plan Check Reference Numbers as assigned in the public landscape plan check process.

B. Key Map (required when full project limits are not presented on a single sheet): provide on each sheet to show which portion of the overall project is represented by scaled plans on that sheet.

C. Consecutively Numbered: All sheets within the set of plans shall be consecutively numbered.

I-4. PLAN VIEWS: Each plan view of the project shall include the following information:

A. Title, Scale and North Arrow.

B. Limit of Work Line: shall reflect the limits of the project.

C. Match Lines: shall be labeled to provide adequate reference for identification and cross referencing between sheets.

D. Legends: Either provide a legend on the first sheet of a given type together with a cross-reference note on each subsequent sheet referring back to the sheet bearing the legend, or provide a legend on each sheet.

E. Base Information: Provide the following base information on all plan views:

- 1) Street Names: Clearly label all streets with their official names within and adjacent to the project;

- 2) Label Land-Use of Adjacent Parcels: Clearly label the designated land use (e. g. residential, commercial, governmental and industrial, vacant/zoned residential, etc.) for all adjacent parcels, and shall show all existing improvements and (where known) all proposed structures, surface improvements, vegetation, etc., within a minimum of 20 feet beyond the common property line between the public landscape project limits and the adjacent parcels;
- 3) R/W, Easement and Parcel Lines: All rights of way, easement and parcel lines of record shall be clearly shown and labeled;
- 4) Proposed Improvements: Provide graphic representations clearly distinguishing existing versus proposed improvements;
- 5) Drainage Improvements: Graphic representation of all drainage inlets, structures and drain lines including notation of their inlet and invert elevations, pipe materials and sizes., and minimum depth of cover;
- 6) Underground Utilities: Show all existing underground utilities of record and all proposed underground utilities with notation of the depths of cover for each; and,
- 7) All “existing” versus “proposed” surface structures.

I-5. GRADING PLANS: Public Landscape Plan Checks shall include submittal of the precise grading plan for the proposed public landscape area. Grading plans may be prepared as a separate set of plans from the public landscape plans:

- A. Topographic Information: Provide topographic information with minimum one foot contour intervals, clearly indicating “existing” versus “proposed” contours.
- B. Curb and/or Pavement Elevations: are to be provided for all “proposed” paving at appropriate control points (e. g. beginning and end of curb returns, at regular intervals along a curb line, concrete pad corners, walkway intersection corners, etc.) as well as “existing” elevations at connection points to existing pavement and other existing improvements.
- C. Retaining and Property Line Walls/Fences: Grading plans shall include horizontal and vertical control information for all retaining and property line walls/fences to be located within the public right of way and/or public landscape easement areas.
- D. Drainage: Grading plans shall show all proposed drainage systems and features, including storm drains, french drains, under drains, inlet and outlet structures, lined and unlined swales, ditches and flowlines, etc.

I-6. IRRIGATION PLANS: The following information shall be provided on all irrigation plans:

- A. Coordination: The Landscape Architect shall coordinate with the other design professional(s) preparing separate street, storm drain, sewer and water plans for a given project so that all sidewalks, storm drain, sewer and water lines that pass through or are impacted by the public landscape area are properly shown on the landscape plans and reflect the final approved locations for each. The Landscape Architect shall coordinate with the utility purveyor and the other designer(s) to ensure that both water and electric utility services for the irrigation system are located appropriately, per City Standards.
- B. POC: Provide Point of Connection information for each irrigation system, including:
 - 1) Water Source Purveyor (e. g. City of Riverside, Western Municipal Water District, Eastern Municipal Water District, other).
 - 2) Type of Water Service (e. g. potable domestic, non-potable or reclaimed).
 - 3) Service Address (to be “as-built” by the Contractor installing the irrigation system).
 - 4) Meter number and size in inches (to be “as-built” by the Contractor installing the irrigation system).

- 5) Pressure Elevation Zone.
 - 6) Minimum static water pressure typically available at the meter, as well as maximum pressure on record.
 - 7) Maximum anticipated demand expressed in gallons per minute (GPM).
 - 8) Minimum pressure at the meter required to operate the system (including all pressure lost to friction and elevation differences).
 - 9) Backflow device size.
 - 10) Pressure Regulator size and setting (as applicable).
- C. Water Service Approval Block: indicating the water purveyors approval of the proposed water service location, type (potable, non-potable or reclaimed) and size.
 - D. Controller Information: Provide full Irrigation controller information, including controller model number, number of stations, vandal resistant enclosure manufacturer and model number, service address for electric service (to be "as-built" by installing contractor and stenciled on enclosure door as specified).
 - E. Electric Service Approval Block: indicating the power purveyor's approval of the proposed electrical service location, meter number, buss size, voltage and amperage, and type (metered or non-metered).
 - F. Irrigation Legend: Provide a comprehensive irrigation legend showing all pertinent data for materials and equipment to be used in the system with reference to corresponding installation details and standard details. Irrigation legend shall include symbols for all materials used in the system (including control wire and sleeves), shall be located on the first sheet on which the symbols are used, and shall either be repeated or cross referenced on all subsequent sheets.
 - G. Valves: Each valve used shall be graphically shown on the plans (includes isolation ball valves, master control valves, remote control valves, manual and quick coupler valves, pressure regulating valves, air relief valves, etc.).
 - H. RCV's: All remote control valves shall be identified by station number assigned, the maximum GPM demand of the valve as designed and the valve size.
 - I. Lines: All lines shall be graphically marked to indicate their design size.
 - J. Utility Information: All water and electrical source information shall be shown, identifying the responsible utility purveyor, the location of each meter, and each service address as assigned by the purveyor (or if no street address is so assigned, Contractor shall obtain a street address for the controller from the City of Riverside Building & Safety Division and record this address on the irrigation "as-built" plans).
 - K. Booster Pumps: All irrigation pumps/boosters shall be shown on the plans, and shall include full operational requirements, including wattage, amperage, voltage, horsepower, boost range, size, maximum GPM flows, etc.
 - L. Calculations: Irrigation pressure loss calculations shall be provided for each service, to include: 1) the largest station; 2) the station furthest from the source; and, 3) the smallest station served.
 - M. Irrigation Designer's Information: If the irrigation system is designed by someone other than the Landscape Architect whose seal is shown on the plans, the Irrigation designer's name, firm name, address, telephone and FAX number, and E-mail address shall be provided on each irrigation sheet, including the details sheet.

SECTION II

PLAN REVIEW PROCEDURES

II-1. GENERAL:

- A. Preliminary Design Meeting: Prior to initiating bid document preparation, the individual who will design the public landscape shall contact the Public Works Department to schedule a Preliminary Public Landscape Design Meeting. Attendees shall include the designer, representatives of the Planning Department and Public Works Department who are assigned to process the plans for the project, and if desired, the Developer's representative. The purpose of this meeting will be to review the extent of public landscape areas being contemplated, to review a preliminary conceptual design (as prepared on tissue in a "sketch" format by the designer) to illustrate the proposed planting scheme(s) for all planting areas, to confer on the plant palette to be used and the corresponding type of irrigation system to be provided. Using drip irrigation for groundcovers, shrubs and subterranean drip for turf is required. If subterranean drip irrigation cannot be utilized on turf a minimum of 2' spacing of sprinklers from any hardscape is required.

- B. Plan Review "Turn-Around-Time": The City's goals for Public Landscape Plan Check reviews are to provide review comments within a two week (10 working days) time frame for initial submittals, and within a one week (5 working days) time frame for subsequent submittals. The Public Works Department staff person assigned will endeavor to meet these goals within the resources available, however, this turn around time cannot be guaranteed since the City has no control over the number or complexity of projects which may be submitted at any one time.

II-2. SUBMITTAL REQUIREMENTS & FEES:

- A. Public Landscape Plan Check Submittal Requirements: Once the conceptual landscape plan, plant palette and type of irrigation design to be used has been approved by the City, the designer may commence construction document preparation. A total of two sets of prints of all plan sheets, a preliminary project cost estimate and a check in payment of the Public Landscape Plan Check initial fees shall be submitted to the Public Works Department as a single packet to be considered a complete submittal for plan check purposes. Packets that do not have all items required will be returned to the applicant without review. A separate submittal packet will be needed for those projects also subject to the Planning Department's Landscape Design Review Process. Please check with your assigned Planner in the Planning Department for Planning's submittal requirements.

- B. Public Landscape Plan Check Fees: "Plan Check Fees are based on the valuation of the proposed improvements as calculated on the Construction Bond Estimate form. As a part of the first submittal, payment of the Plan Check **Base Fee** is **required**. Upon completion of the plan check process, the remaining balance of the Plan Check Fee shall be paid. This is required prior to issuance of a Construction Permit."

- II-3. INITIAL PLAN REVIEW ("1st Check")**: Comments will be provided to the applicant in two forms; written comments cross referenced to individual plan sheets, and redlined comments written directly on a "Redlined Set" of the plans. If the E-mail address(es) of the developer and/or designer are provided, electronic versions of the 1st Check Comments can also be provided in advance of hard copies. The "Redlined Set" of plans and a signed hard

copy of the Review Comments will be returned to the applicant either directly via U.S. Mail (or pick-up at the front counter at applicant's option), or when the project is also subject to Planning Department Design Review, via the Planning Department's Planner assigned to the Project.

II-4. AGREEMENT AND BOND FORMS: As a part of the 1st check review, Landscape Agreement and Bond Forms will be prepared by the Public Works Department and will be forwarded to the Developer either 1) via the Public Works Department (for inclusion in the "Dear Sir" letter associated with Tract recordation) where being processed as a part of a mapping (tract or parcel map) process; or via the applicant who submits the Landscape Plans when the project is not a part of a tract or parcel map process. See Appendix B for Sample Forms. (Agreement and Bond requirement authority is per Subdivision Code Section 18.220.020 Improvement Security)

II-5. SUBSEQUENT PLAN REVIEWS:

- A. Resubmittals: Plan resubmittals shall include two clean sets of prints of the revised plans together with the "Redlined Set" of plans from the previous review. Loss of or failure to provide the "Redlined Set" as a part of subsequent submittals will likely result in additional staff time charges being posted against the "trust account" for the subsequent review, so applicants are encouraged to include the redlined set.
- B. Comments from Subsequent Reviews: If comments are significant in number or nature, they will be provided as written comments and/or redlined comments. If the comments are minor (as determined by the Plan Checker), they can be provided by E-mail without the need for further plan transmittals back and forth.

II-6. FINAL PLAN APPROVAL: Once sets of plans have been submitted, reviewed and found to be in a form acceptable to the Public Works Department, and once both the electric and water service purveyors have signed the originals, and Landscape Agreements and Bonds have been posted, an appointment can be made with the Public Works Department Plan Checker to sign the original plans (note: for Tracts, the submittal of agreements and bonds can be deferred pending final submittal for recordation of the map, but all agreements and bonds must be submitted and accepted before the map can record). One of the two sets of prints submitted will be stamped as the "Public Landscape Permit Set" and will be forwarded to the Public Works Landscape Maintenance Inspector for issuance with the Public Landscape Construction Permit. Once plan originals have been fully signed by the City, they shall be placed on file with the Public Works Department (under authority of Subdivision Code Title 18, Section 18.220.030 Improvement Plans). For any and all revisions to approved plans, the originals must be checked-out from Public Works, and must be resubmitted and re-approved as a "Revision" to the approved plans, or the changes made will not be recognized as legitimate changes by the City and construction delays may occur. The City shall not be liable for delays resulting from "un-approved" revisions to approved plans.

II-7. PUBLIC LANDSCAPE CONSTRUCTION PERMIT: No construction activity (other than rough grading which is the subject of a separate plan review and permit process through the Public Works Department) shall commence within the public landscape area until the Public Landscape Plans have been approved and a Public Landscape Construction Permit obtained by the Developer. Failure to obtain a proper permit may result in "double fees" being applicable. See Section IV of this manual for information regarding obtaining the required permit.

II-8. SURETY RELEASE: All surety releases shall conform with the requirements of Subdivision Code Section 18.220.140. No public landscape surety may be released until the project is inspected and accepted in writing by the appropriate City Public Works Department representative. The public landscape performance surety will not be released until the required one-year plant establishment period has been completed by the developer and the project has been assumed for maintenance by either the City or the HOA as applicable. The payment portion of the surety will be released six months following release of the performance portion, provided no claims are forthcoming.

SECTION III

DESIGN STANDARDS

III-1. GENERAL

- A. Public Works Department Standards: All materials and installation work for public landscapes shall conform to the Public Works Department's standards and shall be installed per the Standard Specifications Sections **02441 Irrigation** and **02483 Planting** (See Exhibits Standard Specifications)
- B. "Greenbook" Standard Specifications: All work within the public right-of-way and within landscape easement areas shall also conform to the Standard Specifications for Public Works Construction ("Greenbook"), latest edition adopted by the City, as written and promulgated by the Joint Cooperative Committee of the Southern California chapter of the American Public Works Association and Southern California Districts Associated General Contractors of California, published by Building News, a division of BNI Publications, Inc., 3055 Overland Avenue, Los Angeles, California 90034, (310) 202-7775. Copies of the "Greenbook" may be purchased over the counter at the City of Riverside's Public Works Department, 4th Floor, City Hall, 3900 Main Street, Riverside, CA 92522.

III-2. GRADING AND DRAINAGE: (See also Standard Specification Section 02110 Grading)

- A. City Ordinances and Regulations: All grading work shall conform to the City's grading ordinances and regulations. Contractor shall be responsible for obtaining all grading and other permits as required.
- B. Slope Grades and Benches: No planting area within either the public right of way or landscape easement areas shall be graded to exceed a slope of 2:1. Benches of a minimum of 30" in width shall be provided at both top and toe of all 2:1 slopes to facilitate irrigation system installation and landscape maintenance efforts.
- C. Minimum Cross Slopes and Flow Line Gradients: No planting area shall have less than a minimum 2% cross slope, nor less than a 1% gradient along an earthen flow line. Where drainage gradients of less than 1% are encountered, special provisions such as concrete ribbon gutters or drain lines and grated inlet drains shall be provided to ensure positive drainage of all landscape areas.
- D. Gradients in Turf Areas: Gradients for sloped turf areas shall not exceed a maximum of 20% (5:1 max.) at mid-slope, and shall "transition" at both top and toe to allow for proper mowing heights without scalping or bridging of turf during mowing operations. Minimum sheet drainage on turf shall be 2% to a minimum 1% flowline.
- E. Transitions: All changes in gradients within turf areas shall transition through a minimum 30' radius vertical curve to avoid scalping or bridging.
- F. Jute Netting: shall be provided on all slopes 3:1 and steeper, and along flow-lines and wherever erosion becomes evident at any time during plant establishment.
- G. Sheet Drainage: Wherever possible, all medians, parkways and common areas shall be designed to sheet drain at a minimum 2% to the curb and gutter along the street. Where no curb and gutter exists, areas shall be graded to drain to storm drain inlets or other appropriate drainage facilities.
- H. Median Grade: Medians shall be designed to drain internally to storm drain inlets wherever possible. Where storm drains are not available, the median grades shall either be crowned or cross sloped (as determined by the Public Works Department), depending upon which method better approximates a 2% sheet flow to the curb. Under no circumstances shall drainage from medians, parkways or common areas be allowed to

- drain onto private property.
- I. Avoidance of Concentrated Flows: All grading designs shall incorporate provisions to prevent concentrated flows across public sidewalks and over curbs and/or retaining walls.
 - J. Positive Drainage Required: All grading designs shall provide positive drainage, and shall avoid the creation of even temporary water ponds in any landscape areas.
 - K. Subsurface Drainage Facilities: Where subsurface drainage systems are used:
 - 1) Lines shall be sized and slopes designed to be self-cleaning based on the anticipated flows.
 - 2) All lines shall be PVC or concrete, minimum of 12" in diameter, with a d-load sufficient to withstand occasional vehicular traffic, and shall be installed with a minimum of 12" of cover.
 - 3) Drain inlets shall be grated, with bolt-down traffic rated grates.
 - 4) Wherever subsurface drainage systems are used, a secondary drainage path must be provided that avoids "spill" onto any private property or across any property lines.
 - L. Drainage from Behind Retaining Walls: Special provisions shall be made (interceptor drain inlets, ribbon gutters, french drains, etc.) to handle surface run-off as well as subsurface water concentration behind retaining walls.

III-3. TRAILS/GENERAL NOTES

Public Works will be responsible for improved trails (those that are paved) the inspection and maintenance of parkway and reverse frontage landscaping adjacent to trails when such landscaping is adjacent to a street and there is a clear delineation between the trail and the parkway.

- A. Grading:
 - 1) The cross slope on all trails shall not exceed 2% maximum.
 - 2) Wherever feasible, based on the natural "lay of the land", all trails shall be designed to be fully accessible per the Americans with Disabilities Act (ADA) and State of California Title 24.
 - 3) Trails shall generally be designed at less than 5% (<20:1) longitudinal gradient.
 - 4) For short distances, accessible trails may be designed as a ramp or series of ramps with a maximum longitudinal gradient of 8.333% (12:1), but must be provided with continuous hand rails along such lengths. Where bottom rails are not provided, curbs are required.
 - 5) Where total ramped lengths exceed 30 feet, landings shall be provided spaced at a maximum of 30 feet on center. Generally for grades exceeding 5%, it is preferred that short intermittent ramps be used rather than using a single long continuous ramp.
 - 6) Subject to the prior written approval of the City, where the natural "lay of the land" precludes the design of trails within the above parameters, trail segments may designated and marked with signage as a "Non-Accessible Trail". In such case, the trail may be constructed without handrails, but shall be designed with switchbacks as necessary to provide a maximum longitudinal gradient of 10%.
- B. Structural Section: The trail's structural section shall consist of a minimum of 3" of decomposed granite paving, color as approved by the inspector, which has been mixed with the specified binder and placed and compacted over compacted subgrade per the binder manufacturer's standard specifications for heavy use areas, all per City standard specifications (See Specifications Section **02210 Grading**). Trail bed subgrade shall be compacted to a minimum relative compaction density of 90% to a depth of 12" prior to

- placement of D.G. Trail D. G. shall be compacted to a relative compaction density of 90%.
- C. Trail Dimensions: Trail bed width shall be a minimum of 10 feet as measured from edge to edge perpendicular to the center line of the trail (or outside edge of mowcurb to outside edge of mowcurb where trails abut irrigated landscape areas).
 - D. Trail Fence: A two rail PVC Trail Fence is required on the street side of all trails parallel to secondary and arterial City streets. The trail fence on residential streets may be located adjacent to the right of way line to separate the trail from residential property. Where a given trail segment is designated for equestrian use the fence shall be continuous the full length of a given block (with interruptions only at driveway openings where they occur). Where a given trail segment is not designated for equestrian use, the fence shall be installed for 150 feet in either direction at all street intersections/curb returns and intermittently along the street where trails are parallel to the street. Step-over's shall be provided (as a means of controlling trail use by motorized vehicles) where trails leave the public right of way.
 - 1) A continuous two-rail trail fence per City standards shall be provided on the street side of trail segments that parallel an arterial street. Where residential properties face the street, the trail fence shall be provided on the private property side of the trail bed to separate the trail from the property front and/or side yard, and shall have openings at driveways and walkways which connect to the street.
 - 2) The trail fence is not required where trails are not adjacent to a roadway.
 - E. Concrete Mowcurbs: are required wherever the trail abuts an irrigated landscape area, but may be omitted where the trail abuts natural lands (native indigenous plants in a wilderness setting with no irrigation system).
 - F. Trail markers: shall be provided along all trails at a maximum of 75 feet on center. Where trail fences are a part of the project, marker decals shall be affixed to the fence posts, where no fence is required, marker decals shall be affixed to both sides of the City standard Carsonite drive stakes and the stakes shall be installed within the trail easement adjacent to the edge of the trail on alternating sides of the trail.
 - G. Motorized Vehicle Barriers: Wherever trails leave the street right of way and cross property not adjacent to a street, barriers to motorcycles and other motorized vehicles shall be provided.
 - H. Use Non-Poisonous Plants: Where trails are approved for equestrian use, landscape plantings used to separate trails from private property and/or sidewalks shall be selected to avoid use of plants with any poisonous plant parts.

III-4. ACCENT FEATURES

- A. Decorative Pavement: Shall be of the color and pattern as approved by the Planning Department. For median islands, a continuous strip of decorative pavement, minimum 12" in width shall be provided at the back-of-curb along both sides of the median. This pavement shall match the decorative pavement used at the island noses as approved by Planning.
- B. Signs: All signs or markers of any sort within any Public Landscape area shall require the review and approval of the City. All other signs are subject to the review and approval of the Planning Department for issuance of a sign permit, and of the Public Works Department for issuance of an encroachment permit.
- C. Accent Lighting:
 - 1) Lighting designed primarily to accent landscaping, buildings, signs, etc., and located

within the public right of way or public landscape easement areas shall be the responsibility of the adjacent private property owner for installation and maintenance. Such lighting may only be installed upon the review and approval of the various City departments affected. Review and approvals typically include, but are not necessarily limited to, Planning, Public Works, and Public Utilities. All such lighting shall be subject to the issuance of both an encroachment permit (as issued by Public Works) and an electrical permit (as issued by the Building & Safety Division of the Planning Department).

- 2) No accent lighting is permitted within the public right of way without the prior written approval of all affected departments.

III-5. IRRIGATION

A. **General:** All irrigation systems shall be designed as Toro drip systems and shall include:

- 1) For vandal resistance and durability to the extent feasible, with special consideration given to placement of the irrigation controllers and water services.
- 2) To deliver a minimum of an inch and one half of water within seven days, within watering time limited to the hours of 11 PM to 6 AM. Irrigation water application rate shall be designed so as not to exceed the infiltration rate of the soil, and system shall be programmed to prevent even temporary water ponds and to minimize runoff.
- 3) To operate at the lowest available pressure per the water purveyor's records. Master valves with flow sensors shall be provided for all mainlines serving Parkways and Median islands.
- 4) To meet the watering needs of all plant materials used within the design area. Separate stations shall be used for full shade, part shade, and full sun areas. Separate stations shall be used for groundcover/shrub areas vs. turf areas.
- 5) To eliminate fogging, overspray and discharge onto areas not intended for irrigation and/or beyond the work limits (includes streets, sidewalks, adjacent properties, etc.).
- 6) To provide uniform coverage throughout each station.
- 7) With proper backflow protection per the water purveyor's standards.
- 8) With a pressure regulator valve whenever the highest recorded static pressure at the meter exceeds the typically available static pressure by more than 20%. Regulator valve when used shall be set at one hundred ten percent (110%) of the minimum pressure required to operate the irrigation system as designed.
- 9) **Using drip irrigation for groundcovers, shrubs and subterranean drip for turf is required.** If subterranean drip irrigation cannot be utilized on turf minimum 6" high pops spaced a minimum of 2' from any hardscape is required. A fertilizer injector will be required.
- 10) Drip irrigation is the required system. If drip irrigation cannot be utilized the maximum head spacing's is as follows:
 - a) Small sprinkler heads with radius throws of up to and including 15 feet shall be spaced "head to head".
 - b) Intermediate sprinkler heads with radius throws of greater than 15 and up to 40 feet shall be spaced at a maximum of 66-2/3% of their diameter.
 - c) Large sprinkler heads with radius throws of 40 feet or more shall be spaced at a maximum of 55% of their diameter.
- 11) With irrigation lines, valves and fittings sized to keep water velocities under five

feet per second (5 fps).

- 12) With isolation gate valves per City standards to allow shut-down of various portions of the irrigation system on a single water source, without the need to shut down the entire system. Each portion shall not exceed 6 control valves. Isolation valves shall be installed per City Standard Detail **2015, Isolation Valve in Box/Gate Valve**.

B. Placement of Components:

- 1) Wherever possible, water services and irrigation controllers shall be located in the parkway at mid-block, but not less than 150' from the BCR at the nearest intersection. The Landscape Architect shall coordinate the electrical and water services with the Civil Engineer and Utility Purveyor(s).
- 2) Remote control valves shall be set in shrub areas wherever possible. Do not locate remote control valves in any area designated for recreational use (such as athletic fields or trails).
- 3) All valves shall be installed with ball valve assembly within valve boxes as specified, with each box set a minimum of three feet from any adjacent box, and each valve in its own box manifold set ups not allowed. Valves and boxes shall be installed per City Standard Detail **2010, Remote Control Valve**
- 4) Slopes:
 - a) Lateral lines on slopes shall be installed generally parallel to topographic contours along the slope face.
 - b) Irrigation valves and constant pressure mainlines shall be designed and installed at the bottoms of slopes wherever possible.
 - c) Provide separate control valves to operate heads at the top, toe, and intermediate slope areas.
- 5) Provide a minimum of 12 inches of separation, measured both vertically and horizontally, between all lines. See Standard Detail **2001, Trenching & Line Placement**
- 6) Lines Beneath the Street: All irrigation lines beneath the street shall be constant pressure lines installed within a rigid sleeve of either Schedule 40 PVC (see further information regarding sleeving below).
- 7) Quick coupler valves shall be provided at a maximum of 50 feet from the ends of all median and parkway landscape areas. For shrub and groundcover areas, valves shall be spaced at a maximum of 75 feet on center. For turf areas, valves shall be spaced at a maximum of 150 feet on center with the intent that all areas of a planting bed can be reached with a 50' hose, and all areas of the turf can be reached with a 75' hose. Install quick coupler valves per Standard Detail **2014, Quick Coupler Valve**.

C. Electric Service:

- 1) Where electric service is available from the City Public Utilities -Electric Division, electric service(s) for all landscapes to be maintained by the City (other than Landscape Maintenance Assessment Districts - "LMAD's"), shall be "non-metered" type, installed per City Standard Detail **2016, Non-Metered/Metered Electric Service**.
- 2) All electric services from purveyors other than the City of Riverside Public Utilities, and all electric services for all landscapes to be maintained by parties other than the City (such as HOA's, MPOA's LMAD's, private parties, etc.), service type shall be a "metered" electric service installed per Standard Detail **2016, Non-Metered Metered/Metered Electric Service**.
- 3) The electric service address, as assigned by the power purveyor, shall be stenciled

on the outside of the controller enclosure door.

D. Water Service:

- 1) Potable/Domestic Water: Shall be metered and provided with backflow protection in accordance with water purveyor's standards and State regulations.
- 2) Reclaimed/Non-potable Water:
 - a) Use of a reclaimed and/or non-potable water source will require prior written approval of the City and is subject to the availability of a City of Riverside, Public Utilities Department approved source.
 - b) For systems using reclaimed water, system installation shall conform with all State regulations and all regulations of the water purveyor. All piping, fittings and valves used shall be color coded ("purple pipe") to identify the system as "non-potable/reclaimed" water piping as applicable. In addition to pipe color coding, warning tape shall also be provided on all constant pressure lines where reclaimed water is used. Warning tape shall be red in color with the words "CAUTION RECLAIMED WATER" imprinted in minimum one inch high letters, black in color. Imprinting shall be continuous and permanent.
 - c) Quick coupler valves used on non-potable/reclaimed water systems shall be as manufactured by **Rainbird Irrigation Products** and shall **not** accept any other manufacturer's quick coupler valve quill.

E. Sleeving:

- 1) All sleeves shall be sized to accept the line and fitting sizes or wire count for which they are intended, and shall be sufficiently sized to provide for easy removal and replacement of the line/wire, preferably from either end of the sleeve. Sleeves shall be a minimum of twice the line size diameter (but in all cases must be sized to accept the line fitting outside diameter).
- 2) Control wire shall be separately sleeved from irrigation lines and each irrigation line shall be separately sleeved from all other lines pull boxes shall be installed at each end of any crossings street or median.
- 3) All sleeves shall be installed in a manner to avoid all changes in direction and depth. Bends turns and tees will not be permitted within sleeves. All sleeves for pipe lines shall be placed so that a minimum of 25 feet of clearance is provided at each end of the sleeve to allow for ease of subsequent removal and replacement of full lengths of pipe within the sleeve.

F. Anti-drain Valves: Wherever irrigation heads show evidence of draining the lines after valve shut-down, provide anti-drain valves within head risers, or integrally within the head, as necessary. Do not install in-line anti-drain valves in the lateral.

G. Details for Non-standard Components: Provide construction details for all irrigation components proposed for use that are not in accordance with City standards.

H. Stub-outs for Future Use:

- 1) Stub-out spare control wire(s), in quantities as determined by the City during the initial plan check. Spare wire shall terminate with a three foot coil in valve boxes at each end of each area served by a given controller.
- 2) Stub-out requirements for future extension of irrigation system (mainline, control wire, laterals, etc.) beyond the limits of the current project shall be as determined by the City.

I. Drip Irrigation: **Use of drip or subterranean irrigation shall be required on all public maintained right of way landscapes.** When it is necessary to use Turf in Medians subterranean drip shall be utilized. If subterranean drip irrigation cannot be utilized on

turf a minimum of 2' spacing of sprinklers from any hardscape is required. The setback shall be 2' from curb face to eliminate overthrow into streets the use of hardscape shall be supplemented in the 2' buffer space to add a maintenance walking strip with prior written approval of the City, and shall only use materials/manufacturers which have been previously approved by the City. Multi-outlet spaghetti tube type systems are unacceptable and will not be approved. All drip irrigation systems shall include a fertilizer injector system.

III-6. PLANTING

A. General:

- 1) All plant material shall comply with City standard specifications.
- 2) All tree species shall conform to City approved species for use in public landscapes as street trees.

B. Pre-plant Weed Control Measures: If any live weeds exist on or adjacent to the site at the beginning of work, in addition to the weed control measures specified in the Standard Specifications Section **02483 Planting**, all live weeds shall be sprayed with a non-selective herbicide as recommended and applied by a licensed pest control advisor and applicator. Leave sprayed weeds intact for at least fifteen (15) consecutive days to allow systemic kill, after which the area shall be cleared and grubbed, removing all weeds and plant parts to a minimum of 1/4" below the ground surface. Once the irrigation system is operational, perform additional weed control measures as specified in **02483 Planting**.

C. Trees: The following criteria shall apply to the placement of all trees:

- 1) Provide the following minimum clear distances between the all trees and the following site features when placing trees:
 - a) 35 foot minimum and according to species as measured from trunk to trunk between all trees (both existing and new).
 - b) 18 inches from the Right-of-way line to all trees.
 - c) 5 foot between all walls and all trees.
 - d) 5 foot between all utilities (including but not limited to sewers, gas lines, water lines, meter vaults, catch basins, storm drains, drain lines, etc.) and all trees.
 - d) 10 feet between edges of all private driveways and private walkways and all trees
 - e) 10 feet between all fire hydrants and all trees.
 - f) 20 feet between all light standards and all trees.
 - g) Root barriers may be required at the Inspectors discretion, size to be determined by tree species and proximity to hardscape.
- 2) Provide a minimum vertical clearance for tree limbs of:
 - a) Fourteen and one half feet (14.5') over streets (includes parking lanes).
 - b) 10 feet over trails.
 - c) 8 feet over sidewalks
- 3) Minimum sizes for all tree species including Palms shall be:
 - a) Brahea/Erythea Palm tree species 6' brown trunk
 - d) All other palm species 10' brown trunk
 - e) All other tree species 36" box

D. Obstructions:

- 1) Sight Obstructions: No plantings of any sort shall be placed where they constitute a hazardous sight obstruction to vehicular, bicycle, equestrian and/or pedestrian traffic. The interpretation of the City Traffic Engineer as to what constitutes a

hazardous sight constraint shall govern in all cases.

- 2) Irrigation Coverage and Drainage: No shrubs or trees shall be located so as to interfere with either irrigation coverage or drainage flow-lines.

E. Medians and Intersections:

- 1) All medians, or portion thereof, measuring less than 5 feet in width (as measured from back of curb to back of curb) shall be paved full width with non-slip or textured (decorative) concrete, and shall not be irrigated and planted.
- 2) At street intersections, the first parkway/street tree from the intersection shall be placed at a minimum distance of 35 feet from the beginning of the curb return (BCR) on rights of way less than 88' in width, and a minimum of 50 feet from the beginning of the curb return (BCR) on rights of way of 88' in width and wider.
- 3) All shrub and groundcover plant selections for medians and parkway intersection areas shall be limited to species which at a mature height, without pruning, do not exceed 30" above the top of the adjacent traveled lane, including all blooms/fruit displays, seed pods and other seasonal growth. Parkway intersection areas are defined as those planting areas within the triangular right of way area at the intersection as defined by a line connecting the two points extending down each cross street to the approved placement for the first street tree planting (35 feet from BCR or 50 feet from BCR dependent on street size) on the respective street.
- 4) Tree species selected for medians shall take into consideration the median width and proximity of the traveled lane to the trees, the tree canopy height at maturity, the rooting characteristics of the planting and its potential for damage to curbs, as well as the attractive nuisance problems associated with edible fruit trees within medians.
- 5) **Use of drip or subterranean irrigation shall be required on all public maintained right of way landscapes.** When it is necessary to use Turf in Medians subterranean drip shall be utilized. If subterranean drip irrigation cannot be utilized on turf a minimum of 2' spacing of sprinklers from any hardscape is required. The setback shall be 2' from curb face to eliminate overthrow into streets the use of hardscape shall be supplemented in the 2' buffer space to add a maintenance walking strip with prior written approval of the City, and shall only use materials/manufacturers which have been previously approved by the City. Multi-outlet spaghetti tube type systems are unacceptable and will not be approved. All drip irrigation systems shall include a fertilizer injector system.

SECTION IV

INSPECTION PROCEDURES

IV-1 GENERAL

- A. **Surety:** Prior to commencement of any work within the Right of Way a form of surety, as acceptable to the City, must be provided by the Developer to guarantee both the installation of the planned improvements and the payment of workers and suppliers for the project. Permits may not be issued, nor work commence, until acceptable sureties have been posted.
- B. **Permits Required:** Both a Public Landscape Permit as issued by Public Works, and a Public Works Construction Permit as issued by Public Works, are required prior to commencement of any construction activity for landscape improvements within a public right of way. The **Public Landscape Permit** may be obtained by contacting the Public Works Department, at 951/826-5341. The Public Works **Construction Permit** may be obtained at the Public Works Counter, 4th Floor, City Hall, 3900 Main Street, Riverside, 92522. All fees and charges associated with issuance of all required permits shall be paid at the time of permit issuance. The Public Landscape Permit will be issued together with a stamped set of the approved landscape plans marked "Public Landscape Permit Set". This permit set and the permit card must be available on-site for all public landscape inspections.
- C. **Approved Plans:** Permits will not be issued without "approved" plans. Public Landscape Plans are required to be approved by the Planning, and Public Works Departments prior to permit issuance. Any changes or revisions to the "approved" plans, must similarly be approved by these same departments to be valid as "approved" plans for installation of improvements (see Section II, Plan Review Procedures). City Approved Plans will typically bear signatures and/or initials of representatives of the approving department(s) to evidence their approval.
- D. **Compliance with Building Codes, Title 24 and ADA:** It is the Contractor's responsibility to ensure all improvements as installed are in full compliance with all applicable codes and regulations, particularly with respect to Building codes, and Title 24 & ADA accessibility regulations

IV-2 INSPECTION REQUIREMENTS:

- A. **Public Landscape Inspections:** Contractor is responsible to call for all required inspections. Inspection requests must be received a minimum of 48 hours (two working days) in advance of the time inspection is needed. The Public Works Landscape Maintenance Inspector may be contacted at 951/351-6313 for inspection requests. Both the Public Landscape Permit Card and the Public Landscape Permit Set of approved plans must be available on-site to obtain required inspections.
- B. **Pre-Construction Meeting:** A pre-construction meeting of the Contractor, Landscape Architect/Designer, Public Works Landscape Maintenance Inspector and Developer is required prior to commencement of any construction activity. This meeting shall generally be held on-site and shall include the following agenda items:
 - 1. Review of All Approved Plans including grading and drainage, construction, irrigation, and planting.
 - 2. Required Permit: Prior to the pre-construction meeting, Contractor shall obtain the Public Works **Construction Permit**. The **Public Landscape Permit** may be obtained after the Public Works permit has been issued, and may be obtained either prior to the pre-construction meeting or at the pre-construction meeting (contingent

upon proper form of payment being provided). Payment of the permit fees shall be in the form of a check made out to the City of Riverside in the full amount of the initial inspection fee.

3. Coordination with Utility Purveyor(s) for water and electric service.
 4. Compliance with other Regulatory Agency Requirements:
 - a) SWPPP/NPDES requirements
 - b) Title 24/ADA requirements
 - c) Public Utilities Requirements
 - d) OSHA requirements
 5. General Discussion of project elements.
 6. Work Schedule.
- C. Inspections Required: The following stages of work will require inspection and approval by the Public Works Landscape Maintenance Inspector:
1. Rough grade required prior to any trench layout.
 2. Trench layout for mainlines and sleeve locations prior to paving;
 3. Main line and control wire installation prior to pressure test;
 4. Hydrostatic pressure test of main line with line center loaded, prior to installation of any valves:
 - a) All constant pressure lines shall be tested under hydrostatic pressure of 150 psi for a period of not less than two consecutive hours. Contractor shall furnish all necessary equipment, including force pump and pressure gauges. Install pressure gauges at each end of each line segment being tested and at point of connection;
 - b) All hydrostatic tests shall be performed in the presence of the Public Works Maintenance Inspector with the force pump disconnected from the line being tested. No such lines shall be backfilled until they have been tested, inspected, and accepted in writing;
 5. Backfill and compaction of main line trenches;
 6. Soil amendment and rototilling operations amending soils to minimum 6" depth. Contractor shall provide bills of lading for all soil amendment materials being incorporated into the soil;
 7. Lateral line trenches;
 8. Installation of lateral lines, sleeves, risers and flushing of each station;
 9. Backfill and compaction of lateral line trenches;
 10. Construction of mow curbs,
 11. Paved trails
 12. Finish grades prior to planting;
 13. Wire connections for all low voltage and service voltage wiring, including electric service to controller;
 14. Weed control measures prior to planting;
 15. Irrigation coverage test prior to planting;
 16. Plant materials delivered on-site prior to installation;
 17. Planting pit excavations and soil backfill amendment prior to planting;
 18. Hydroseed materials prior to hydroseeding. Contractor to provide bills of lading for all hydroseed materials;
 19. Installation of plant material, fertilizer tablets, tree stakes and braces, guys and anchors, and tree guards;
 20. Final irrigation system operational test (prior to final acceptance), to include

- flushing of all filters, cleaning of all heads, verification of valve boxes and heads at specified heights per standards, no runoff onto streets and irrigation time settings being properly re-adjusted for established plantings and the season;
21. Final planting inspection (prior to final acceptance), to include all turf areas freshly mown (within 24 hours of inspection), all groundcover and turf neatly edged, all trash, clippings, dead plant material and weeds removed from the site, all plantings not showing vigor or that have been damaged shall be replaced.
 22. Inspection of entire installation for “start” of Plant Establishment Period. Results of this inspection shall be confirmed in writing by the City;
 23. Periodic inspections (quarterly for one-year plant establishment period) throughout the duration of the Plant Establishment Period, results of these inspections to be confirmed in writing by the City;
 24. Final Acceptance Inspection, contractor shall provide “as-built” plans, written certification of the backflow device having been recently tested and accepted by the water purveyor, and all other turn-over items being provided to the City. Final Acceptance shall be confirmed in writing by the City. Contractor shall continue to maintain the entire landscape area until the City’s written confirmation of final acceptance has been received.

IV-3 RELEASE OF LANDSCAPE IMPROVEMENT BONDS/SURETY:

- A. The developer’s surety posted to guarantee the installation of all landscape improvements will not be released until Final Acceptance of the project following completion of the required Plant Establishment period. For most public landscapes, the Plant Establishment Period shall be a minimum of one (1) year. Once the City’s letter acknowledging final acceptance of the project has been issued, the release process for the surety can begin. Developer should anticipate a minimum two week processing time for the issuance of a release letter for the Performance portion of the surety. The Payment portion (labor and materials portion) will be released six months thereafter, barring the City receiving any claims of non-payment from either material men or labors who worked on the project.
- B. Notice of Completion: Developer shall file a Notice of Completion with the County Recorder’s Office at the end of the one year plant establishment period upon receipt of the City’s letter of Final Acceptance of the project.

Section V

Appendixes



PUBLIC WORKS LANDSCAPE PLANS & SPECIFICATIONS SUBMITTALS CHECK LIST

PROJECT TITLE: _____ CITY PLAN CHECK CASE NUMBER: _____ DEVELOPER: _____

SUBMITTED FOR: 1ST 2ND 3RD 4TH PLAN CHECK (If later specify which) _____ DATE RECEIVED BY CITY: _____

(FIRM NAME) _____ (FIRM)

(REPRESENTATIVE'S NAME & E-MAIL ADDRESS) _____

(STREET ADDRESS) _____ (STREET ADDRESS)

(CITY/STATE/ZIP CODE) _____ (CITY/STATE/ZIP)

(Telephone/FAX Number) _____ (Telephone/FAX)

Submittals:

- Plans (2 sets landscape, 1 set street & grading)
- Specs (1 set - do **not** incorporate into plans)
- Agronomic Soils Report w/recommendations (1 copy if available)
- Cost Estimate for R.O.W. Landscape Improvements (1 copy)
- Irrigation Calculations (Largest, smallest, furthest) requested by Plan Checker)

General:

- 24" x 36" standard sheet size w/City Standard Title Block
- Complete set of plans (w/all sheets listed on the Title Sheet Index) (DO NOT)
- Project Limits, building coverage, paved vs. landscape areas, R.O.W. line clearly labeled/defined
- Maintenance Responsibilities defined
- City Standard Details to be incorporate into Plans

All Sheets:

- Plan Check Numbers (PC-xxxx-L-M-PKWY/PRP0x-xxxx)
- Sheets numbered as _____ of _____
- Maximum Plan Scale: largest scale still adequately legible when reduced for irrigation controller charts. (Absolute max. 1" = 40'-0"; 1"-20" preferred)
- North Arrow on each sheet/plan
- Match Lines
- Street Names
- Handicap ramps clearly shown (applicable for trails plan check purposes).

Title Sheet:

- Location Map
- Vicinity/Key Map(s) w/street configuration accurately shown
- Plan Index
- Public Landscape General Notes
- Total square footage of entire landscape area, including

- decorative pavement and trail areas as applicable
- Total numbers of trees by size
- Project Title/ Tract #/ Cross Streets or Address
- Approvals Signature Blocks for:
 - Planning Department - Design Review
 - Public Works Department
 - Water Purveyor
 - Electric Purveyor
- Revisions Block
- Landscape Architect's firm name, representative's name and e-mail address, firm address, phone # and FAX number, L.A. seal and signature & license expiration date
- Developers firm name, representative's name & e-mail address, firm's address, phone # and FAX number

Irrigation Plans:

- Location(s) of Water Meter(s) and P.O.C Information: _____
- Service address _____
- Water Source Type (Potable/reclaimed/well) _____
- Available pressure range in PSI _____
- Peak demand in GPM _____
- Backflow device provided (potable only) _____
- Calculations (longest, largest, smallest) _____
- Equipment legend/cross reference on each sheet _____
- No drinking connections _____
- No hose bibbs on reclaimed water _____
- Strainer provided at backflow _____
- Isolation/section valves per standards _____
- Quick coupler valves at 75' o.c.at shrub areas/150' o.c. @ turf, 50' from end(s) of project planted area (project limits/ends of median islands) _____
- All details per City standards _____

Planting Plans:

- All trees on approved Tree List.
- All trees at minimum 24" box size and minimum 35' separation
- Adequate sight distances clear of trees provided at intersections

- Consistency of landscape treatment with previously approved landscapes/existing landscapes within the same block/vicinity
- All planting details per City standards
- Maximum/minimum slopes provided for turf areas/g.c. areas
- Concrete mowcurbs provided per standards
- Vine plantings provided per standards.

Specifications Check List:

- Inspections: Pressure Test/Start of Maintenance/Final Acceptance
- 48 Hour Notice: start work/paving/trenching/digging plant pits/Tree planting/hydroseeding or sodding
- Main lines $\geq 1/2"$ Class 315/ $\leq 2"$ Sch 40
- Lateral lines minimum SCH 40
- Sleeves minimum SCH 40, 2x line size
- Fittings for lines, minimum SCH 40
- Fittings for swing joints, minimum SCH 80
- QC's min. 1" diameter two piece body w/quill and bent nose hose bibb
- Valve boxes: concrete with hinged locking cast iron lids marked for valve type
- RCV's: Superior 950-DWPRS series or City approved equal
- Low Voltage Control wire min. #14 control, min. #12 common
- Depth of cover: $\geq 3"$ = $24"/\leq 1/2"$ = 18"/laterals = min. 12" to max 16"/Control wire = min. 18"
- Flush/adjust/coverage test/pressure test @ 150 psi for min. 2 hours
- Furnish Turn-over Items:
 - 4% extra stock of each type head and nozzle used
 - 2 keys for each Controller enclosure
 - 1 valve box key
 - 1 quick coupler quill with up-kink hose bibb
 - Record drawings/controller charts
 - Minimum one (1) year Plant Establishment Period

B. Standard Specifications

SECTION 02211 - TRAIL GRADING AND CONSTRUCTION

PART 1 - GENERAL

1.01 STANDARD SPECIFICATIONS: The provisions of the "Standard Specifications for Public Works Construction" shall apply except as modified herein.

1.02 SCOPE: The Work of this Section shall consist of furnishing all labor, materials, equipment, appliances and services necessary for the execution and completion of all **Trail Grading and Construction Work** as shown on the Plans and as described in the Specifications including, but not necessarily limited to, the following:

- Rough grading as shown on the plans, including cut, fill, backfill and backfill compaction
- Subgrade preparation for D. G. paving including any over-excavation and re-compaction as may be required
- Excavation of soils for all trail fence posts and structures
- Excavation, backfill and compaction of soils for all mowcurbs
- Soil compaction as required;
- Protective measures;
- Dust and noise abatement;
- Borrow from and/or export to a local borrow/disposal site as directed and as necessary for a balanced grading operation;
- Fine grading of the work site;
- Decomposed Granite Paving;
- Soil testing as required;
- Coordination with Work of other Sections;
- Clean-up; and,
- Erosion Repairs, Guarantees and Warranty Work.

1.03 RELATED WORK SPECIFIED ELSEWHERE:
Finish Grading in Landscaped Areas Section 02483

1.04 QUALITY ASSURANCE:

A. Other Requirements: All Work of this Section shall comply with the requirements of the following:

1. The Grading Code of the City of Riverside.
2. The Soils Engineering Investigation Reports for the site prepared by Soils Engineer (see Appendix___).

B. Tests and Inspections:

1. All Work in this Section shall be subject to the observation and testing as required by the Soils Engineer selected by City. The Soils Engineer will submit a compaction report to the Public Works Department Representative certifying Contractor's compliance with the Plans, Specifications, Soils Reports and City Grading Ordinance in placing all fills and backfills. The Soils Engineer will conduct all specified tests to insure compliance. The

Soils Engineer will also test, identify and make recommendations on borrow site fill materials as specified in this Section.

2. The number and location of soils tests shall be at the discretion of the Soils Engineer to assure uniformity and compliance with the City Grading Ordinance, and shall be at least one test per two vertical feet of fill, but not less than one test per 500 cubic yards, all as approved by the Public Works Department Representative.
3. The costs of services of the Soils Engineer for specified field density and maximum density tests, compaction reports and certificates of compliance, will be borne by City except that additional tests and recompactions made necessary by inadequate compaction, inadequate materials provided by Contractor, or inaccurate excavations shall be paid for by Contractor.

1.05 GRADING A "BALANCED" OPERATION: It is the intent of the Plans and Specifications that the grading shall be a balanced operation with site material. No import nor export is contemplated. If during grading operations an excess or deficiency of earth becomes apparent, Contractor shall notify the Public Works Department Representative immediately in writing and ask for direction in adjustment of plan grades such that the grading shall be completed with site material conforming as nearly as possible to the finish grades shown and insuring positive drainage all at no additional cost to City.

1.06 WATER: See Special Provisions Section **7-8.5 Temporary Light, Power, and Water** regarding temporary construction water.

1.07 JOB CONDITIONS:

A. Protection of Existing Items:

1. Contractor shall furnish, place and maintain all shoring and bracing as may be required for protection of existing structures and utility services during execution of the Work.
2. All bench marks, monuments and other reference points shall remain undisturbed unless specifically directed otherwise by the Public Works Inspector.

B. Coordination with Others:

1. Contractor shall give written notice to the Public Works Department Representative, utility agencies, and other legal authorities prior to starting Work.
2. Contractor shall coordinate Contractor's operations with other trades, utility agencies, and other affected public departments to assure continuity for both access and service of all utility service distribution lines, in conformance with applicable requirements of these organizations. No services to any property shall be impeded.

C. Abandoned and Unknown Utilities:

1. Abandoned lines, meters and boxes, obstructions or piping, shall be removed, plugged, or capped in accordance with the requirements and approval of the agencies affected, or as directed by the Public Works Inspector. Coordinate all such Work with applicable mechanical or electrical trade having responsibility. Remove all abandoned utility lines, pipes, or conduits, to a point outside new construction lines.
2. Where unmarked utility lines or other underground obstructions or piping are uncovered within the Work area, notify the agencies or service utility companies having jurisdiction and take necessary measures to prevent interruption of service. Should such lines or

services be damaged, broken, or interrupted through Contractor's own negligence, those services shall be repaired immediately by the party designated by the utility owner, at Contractor's expense. If an unmarked utility is damaged other than through the negligence of Contractor, Contractor's responsibility is limited to providing immediate and proper notification of the damage to the utility owner so that repairs can be made. Contractor shall cooperate with the utility owner and provide access for repair work.

PART 2 - MATERIALS

2.01 D.G. PAVING:

- A. D.G.: Shall be color as approved by the Inspector to match existing, decomposed granite free of silt, clay, weed seed, and any other deleterious material, conforming with Section 400-2.3 Disintegrated Granite, per the Standard Specifications and as approved by the Public Works Department Representative. Contractor shall provide a one pound sample to the Public Works Department Representative a minimum of 35 days prior to ordering materials for the review and approval of the Public Works Department Representative.
- B. Stabilizer: Shall be "Stabilizer" as manufactured by Stabilizer Solutions, Phoenix, AZ PH: 1/800/336-2468; "Poly Pavement" as manufactured by Poly Pavement Co, Los Angeles, CA 90036 PH: 323/954-2240, or City approved equal.

2.02 DRAIN ROCK: Drain rock for all sumps and french drains shall be pervious backfill as specified in Standard Specifications, Section **300-3.5.2 Pervious Backfill**.

2.03 FILL MATERIAL:

- A. Required Approval: All fill material must be approved by the Soils Engineer and the Public Works Department Representative.
- B. On-site Material: On-site excavated materials may be used for fill as approved by the Soils Engineer and the Public Works Department Representative.

2.04 GRANULAR BEDDING MATERIAL: Where called for on the Plans, granular bedding material shall be crushed stone or pea gravel conforming to the following grading:

<u>Sieve Size</u>	<u>% Passing</u>
3/4"	100
1/2"	95
#4	5

2.05 IMPORT:

- A. Landscape Fills: All import soil used for fill in landscape areas shall be Class 'A' topsoil per Standard Specifications, Section **212-1.1 Top Soil, General**.

- B. Structural Fills: All import soil used solely for structural fill shall be non-expansive, predominantly granular material free from organic contaminants, and capable of attaining the required compacted densities.
- C. Approved Samples: Samples of all import soil, as obtained by the City's Inspector at the borrow site, must be approved by the Public Works Department Representative prior to start of import of soil to the Project site.

2.06 TRAIL FENCE: Trail fence shall be a heavy duty two rail white vinyl fence designed for agricultural uses, as manufactured by Kroy Building Products, Inc. (800/933-5769), Ultra Guard Fence (800/592-6220), or City approved equal. Fence rails shall be nominal 2 x 6 x 16' ribbed type, with minimum 0.11 inch wall thickness. Posts shall be nominal 5" square by minimum 6' length with minimum 0.20 inch wall thickness, installed with a minimum 24" bury at 8' on center. Use aluminum inserts at all end, corner and gate posts (both latch and hinge sides), or fill with concrete.

PART 3 - EXECUTION

3.01 GENERAL:

- A. Work Sequence: All demolition, clearing and grubbing of objectionable materials must be completed to the satisfaction of the Public Works Department Representative before starting any earthwork grading and excavation.
- B. Survey: See Special Provisions Section **2-9.3 Survey Service** regarding responsibility for provision of all survey services as necessary for horizontal and vertical control points, layouts, lines and levels, and staking of the Work.
- C. Allowable Gradients: Trails shall be constructed in the field to comply with the following maximum and minimum gradients.
 - 1) Cross Slope: Trail cross slope shall be between 1% minimum and 2% maximum.
 - 2) Longitudinal Gradients:
 - a) Accessible Trails: Trails designated for ADA access shall not exceed a longitudinal slope of 5% (20:1) unless configured as an Accessible Ramp.
 - b) Non-Accessible Trails: Trails designated as non-accessible, must be so marked, and generally shall not exceed a longitudinal gradient of 10% (10:1). However, slopes steeper than this for short distances may be allowed under the following conditions:
 - Maximum of 15% slope for distance of 500' or less.
 - 20% slope permitted only in unique situations and limited to 100' or less.
 - Under no circumstances shall any slope exceed 20%.
 - c) Alternate Trail Designs: Where the natural terrain is so steep that provision of a trail at more than 20% gradient is required, to decrease grade, terrace steps may be used.
 - 3) Accessible Ramp Systems: All ramps shall not exceed a maximum slope of 8.333% (12:1). Ramps shall not exceed a maximum of 30' in length between landings. All landings shall not exceed a maximum cross slope of 2% in any direction. All landings shall be sized at a minimum of 60" x 60" or the width of the trail whichever is greater, all per ADA requirements. All ramps and landings shall be provided with accessible handrails.

- 4) Trail Edge: Where adjacent to developed landscape areas, the trail D.G. shall be contained by a concrete mowcurb on each edge of the trail tread. Where adjacent to native landscapes, no mowcurb is required and may be omitted.
- 5) Trail Fence and Markers: All trails along public streets shall be fenced and marked per Trails Standard Details.
- 6) Crossing Concrete: Where the trail is designated to cross concrete aprons and sidewalks, such aprons and sidewalks shall be constructed of concrete with rough broom or rake finish to prevent slipping. Where such areas exist, they shall be removed and replaced with rough broom finish concrete, or shall be heavy sandblasted in place to provide an equivalent non-slip surface..

3.02 ROUGH GRADING:

- A. Conformance with Plans: Rough grading of the site shall be completed in accordance with indicated contours, elevations, and limit lines shown on the Plans and shall allow for the depths of slabs, paving, sub-base, topsoil, and controlled fills.
- B. Grading Tolerances:
 1. Sub-grades to receive slabs and pavements shall be graded to a tolerance of plus or minus one-half (1/2) inch, and shall be compacted as specified below in Sub-section **3.04 CONTROLLED FILL**, paragraph G. Relative Compaction Requirements, subparagraph 1. Slabs & Pavement Subgrades.
 2. Tolerance for rough grading in all other areas is 1/10th of a foot.
 3. In all areas, appearance and positive drainage will be factors in the acceptability of grades.
- C. Compacted Lifts: Graded material shall not be left in loose layers, but shall be stockpiled for use in controlled fill or compacted in thin layers as grading takes place in accordance with the requirements for controlled fill.
- D. Scarification: Shall be performed on all areas indicated to receive paving to depths as indicated in the soils report. In the absence of a soils report, scarification shall be to a minimum depth of six (6) inches or to a depth permitting twelve (12) inches of controlled fill whichever is greater.
- E. Engineer's Approval: Contractor shall obtain the Soil Engineer's approval of all scarified surfaces prior to placement of fill.

3.03 CONTROLLED FILL:

- A. Landscape Fills: The topmost 12" of fill in all landscape areas shall be topsoil.
- B. Rocks: Rocks larger than two (2) inches in diameter shall be removed from all fills to be compacted.
- C. Lifts: Fill material shall be spread in uniform lifts of six (6) to eight (8) inches of un-compacted thickness.

- D. Moisture Content: Prior to starting compaction, the fill material shall be brought to optimum moisture content by spraying with water if too dry, and aeration if too wet.
- E. Mixing: Thoroughly mix each lift to assure uniform distribution of water content.
- F. Allow for Shrinkage & Subsidence: Bring fills to suitable elevations above required grades to provide for effects of shrinkage and settlement.
- G. Relative Compaction Requirements:
 - 1. D.G. Pavement Subgrades: For all areas designated to receive D.G. pavement and within a perimeter five (5) feet outside these areas, each lift shall be compacted to a minimum of 90% of maximum density as determined by ASTM D1557-78.
 - 2. Planting Areas: Where fill is required in planting areas each lift shall be compacted to a minimum of 85% maximum density.
 - 3. Mechanical Equipment: Perform all compaction by suitable mechanical equipment and methods approved by the Soils Engineer.
- H. Contractor's Responsibility: During the grading operations, inspection and field tests will be carried on by the Soils Engineer. However, Contractor is responsible to ensure obtaining the required degree of compaction and the proper moisture content. Where compaction of less than the specified percentage is found, additional compaction effort shall be made with adjustment of the moisture content as necessary until the minimum specified compaction is obtained.
- I. Over-excavation Due to Unsuitable Materials: Excessively wet material, material in any soft or spongy spots, and material in standing water shall be over-excavated to such depth as directed by the Soils Engineer and replaced with suitable material, properly compacted.

3.04 EXCAVATION: Contractor shall perform all necessary excavation work for trail fence footings and mowcurbs and shall perform any additional excavation work necessary to provide ample room for installation of concrete forms where required. The bottom of all excavations shall be level and free from loose material, and shall be brought to the indicated or required grades in undisturbed earth. All excavations shall be kept free of standing water. Contractor shall perform all pumping, draining, and dewatering as may be necessary to keep excavations free of standing water while carrying on the Work. Should excavations for footings, through error, be excavated to a greater depth or size than indicated or required, such additional depth or size shall be filled with concrete at Contractor's expense.

3.05 OPEN TRENCH OPERATIONS: Shall conform with Standard Specifications Section **306-1 Open Trench Operations**, as modified by the following:

- A. General: Add the following to Standard Specifications Section **306-1.1.1 General**:
 "Where trench is close to existing pole mounted lights, catch basins, or other structures that are to remain, Contractor shall brace as necessary to prevent dislocation of such structures. In the area of any such structures, the trench backfill shall be compacted to 90% to the full depth of the structure."

B. Unsuitable Material: Add new subsection 306-1.1.7 as follows:

3.06-1.1.7 Unsuitable Material. The conditions and requirements for the determination and disposition of unsuitable material encountered during open trench operations shall be in accordance with Standard Specifications Section **300-2.2 Unsuitable Material**.

C. Trench Backfill: Shall conform with Public Works Department Standard Drawing No. 453.

3.06 BACKFILLING:

A. Material: Select site material shall be used for backfill of trenches and shall be free from large stones and clods. Material shall be as approved by the Soils Engineer.

B. Pre-Conditioning and Placement:

1. Layers of backfill shall be pre-conditioned by moistening with water, the amount to be controlled to insure optimum moisture conditions for the type of fill material used. Excess water causing saturated earth beneath footings, walks, and curbs is unacceptable.
2. Backfill shall be deposited in layers of maximum six inch thickness.
3. Backfill shall be compacted by suitable means to a minimum relative compaction of 90%.
4. All trenches shall be backfilled in accordance with this Section, and may be tested at the discretion of the Engineer.

3.07 FINE GRADING: Fine grading, as specified under this Section, is a separate operation from finish grading as specified under Section **02483 Planting**. Fine Grading Work is to commence upon completion of all trenching and backfill operations, and prior to soil preparation.

Upon completion of Fine Grading Work all areas shall slope to drain without water pockets or irregularities and shall conform to the intent of all Plans and Specifications after thorough settlement and compaction of the soil. Fine grading should allow for Soil Preparation Work as specified under Section **02483 Planting**, such that finish grades shall meet the elevations indicated on the Plans. Tolerance for fine grading is 1/4 inch, plus or minus. Any corrections to the Grading Work required to obtain proper drainage and to bring it into conformance with the intent of the Plans and Specifications and City codes shall be performed by Contractor at no additional cost to City.

3.08 DECOMPOSED GRANITE: Stabilizer shall be mixed with decomposed granite in proportions as recommended by the manufacturer for "high traffic" usage. Pre-mixed D.G. and stabilizer shall be placed in lifts, wetted and compacted as specified by the stabilizer manufacturer to a minimum relative compaction of 90%. D.G. pavement shall be smooth, free of rills, dips, and flow lines, such that surface water will properly drain off the surface of the pavement. Contractor shall provide as a turn-over item a minimum of 10 pounds of stabilizer product per 1000 lineal feet of trail being installed.

3.09 DUST AND NOISE ABATEMENT: During the entire construction period, site areas shall be kept sprinkled (either with water or an approved dust palliative) as necessary to minimize dust in the air and annoyance to surrounding properties. Adhere to the requirements of City ordinances for dust and noise control.

2. The changes and dimensions shall be recorded in a legible and workmanlike manner to the satisfaction of the Public Works Landscape Inspector. Prior to final inspection of the Work, submit "record" Mylar prints reflecting the 'As-Built' condition of the system to the Public Works Landscape Inspector's for approval and records. GPS coordinates for each item listed below, shall be noted on the plans and recorded on Compact Disk (CD) in WR format, on an Excel spread sheet to City for approval.
3. Dimension from two permanent points of reference (buildings, monuments, sidewalks, curbs, pavement, etc.). Data to be shown on "record" prints shall be recorded day-to-day as the project is being installed.
4. Show locations and depths of the following items:
 - a) Point of connection, Water Meter and Backflow Device. (GPS)
 - b) Routing of irrigation pressure lines (dimension maximum 100 feet along routing).
 - c) Gate valves. (GPS)
 - d) Irrigation remote control valves, master valves filters, etc. (GPS)
 - e) Quick coupling valves. (GPS)
 - f) Routing of control wires.
 - g) Controllers. (GPS)
 - h) Flow Meters. (GPS)
 - i) Related equipment (as may be directed).
5. Maintain record prints on site at all times.

1.05 INSPECTIONS:

- A. Inspections will be required for:
 1. Pressure test of irrigation main line.
 2. System layout.
 3. Coverage test.
 4. Final inspection/start of maintenance.
 5. Final acceptance.
- B. Inspection Requests: Contractor shall notify the Public Works Landscape Inspector a minimum of 48 hours (two working days) in advance for all inspections including the following:
 1. Pressure supply line installation and testing
 2. System layout/to insure no runoff onto streets
 3. Coverage tests/to insure no runoff onto streets
 4. Final Inspection
- C. Evidence of Inspection by Others: When inspections have been conducted by other than the Public Works Landscape Inspector, Contractor shall show evidence of when and by whom these inspections were made.
- D. Requirements for Inspection: No inspection is to commence without "record" prints available on the site. In the event Contractor calls for an inspection without up to date "record" prints, without completing previously noted corrections, or without preparing the system for inspection, the inspection may be canceled.

- E. Closing in Un-inspected Work: Do not allow or cause any of the Work of this Section to be covered up or enclosed until it has been inspected, tested and approved by the Public Works Landscape Inspector.
- F. Coverage test: When the irrigation system is completed, Contractor shall perform a coverage test in the presence of the Public Works Landscape Inspector to determine if the water coverage for planting areas is complete and adequate. To assure that no water is spilling onto the street. The Public Works Landscape Inspector must accept this test before planting may commence.
- G. Hydrostatic test:
 - 1. Prior to the installation of any valves, all pressure lines shall be tested under a hydrostatic pressure of 150 psi for a period of not less than two hours. Ball valves and pressure gauges shall be installed at all terminating ends of the mainline and the remainder of all points in between shall be capped and the line fully charged with water after all air has been expelled from the line.
 - 2. All hydrostatic tests shall be made in the presence of the Public Works Landscape Inspector or Inspector's designated representative. No pressure line shall be backfilled until it has been inspected, tested, approved in writing, and the mainline and valve locations have been noted on the "record" prints.
 - 3. Contractor shall furnish the necessary force pump and all other test equipment, and shall perform the test.

1.06 TURNOVER ITEMS:

- A. Controller Charts:
 - 1. "Record" prints must be approved by the Public Works Landscape Inspector before charts are prepared.
 - 2. Provide one controller chart for each automatic controller. The chart shall show the entire area covered by the controller, preferably in a single sheet. The chart shall be a reduced copy of the approved "record" print. Reduce the print to a size that is the maximum dimensions that will fit within the controller door without folding. If the controller sequence is illegible at this reduction scale, the chart may be provided as a "multi-sheet" chart to provide adequate legibility.
 - 3. Each control station on the Chart shall be marked with a different color to show its area of coverage.
 - 4. When completed and approved, the chart shall be hermetically sealed between two pieces of plastic, each piece being minimum 20 mils in thickness. The chart shall be installed in the controller enclosure using Velcro fasteners, and three different color grease pencils (red, black and blue) shall be provided in the enclosure for maintenance notations on the chart.
 - 5. Controller charts shall be completed prior to the final acceptance inspection.
- B. Operation and Maintenance Manuals: Within a minimum of 14 calendar days prior to acceptance of construction, prepare and deliver to the Public Work Landscape Inspector all required descriptive materials, properly prepared in two individually bound copies of the operation and maintenance manual. The manual shall describe the material installed and shall be in sufficient detail to permit operating personnel to identify, operate, and maintain all

equipment. Spare parts lists and related manufacturer's information shall be included for each equipment item installed. Each complete, bound manual shall include the following information:

1. Index sheet stating Contractor's address and telephone number, including names and addresses and telephone numbers of local manufacturer's representatives.
2. Complete operating and maintenance instructions on all major equipment.

C. Materials to be furnished: The following items shall be supplied as part of this Contract and shall be turned over to the Public Works Landscape Inspector at the conclusion of the Project at the Final Acceptance Inspection:

* Some of the Calsense items may be optional as required.

1. *One Calsense LR-Hub
2. *One Radio Remote Transmitter (Calsense RRe-TRAN Remote or City approved equal) compatible with controller that will turn irrigation stations on and off, complete with batteries.
3. *Calsense products such as LR YAGI Antenna, LR-Dome-RR Antenna, LR-Dome-RRe Antenna, LMR-400-DB Antenna cable 30' minimum and Transient protection board TP-1.
4. *One Data Logger (Calsense DL-2 or City approved equal) with phone modem compatible with irrigation controller and City's irrigation communications hub.
5. Two (2) special tools/wrenches for disassembly and adjustment of each type of irrigation equipment/heads installed that require such special tools/wrenches.
6. Two keys for each type of automatic controller.
7. One valve box cover key.
8. "Record" prints, CD's and Mylar "As-Built" Plans at Final Acceptance.
9. Documentation of Water Department's inspection and acceptance of backflow device.

1.07 GUARANTEE:

A. General: The entire irrigation system, including all Work done under this Contract, shall be guaranteed against all defects and fault of material and workmanship for a period of one (1) year following Final Acceptance of the Work as documented by the Notice of Completion filed with the Riverside County Recorder's Office. All materials used shall carry a manufacturer's guarantee of one (1) year. Should any problem with the irrigation system be discovered within the guarantee period, it shall be corrected by Contractor at no additional expense to City within fourteen (14) calendar days of receipt of written notice from City.

B. Form of Guarantee: Guarantee shall be submitted on Contractors own letterhead as follows:

GUARANTEE FOR IRRIGATION SYSTEM

PROJECT: _____

LOCATION: _____

We hereby guarantee the irrigation system we have furnished and installed against defects in materials and workmanship, ordinary wear and tear and unusual abuse, or neglect accepted, and that the Work has

been completed in accordance with the Plans and Specifications. We agree to repair or replace any or all of the Work, together with any other adjacent Work which may be displaced by so doing, that may prove to be defective in its workmanship or materials within a period of one (1) year after the date the Notice of Completion for the above named Project is filed with the County Recorder by the City of Riverside, California, at no additional cost to City. We shall make such repairs or replacements within 14 calendar days following written notification by City. When the immediate repair or replacement of the Work is necessary to ensure the public safety and welfare, which would be endangered by continued usage of the facility, such circumstance will be deemed an operational emergency. In the event of such an emergency, after City contacts our firm and after authorizing 24 hours to initiate repairs, if we fail to initiate and diligently complete such repairs in a timely manner, the Director may direct City forces to perform such functions as the Director may deem necessary to correct the Work and immediately place the facility back in operational condition. If such procedure is implemented, we shall bear all expenses incurred by City. In all cases, the judgment of the Director shall be final in determining whether an operational emergency exists. In the event of our failure to make such repairs or replacements within the time specified after receipt of written notice from City (other than an operational emergency), we authorize City to proceed to have said repairs or replacements made at our expense and we will pay the costs and charges therefore upon demand.

PRINTED NAME & TITLE: _____

SIGNATURE: _____

ADDRESS: _____

PHONE: () _____
(Area Code) Number

- C. Operational Instruction: After the system has been completed, Contractor shall instruct the Public Works Landscape Inspector in the operation and maintenance of the system and shall furnish a complete set of operating instructions.
- D. Trench Settlement: Any settling of trenches which may occur during the one-year period following acceptance shall be repaired to City's satisfaction by Contractor without any additional expense to City. Repairs shall include the complete restoration of all planting, paving or other improvements of any kind, which are damaged as a result of the Work.

PART 2 - MATERIALS

2.01 GENERAL: All materials shall conform with Section 212 - 2 **IRRIGATION SYSTEM MATERIALS** of the Standard Specification except as modified herein.

2.02 PIPE AND FITTINGS:

- A. General:

1. Pressure supply lines 2 inches in diameter and up to 8 inches in diameter shall be Class 315 solvent weld PVC. Solvent weld and ring type pipe shall not be used together on the same pressure supply line.
 2. Pressure supply lines 1-1/2 inches in diameter and smaller shall be minimum schedule 40 PVC.
 3. Non-pressure lines shall be minimum schedule 40 PVC.
- B. **Steel Pipe:** Amend Standard Specifications Section **212-2.1.2 Steel Pipe** to read:
 "All steel pipe shall be hot-dipped galvanized", and add: "All fittings for steel pipe shall be 250 pound rated galvanized malleable iron, banded pattern. Pipe sizes indicated on the Plans are nominal inside diameter, unless otherwise noted."
- C. **Plastic Pipe:**
1. Add the following to Standard Specifications Section **212-2.1.3 Plastic Pipe for Use with Solvent Weld Socket or Threaded Fittings:**
 "All plastic pipe shall bear the following markings: manufacturer's name, nominal pipe size, schedule or class, type of material, pressure rating in PSI, NSF seal of approval, and date of extrusion."
 2. Amend Standard Specifications Section **212-2.1.3 Plastic Pipe for Use with Solvent Weld Socket or Threaded Fittings** to read:
 All plastic pipe fittings shall be standard weight schedule 40 and shall be injection molded of an improved PVC fitting compound. All threaded plastic fittings shall have injection molded threads. No cut threads will be accepted on PVC pipe and fittings. All tees and ells shall be manufactured in injection molds that are side gated. All threaded nipples shall be standard weight schedule 80 with molded threads.
 3. Amend first sentence of Standard Specifications Section **212-2.1.4 Plastic Pipe for Use with Rubber Ring Gaskets** to read:
 "All rubber gasket PVC pipe, couplings, and fittings shall conform to ASTM D 2241 Type 1, Grade 1, 2000-PSI design stress"; and add the following to the Section:
 "Couplings, rubber gaskets, and fittings shall be as approved by the pipe manufacturer. Ring-type rubber gasket couplings shall permit a five (5) degree deflection of the pipe at each coupling (2-1/2 degrees each side) without ex-filtration or infiltration, cracking or breaking."
- D. **Asbestos Cement Pipe (ACP):** Is not approved for use on City projects.

2.03 VALVES AND VALVE BOXES:

- A. **Valves:**
1. **Ball Valves:** All ball valves shall be bronze bodied, capable of withstanding a minimum working pressure of not less than 150 psi.
 2. **Manual Control Valves:** Add the following to Standard Specifications Section **212-2.2.3 Manual Control Valves:** Anti-siphon-type valves shall be all bronze with swivel-type replaceable seating members and an approved vacuum breaker as an integral part of assembly.

3. **Quick-Coupling Valves:** Add the following to Standard Specifications Section **212-2.2.6 Quick Coupling Valves and Assemblies:** Quick coupling valves shall have locking vinyl cover and shall be 1" in size.
4. **Remote Control Valves:** Add the following to Standard Specifications Section **212-2.2.4 Remote Control Valves:**
 - a) Valves shall be spring-loaded, self-cleaning, packless diaphragm activated, of a normally closed type.
 - b) Valve solenoid shall be corrosion-proof and constructed of stainless steel molded in epoxy to form one integral unit, and shall be 24 volt A.C., 2.0 watt maximum (2" and smaller valves).
 - c) Valve shall close against flow without chatter and with minimum closing surge pressure (minimum 5 seconds closing time per valve).
 - d) Valve shall be completely serviceable in the field without removing valve body from line.

B. **Boxes:**

1. **Concrete Valve Boxes:** Add the following to Standard Specifications Section **212-2.2.7 Valve Boxes:** Remote control valve boxes shall be rectangular concrete boxes with hinged locking cast-iron covers. Valve station numbers shall be welded in two-inch-high (2") numerals on lids. Gate valve boxes shall be round concrete boxes with cast iron covers marked "G. V." with letters cast or tooled in the cover.
2. **Plastic Valve Boxes:** (For use on Drip Irrigation Systems only)
 - a) **General:** Valve boxes and covers shall be fabricated from a durable plastic material resistant to weather, sunlight and chemical reactions. The covers shall be secured with a hidden latch mechanism or bolts. The cover and box shall be capable of sustaining a load of 1,500 pounds. Valve box extensions shall be by the same manufacturer as the valve box. The box covers shall be factory embossed for the designated use and valve station numbers in 2" high letters. Boxes and covers shall be as manufactured by AMETEK or City approved equal.
 - b) **Rectangular Plastic Boxes and Covers:** Shall be a minimum of 12" wide x 18 long", with depths as necessary to protect the valve and provide the clear dimensions as detailed and/or specified. The covers shall be embossed with words or initials to identify the use for the box (e.g. "Flush Valve" or the letters "F.V.", and Air Relief Valve or the letters "A.R.V.") as noted on the Plan.
 - c) **Round Plastic Boxes and Covers:** Shall be minimum 12" diameter, round boxes with covers embossed with words to identify the use for the box (e.g. "Quick Coupler Valve" or the letters "Q.C.V.") and shall be marked as noted on the Plans

2.04 **BACKFLOW PREVENTION DEVICE:** Add the following to Standard Specifications Section **212-2.3 Backflow Preventer Assembly:** The backflow prevention unit shall be a reduced pressure type vacuum breaker of the size, manufacture, and model number as indicated on the Plans. If not indicated, the device shall be the same size as the water service and the manufacturer and model number shall be as approved by the Public Works Landscape Inspector.

2.05 **IRRIGATION HEADS:** All irrigation heads shall be as shown on the Plans and shall conform with Section **212-2.4 Sprinkler Equipment** of the Standard Specifications. All heads used on the same control valve shall be matched precipitation rate heads. All heads used on turf shall be minimum 6" pop-up types; all heads used in shrub areas shall be minimum 12" pop-up types the heads shall be

configured so as to elevate any runoff onto streets and shall be a minimum of 2' from any hardscape.

2.06 ELECTRICAL MATERIALS:

- A. Conduit: Amend Standard Specifications Section **212-3.2.1 Conduit** to read: All conduit below grade shall be schedule 40 PVC of sufficient size to carry all proposed wiring. Conduit above grade shall be galvanized steel per the Standard Specifications. Low Voltage (24 volt) wiring shall be provided with a separate conduit/sleeve from both high voltage wiring (110/120 volt and higher) and the irrigation mainline sleeve.
- B. Electrical Service: Materials for electrical service shall comply with the standard specifications, governing utility agency standards, and requirements of all applicable codes. All controllers serving landscape areas that will **not be turned over to the City** for maintenance shall be powered through a **metered** electrical service. Controllers serving landscape areas to be maintained by the City shall be powered through a non-metered electrical service.
- C. Wire: Add the following to Standard Specifications Section **212-3.2.2 Conductors:** "All low voltage conductors shall be 14 gauge for control and 12 gauge for common wires. All low voltage common wire shall be white with a colored stripe. Stripe color shall be different for each controller installed. All low voltage control wire shall be of one color other than white or green. A different color control wire shall be used for each controller installed."

2.07 CONTROLLER UNIT: Add the following to Standard Specifications Section **212-3.3 Controller Unit:**

- A. Controller: Shall be wall mounted type, as indicated on the Plans, with a heavy duty watertight case and locking hinged cover, installed within a lockable stainless steel enclosure.
- B. Controller Enclosure: Shall be Stainless Steel, sized to fit the controller and the other electrical components as required per Standard Detail 4060, irrigation controller electrical pedestal shall be Myers Power Products, Inc. – Catalog # MEUG22X-ENC-RIV Stainless Steel Enclosure, or City approved equal. The equipment shall conform to the requirements of the City of Riverside. Complete pedestal shall be UL Listed under Standard 508, Enclosed Industrial Control Equipment.

Enclosure shall be Rainproof NEMA Type 3R, fabricated from 12 gauge corrosion resistant stainless steel, minimum grade 304. Enclosure shall include vandal resistant hinged door with 3-point latch assembly and folding "T" handle behind lockable cover. Enclosure shall be equipped with stainless steel mounting pans, adjustable from front to back. All interior sheet metal shall be stainless steel. Mounting pans shall have painted exterior grade ¾" plywood panels. Enclosure shall have interior mounting flanges for attachment to padmount base (Myers part number 519100) encased in 4" minimum concrete.

Pedestal shall be equipped with insulated neutral and ground lug. Pedestal shall be wired for 120V 1Ph 2W with a 15 ampere circuit breaker, 10,000 A/C rated, installed. All factory wiring shall be 600 volt rated copper.

PART 3 - EXECUTION

3.01 GENERAL: All Work shall conform with Section 308 LANDSCAPE AND IRRIGATION INSTALLATION of the Standard Specifications except as modified herein. No Work of this Section other than sleeving under pavement shall commence prior to the completion and acceptance of all Grading Work.

Add the following to Standard Specifications Section 308-5.1 General:

- A. Irrigation System Design & Water Supply:
1. The irrigation system design is based upon an available water pressure of ____ p.s.i. at a flow rate of _____ g.p.m. Individual stations are designed to this minimum p.s.i. The system is also designed to withstand a maximum pressure of ____ p.s.i. Contractor shall verify the size of the existing water supply/meter and the existing operating water pressure at the water supply location shown on the Plans prior to starting construction. Contractor shall notify the Public Works Landscape Inspector in writing of any discrepancies noted. Failure to provide such written notification may cause Contractor to provide for modifications to the irrigation system as necessary to provide for a fully operational system providing 100% coverage at the operating pressure available, all at no additional cost to City.
 2. Connection to, or the installation of, the water supply shall be at the location shown on the Plans. Minor changes caused by actual site conditions shall be made at no additional cost to City.
- B. Electrical Service: Contractor shall provide either a **metered** (for areas to be maintained by **other than the City**, such as an HOA) or non-metered electrical service (for areas to be maintained by the City) as required, and shall make the final 120 V connection to the irrigation controller.
- C. Code Requirements: Prior to all Work of this Section, Contractor shall carefully inspect the installed Work of all other trades and verify that all such Work is complete to the point where this installation may properly commence. Verify that the irrigation system may be installed in strict accordance with all pertinent codes and regulations, the original design, the referenced standards, and the manufacturer's recommendations.
- In the event any equipment or methods indicated on the Plans or in the Specifications is in conflict with local codes, immediately notify the Public Works Landscape Inspector prior to installing the Work. If this notification is not provided, Contractor shall assume full responsibility for the cost of all revisions necessary to comply with all codes.
- D. Grades: Contractor is to keep within the specified material depths with respect to finish grade. Failure to obtain specified material depths may subject Contractor to adjusting the grades or depth of lines until acceptable depths of cover are achieved, all as directed by the Public Works Landscape Inspector and at no additional cost to City.
- E. Coordination with Work of Other Trades: Make all necessary measurements in the field to ensure precise fit of items in accordance with the original design. Contractor shall coordinate the installation of all irrigation materials with all other Work. Special attention shall be given

to coordination of piping locations versus tree and shrub locations and sleeve locations versus pavement installation to avoid conflicts.

- F. Maintain Record Prints: Contractor shall maintain "record" prints on site at all times. Upon completion of the Work, transfer all "record" information on changes and dimensions to reproducible sepia Mylar or photo Mylar prints and CD's. The changes and dimensions shall be recorded in a legible and workmanlike manner, to the satisfaction of the Public Works Landscape Inspector.

3.02 TRENCHING AND BACKFILLING:

A. Trenching:

1. Add the following to Standard Specifications Section **308-2.2 Trench Excavation and Backfill**: Dig trenches and support pipe continuously on bottom of ditch. Where lines occur under paved areas, depth dimensions shall be considered below subgrade.
2. Amend Standard Specifications Section **308-2.2, Subparagraph 2 Waterlines continuously pressurized**) to read: Water lines continuously pressurized - minimum 18 inches, maximum 24 inches. (These measurements are to be from subgrade elevation for piping under pavement.)
3. Amend Standard Specifications Section **308-2.2, Subparagraph 3 Lateral sprinkler lines**) to read: Lateral irrigation lines - minimum 12 inches and maximum 16 inches. All main lines and lateral lines running parallel to other such lines shall have a minimum horizontal separation of 12".
4. Add the following to Standard Specifications Section **308-2.2 Trench Excavation and Backfill**: Where it is necessary to excavate adjacent to existing trees, Contractor shall avoid injury to trees and tree roots. Excavation in areas where 2-inch and larger roots occur shall be done by hand. All roots 2 inches and larger in diameter shall be tunneled under and shall be heavily wrapped with wet burlap to prevent scarring or drying. Where trenching machine is run close to trees having roots smaller than 2 inches in diameter, the wall of the trench adjacent to the tree shall be hand trimmed, making a clean cut through the roots. Roots 1 inch and larger in diameter shall be painted with two coats of tree seal or approved equal. Trenches adjacent to trees shall be closed within 24 hours.
5. Permanent Resurfacing: Add the following to Standard Specifications Section **308-5.1 General**: All surface improvements damaged or removed as a result of Contractor's operations shall be reconstructed by Contractor to the same dimensions, except for pavement thickness, and with the same type materials used in the original Work. Trench resurfacing shall be 1 inch greater in thickness than existing pavement. Concrete pavement shall be removed and replaced in "full panels" with no horizontal dimension less than five (5) feet. Contractor shall review the planned limits and lines of concrete removal and replacement with the Public Works Landscape Inspector prior to sawcutting for Removal Work.

B. Backfill:

1. Amend Standard Specifications Section **308-2.2 Trench Excavation and Backfill** to read: " Backfill shall be uniformly tamped in 4-inch layers under and around the pipe for the full width of the trench and the full length of the pipe. Materials shall be sufficiently

damp to permit thorough compaction, free of voids. Backfill shall be compacted to dry density equal to adjacent undisturbed soil and shall conform to adjacent grades."

2. Add the following to Standard Specifications Section **308-2.2 Trench Excavation and Backfill**:
 - a) Flooding in lieu of tamping is not allowed without specific prior written approval of the Public Works Landscape Inspector.
 - b) Under no circumstances shall the wheels of any vehicle not designed for the purpose of soils compaction be used to compact backfill.

3.03 PIPE INSTALLATION:

A. General: Add the following to Standard Specifications Section **308-5.2.1 Irrigation Pipeline Installation, General**:

1. Piping under existing pavement may be installed by jacking, boring, or hydraulic driving. However, no hydraulic driving is permitted under asphaltic concrete pavement.
2. Cutting or breaking of existing pavement is not permitted except as approved in writing by Public Works Landscape Inspector. When approved, all necessary repairs and replacements will be made at no additional cost to City.
3. Carefully inspect all pipe and fittings before installation, removing all dirt, scale and burrs and reaming; install pipe with all markings up for visual inspection and verification.
4. Contractor shall install concrete thrust blocking per the manufacturer's recommendations at all changes of direction and terminal points of pressure pipe.
5. Parallel lines shall not be installed directly over one another. Provide a minimum of 12" horizontal separation for all parallel lines.
6. For plastic-to-metal connections, work the metal connections first. Use a non-hardening pipe dope on all threaded plastic-to-metal connections, except where noted otherwise.
7. Constant pressure piping under pavement shall be sleeved using class 315 solvent weld PVC and non-pressure lines in schedule 40 PVC sleeves. All wiring shall be sleeved under pavement using gray schedule 40 PVC. Each line shall be separately sleeved.
8. Do not install multiple assemblies ("manifold") on plastic lines. Provide each equipment assembly (e.g. RCV, quick coupler, gate valve, head, backflow device) with its own connection to its service line.

B. Plastic Pipe: Add the following to Standard Specifications Section **308-5.2.3 Plastic Pipeline**:

1. Exercise care in handling, loading, unloading and storing plastic pipe and fittings, store plastic pipe and fittings under cover until ready to install; transport plastic pipe on a vehicle with a bed long enough to allow pipe to lay flat, avoid undue bending and any concentrated external load.
2. 360E applicators shall be used to apply primer and solvent on pipe sizes 2-1/2 inches and larger.

3.04 BACKFLOW INSTALLATION: Add the following to Standard Specifications Section **308-5.3 Installation of Valves, Valve Boxes, and Special Equipment**: Install backflow assemblies at locations approved in the field by the Public Works Landscape Inspector and at heights required by local codes. In cases where the Backflow is to be placed at toe of a slope with minimum grade of 2 to 1 a crib wall be required

3.05 VALVE AND VALVE BOX INSTALLATION:

A. Valves:

1. Amend Standard Specifications Section **308-5.3 Installation of Valves, Valve Boxes, and Special Equipment** to read: Valves shall be the same size as the pipeline in which valves are installed unless otherwise specified on the Plans. Valves shall be installed a minimum of three feet in horizontal distance apart, each with its own connection to the pressure main line.
2. Amend Standard Specifications Section **308-5.3 Installation of Valves, Valve Boxes, and Special Equipment** to read: Install quick couplers within valve boxes per the Public Works Department's standards at maximum 75' o.c., and maximum 50' from ends of all planting areas.
3. Add the following to Standard Specifications Section **308-5.3 Installation of Valves, Valve Boxes, and Special Equipment:** Valves shall be installed in shrub areas whenever possible. No valves or valve boxes other than quick coupler valves shall be installed within a designated turf area.

B. Valve Boxes:

1. General: Valve boxes shall be installed with a minimum of 2" vertical clearance between the box and all pipelines and valve components and/or special equipment within the box. Valve boxes found resting on either the valve, special equipment or pipelines shall be cause for rejection of the installation.
2. Uses:
 - a) Concrete Valve Boxes:
 - i) Rectangular: Unless noted otherwise on the Plans, each remote control valve, all wire splices, flow meters and each master control valve shall be installed within a rectangular concrete valve box.
 - ii) Round: Unless noted otherwise on the Plans, each quick coupler valve and each gate valve shall be installed within a round concrete valve box.
 - c) Plastic Valve Boxes: (for drip irrigation systems only)
 - i) Rectangular: Unless noted otherwise on the Plans, each drip irrigation flush valve, and each air relief valve shall be installed within a rectangular plastic valve box.
 - ii) Round: Unless noted otherwise on the Plans, ball valves and/or gate valves shall be installed within a round plastic valve box.

3.06 IRRIGATION HEAD INSTALLATION: Amend Standard Specifications Section **308-5.4.1 Sprinkler Head Installation and Adjustment, General** to read: Irrigation heads shall be installed as designated on the Plans and per the Public Works Department's standard details. Upon coverage testing of the system if 100% coverage is not afforded by the system as designed, additional heads shall be added as necessary to achieve 100% coverage and have no runoff onto streets.

3.07 CONTROLLER INSTALLATION: Add the following to Standard Specifications Section **308-5.5 Automatic Control System Installation:**

- A. Controller Installation: The controller location, as shown on the Plans, is diagrammatic. The final location of the controller(s) shall be as approved by the Public Works Landscape Inspector before installation. Typical controller location shall be mid-block 3' behind the

sidewalk. If replacement of existing controller(s) is a part of the project, Contractor shall remove the existing controller(s) and replace with the replacement unit as specified. Contractor shall install all conduit runs, 120V wire and cable, and 24V control wire, as necessary for a complete and operational system..

B. Controller Enclosure:

(1) Conventional Type: The controller shall be wall mounted within a Myers Power Products, Inc. Catalog # MEUG22X-ENC-RIV, stainless steel vandal resistant enclosure, unless noted otherwise on the Plans. Controller enclosure shall be located in shrub areas and/or adjacent to other hardscape items. Enclosure shall have the service address applied to the upper half of the enclosure in a location visible from the roadway in 3" black vinyl numerals. A 4" thick concrete slab for maintenance access shall be provided, size approximately 15 sq. ft., line, grade and dimensions as directed by the Public Works Landscape Inspector. In cases where the controller enclosure is to be placed at toe of a slope with minimum grade of 2 to 1 a crib wall be required

B. Coordination of Controller Location with Various Service Connections: Contractor shall coordinate the electrical

service with the approved controller location. Contractor shall verify the locations of 120V power prior to installing controller(s) and shall coordinate final assembly mounting locations with the needed utilities. Contractor shall furnish and install grounding rods and ground wires for each controller. Ground rod shall be installed inside base of pedestal.

C. Controller Connections: Contractor shall inspect, test, and certify all low voltage control wire splices and ground rod installations as applicable. Any repairs as necessary to provide properly operating wiring are to be made by Contractor at no additional cost to City. After repairs are satisfactorily completed, Contractor shall connect the ground wires to the ground rods and the controller(s).

D. Controller Programming: Following establishment of the turf, the irrigation system shall be programmed to operate during the periods of minimal use of the Project area (i.e., 11:00 p.m. through 6:00 a.m.).

3.08 WIRING:

A. Wiring: Add the following to Standard Specifications Section **308-5.5 Automatic Control System Installation:**

1. All splice connections shall occur in a valve box. All wire runs between the valve and the controller shall be a continuous run with no splices unless noted otherwise on the Plans.
2. All low voltage-wiring splices shall be made-up with Spears DS-100 Dri-Splice wire Connectors filled with DS-300 Sealant or Christy's Electra Seal #RHES-5 Sealant or City approved equal.

3.09 FINISHING AND TESTING: Amend Standard Specifications Section **308-5.6.2 Pipeline Pressure Test** to read: Pressure test the mains - minimum 2 hours at 150 PSI. Add the following to Standard Specifications Section **308-5.6.2 Pipeline Pressure Test:** Center-load all plastic pipe

prior to pressure testing. The entire system shall be operating properly before any planting operations commence.

3.10 **COMPLETION CLEANING:** Add the following to Standard Specifications Section **308 LANDSCAPE AND IRRIGATION INSTALLATION:** Upon completion of the Work, Contractor shall smooth all ground surfaces, remove excess materials, rubbish, debris, etc., sweep adjacent streets, curbs, gutters, walkways and trails, and remove construction equipment from the premises.

SECTION 02483 - PUBLIC LANDSCAPE PLANTING

PART 1 - GENERAL

1.01 DEFINITIONS:

- A. Contractor: Where used throughout this specification, the term "Contractor" shall mean the licensed Contractor hired by the Builder/Developer to install the landscape improvements and any and all subcontractors to Contractor.
- B. Builder/Developer: The Legal entity/individual responsible for development of the project that has entered into the agreement and posted a surety to guarantee the installation of the public landscape improvements.

1.02 RELATED DOCUMENTS:

- A. Standard Specifications: All Public Landscape Planting Work shall conform to the "Standard Specifications for Public Works Construction" Current Edition, prepared by the Southern California Chapter of the American Public Works Association and Southern California District of the Associated General Contractors of California, published by Building News, Inc., Los Angeles, California, and all amendments thereto, as adopted by the City of Riverside, and as provided herein.
- B. Reference Standards: American Association of Nurserymen Standards.

1.03 SCOPE: The Work of this Section shall consist of furnishing all labor, materials, equipment, appliances and services necessary for the execution and completion of all **Public Landscape Planting Work** as shown on the Plans and as described in the Specifications including, but not necessarily limited to, the following:

- Soil preparation;
- Finish grading;
- Planting trees;
- Guying and staking trees;
- Planting shrubs, vines and groundcover;
- Hydroseeding turf;
- Soil erosion control;
- Maintenance;
- Plant establishment;
- Coordination with Work of other Sections;
- Testing;
- Clean-up;
- Replacements, Repairs, Guarantees and Warranty Work.

1.04 RELATED WORK: (*Comment: Line out inapplicable sections*)

Submittals	01300
Clear and Grub and Selective Demolition	02110
Site Grading	02210

Irrigation
Electrical

02441
16530

- 1.05 **SOILS TEST:** Contractor shall notify the Public Works Landscape Inspector upon completion of rough grading and prior to commencement of soil preparation work. The Contractor shall take soils samples in the presence of the Public Works Landscape Inspector and shall obtain agronomic soils tests for all planting areas after completion of rough grading and prior to start of soil preparation work. Tests shall be performed by an approved agronomic soils testing laboratory and shall include a fertility and suitability analysis with written recommendations for soil preparation, planting backfill mix, auger hole requirements, and post plant fertilization program. The soils report recommendations will take precedence over the minimum amendment and fertilizer application rates specified herein only if the soils report recommendations exceed the specified minimums. Contractor shall allow a minimum two week period for the soils testing work commencing upon the Public Works Landscape Inspector's acceptance of grade.
- 1.06 **GUARANTEE:** All trees installed by the Contractor shall be guaranteed against any and all poor, inadequate or inferior materials and/or workmanship for a period of one (1) year following the date of completion. During the guarantee period, any trees found to be dead, missing, or in poor condition shall be replaced by Contractor within ten (10) days of written notification. Public Works Landscape Inspector shall be the sole judge as to the condition of the trees. Replacement shall be made in accordance with City standards. Material and labor involved in replacing trees shall be provided by Contractor at no additional cost to City and/or the Developer.
- 1.07 **INSPECTIONS:** Inspections are required. Contractor shall contact the Public Works Landscape Inspector and the Developer's Landscape Architect at least 48 hours (2 working days) in advance of an anticipated inspection. An inspection will be required at each of the steps listed below:
- A. **Rough Grade Prior to Commencement of Soil Preparation:** Upon completion of rough grading and prior to commencement of soil preparation, for acceptance of rough grading work and taking of soils samples.
 - B. **Finish Grade:** Inspection of completed finish grading work following soil preparation work.
 - C. **Plant Material:** Inspection of plant materials upon delivery to the job site, but prior to planting.
 - D. **Plant Locations:** When container plants and/or bare rootstock are spotted for planting, but before planting holes are excavated.
 - E. **Completed Planting:** When planting and all other indicated or specified work has been completed.
 - F. **Chemical Applications:** During application of pre-emergent chemical.
 - G. **Start of Plant Establishment:** At the start of the Plant Establishment Period.
 - H. **End of the Plant Establishment:** Prior to Final Acceptance of the Project for ongoing maintenance, the project will be inspected for end of the Plant Establishment Period.

Acceptance for maintenance shall be confirmed in writing. Contractor shall remain responsible for maintenance until receipt of written confirmation of acceptance of the Project for maintenance by the applicable party (Home Owner's Association, City, or Master Property Owner's Association as applicable).

1.08 **SUBMITTALS:** The following written certifications are required to be submitted to the Public Works Landscape Inspector upon delivery of the respective materials to the job site:

- Total Quantity of commercial fertilizers, by type
- Total Quantity of soil amendments and conditioners, by type
- Total Quantity of seed, by type
- Total Quantity of fiber-mulch
- Total Quantity of iron sulphate

1.09 **PLANT ESTABLISHMENT PERIOD:** The Plant Establishment Period shall be for a minimum period of **one (1) year**; see also Subsections **3.12 Maintenance and Plant Establishment** and **3.13 Start of Plant Establishment Period** regarding length of plant establishment and criteria to start.

PART 2 - MATERIALS

2.01 **GENERAL:** All materials shall conform with Section **212 - Landscape and Irrigation Materials** of the Standard Specifications except as modified herein.

2.02 **FERTILIZER, SOIL AMENDMENTS AND CONDITIONERS:** Add the following to Standard Specifications Section **212-1.2.3 Commercial Fertilizer:**

- A. **Planting Tablets:** Tightly compressed long-lasting, slow-release fertilizer tablets weighing 21 grams, with a potential acidity of not more than 5 percent by weight and having an analysis of 20-10-5 derived from the sources listed in the following guaranteed analysis:

GUARANTEED ANALYSIS

Total Nitrogen (N)	20%
Derived from urea formaldehyde	
7.0% water soluble nitrogen	
13.0% water insoluble nitrogen	
Available Phosphoric Acid (P ₂ O ₅).	10%
Derived from calcium phosphate	
Soluble Potash (K ₂ O).	5%
Combined Calcium (Ca).	2.6%
Derived from calcium phosphates	
Combined Sulfur (S).	1.6%
Derived from ferrous and potassium sulfates	
Iron (expressed as elemental Fe)	35%
Derived from ferrous sulfate	

- B. Commercial fertilizer: Shall bear the manufacturer's guaranteed statement of analysis and shall meet the following minimum requirements: 16% nitrogen, 6% phosphoric acid, and 8% potash.
- C. Organic Soil Amendment: Shall be type 1 organic soil amendment, wood based product, nitrogen stabilized, and free of foreign matter.
- D. Soil Conditioners: Add to Standard Specifications, new Section as follows:

212-1.2.6 Inorganic Conditioners. Inorganic conditioners shall be agricultural grade gypsum, soil sulfur and iron sulfate. Iron sulphate shall be ferric sulphate or ferrous sulphate in pelleted or granular form containing not less than 18.5% iron, expressed as metallic iron, and shall be registered as an agricultural mineral with the State Department of Food and Agriculture in compliance with Chapter 5 "Fertilizing Materials", of Division 7 of the Food and Agriculture Code of California, commencing at Section 14501.

2.03 HEADERS, STAKES AND TIES: Add the following to Standard Specifications Section **212-1.5 Headers, Stakes and Ties**:

- A. Headers: Standard Specifications Section **212-1.5.2 Headers and Stakes** replace with the following to read:

"Headers shall be Concrete Headers/Mow Curbing - Concrete shall be 5 sack mix with a maximum slump test of four inches (4"). Provide sufficient concrete forming and stakes (maximum 3' o.c.) to provide continuous line without waving."
- B. Tree Stakes: Shall be straight-grained lodgepole pine, or City approved equal. Stakes shall be free from knots, checks, split, or disfigurements.
- C. Tree Ties: Tree ties shall be manufactured of virgin flexible vinyl meeting ASTM-D-412 standards (Cinch-Tie) for tensile and elongation strength. Material shall be black for ultraviolet resistance. Tree ties shall be manufactured with a double back locking configuration and secured with one galvanized nail to prevent slippage. Tree ties shall elongate with the tree growth preventing damage to the tree. Installed in a double stake, four tie, figure eight configuration. **Metal "Twist Braces" are NOT ALLOWED.**

2.04 HYDROSEEDING MATERIALS:

- A. Binding Agent: Shall be a dry powder organic concentrate, Ecology Controls "M-Binder" as available from Robinson Fertilizer Company, Anaheim, CA 714/632-9715 or City approved equal.
- B. Fertilizers:
 - 1. Controlled Release Fertilizer (CRF):
 - a) Total Quantity Exceeding 1 Ton: CRF shall be "Sierra 17-6-12 Plus Minors" Controlled Release Fertilizer (Stock# 90209), 4-5 month time release formulation,

using resin coated prills, as manufactured by The Scotts Co., Marysville, OH 1-800-492-8255 (Local Manufacturer's Representative: Karen Stringer, (951) 452-1634), or City approved equal, and as available through Western Farm Service, Riverside, CA (951) 686-3236.

b) Total Quantity Less than 1 Ton: CRF shall be "Osmocote" Controlled Release Fertilizer with a formulation of 17-7-12 (Stock #90010) as manufactured by the Scotts Company, Marysville, OH 1-800-492-8255 (Local Manufacturer's Representative: Karen Stringer, (951) 452-1634) or City approved equal, and as available through Western Farm Service, Riverside, CA (951) 686-3236.

2. Triple Super Phosphate: Shall be a premium quality granulated high phosphorus "Best" fertilizer product having an analysis of 0-45-0, as manufactured by J. R. Simplot Company, Lathrop, CA (209) 858-2511, or City approved equal.

C. Fiber-Mulch: Shall be produced from cellulose such as wood pulp or similar organic material and shall be of such character that it will disperse into a uniform slurry when mixed with water. The fiber shall be of such character that when used in the applied mixture, an absorptive or porous mat, but not a membrane, will result on the surface of the ground. Materials which inhibit germination or growth shall not be present in the mixture.

D. Seed: Turf seed mix as specified.

E. Water: All water used for hydroseeding shall be potable domestic water. Contact the City Public Utilities Department, Water Division at 951/826-5648 regarding availability of water and temporary construction meter and charges for water drawn from City fire hydrants.

2.05 JUTE NETTING: Jute netting shall be new and shall be of uniform, plain-weave, flame-retardant mesh. The mesh shall be dyed green and shall be made from unbleached single jute yarn. The yarn shall be of loosely twisted construction and shall not vary in thickness by more than one-half its normal diameter. Jute netting shall be furnished in rolled strips and shall meet the following requirements:

Width - 48 inches, with a tolerance of one inch wider or narrower.

Minimum 78 warp ends per width of roll.

Minimum 41 weft ends per yard of length.

Weight shall average 1.22 pounds per linear yard, with a tolerance of 5 percent heavier or lighter.

2.06 PLANTS: Add the following to Standard Specifications Section **212-1.4 Plants**:

A. General: Add the following to sub-section **212-1.4.1 General**: All plants shall be true to name, with at least one of each bundle or lot tagged with the name and size in accordance with the American Association of Nurserymen Standards. In all cases, botanical names shall take precedence over common names. All plants and planting materials shall meet or exceed the specifications of Federal, State, and County Laws requiring inspection for plant disease and insect control.

B. Quality and Size:

1. Quality: All plant material shall comply with the definition for number one nursery stock per the current edition of "Horticultural Standards" as adopted by the American Association of Nurserymen.
 2. Size: Add the following to Standard Specifications Sections **212-1.4.2 Trees** and **212.1.4.3 Shrubs**:
 - a) All container plants supplied by Contractor shall be of the standard height and diameter set by the American Standard for Nursery Stock as specified for the container size within which the plants are delivered to the site. The height of the trees shall be measured from the root crown to the last division of the terminal leader and the diameter shall be measured six (6) inches above the crown roots.
 - b) All palm trees shall be the size(s) as noted on the approved plans, but in no case less than a minimum overall height of 10 to 14 feet as measured from the crown of the root ball to the tips of the fronds, or ten feet of brown trunk whichever is greater.
 - c) All container grown trees shall be the size(s) as noted on the approved plans, but in no case less than a minimum 15 gallon container size, with minimum caliper and height in accordance with the American Association of Nurseryman standards for container plants.
- C. Bare Root Stock: Substitution of bare root stock for plant material specified by container size shall be subject to the review and approval of the Public Works Landscape Inspector. All bare root stock shall conform to the American Nurseryman's Association standards. Minimum caliper shall be two (2) inch diameter and minimum height shall be twelve (12) feet.
- D. Cuttings: Modify Standard Specifications Section **212-1.4.6 Cuttings** to read: All cuttings used on the project shall be fully rooted cuttings unless otherwise approved in writing by the Public Works Landscape Inspector.

2.07 MULCH:

- A. Nitrolized Shavings: Shall conform with Standard Specifications Section **212-1.2.5 (a) Type I Mulch**.
- B. Tree Mulch: Shall be a ground wood product as produced through a wood chipper, and shall consist of twigs and branches with pieces of a maximum size of 2" diameter by 4" long, free of seeds, trash and debris and other inert non-organic materials.

2.08 TURF PLANTINGS:

- A. SEED: Add the following to Standard Specifications Section **212-1.3 Seed**:

Seeded Turf: For turf areas being planted solely from seed, use the following seed mix:

<u>Turf Seed Mix</u>	<u>by weight</u>	<u>Proportion</u>	
		<u>Purity</u>	<u>Germination</u>
Medallion Turf Type Tall Fescue	50%	98%	90%
Triple Crown Tall Fescue Blend	50%	98%	90%

Seeding rate: Shall be as noted on the approved plans, but in no case less than a minimum of 400 pounds per acre (10 LBS/1,000 SF)

- B. SOD: Turf sod shall be of the type noted on the Plans. All sod shall be new, fresh, viable sod delivered in full pallets ready for installation.

PART 3 - EXECUTION

3.01 GENERAL: All Work shall conform with Section **308 LANDSCAPE AND IRRIGATION INSTALLATION** of the Standard Specification, except as modified herein.

At Contractor's option, subject to the Public Works Landscape Inspector and Landscape Architect's acceptance of the material available and the appropriateness of the planting season, bare root stock may be substituted for the required 15 gallon and 24" box tree species if commercially available as bare root plantings and provided the corresponding minimum caliper and height requirements specified above in Part 2 Materials are met.

3.02 WEED CONTROL MEASURES: Upon completion of all rough grading work, and prior to soil preparation, perform weed control measures as follows:

1. Irrigate all areas designated to be planted for a minimum of 10 minutes per setting, two settings per day for seven days to germinate all weed seed possible.
2. Apply a systemic weed killer and allow sufficient time to obtain complete kill of all weeds germinated.
3. Repeat step one above.
4. Repeat step two above.

3.03 SOIL PREPARATION: Add the following to Standard Specifications Section **308-2.3 Topsoil Preparation and Conditioning**:

- A. Work Sequence: All rough grading, mounding and weed control measures shall be completed prior to soil preparation. Soil Preparation Work shall not commence until the agronomic soils test has been completed. Should 30 calendar days elapse between completion of soil preparation and commencement of planting, all areas shall be prepared again.
- B. Excluded Areas: Planting areas with slopes 3:1 and steeper shall not be soil prepared. In lieu of soil preparation, such slopes will require fertilizer tablets for all plantings as specified below.
- C. Soil Preparation: In all planting areas with gradients less than 3:1, areas to be soil prepared shall first be cross ripped to a minimum depth of 6" with tractor tines spaced at maximum 18" on center. Following cross-rip operations, a layer of soil amendments shall be spread and

rototilled into the soil to a minimum depth as noted on the Plans, but not less than 4 inches, or as recommended by the soils report if greater, so that the soil shall be loose, friable, and free from rocks, sticks, and other objects undesirable to planting.

- D. Amendment Application Rates: The following soil amendments shall be added per 1,000 square feet to all planting areas with gradients less than 3:1 (agronomic soil test recommendations shall take precedence where these minimum amounts are exceeded):
1. 6 cubic yards Type I organic soil amendment.
 2. 15 pounds commercial fertilizer.
 3. 100 pounds gypsum.
 4. Soil sulfur per soils report.

3.04 FINISH GRADING: Contractor shall finish grade all planting areas, filling as needed or removing surplus dirt, raking to remove all rocks and debris over 1 inch in diameter, and floating to a smooth uniform grade. All areas shall slope to drain. Flow lines shall be established to roads, curbs, drainage swales and inlets, and/or sidewalks as shown on the Plans and as directed. All fill material placed within the top 12" from finish grade elevations in all planting areas shall be topsoil.

All landscape areas shall be finish graded to "dress out", maintain, and/or re-establish finish grades and flow lines as approved prior to amending the soil. Contractor shall call for inspection upon completion of finish grading work. Contractor shall not proceed with planting work until finish grades have been inspected and accepted by the Public Works Landscape Inspector.

3.05 EROSION CONTROL: Add new Section to the Standard Specifications:

"308-4.9.6 Jute Netting. All slopes areas exceeding 3:1 shall receive jute netting. Netting shall also be provided during the Plant Establishment Period, when and as directed by the Public Works Landscape Inspector, along flow lines and other locations where erosion is evident. Jute netting shall be installed loosely, up and down the slope. The installed netting shall fit the soil surface contour and shall be held in place by 9-inch long, 11-gage (minimum) steel wire staples driven vertically into the soil at approximately 24-inch spacing. Jute netting strips shall overlap along the sides at least 6 inches. Ends of strips shall be buried into the soil at least 6 inches. Lap all ends of rolls a minimum of 24"."

3.06 INSPECTION OF CONTAINER PLANTS: The root condition of plants furnished in containers and proposed for use in the Work will be checked by the Public Works Landscape Inspector by removal of earth from the roots of not less than two plants nor more than 2% of the total number of plants of each species or variety from a single source. When container-grown plants are from several different sources, the roots of not less than two plants of each species or variety from each source may be checked by the Public Works Landscape Inspector at the Inspector's option. The selection of plants to be checked will be made by the Public Works Landscape Inspector. Care shall be exercised to avoid rendering plants unsuitable for planting by virtue of this inspection. However, all plants rendered unsuitable for planting shall be considered as samples, and replacements shall be provided at no additional cost to City. In case the sample plants are found to be defective, the entire lot or lots of plants represented by the defective samples will be rejected.

3.07 PLANTING BACKFILL:

- A. Mixing: All backfill materials shall be bulk mixed, not individually mixed at each plant pit.
- B. Proportions: Backfill for planting pits shall be enriched using the following blend per cubic yard (agronomic soil test recommendations shall be reviewed prior to soil mixing):
 - 1. Container Plants:

60% top soil	3 lbs. gypsum
40% Type I Organic Amendment	2 lbs. iron sulphate
2 lbs. commercial fertilizer	
 - 2. Bare Root Stock:

10% wood shavings	90% topsoil
fertilizer and soil conditioners as specified for container plants.	

3.08 PLANTING:

- A. Tree and Shrub Planting: Add the following to the Standard Specification Section **308-4.5 Tree and Shrub Planting**:
 - 1. Soil surrounding planting pit shall be in a friable condition and moist to a depth of 8".
 - 2. Backfill using specified soil mix to within 8" of finish grade. At this depth, place the plant fertilizer tablets Agriform 20-10-5, 21 grams each, or City approved equal. A minimum of 1 tablet for 1 gallon, 3 tablets for 5 gallons, 5 tablets for 15 gallons, and 8 tablets for a 24" box. Complete backfilling to finish grade.
 - 3. Trees (other than relocated palms) shall be planted at such a depth that the crown roots bear the same relative position to finish grade as the crown roots did in the soils where the trees were grown. Backfill after planting shall be compacted carefully into place without injuring the roots of the tree or breaking up the ball of earth surrounding the roots.
- B. Groundcover and Vine Planting: Add the following to Standard Specifications Section **308-4.7 Groundcover and Vine Planting**:
 - 1. On slopes exceeding 3:1 ratio, apply 5 gram Agriform tablets, one per plant in lieu of soil preparation work.
 - 2. Prepare the soil in all planting areas (except where slopes exceed 3:1) by applying 1.5 cubic yards of Nitrolized Shavings and 5 lbs. of the specified commercial fertilizer per 1,000 square feet. Repeat fertilization at 30 day intervals throughout the duration of the Work up to 4 applications. After the fourth application decrease frequency to once every 90 days.
 - 3. All planting areas, areas to receive Tree-Mulch and bare dirt areas shall be treated with a pre-emergent chemical (subject to approval by the Public Works Landscape Inspector prior to application). Chemicals shall be applied by a licensed Pest Control Agent. This treatment shall be applied at the following times during the Contract: a) before planting, b) at beginning of Plant Establishment Period, and c) at end of Plant Establishment Period. The Public Works Landscape Inspector, (951) 351-6313, shall be given a minimum of 48 hours (2 working days) notice prior to each application. No chemicals shall be applied other than in the presence of the Inspector.
 - 4. All areas designated to receive Tree-Mulch shall have mulch applied and spread to provide a uniform thickness of not less than 3" of mulch, and shall be neat and clean, free of trash.

3.09 **TREE STAKING**: Stake trees in accordance with the Public Works Department's Standard Detail #1001.

3.10 **TURF PLANTING**: Add the following to Standard Specifications Section 308-4.8.2, (b) **Method AB**: Turf Planting shall be performed by either hydroseeding or sodding as indicated on the Plans, or, if not noted, as suitable for the species of turf specified and as acceptable to the City:

A. **Pre-moistening**: All areas to be planted shall be moistened to a depth of six inches just prior to application.

B. **Hydroseeding**:

1. **Mixing of hydroseed slurry**:

a. Mixing shall be performed in a tank, with a built-in continuous agitation and recirculation system of sufficient operating capacity to produce a homogeneous slurry of fiber, M-Binder, seed, fertilizer and water in the following designated unit proportions:

Fiber-Mulch: 1,500 lbs./acre

Fertilizers:

CRF 870 lbs./acre (20#/1000 SF)

Triple superphosphate 200 lb./acre (4 □#/1000 SF)

Seed: as specified above.

Binding Agent: 100 lbs./acre (use on all slopes 5:1 and steeper)

Water: 3,000 gal./acre (maximum)

Agricultural Grade Gypsum: 500 lb./acre

b. With agitation system operating at part speed, water shall be added to the tank, good recirculation shall be established. Materials shall be added in such a manner that they are uniformly blended into the mixture in the following sequence (assumes a nominal 1500 gallon tank):

c. When tank is 1/3 filled with water:

Add binding agent - □ acre requirement.

Add 5 - 50 pound bales of fiber-mulch.

Add seed - □ acre requirement.

Add fertilizer - □ acre requirement.

d. Agitate mixture at full speed when the tank is half-filled with water.

e. Add remainder fiber-mulch requirement, 10 bales, before tank is 3/4 full. Add remainder fertilizers, seed and gypsum. Slurry distribution should begin immediately.

2. **Application**: Hydroseed slurry shall be applied under high pressure evenly and result in a uniform coat on all areas to be treated. Care shall be exercised to assure that plants in place are not subjected to the direct force of the application. Slurry shall be immediately removed from walks, structures, plants, etc., that are inadvertently sprayed.

3. **Clean-up**: The slurry shall not be sprayed on non-designated areas. Any slurry spilled or sprayed into areas other than those designated to receive spray shall be cleaned up at Contractor's expense to the satisfaction of the Public Works Landscape Inspector.

- B. Sodding: All areas to receive sod shall be Finish Graded prior to commencement of sodding. Immediately prior to laying sod, all areas shall be irrigated to moisten the soil as specified above. Rooting Agent shall be applied per the written recommendations of the Sod Grower. Contractor shall provide a copy of such recommendations to the Public Works Landscape Inspector prior to installation of the sod. Lay sod in parallel rows with a running bond pattern using uniformly sized strips of sod. Use whole pieces wherever possible. Lay sod smooth, with tight joints, no gaps greater than 1/8" in size. All irrigation heads shall be marked with flags for ease of location. Cut sod neatly trimming it away from around each irrigation head a maximum of 1/8" all around to allow for proper spray pattern and smooth pop-up and retract operation. Immediately following completion of sodding operations, irrigate as necessary.
- C. Replanting: At the point that the turf is generally showing signs of establishment, all bare spots shall be replanted within 10 days by Contractor, either with seed or sod as designated by the Public Works Landscape Inspector. Contractor shall be responsible for all replanted turf areas for as long after replanting as is necessary until acceptable germination/rooting and establishment is realized and approved by the Public Works Landscape Inspector.

3.11 WATERING: Add the following to Standard Specifications Section **308-4.9.5 Watering**:

- A. Responsibility: It shall be Contractor's responsibility to maintain a balanced watering program to ensure proper growth until Final Acceptance of the Work and to assure no runoff onto streets.
- B. Initial Watering: Immediately after planting, apply water to each plant. Apply water in a moderate stream in the planting hole until the material about the roots is completely saturated from the bottom of the hole to the top of the ground.
- C. Ongoing Watering: Apply water in sufficient quantities and as often as seasonal conditions require to keep the planted areas moist at all times, well below the root system of plants.
- D. Irrigation:
 1. Contractor shall properly and completely maintain the irrigation system. A balanced water program shall be maintained to ensure proper germination and growth until Final Acceptance of the Work. Plants which cannot be watered sufficiently with the irrigation system shall be watered by means of a hose.
 2. All controllers are to have each station individually adjusted on a weekly basis. System shall be set considering the application rate each area is capable of receiving. The system shall operate on short intervals, with the cycle repeating at a later time to reduce runoff.

3.12 MAINTENANCE AND PLANT ESTABLISHMENT: Amend the first sentence of Standard Specifications Section **308-6 MAINTENANCE AND PLANT ESTABLISHMENT** to read: " Contractor shall maintain **all areas within the Work Limits of this Project** on a continuous basis...until Final Acceptance".

3.13 START OF PLANT ESTABLISHMENT: Add the following to Standard Specifications Section **308-6 MAINTENANCE AND PLANT ESTABLISHMENT**:

A. Criteria for Start of Plant Establishment Period:

1. The Plant Establishment Period shall not start until all elements of the Project that impact the landscape are completed in accordance with the Contract Documents. Projects will not be segmented into phases.
2. Permanent power to remote controllers shall be established.
3. The Plant Establishment Period for the Project shall not begin until after the first mowing of the newly planted turf areas. For Plant Establishment purposes "First Mowing" is defined as the first mowing after the point in time that a minimum of 85% of the turf area has attained a minimum height of 2". Until the above specified percentage of turf area is established and mown, Contractor shall mow as necessary to maintain those portions of turf exceeding 2" at the mowing height of 1 1/2 inches. At no time shall any turf exceed 3" in height.
4. Written acceptance of the Public Works Landscape Inspector must be obtained to start the Plant Establishment Period.
5. If the project maintenance fails to continuously meet standards required, the Plant Establishment Period "day count" will be suspended and will not recommence until Contractor has corrected all deficiencies.

3.14 MAINTENANCE TASKS: Add the following to Standard Specifications Section **308-6 MAINTENANCE AND PLANT ESTABLISHMENT:**

- A. General: During the contract period provide all watering, weeding, mowing, fertilizing and cultivation and spraying necessary to keep the plants and turf in a healthy growing condition and to keep the planted areas neat, edged, and attractive. All shrubs planted by Contractor shall be pinched and pruned as necessary to encourage new growth and to eliminate rank sucker growth. Old wilted flowers and dead foliage shall be immediately pinched or cut off. Do not prune trees without written approval of the Public Works Landscape Inspector.
- B. Iron Chlorosis: After planting and during the Plant Establishment Period, in the event that any plantings exhibit iron chlorosis symptoms, apply FE 138 Geigy or equivalent at manufacturer's recommended rates.
- C. Replacement Plantings: During the Plant Establishment Period, should the appearance of any planting installed by Contractor indicate weakness, that plant shall be replaced immediately with a new, healthy plant. At the end of the Plant Establishment Period, all plant materials shall be in a healthy, growing condition and spaced as indicated on the Plans.
- D. Fertilization: Contractor shall apply commercial fertilizer to all turf areas at a rate of 10 pounds per 1,000 square feet, and all groundcover areas at a rate of 5 pounds per 1,000 square feet, at 30-day intervals, for 3 applications as a minimum, above and beyond the original soil preparation application.
- E. Planting Establishment: All planting areas that do not show a prompt establishment of plant material, and areas where plant material is missing, shall be replanted at 10-day intervals until the plant material is established. For turf sod plantings, sod shall exhibit sufficient root growth knitting into the subgrade such that the sod can no longer be removed by hand. If a good rate of growth has not been demonstrated within 30 days of first planting/hydroseeding, Contractor shall be responsible to determine the appropriate horticultural practices necessary to obtain good growth. Contractor shall obtain agronomic soils testing of all areas not showing good

growth and shall provide copies of the test results to the Public Works Landscape Inspector to verify the appropriateness of all maintenance work performed.

- F. Grading and Drainage: During the Plant Establishment Period all flow lines shall be maintained to allow for free flow of surface water. Displaced material which interferes with drainage shall be removed and placed as directed. Low spots and pockets shall be graded to drain properly. Jute netting shall be installed at flow lines and other locations where erosion is evident, when directed by the Public Works Landscape Inspector.
1. Damage to planting areas shall be repaired immediately and throughout the Plant Establishment Period. Depressions caused by vehicles, bicycles, or foot traffic shall be filled and leveled. Replant damaged areas.
 2. All paved areas shall be washed and maintained in a neat and clean condition at all times.
 3. All subsurface drains and inlets shall be periodically cleared of debris, leaves and trash and flushed with clear water to avoid build up of silt and debris.
 4. Debris and trash shall be removed from the site daily.
- G. Disease and Pest Control: Throughout the Plant Establishment Period, all plants shall be maintained in a disease and pest free condition. A licensed pest control operator shall be retained by Contractor to recommend and apply all pesticides, herbicides, and fungicides. Exterminate gophers, moles, and all other rodents, and repair damage.

3.15 END OF PLANT ESTABLISHMENT PERIOD: Add the following to Standard Specification Section **308-6 MAINTENANCE AND PLANT ESTABLISHMENT**:

- A. Request for Inspection: When Contractor believes the Plant Establishment Period is complete and the Project is ready for Final Acceptance, Contractor shall request inspection of the Project. The Public Works Landscape Inspector will inspect the Project for Final Acceptance. Deficiencies noted during inspection shall extend the Plant Establishment Period until all are corrected.
- B. Established Plantings: All planting areas shall show a good rate of growth and shall be well established "filled in" plantings free of voids. Bare areas will be unacceptable. Contractor shall provide sod or plantings from flats as necessary to fill in all bare areas. Such sod or plantings shall be planted a minimum of 10 days prior to the end of the Plant Establishment Period and shall have roots "knit-in" to the native soil.
- C. Written Acceptance: Final Acceptance and assumption of maintenance responsibilities by City shall occur only upon the Public Works Department Representative's written acceptance of the Project for maintenance by City.

3.16 CLEAN UP: Upon completion of the Work, Contractor shall smooth all ground surfaces; remove excess materials, rubbish, debris, etc.; sweep adjacent streets, curbs, gutters; wash down all walkways, and trails; and remove construction equipment from the premises.

SECTION 02482 - TREE RELOCATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

- A. Standard Specifications: All Work shall conform to the "Standard Specifications for Public Works Construction" Current Edition, prepared by the Southern California Chapter of the American Public Works Association and Southern California District of the Associated General Contractors of California, published by Building News, Inc., Los Angeles, California, and all amendments thereto adopted by the City of Riverside, and as provided herein.
- B. Reference Standards: American Association of Nurserymen Standards.

1.02 SCOPE: The Work of this Section shall consist of furnishing all labor, materials, equipment, appliances and services necessary for the execution and completion of all **Tree Relocation Work** as shown on the Plans and as described in the Specifications including, but not necessarily limited to, the following:

- Obtaining all required street tree and street opening permits;
- Transplanting trees;
- Guying and staking trees;
- Maintenance;
- Plant Establishment;
- Replacements, Repairs, Guarantees and Warranty Work;
- Coordination with Work of other Sections;
- Clean-up.

1.03 GUARANTEE: All relocated trees shall be guaranteed against any and all poor, inadequate or inferior workmanship for a period of one year following relocation. At the end of the guarantee period any material found dead or not in a satisfactory growth condition shall be removed from the site. Such trees shall be replaced at no expense to the City with the same variety and size as originally designated and the maintenance period extended for a period as deemed appropriate by the Public Works Department but not to exceed one additional year.

1.04 INSPECTIONS & PERMITS:

- A. Inspections: Inspections will be required. Contractor shall contact the Call-Center at 951/826-5311 a minimum of two working days in advance to schedule required inspections. An inspection will be required at each of the steps listed below:
1. On-site inspection of all equipment to be used in Tree Relocation Work.
 2. Inspection and approval of new tree locations prior to digging.
 3. Inspection of defronding and tying prior to moving of palm trees.
 4. Inspection of replanting operations and trees in place following relocation for start of Plant Establishment Period.
 5. Inspection for Final Acceptance and release from Plant Establishment Period.
- B. Permits: Public Works Department Street Tree Permit(s) for Tree Relocation and/or Removal and a Public Works Department Street Opening Permit are required prior to commencement of

Tree Relocation and/or Removal Work. Contractor shall obtain permits by contacting the Urban Forester at 351-6112. Street Tree permits will be issued as "no fee" permits based upon submittal of a set of the improvement plans to either of these gentlemen. Backfill operations for all holes from which palm trees are removed are to be inspected by Public Works for proper compaction under the Street Opening Permit process.

- 1.04 PLANT ESTABLISHMENT PERIOD: Contractor shall be responsible for maintenance of all relocated trees for a minimum one (1) calendar year Plant Establishment Period. Trees shall be maintained in a good growth condition throughout the Plant Establishment Period. Maintenance work shall include periodic watering and weeding of the tree basins. Trees shall be maintained in a plumb position until accepted. Contractor shall provide a source of water and/or watering truck. All water used shall be paid for by Contractor. At the time of Final Acceptance and release of the Project Bonds, all watering basins shall be weed free and shall be filled in with clean top soil and all guy wires removed as directed by the Public Works Inspector.

The Plant Establishment Period will end and Contractor will be released from further maintenance responsibility, only upon receipt of written notification from the City that the Public Works Department is releasing the project. This release will be issued in writing by the Public Works Department.

- 1.05 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS: Contractor's attention is directed to Section 7-9 **PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS** of the Standard Specifications which shall govern this Work. Contractor shall proceed at Contractor's own risk.

PART 2 - MATERIALS

- 2.01 TOPSOIL: All soil used for planting shall conform to the requirements of Class "C" topsoil as defined in subsection **212-1.1.4 Class C Topsoil** of the Standard Specifications.
- 2.02 ROOT GROWTH STIMULATE: Stimulant shall be Vitamin B-1 as manufactured by Cal-liquid, Cooke, Chican, Ortho, or City of Riverside approved equal.
- 2.03 PLANT TABLETS: Planting fertilizer tablets shall be slow-release type, 21 grams. Tablets shall be in compressed form with the following minimum available percentages: N-20 percent, P-10 percent, and K-5 percent.

PART 3 - EXECUTION

- 3.01 GENERAL: All Relocation Work is to be done in a workmanlike manner by personnel experienced in this type of Work to the satisfaction of the Public Works Inspector.
- 3.02 PRUNING: No Pruning Work shall be performed other than in the presence of the Public Works Department representative. In preparing trees for relocation, all dead or damaged limbs shall be removed. Healthy limbs shall be pruned to remove an amount of foliage in proportion to root loss, and in such a manner as to encourage the natural form of the tree. Care shall be taken to prevent injury to trunks of trees.

3.03 **PLANT PITS**: New planting pits shall be dug prior to removal of trees from their existing location. All pits shall be dug in accordance with Standard Specifications Section **308-4.5 Tree and Shrub Planting**.

3.04 **DIGGING THE ROOTBALL**: When digging out the rootball, no excavation shall be done closer than 24" to the trunk at ground level and the excavation shall extend below the major root system to a minimum depth of six (6) feet. The bottom of the rootball shall be cut off square and perpendicular to the trunk below the major root system. Under no conditions shall Contractor cut down the size of the rootball in width or depth.

Contractor shall not free-fall, drag, roll or abuse the tree or put a strain on the crown at any time. A protective device shall be used around the trunk of the tree while lifting and relocating so as not to scar or skin the trunk in any way. This device shall consist of either a rubber or leather sling or a sling made out of timbers sufficiently sized to withstand the cable/choker pressure. At no time will trees be balled out and laid on the ground with rootball left exposed to direct sunlight and air. The rootball shall be kept moist and shaded at all times.

3.05 **ROOT GROWTH STIMULANT**: Root growth stimulant shall be applied when the backfilling is between half to two thirds up the rootball. Application rate shall be one (1) quart for trees less than thirty (30) feet in height, two (2) quarts for trees thirty (30) feet and larger in height. Stimulant shall be poured full strength equally distributed around the rootball, and water-jetted into the backfill.

3.06 **PLANT TABLETS**: Twenty-one gram tablets shall be placed in the upper one-third of the planting pit, 12-inches from rootball at a rate of one tablet per inch of trunk diameter.

3.07 **PLANTING**: When the trees are replanted in the new location, trees shall be placed at the same depth in the ground as the trees originally stood in relation to finish grade. The trees shall be placed with their vertical axis in a plumb position. When the trees are in position for backfilling, a minimum of 36" of water shall be placed in the hole before any backfill is added. Backfilling shall continue with clean topsoil and water. Trees shall be "mudded-in" for the full height of the rootball and up to the ground surface. When directed by the Public Works Inspector, relocated trees shall be guyed and/or braced until accepted.

A watering basin shall be provided at each tree. Basins shall extend a minimum of 3 feet out from the trunk all around and shall be a minimum of one foot deep.

3.08 **CLEAN UP**: Following Planting Work, all remaining excavations shall be backfilled and compacted to a minimum relative compaction of 85%. Burying of debris in holes will not be permitted. All excess soil and debris from the Relocation Work shall be disposed of off the site by Contractor. The site shall be left neat and clean to the satisfaction of the Public Works Department Representative.

C. GENERAL NOTES

1) Irrigation System Design Criteria for Capital Projects

- Water Service:** Contractor shall contact the City of Riverside, Public Utilities, Water Department or Western Municipal Water District and obtain and pay for new water meter(s) as necessary to adequately serve the irrigation system as designed. Meter and backflow devices shall be located in the parkway (within public right-of-way) a minimum of 100' from any intersection or major driveway (curb return type driveway opening). Contractor shall be responsible for all water costs throughout the maintenance and Plant Establishment period if applicable.
- Electric Service:** Contractor shall contact the City of Riverside, Public Utilities, Electric Division to obtain and pay for a new "non-metered" electric service as necessary to serve each new irrigation controller(s). Service shall be underground type. Coordinate location and obtain approval from the City's Inspector.
- Irrigation Controller:** The irrigation controller(s) (One required at each Point of Connection, i.e. POC), each shall be sized to accommodate the number of valves required to serve the entire project and to provide a minimum of two spare stations. The controller and enclosure shall be the type and manufacturer as indicated on the Plans and/or Irrigation Legend. Controller shall be weatherproof, wall-mount type, installed within a locking stainless steel metal enclosure to support controller manufacturer requirements, as well as City requirements, and shall be located minimum of 100' from any intersection or major driveway (curb return type driveway opening). A concrete pad the same width and thickness, as the controller pad shall be installed between the controller and the back of sidewalk.
- Sleeves:** Sleeves shall be installed in straight lines (no turns or bends, either vertical or horizontal).
- All lines beneath street areas (i.e. not within the landscape planting areas) shall be constant pressure lines installed in sleeves with Tracer Tape (type of sleeve indicated on tape) installed six inches above each sleeve.
 - Main line sleeves under street areas shall be Class 315 PVC or Sch.40.
 - Controller wires installed within streets shall be sleeved in gray PVC Sch. 40 conduit, with 12" minimum separation from the mainline water sleeve.
 - Main line, lateral lines and control wires installed beneath hardscape within the landscape area extending for five feet or more must be sleeved. The sleeve shall extend twelve inches beyond edge of hardscape.

- Main line and lateral lines shall be sleeved in Sch 40 PVC.
- Controller wires shall be installed in gray Sch 40 PVC conduit.

- Control Wire:** All control wire located under pavement of any type shall be separately sleeved from main line and laterals. Provide a minimum of two spare control wires at each terminating end of the mainline, stubbed out in a valve box with the lid marked "SW". Station control wire shall be 14 gauge, common wire 12 gauge and spare wires 14 gauge. Spare wire shall be a different color from station and common wires.
- Main Line:** Size all mainlines as necessary to keep water velocity below 5 feet per second. Pressure supply lines 2 inches in diameter and up to 8 inches in diameter shall be either Class 315 solvent weld PVC or gasket type PVC. Solvent weld and ring type pipe shall not be used together on the same pressure supply line. Pressure supply lines 1-1/2 inches in diameter and smaller shall be Schedule 40 PVC. Provide a line size gate valve within a valve box immediately upstream of line entering a sleeve passing under the street area. Thrust blocks shall be installed per pipe manufacturer requirements or as Directed by City Inspector.
- Lateral Lines:** Size all lateral lines as necessary to keep water velocity below 5 feet per second. Design lateral line placements at edges of planting spaces to avoid conflict with plantings, the pipe shall be Sch. 40 PVC. All main line and lateral lines running parallel to other lines shall have a minimum horizontal separation of 12 inches.
- Control Valves:** All irrigation control valves shall be brass, pressure regulating (Master Valve Non-Pressure Regulating), sized to provide the water volume required with pressure loss through the valve kept at below a maximum of 10% of the available static pressure. Install valves in "inline" configuration. All stations shall be sized to avoid 100 GPM demand or 50 heads per station whichever is greater.
- Valve boxes:** All valve boxes shall be concrete body, with cast iron, hinged, locking lids. Lids shall be marked by manufacturer of lids (welded into top of lid) with numbers for Station Identification, "GV" for Gate Valve, "QC" for Quick Coupler, "MV" for Master Valve, "FM" for Flow Meter, "SW" for Spare Wire, "SB" for Wire Splice Box and "FI" for Fertilizer Injector.
- Quick Couplers:** Provide quick coupler valves at a maximum of 50' from the end of the landscaped area in each island/parkways, and spaced at a maximum of 100' o.c. in shrub and turf areas.
- Bubblers:** All bubblers shall be of the type and manufacturer indicated on the plans and shall be installed with triple swing joints inside in a 3" PVC perforated drain pipe, with a 3" PVC cap filled with crushed one inch rock as detailed. Two bubblers shall be installed at each tree, with 48" minimum spacing between each bubbler. Trees shall be planted 50'

minimum from each nose, then spaced 45' minimum between each tree.

- Miscellaneous:
1. The Rain Bucket and the ET Gauge shall be installed per Manufacturer requirements.
 2. A fertilizer Injector shall be installed after the master valve adequately sized per manufacturer recommendations. Equal to EZ-Flo Fertilizing Systems, (866) 393-5601.

Curb Marking: Stencil Valve box markings to curb top along right-of-way with a commercial quality Alkyd marking paint (equal to Sherwin-Williams Setfast Premium Alkyd Zone Marking Paint, A303 Yellow, A305 Black - (800) 524-5979). Paint black 3" markings atop a yellow background, which extends a minimum 1" beyond stenciled markings.

Record Prints: Initially shall be marked up blue line prints, all dimensions noted on a Compact Disk (CD) with all Global Positioning System (GPS) coordinates for each required item, and all information is to be transferred to either Sepia Mylar or Photo Mylar prints prior to turn-over to the City at Final Acceptance of the project.

2) Irrigation Design Criteria for Developer Street Improvement Projects

Water Service: Contractor/Developer shall contact the City of Riverside, Public Utilities, Water Department or Western Municipal Water District and obtain and pay for new water meter(s) as necessary to adequately serve the irrigation system as designed. Meter and backflow devices shall be located in the parkway (within public right-of-way) a minimum of 100' from any intersection or major driveway (curb return type driveway opening). Contractor/Developer shall be responsible for all water costs throughout the maintenance and Plant Establishment period if applicable.

Electric Service: Contractor/Developer shall contact the City of Riverside, Public Utilities, Electric Division to obtain and pay for a new "non-metered" electric service as necessary to serve each new irrigation controller(s). Service shall be underground type. Coordinate location and obtain approval from the City's Inspector.

Irrigation Controller: The irrigation controller(s) (One required at each Point of Connection, i.e. POC), each shall be sized to accommodate the number of valves required to serve the entire project and to provide a minimum of two spare stations. The controller and enclosure shall be the type and manufacturer as indicated on the Plans and/or Irrigation Legend. Controller shall be weatherproof, wall-mount type, installed within a locking stainless steel metal enclosure to support controller manufacturer requirements, as well as City requirements, and shall be located minimum of 100' from any intersection or major driveway (curb return type driveway opening). A concrete pad the same width and thickness, as the controller pad shall be

installed between the controller and the back of sidewalk.

- Sleeves:** Sleeves shall be installed in straight lines (no turns or bends, either vertical or horizontal).
- All lines beneath street areas (i.e. not within the landscape planting areas) shall be constant pressure lines installed in sleeves with Tracer Tape (type of sleeve indicated on tape) installed six inches above each sleeve.
 - Main line sleeves under street areas shall be Class 315 PVC or Sch. 40.
 - Controller wires installed within streets shall be sleeved in gray PVC Sch. 40 conduit, with 12" minimum separation from the mainline water sleeve.
 - Main line, lateral lines and control wires installed beneath hardscape within the landscape area extending for five feet or more must be sleeved. The sleeve shall extend twelve inches beyond edge of hardscape.
 - Main line and lateral lines shall be sleeved in Sch 40 PVC.
 - Controller wires shall be installed in gray Sch 40 PVC conduit.
- Control Wire:** All control wire located under pavement of any type shall be separately sleeved from main line and laterals. Provide a minimum of two spare control wires at each terminating end of the mainline, stubbed out in a valve box with the lid marked "SW". Station control wire shall be 14 gauge, common wire 12 gauge and spare wires 14 gauge. Spare wire shall be a different color from station and common wires.
- Main Line:** Size all mainlines as necessary to keep water velocity below 5 feet per second. Pressure supply lines 2 inches in diameter and up to 8 inches in diameter shall be either Class 315 solvent weld PVC or gasket type PVC. Solvent weld and ring type pipe shall not be used together on the same pressure supply line. Pressure supply lines 1-1/2 inches in diameter and smaller shall be Schedule 40 PVC. Provide a line size gate valve within a valve box immediately upstream of line entering a sleeve passing under the street area. Thrust blocks shall be installed per pipe manufacturer requirements or as Directed by City Inspector.
- Lateral Lines:** Size all lateral lines as necessary to keep water velocity below 5 feet per second. Design lateral line placements at edges of planting spaces to avoid conflict with plantings, the pipe shall be Sch. 40 PVC. All main line and lateral lines running parallel to other lines shall have a minimum horizontal separation of 12 inches.
- Control Valves:** All irrigation control valves shall be brass, pressure regulating (Master Valve Non-Pressure Regulating), sized to provide the water volume required with pressure loss through the valve kept at below a maximum of 10% of the available static pressure. Install valves in "inline"

configuration. All stations shall be sized to avoid 100 GPM demand or 50 heads per station whichever is greater.

Valve boxes: All valve boxes shall be concrete body, with cast iron, hinged, locking lids. Lids shall be marked by manufacturer (welded into lid) with numbers for Station Identification, "GV" for Gate Valve, "QC" for Quick Coupler, "MV" for Master Valve, "FM" for Flow Meter, "SW" for Spare Wire, "SB" for Wire Splice Box and "FI" for Fertilizer Injector.

Quick Couplers: Provide quick coupler valves at a maximum of 50' from the end of the landscaped area in each island/parkways, and spaced at a maximum of 100' o.c. in shrub and turf areas.

Bubblers: All bubblers shall be of the type and manufacturer indicated on the plans and shall be installed with triple swing joints inside in a 3" PVC perforated drain pipe, with a 3" PVC cap filled with crushed one inch rock as detailed. Two bubblers shall be installed at each tree, with 48" minimum spacing between each bubbler. Trees shall be planted 50' minimum from each nose, then spaced 45' minimum between each tree.

Miscellaneous:

1. The Rain Bucket and the ET Gauge shall be installed per Manufacturer requirements.
2. A fertilizer Injector shall be installed after the master valve adequately sized per manufacturer recommendations. Equal to EZ-Flo Fertilizing Systems, (866) 393-5601.

Curb Marking: Stencil Valve box markings to curb top along right-of-way with a commercial quality Alkyd marking paint (equal to Sherwin-Williams Setfast Premium Alkyd Zone Marking Paint, A303 Yellow, A305 Black - (800) 524-5979). Paint black 3" markings atop a yellow background, which extends a minimum 1" beyond stenciled markings.

Record Prints: Initially shall be marked up blue line prints, all dimensions noted on a Compact Disk (CD) with all Global Positioning System (GPS) coordinates for each required item, and all information is to be transferred to either Sepia Mylar or Photo Mylar prints prior to turn-over to the City at Final Acceptance of the project.

3) Irrigation Design Criteria for HOA Maintained Development Projects

Water Service: Contractor/Developer shall contact the City of Riverside, Public Utilities, Water Department or Western Municipal Water District and obtain and pay for new water meter(s) as necessary to adequately serve the irrigation system as designed. Meter and backflow devices shall be located in the parkway (within public right-of-way) a minimum of 100' from any intersection or major driveway (curb return type driveway opening). Contractor/Developer shall be responsible for all water costs.

- Electric Service:** Contractor/Developer shall contact the City of Riverside, Public Utilities, Electric Division to obtain and pay for a new “metered” electric service as necessary to serve each new irrigation controller(s). Service shall be underground type.
- Irrigation Controller:** The irrigation controller shall be water wise type (s) (One required at each Point of Connection, i.e. POC), each shall be sized to accommodate the number of valves required to serve the entire project and to provide a minimum of two spare stations. The controller and enclosure shall be the type and manufacturer as indicated on the Plans and/or Irrigation Legend. Controller shall be weatherproof, wall-mount type, installed within a locking stainless steel metal enclosure to support controller manufacturer requirements, as well as City requirements, and shall be located minimum of 100' from any intersection or major driveway (curb return type driveway opening). A concrete pad the same width and thickness, as the controller pad shall be installed between the controller and the back of sidewalk.
- Sleeves:** Sleeves shall be installed in straight lines (no turns or bends, either vertical or horizontal).
- All lines beneath street areas (i.e. not within the landscape planting areas) shall be constant pressure lines installed in sleeves with Tracer Tape (type of sleeve indicated on tape) installed six inches above each sleeve.
 - Main line sleeves under street areas shall be Class 315 PVC or Sch. 40.
 - Controller wires installed within streets shall be sleeved in gray PVC Sch. 40 conduit, with 12” minimum separation from the mainline water sleeve.
 - Main line, lateral lines and control wires installed beneath hardscape within the landscape area extending for five feet or more must be sleeved. The sleeve shall extend twelve inches beyond edge of hardscape.
 - Main line and lateral lines shall be sleeved in Sch 40 PVC.
 - Controller wires shall be sleeved in gray Sch 40 PVC conduit.
- Control Wire:** All control wires located under pavement of any type shall be separately sleeved from main line or laterals. Provide a minimum of two spare control wires at each terminating end of the mainline, stubbed out in a valve box with the lid marked “SW”. Station control wire shall be 14 gauge, common wire 12 gauge and spare wires 14 gauge. Spare wire shall be a different color from station and common wires.
- Main Line:** Size all mainlines as necessary to keep water velocity below 5 feet per second. Pressure supply lines 2 inches in diameter and up to 8 inches in diameter shall be either Class 315 solvent weld PVC or gasket type PVC.

Solvent weld and ring type pipe shall not be used together on the same pressure supply line. Pressure supply lines 1-1/2 inches in diameter and smaller shall be Schedule 40 PVC. Provide a line size gate valve within a valve box immediately upstream of line entering a sleeve passing under the street area. Thrust blocks shall be installed per pipe manufacturer requirements or as Directed by City Inspector.

- Lateral Lines:** Size all lateral lines as necessary to keep water velocity below 5 feet per second. Design lateral line placements at edges of planting spaces to avoid conflict with plantings, the pipe shall be Sch. 40 PVC. All main line and lateral lines running parallel to other lines shall have a minimum horizontal separation of 12 inches.
- Control Valves:** All irrigation control valves shall be brass, pressure regulating (Master Valve Non-Pressure Regulating), sized to provide the water volume required with pressure loss through the valve kept at below a maximum of 10% of the available static pressure. Install valves in "inline" configuration. All stations shall be sized to avoid 100 GPM demand or 50 heads per station whichever is greater.
- Valve boxes:** All valve boxes shall be concrete body, with cast iron, hinged, locking lids. Lids shall be marked by manufacturer (welded into lid) with letter and/or numbers (ex. "A10") for Station Identification, "GV" for Gate Valve, "QC" for Quick Coupler, "MV" for Master Valve, "FM" for Flow Meter, "SW" for Spare Wire, "SB" for Wire Splice Box.
- Quick Couplers:** Provide quick coupler valves at a maximum of 50' from the end of the landscaped area in each island/parkways, and spaced at a maximum of 100' o.c. in shrub and turf areas.
- Bubblers:** All bubblers shall be of the type and manufacturer indicated on the plans and shall be installed with triple swing joints inside in a 3" PVC perforated drain pipe, with a 3" PVC cap filled with crushed one inch rock as detailed. Two bubblers shall be installed at each tree, with 48" minimum spacing between each bubbler. Trees shall be planted 50' minimum from each nose, then spaced 45' minimum between each tree.
- Miscellaneous:** Controller weather stations shall be installed per Manufacturer requirements.
- Record Prints:** Initially shall be marked up blue line prints, all dimensions noted on a Compact Disk (CD) with all Global Positioning System (GPS) coordinates for each required item, and all information is to be transferred to either Sepia Mylar or Photo Mylar prints prior to Final Acceptance of the project.

4) Public Landscaping

- a. All related work shall conform to the City of Riverside Public Works Department Standards and Specifications for Planting and Irrigation work. (Sections 02441 and 02483).
- b. A "Public Landscape" permit, as issued by the Public Works Department is required. Contact the Public Works Landscape Inspector at (951) 351-6313 to schedule a pre-construction meeting and to obtain the permit.
- c. When calling for inspections contact the Public Works Landscape Inspector a minimum of 48 hours in advance at to schedule an inspection. A written approval will be provided on the Public Landscape Permit card for each stage of inspection. A verbal approval will not be acceptable. Inspections are required per the standard specifications, and include but are not necessarily limited to the following:
 - After completion of final grading and when all utility services have been marked, but prior to initiating any landscape work within in the public right of way;
 - At time of installation of irrigation sleeves and constant pressure mainlines, but prior to backfill of trenches for same (Note: mainlines must be pressure tested in the presence of the Public Works Landscape Inspector);
 - At time of installation of irrigation valves, laterals and heads;
 - For spotting of all trees prior to digging planting pits;
 - While digging plant pits and planting/relocating trees;
 - After planting and all other indicated or specified work has been completed, for start of maintenance;
 - At substantial completion of the project for City's acceptance to start the required maintenance period;
 - At the end of the Maintenance Period, the Contractor/Developer shall call the Public Works Landscape Inspector at the number listed above for a final acceptance inspection in order to be released from maintenance. Contractor's bond will not be released until after City's issuance of written notification that the project has passed final inspection and the Public Works Department is assuming maintenance responsibilities.
- d. The Developer shall be responsible to acceptably maintain all plantings for a minimum period as specified in the bid documents.

5) HOA Maintained Public Landscapes

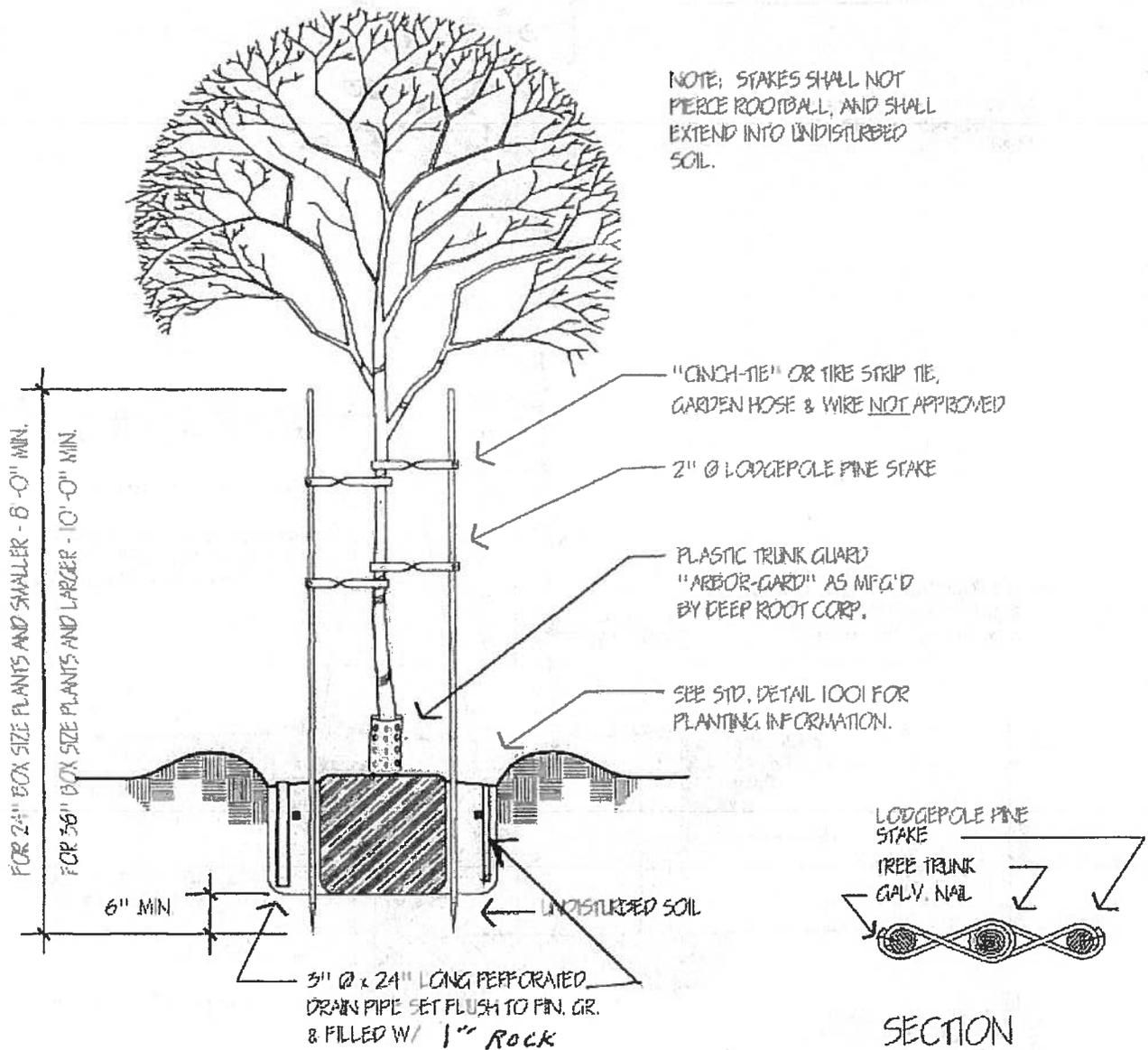
- a. All related work shall conform to the City of Riverside Public Works Department Standards and Specifications for Planting and Irrigation work. (Specification Sections 02441 and 02483).
- b. A "Public Landscape" permit, as issued by the Public Works Department is required. Contact the assigned Public Works Landscape Inspector at (951) 351-6313 to schedule a pre-construction meeting and to obtain the permit.
- c. When calling for inspections contact the Public Works /Landscape Inspector a minimum of 48 hours in advance to schedule an inspection. A written approval will be provided on the Public Landscape Permit card for each stage of inspection. A verbal approval will not be acceptable. Inspections are required per the standard specifications, and include but are not necessarily limited to the following:
 - After completion of final grading and when all utility services have been marked, but prior to initiating any landscape work within in the public right of way;

- At time of installation of irrigation sleeves and constant pressure mainlines, but prior to backfill of trenches for same (Note: mainlines must be pressure tested in the presence of the Public Works Landscape Inspector);
 - At time of installation of irrigation valves, laterals and heads;
 - For spotting of all trees prior to digging planting pits;
 - While digging plant pits and planting/relocating trees;
 - After planting and all other indicated or specified work has been completed, for start of maintenance;
 - At substantial completion of the project for City's acceptance to start the required maintenance period;
 - At the end of the Maintenance Period, the Contractor/Developer shall contact the Public Works /Landscape Inspector at the number listed above for a final acceptance inspection in order to be released from maintenance. Developers bonds will not be released until after City's receipt of written notification from the HOA's authorized representative that the HOA is assuming maintenance responsibilities, and the City's issuance of written notification to the Developer that the project has passed final inspection.
- d. The Developer shall be responsible to acceptably maintain all plantings for a minimum period of one (1) year.

*NOTE: In the interest of public safety and maintenance the Public Works Landscape Inspector shall have the authority to revise the tree quantities and locations shown on approved plans based upon field conditions found at the time of installation of the trees.

6) Sample Pressure Loss Calculations

PRESSURE LOSS CALCULATIONS		
(HIGHEST FLOW - 50 GPM)		
<u>EQUIPMENT</u>	<u>SIZE</u>	<u>LOSS</u>
WATER METER	2"	1.9
BACKFLOW	2"	11.5
FLOW SENSOR	2"	1.0
MASTER VALVE	2"	0.82
MAINLINE	3"	2.5
CONTROL VALVE	1.5"	2.65
LATERAL LINES	<5 FPS	2
SUBTOTAL PRESSURE LOSSES		22.37
MISC. LOSSES THRU SYSTEM (10%)		2.28
ELEVATION GAIN (FT)	10	4.33
TOTAL PRESSURE LOSSES		28.89
PRESSURE REQUIRED AT HEAD		40
TOTAL PRESSURE REQUIRED		69.48
STATIC PRESSURE AVAILABLE		80
RESIDUAL PRESSURE		10.51



NOT TO SCALE

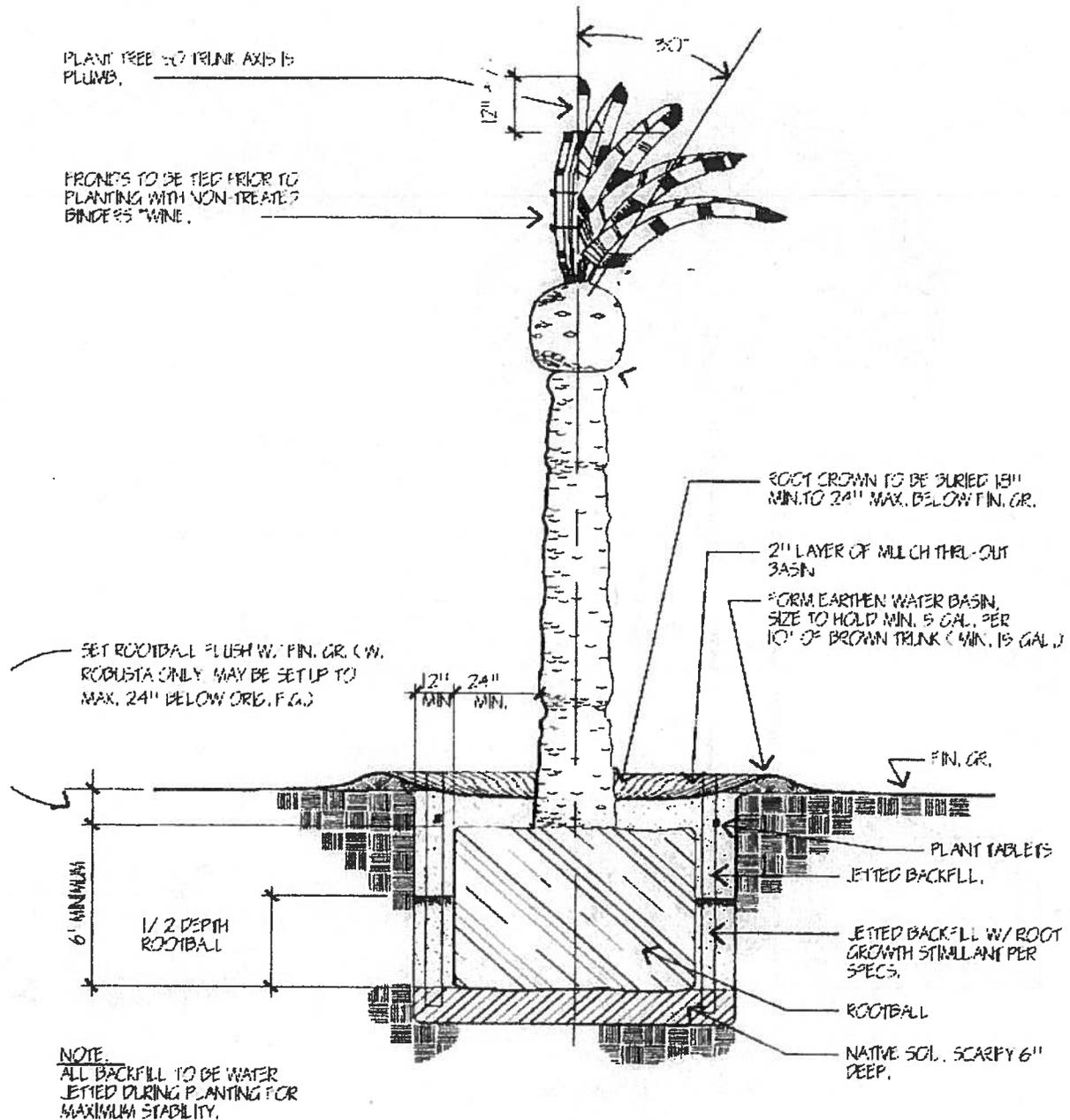
Approved Date
R.F. 3/21/12
Revised Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

TREE PLANTING DETAIL

Detail No.

1001



NOT TO SCALE

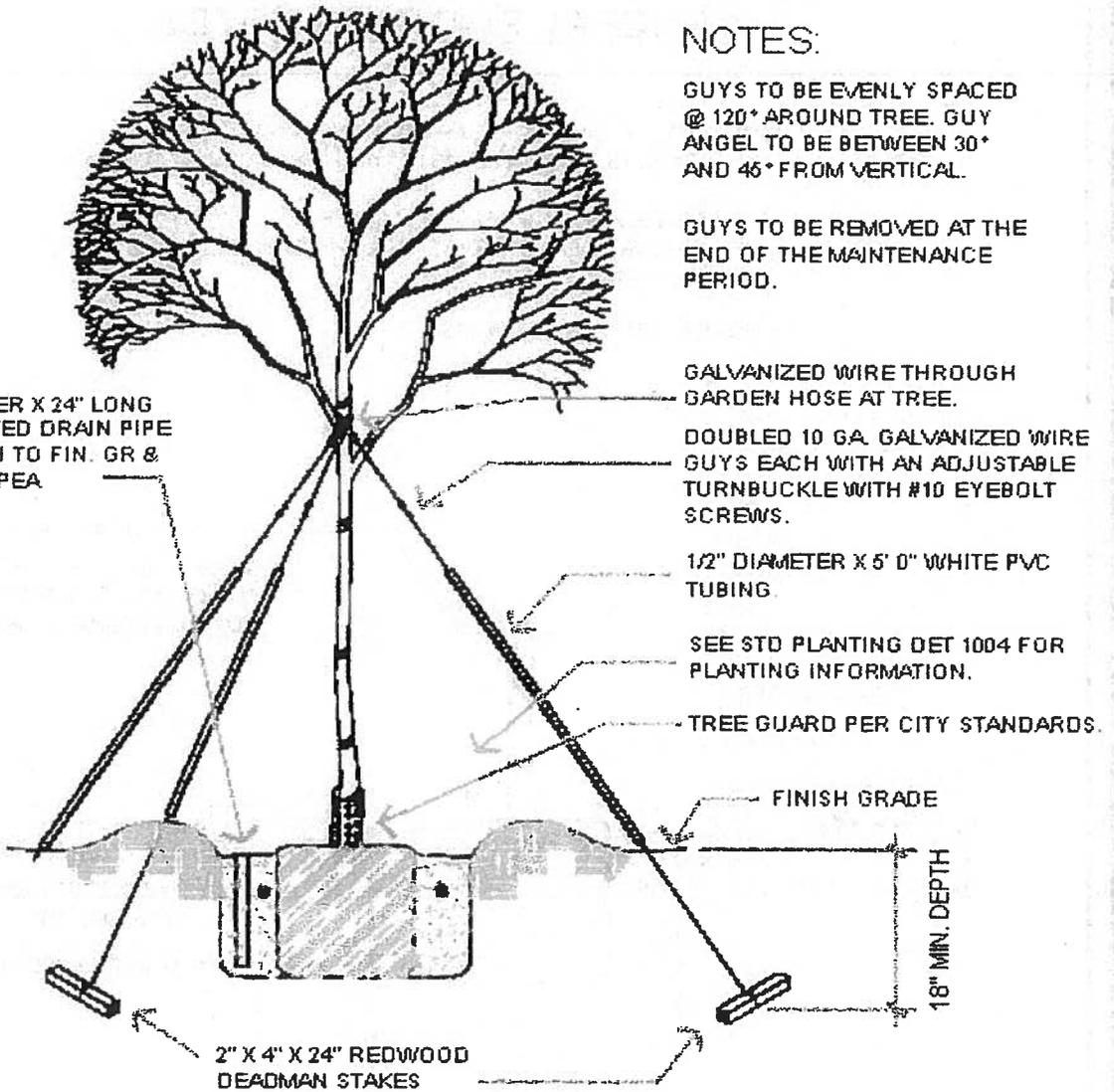
Construction Notes

- 1) Provide minimum two deep water wells 4" x Min. 36" perforated PVC Pipe. filled with 3/4" crushed rock, wrapped with soil cloth.
- 2) Sand backfill may be required depending on species and location.

Approved	Date
P.V.	5/6/08
Revised	Date

Public Works Department Forestry and Landscape Division
CITY OF RIVERSIDE
PALM TREE PLANTING

Detail No.
1002



NOTES:

GUYS TO BE EVENLY SPACED @ 120° AROUND TREE. GUY ANGLE TO BE BETWEEN 30° AND 45° FROM VERTICAL.

GUYS TO BE REMOVED AT THE END OF THE MAINTENANCE PERIOD.

3" DIAMETER X 24" LONG PERFORATED DRAIN PIPE SET FLUSH TO FIN. GR & FILLED W/PEA GRAVEL.

GALVANIZED WIRE THROUGH GARDEN HOSE AT TREE.

DOUBLED 10 GA. GALVANIZED WIRE GUYS EACH WITH AN ADJUSTABLE TURNBUCKLE WITH #10 EYEBOLT SCREWS.

1/2" DIAMETER X 5' 0" WHITE PVC TUBING.

SEE STD PLANTING DET 1004 FOR PLANTING INFORMATION.

TREE GUARD PER CITY STANDARDS.

FINISH GRADE

18" MIN. DEPTH

2" X 4" X 24" REDWOOD DEADMAN STAKES

NOT TO SCALE

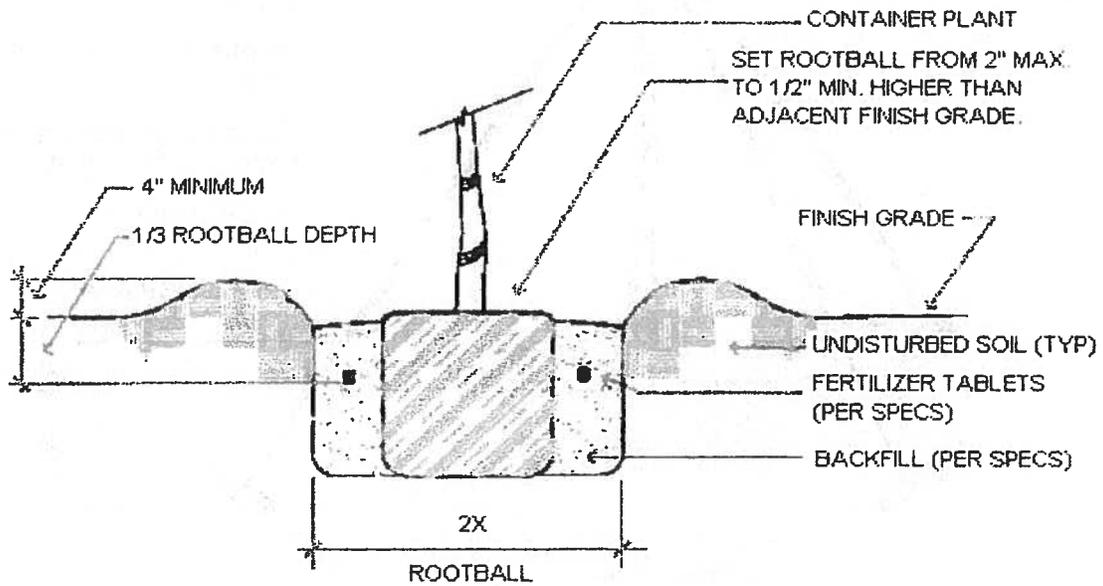
Approved	Date
P.V.	5/12/08
Revised	Date

<i>Public Works Department, Forestry and Landscape Division</i>
CITY OF RIVERSIDE
TREE GUYING DETAIL

Detail No.
1003

GENERAL PLANTING NOTES

1. CONTACT THE LANDSCAPE MAINTENANCE INSPECTOR AT (951) 351-6313 TWO DAYS (48 HOURS) PRIOR TO INSTALLATION.
2. FOR SPECIFICATION INFORMATION REFER TO CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT STANDARD SPECIFICATIONS, SECTION 02483 PLANTING.
3. PROVIDE FERTILIZER TABLETS.



NOT TO SCALE

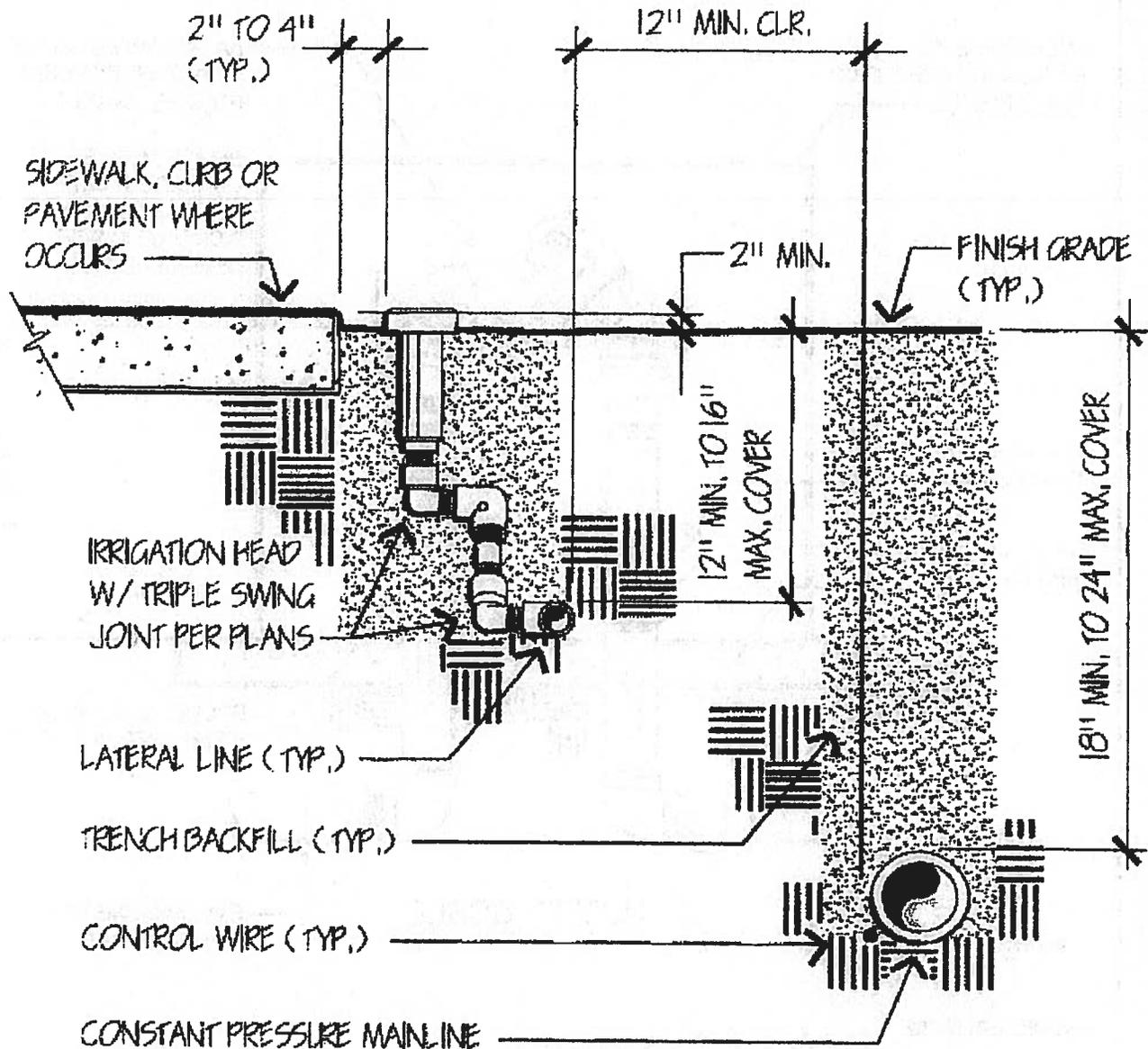
Approved	Date
P.V.	5/12/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

PLANTING DETAIL

Detail No.

1004



Construction Notes

Not to Scale

- 1) Controller wire shall be taped every 100'.
- 2) Main Line pipe and Lateral Line pipe shall not be placed within the same trench.
- 3) Rotor type sprinklers shall have a minimum 4" clearance between the hardscape and edge of rotor.

Approved	Date
P.V.	5/13/08
Revised	Date

Public Works Department, Forestry and Landscape Division CITY OF RIVERSIDE
TRENCH AND LINE PLACEMENT

Detail No.
2001

LOCKABLE STEEL
ENCLOSURE SBBC-30-CR
PER CITY STDS.

BACKFLOW DEVICE AS
APPROVED BY PUBLIC
UTILITIES - WATER.

DEVICE MUST BE
CONSISTENT WITH
METER SIZE, OR MAY
INCREASE IN SIZE.
NEVER REDUCED.

LINE SIZE WYE
STRAINER

4" THICK CONC. PAD
PER CITY STDS.

FIN. GR.

12" MIN.

BRONZE ELBOWS AND
RISERS PER CITY STDS.

NOT TO SCALE

PVC MAINLINE WITH
MALE ADAPTER

Notes:

Construction Notes

- 1) Install backflow device square with hardscape elements as approved by the Public Works Inspector in the field.
- 2) Coordinate with Public Utilities-Water for location of backflow and water meter. Wherever possible, locate service and backflow in the parkway at mid-block a minimum of 150' from the Back of Curb Return at the nearest intersection per City standards.
- 3) The backflow enclosure must be locking Stainless Steel powder coated green per City specifications. SBBC-30-CR or Applicable size.
- 4) Backflow device shall be a Febco 825 YA installed using 250 psi rated brass/bronze pipe and fittings, between P.O.C. and device including the ninety degree elbows at the point of connection to the mainline. Contact Public Utilities-Water Backflow Program Staff (951) 351-6320 or (951) 351-6282 for inspection before back filling.

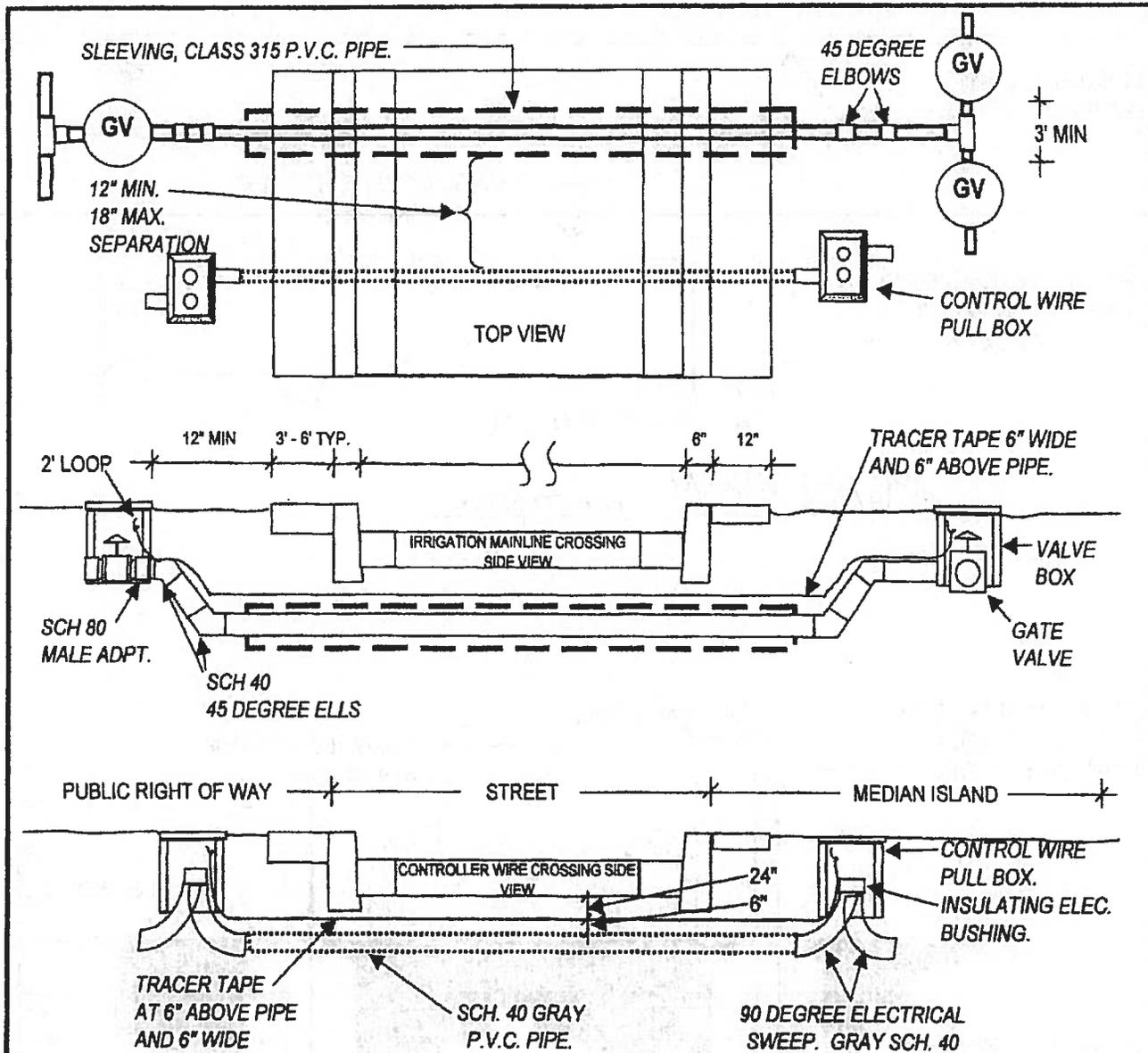
Approved	Date
P.V.	4/23/08
Revised	Date
P.V.	7/9/08

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

REDUCED PRESSURE BACKFLOW W/ENCLOSURE

Detail No.

2002



Construction Notes

Not to Scale

- 1) The Contractor shall mark the proposed crossing with blue paint, and receive written approval from the inspector prior to trenching and or boring. They shall also have Dig Alert markings prior to inspection.
- 2) The irrigation tracer tape shall be 6" wide, Blue in color, and read "CAUTION Irrigation Line Buried Below".
- 3) The irrigation wire tracer tape shall be 6" wide, Red in color, and read "CAUTION Electrical Line Buried Below".

Approved	Date
P.V.	5/13/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

TYPICAL STREET CROSSING

Detail No.
2003

SIDEWALK, CURB &
GLUTTER, ETC.

6" DIA. SCH 80 STEEL
PIPE, FILLED SOLID
W/1 CONC. (TYP.)

BACKFLOW DEVICE PER
CITY STANDARDS

12" MIN.

24" MIN.

6" MIN. (TYP.)

PLAN VIEW NOT TO SCALE

6" DIA. SCH 80 STEEL
PIPE, FILLED SOLID
WITH CONC. (TYP.)

6" MIN. (TYP.)

BACKFLOW DEVICE PER
CITY STANDARDS

CONC. FTG. MIN. 18"
DIA. (TYP.)

FINISH GRADE
(TYP.)

18" MIN.

24" MIN.

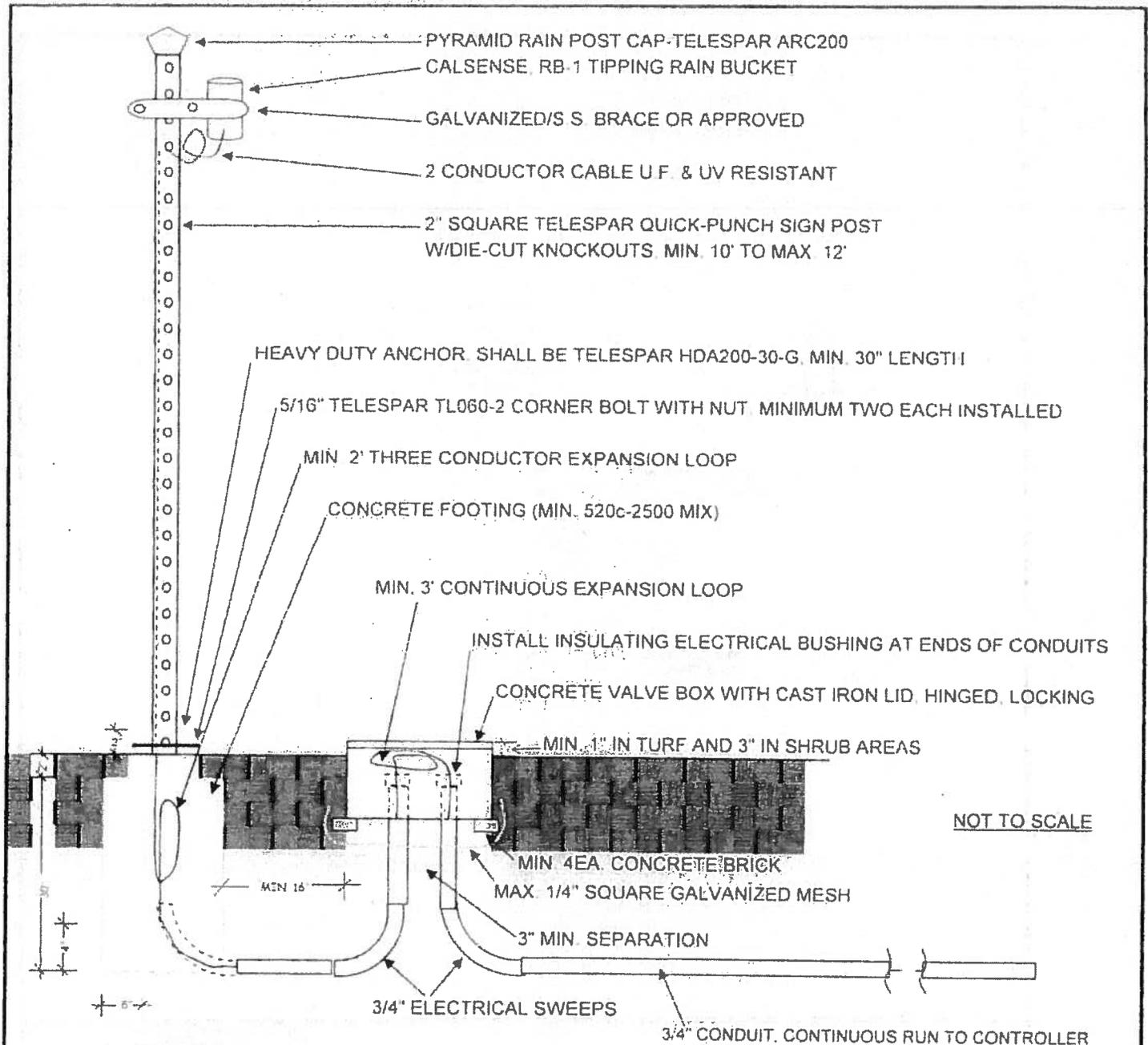
ELEVATION NOT TO SCALE

Approved	Date
P.V.	5/6/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

BACKFLOW PREVENTER WITH POSTS

Detail No.
2004



NOT TO SCALE

Construction Notes

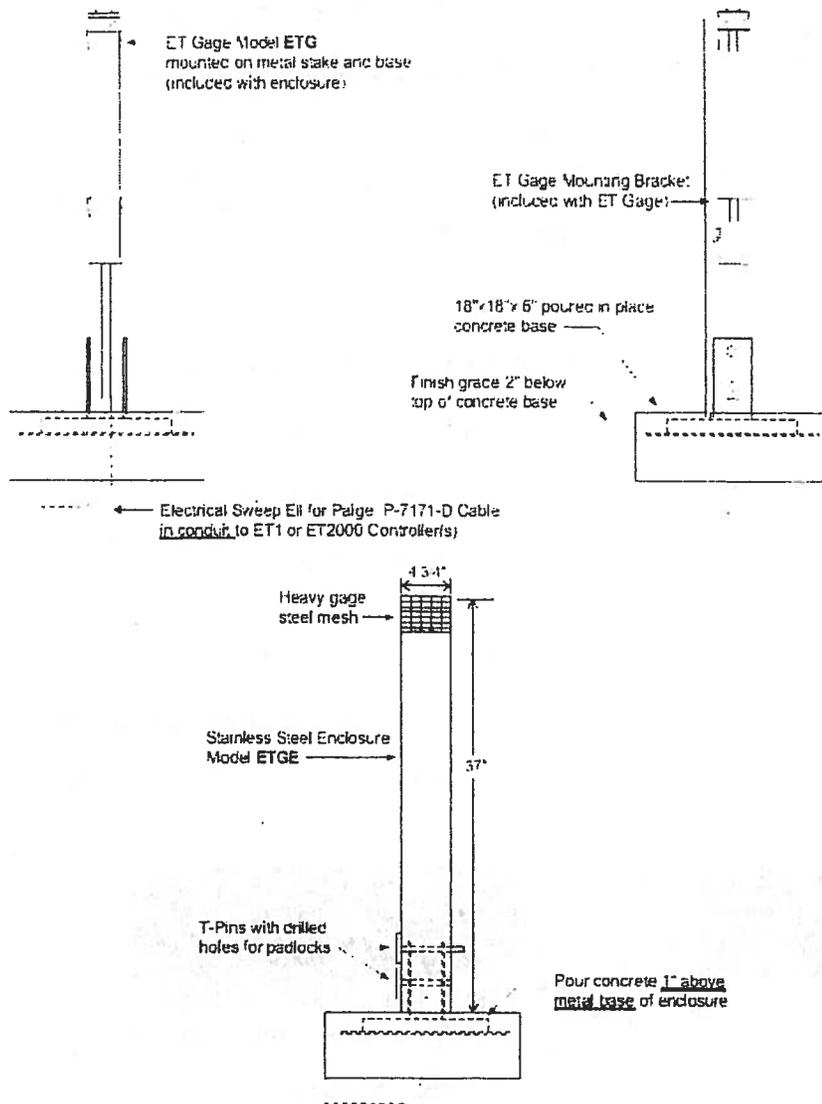
- 1) The rain bucket shall not be installed within a 25' radius of any tree.
- 2) The installation shall be certified in writing by Calsense
- 3) The maximum length of cable which can be used is 200'
- 4) The location shall be approved by the Landscape Maintenance Inspector
- 5) The pole and rain bucket shall be level
- 6) RB-1 Tipping Rain Bucket supplied with 60' of plastic covered wire.

Approved P.V.	Date 5/6/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

TYPICAL CALSENSE RAIN BUCKET INSTALLATION

Detail No
2005



NOT TO SCALE

- Note: 1) Installation of ET Gauge shall be certified by Manufacturer.
 2) The proposed location shall be spotted by the Contractor, with the final location Approved by the Landscape Maintenance Inspector
 3) The ET Gauge shall be level.
 4) The cable (P-7171-D) shall run continuously from the ET Gauge to the controller in a separate 1" PVC Gray conduit.

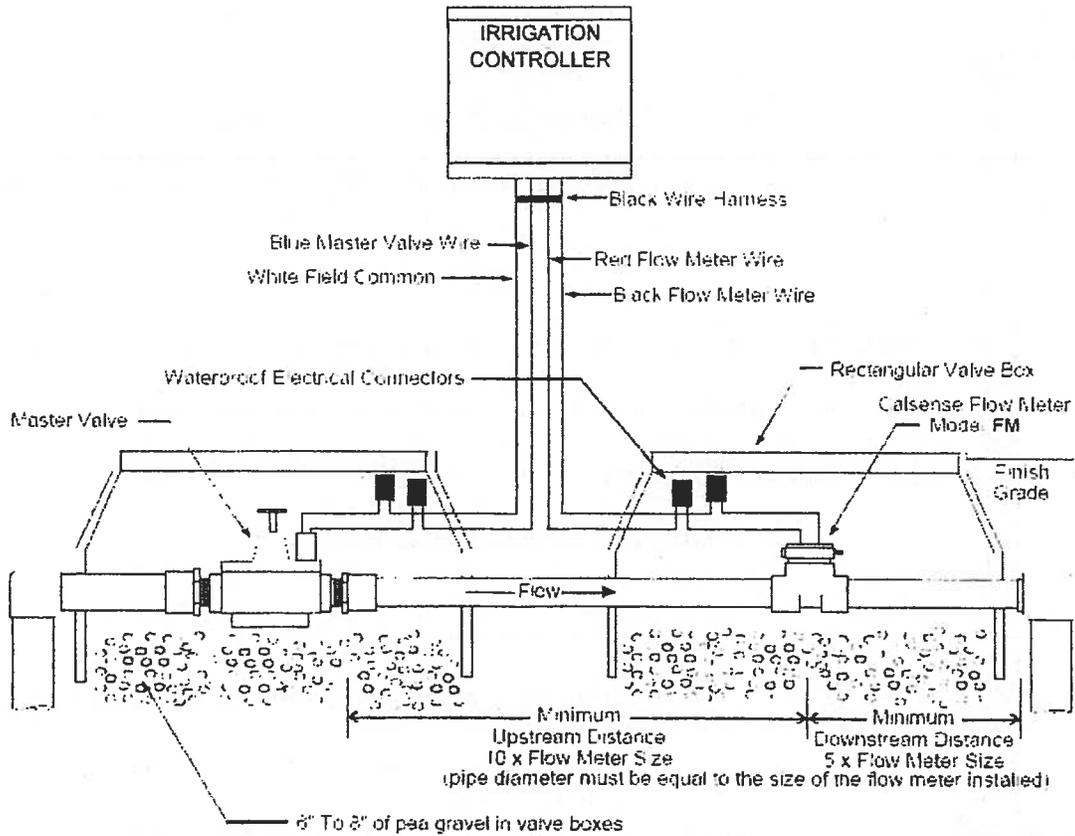
Approved	Date
P.V.	5/6/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

CALSENSE EVAPOTRANSPIRATION (ET) GAGE

Detail No.
2006

Flow Meter Installation



Minimum Upstream and Downstream Distance for Various Flow Meter Sizes

Flow Meter Size	Minimum Upstream Pipe Length	Minimum Downstream Pipe Length	Pipe Diameter
1"	10'	5'	1"
1.25"	12-12'	6-6'	1-1.4"
1.5"	15'	7-7'	1-1.2"
2"	20'	10'	2"
3"	30'	15'	3"

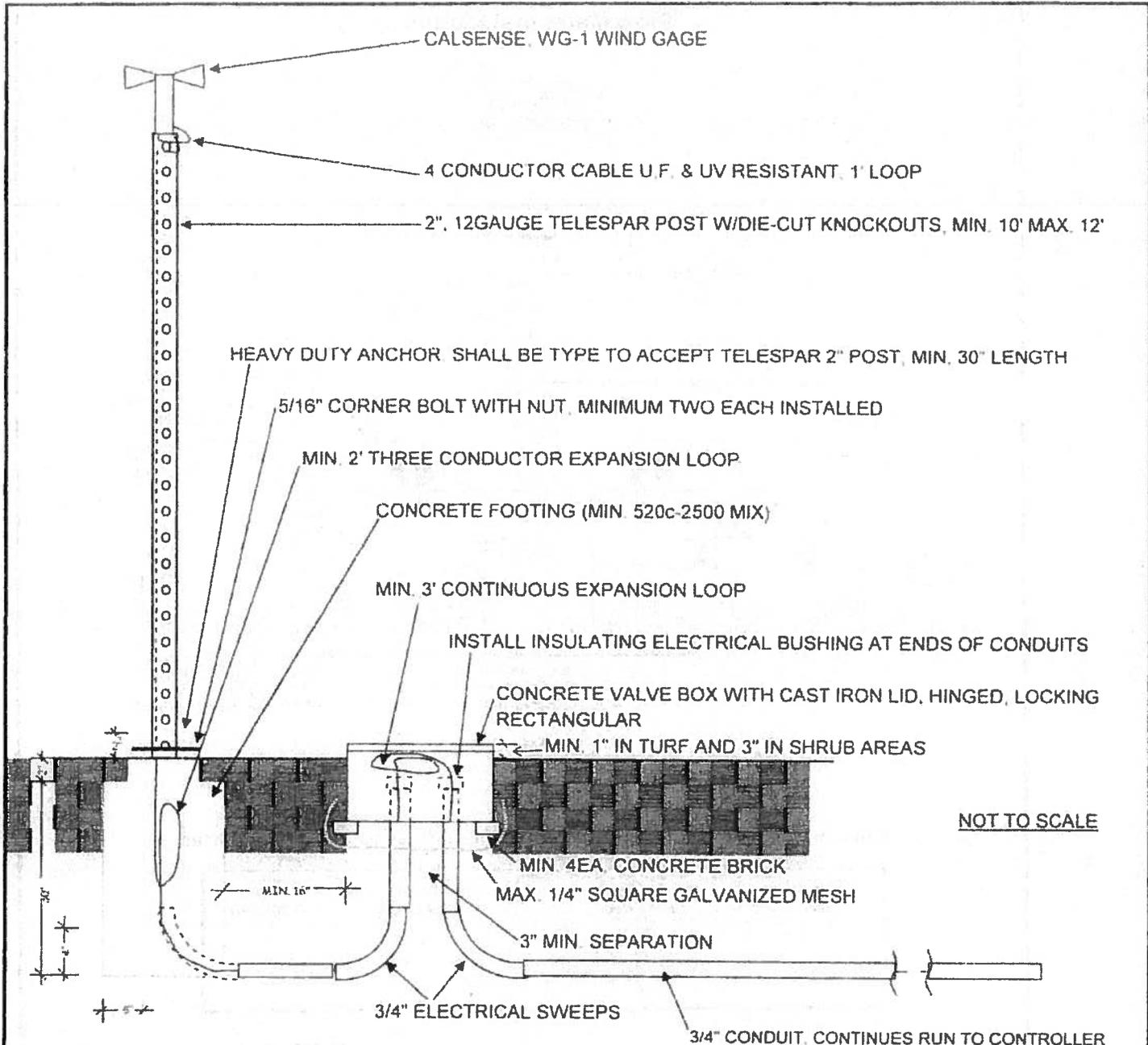
NOT TO SCALE

- Note:
- 1) Installation of the Master Valve and Flow Meter shall be certified by Manufacturer.
 - 2) The proposed location shall be spotted by the Contractor, with the final location Approved by the Landscape Maintenance Inspector
 - 3) Valve boxes shall be Concrete, with Locking cast iron hinged lids.
 - 4) A 3" Min. Clearance between the valve / flow meter and the inside of the valve box is required.

Approved Date	P.V. 5/5/08
Revised Date	

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE
CALSENSE TYPICAL FLOW METER & MASTER VALVE

Detail No.
2007



Construction Notes

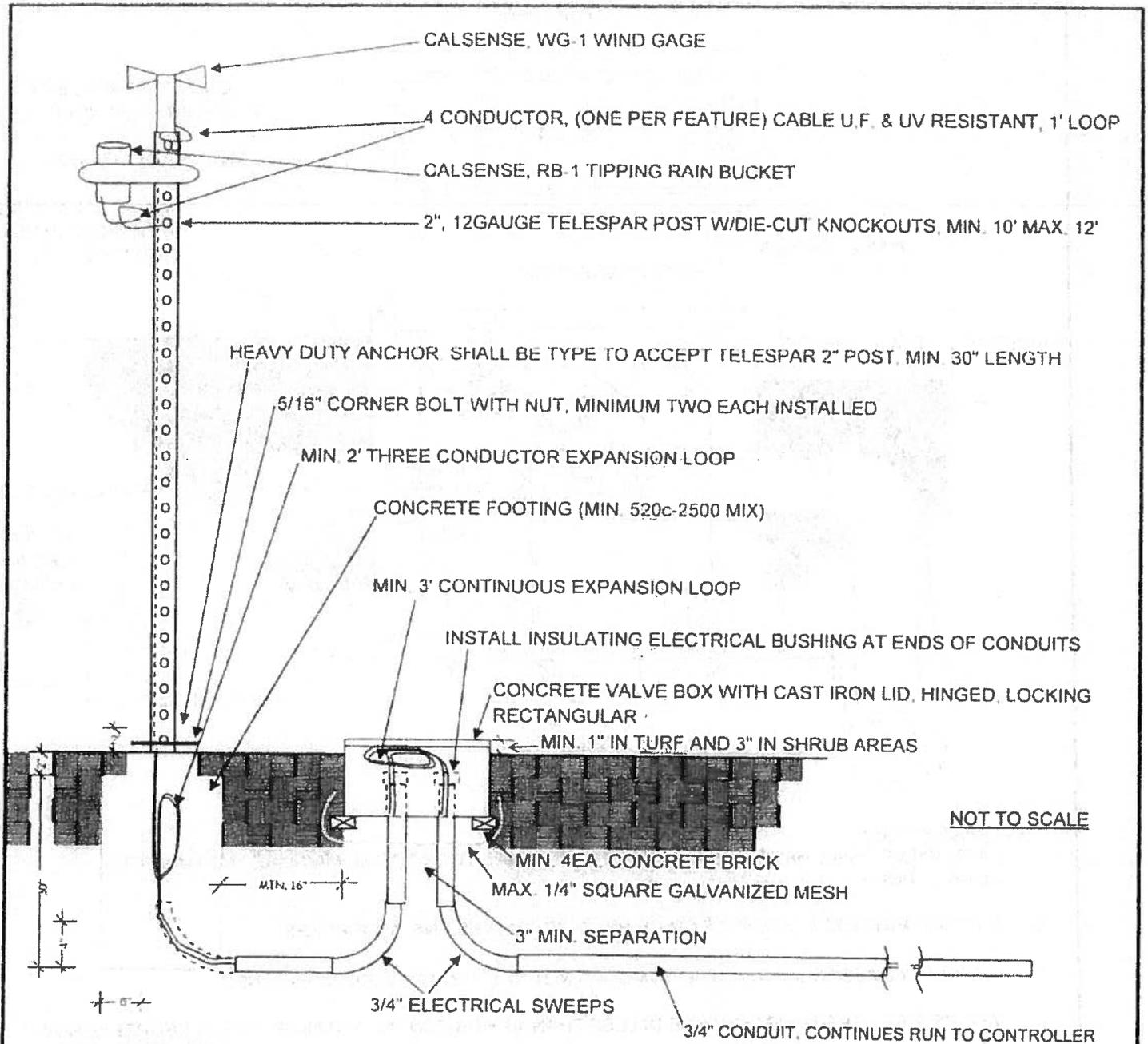
- 1) The rain bucket shall not be installed within a 25' radius of any tree.
- 2) The installation shall be certified in writing by Calsense.
- 3) The maximum length of cable which can be used is 200'.
- 4) The location shall be approved by the Landscape Maintenance Inspector.
- 5) The pole and rain gage shall be level.

Approved	Date
P.V.	5/6/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

CALSENSE TYPICAL WIND GAGE INSTALLATION

Detail No
2008



NOT TO SCALE

Construction Notes

- 1) The rain bucket and wind gage shall not be installed within a 25' radius of any tree
- 2) The installation shall be certified in writing by Calsense
- 3) The maximum length of cable which can be used is 200'
- 4) The location shall be approved by the Landscape Maintenance Inspector
- 5) The pole, wind gage and rain gage shall be level.
- 6) Both the wind gage and rain bucket shall have separate groups of wires that run from each feature, back to the irrigation controller.

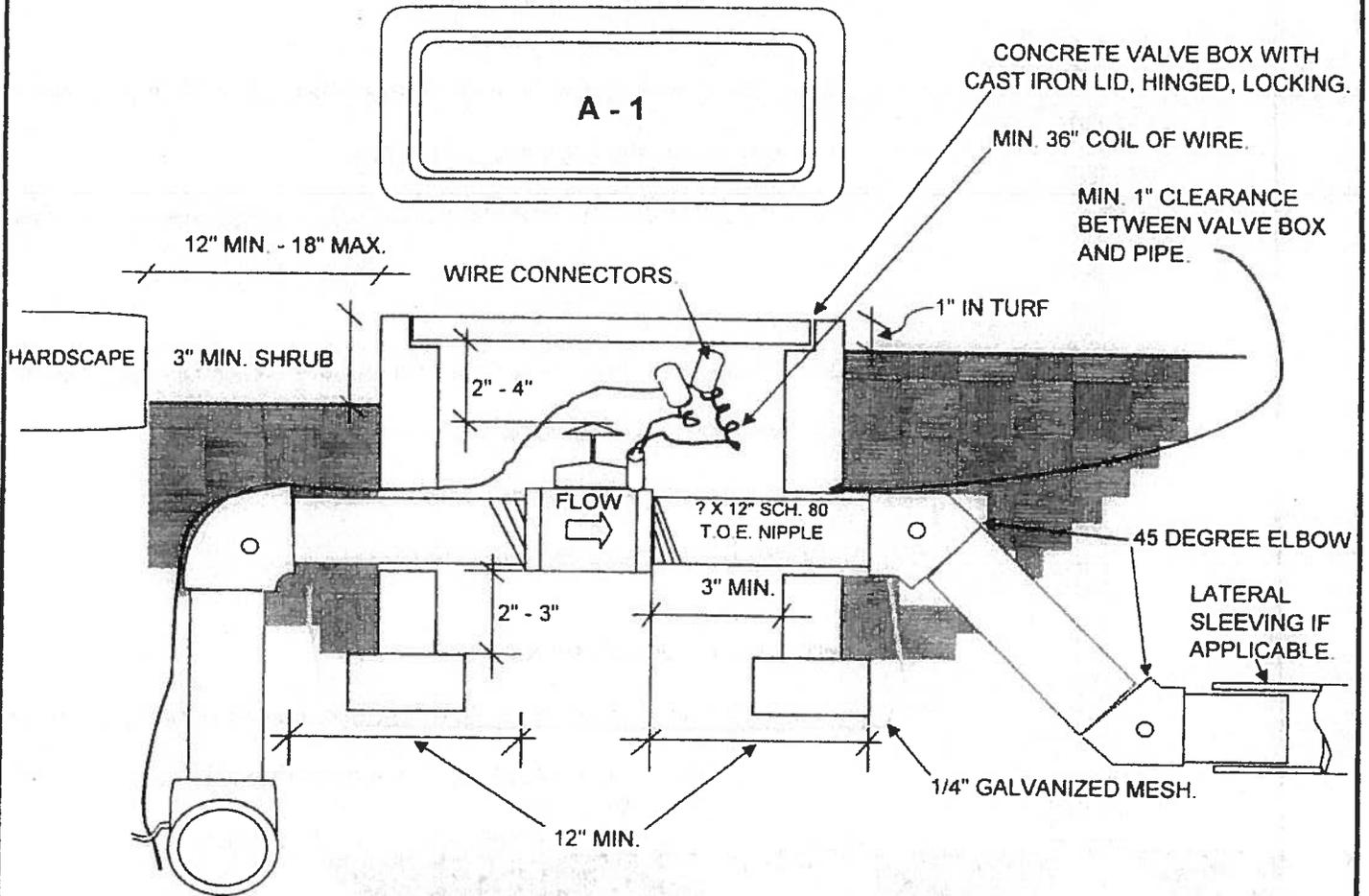
Approved	Date
P.V.	5/8/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

CALSENSE TYPICAL RAIN BUCKET & WIND GAGE INSTALLATION

Detail No
2009

TOP VIEW



Construction Notes

- 1) EACH VALVE SHALL HAVE ITS OWN TEE OR ELL CONNECTION TO THE MAINLINE. NO MANIFOLD CONNECTIONS.
- 2) PROVIDE MINIMUM 3' CLEAR DISTANCE BETWEEN VALVES AND WIRE BOXES.
- 3) INSTALL VALVE BOX SO THAT THE BOX DOES NOT REST ON ANY IRRIGATION LINES.
- 4) WHERE PIPE DEPTH MUST CHANGE IN LESS THAN 10' HORIZONTAL DISTANCE, USE 45 DEGREE ELBOWS.
- 5) 3/4" GRAVEL ROCK SHALL BE PLACED IN EACH BOX. MINIMUM 2 CF.

NOT TO SCALE

Approved	Date
P.V.	5/7/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

REMOTE CONTROL VALVE "IN-LINE"

Detail No.

2010

BUBBLER HEAD & STREET ELL PER SPECS.

P.V.C. SCH. 40 CAP WITH
3/4" HOLE DRILLED IN CENTER,
PRESS FIT - NOT GLUED

1" WIDE NOTCH IN DRAIN
PIPE TO ACCEPT
BUBBLER

SCH. 80 PVC
NIPPLE (TYP.)

FIN. GRADE

SCH. 40 PVC
ELL

1" MAX.
2"
2"

3" DIA. PERFORATED DRAIN PIPE, MIN. 24"
IN LENGTH, PER STD. DET. 1002/1003,
MIN. 2 PER TREE AT 180 DEGREES.

5/8" CLEAN PEA GRAVEL TO BOTTOM
OF DEEP WELL IRRIGATOR.

MARLEX STREET ELLS (2).
WITH 5xT P.V.C. ADAPTER

P.V.C. LATERAL W/ MALE ADAPTER

NOT TO SCALE

Construction Notes

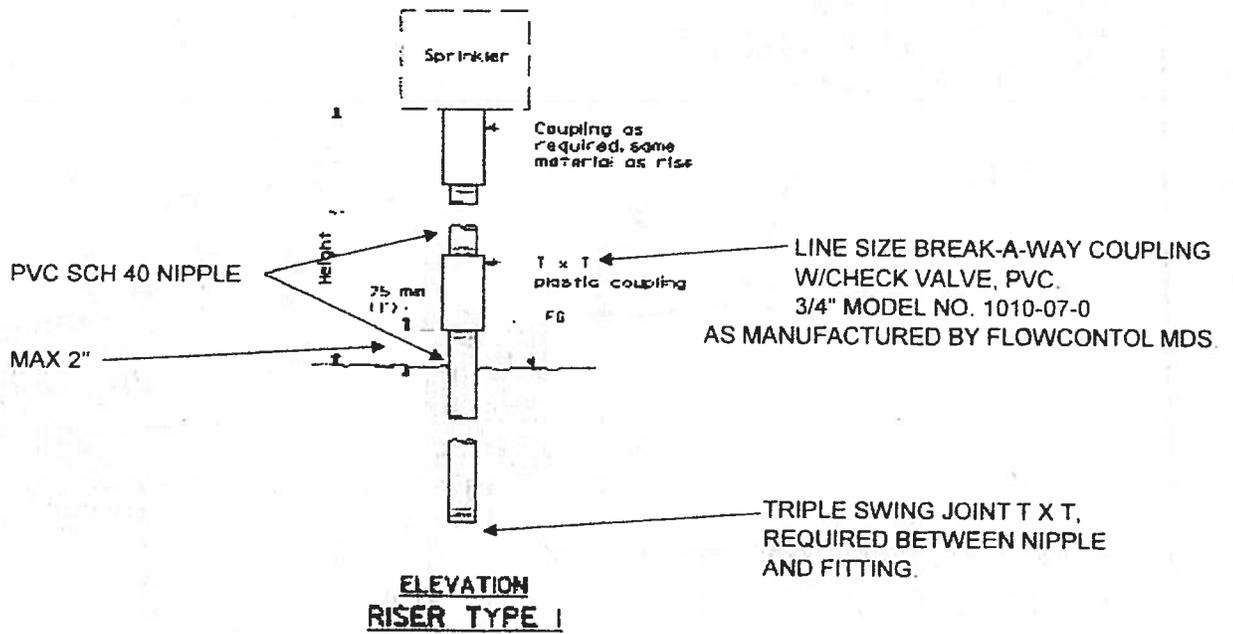
- 1) Each tree shall have a minimum of two deep well irrigators.
- 2) The deep well irrigators shall be irrigated separately from shrub and turf area's.
- 3) Use pre-set bubblers only, adjustable flood bubblers will not be accepted.
- 4) The use of Rainbird RWS-BCG02 Root Watering System in place of drain pipe and rock is acceptable.

Approved	Date
P.V.	5/8/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

DEEP WELL IRRIGATOR

Detail No.
2011



Construction Notes

- 1) The risers shall be Sch. 40 PVC threaded at both ends.

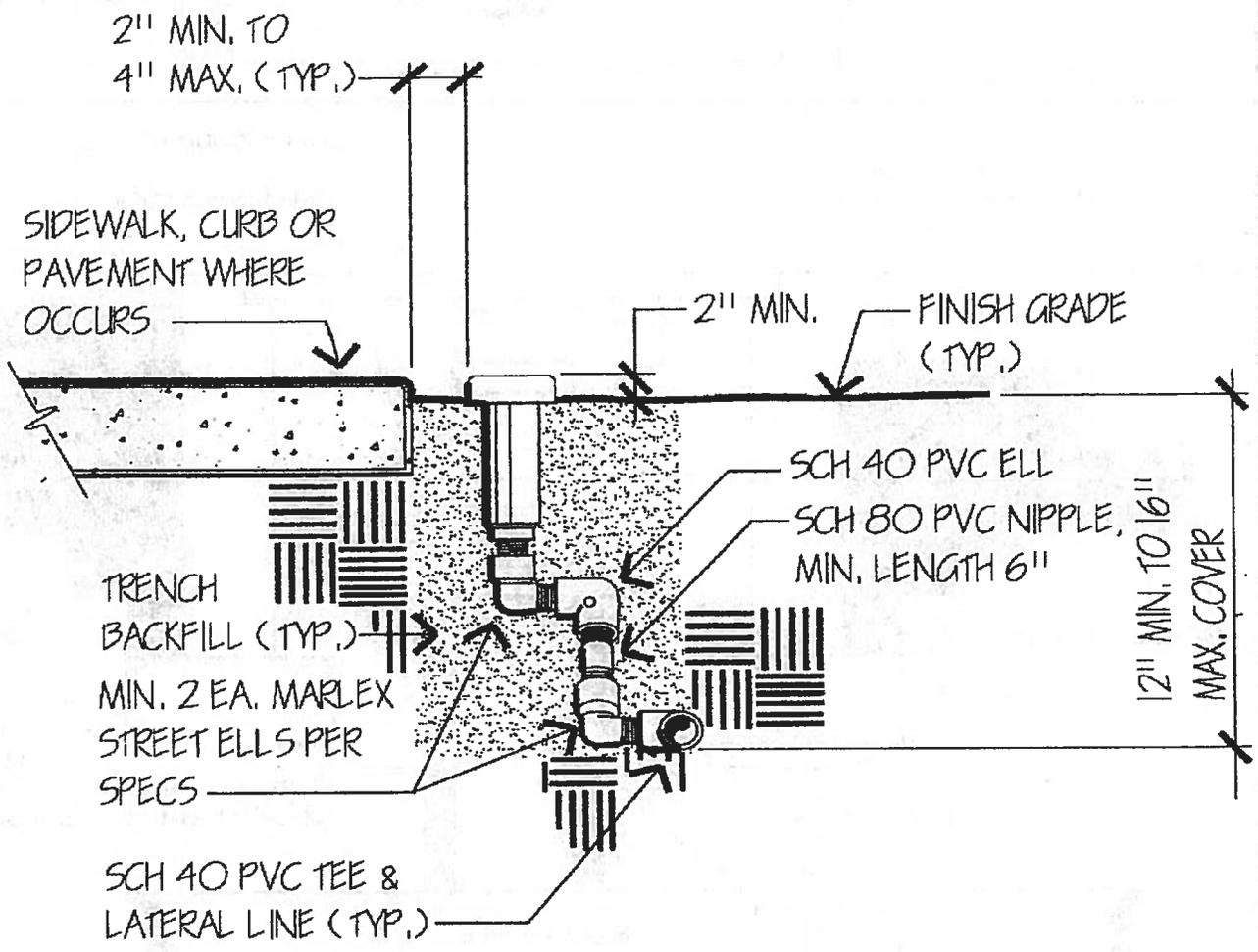
NOT TO SCALE

Approved	Date
P.V.	5/9/08
Revised	Date

**Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE**

SHRUB RISER EXTENSION (TYPE 1)

Detail No.
2012



NOT TO SCALE

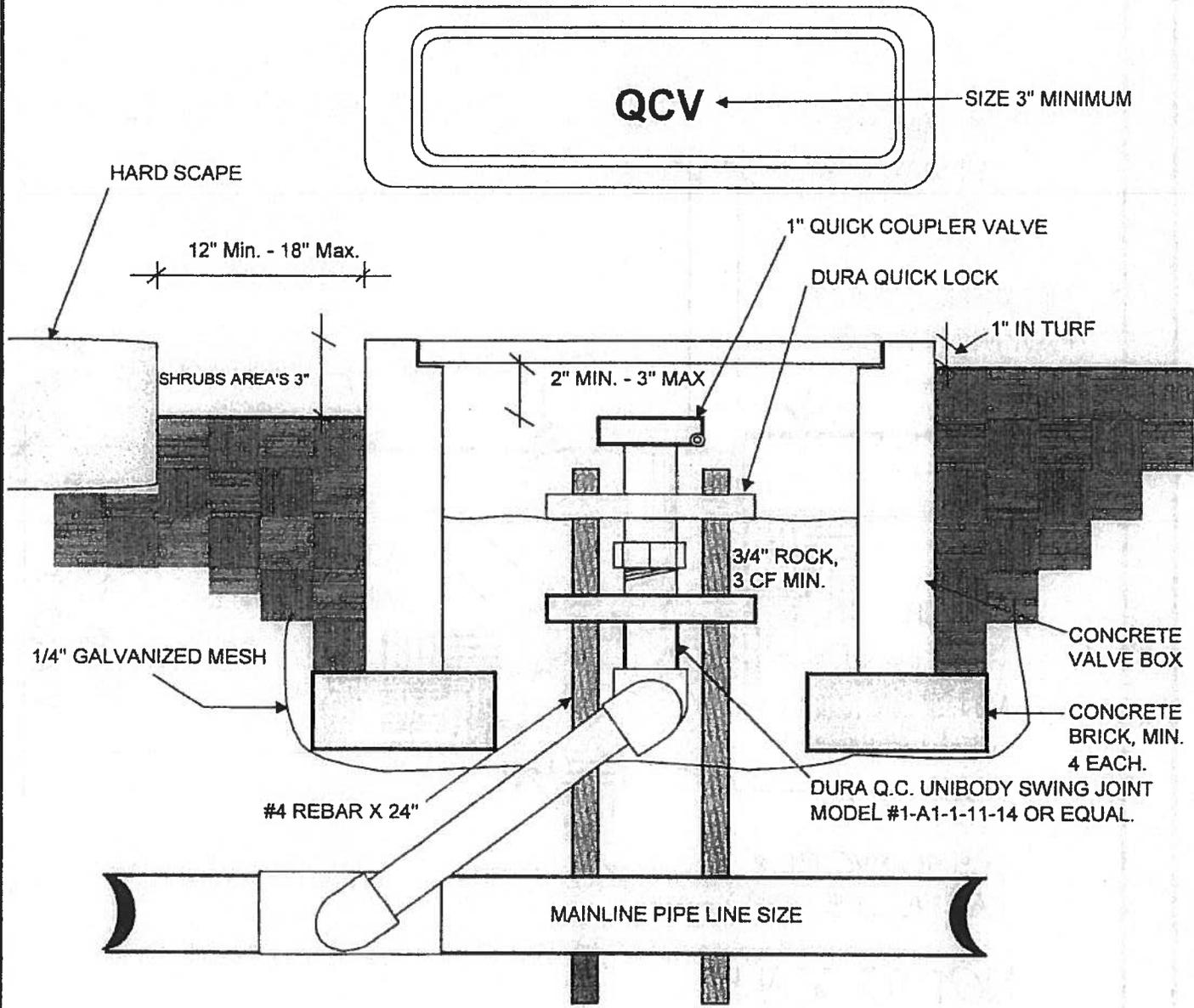
Approved	Date
P.V.	5/23/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

TYPICAL IRRIGATION SPRAY HEAD DETAIL

Detail No.
2013

TOP VIEW



Construction Notes

- 1) The contractor shall ensure that the hexagons between the quick lock and the swing joint are aligned.
- 2) All boxes shall have a minimum 3' foot space between each other.

NOT TO SCALE

Approved	Date
P.V.	5/27/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE
QUICK COUPLER IN VALVE BOX

Detail No.
2014

P.V.C. MALE
ADAPTER

VALVE BOX PER
SPECS.

MULCH AS
SPECIFIED

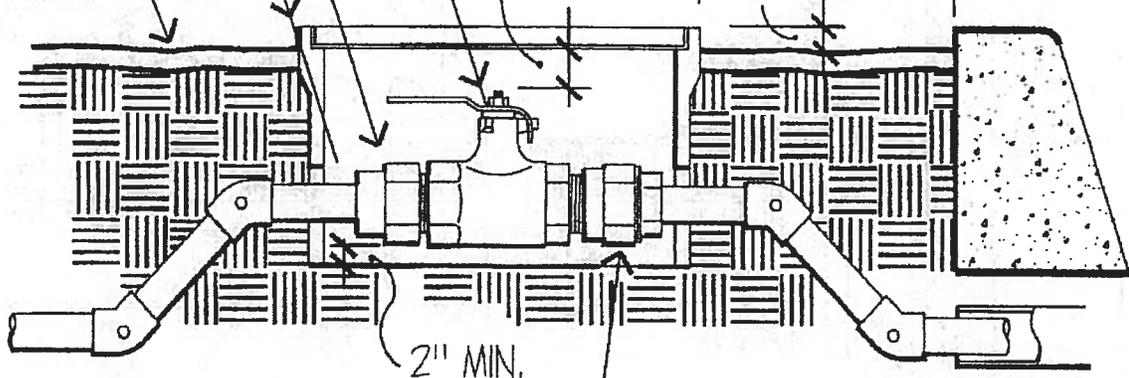
ISOLATION VALVE
PER SPECS

2" MIN.
4" MAX.

12" MIN.

18" MAX.

1" TYP



2" MIN.

PVC UNION

WHERE PIPE GRADE MUST CHANGE
IN LESS THAN 10' HORIZONTAL
DISTANCE, USE 45 DEGREE ELL
FITTINGS

SCH 40 PVC SLEEVE WHERE
UNDER PAVEMENT

NOT TO SCALE

Construction Notes

- 1) Isolation valve must be Nibco T-113-K Gate Valve.
- 2) Where pipe depth must change, use 45 degree elbows.
- 3) A minimum of 2 CF. of 3/4" gravel rock shall be placed under valve in box.
- 4) Install valve box so that the box does not rest on any lateral or main lines.
- 5) Provide minimum 3' clear distance between valve and wire boxes.

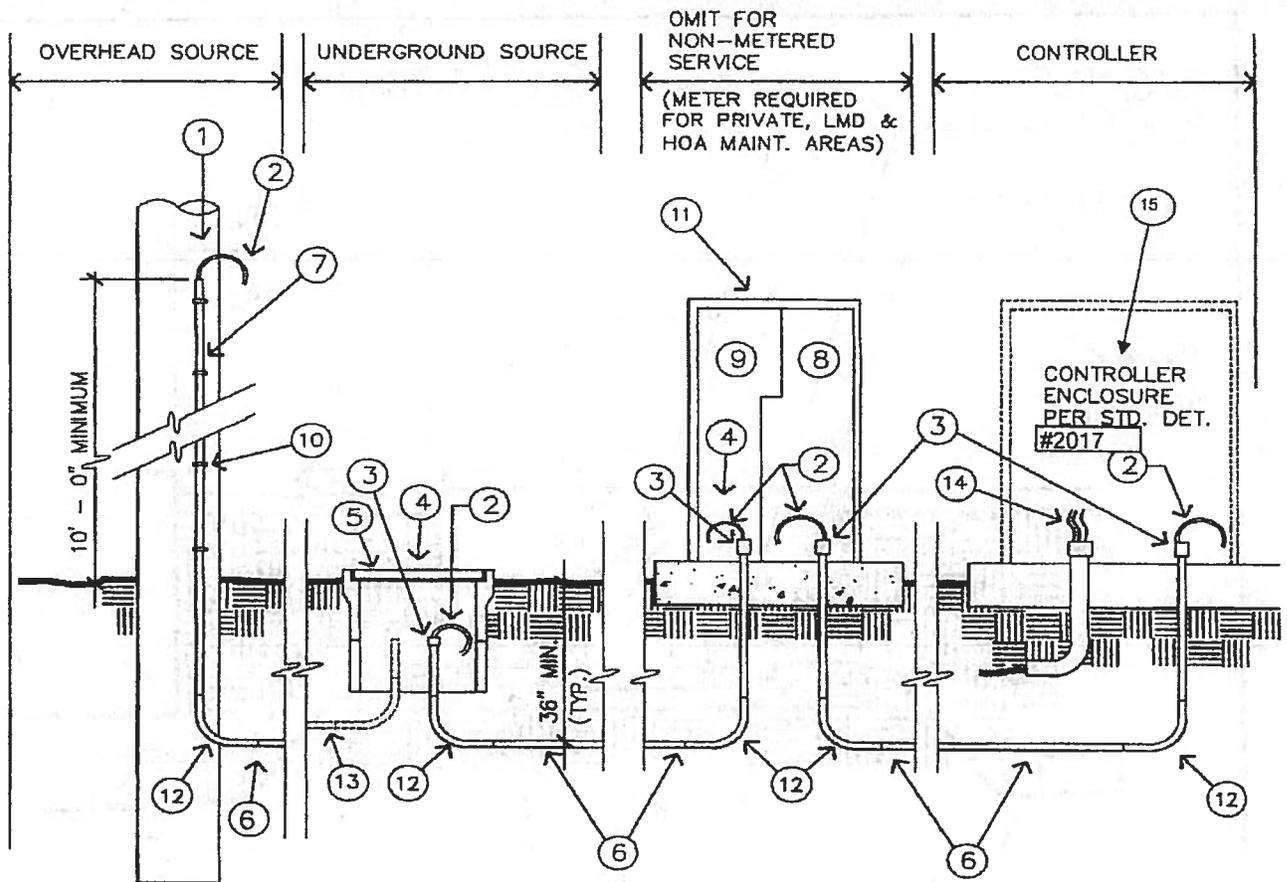
Approved	Date
P.V.	5/27/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

ISOLATION VALVE IN BOX

Detail No.

2015



NOT TO SCALE

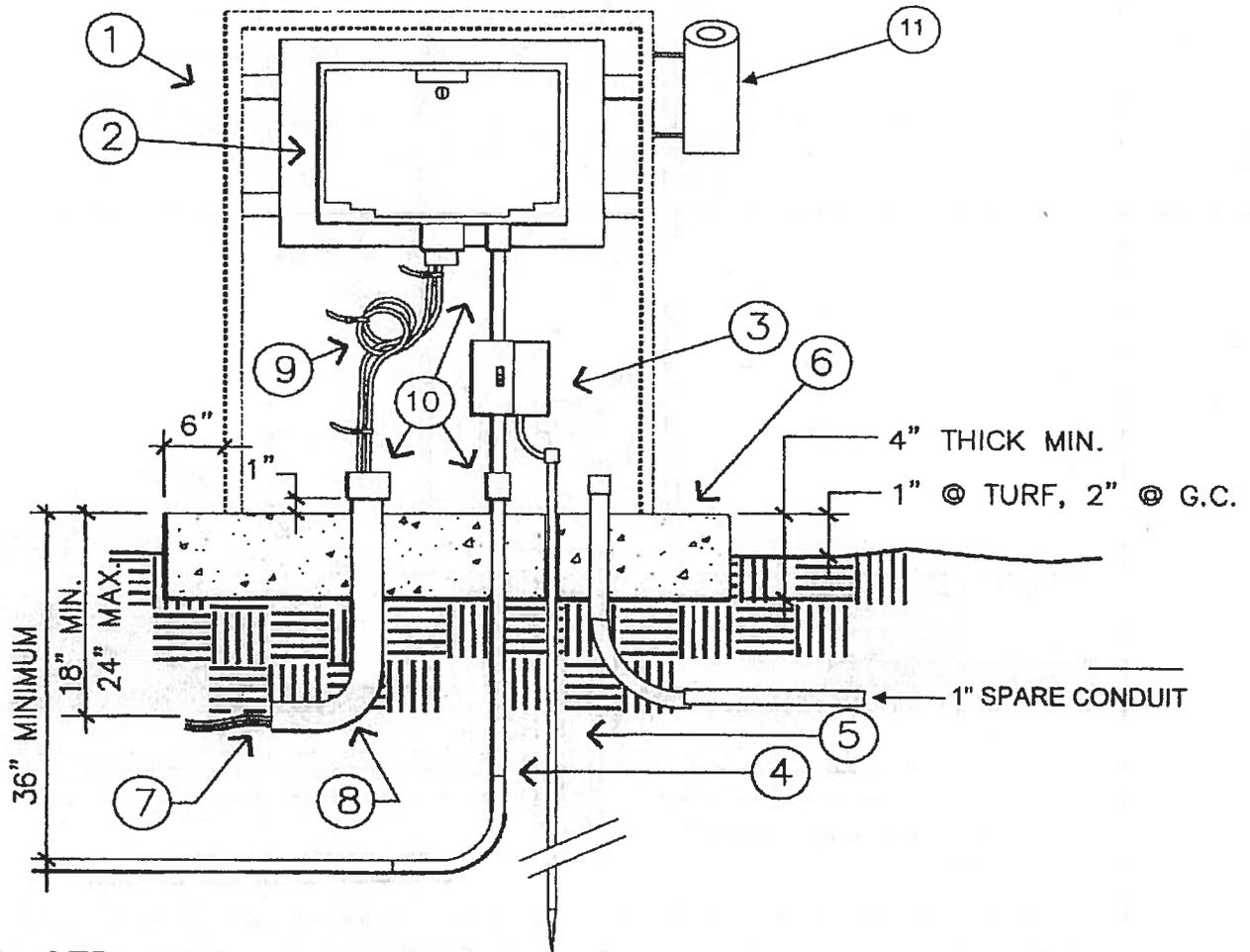
CONSTRUCTION NOTES:

- 1) COORDINATE W/UTILITIES-ELECTRIC (951) 826-5383 FOR RISER LOCATION ON POLE.
- 2) 3-#8 CU THW WIRES. CONTRACTOR TO PROVIDE SUFFICIENT WIRE LENGTH BEYOND END OF CONDUIT TO REACH OVERHEAD SECONDARY LINES FOR OVERHEAD SERVICE AND TO PROVIDE 2 FEET OF WIRE BEYOND CONDUIT END AT UGS BOX & 4 FEET OF WIRE AT METER AND CONTROLLER. IDENTIFY NEUTRAL.
- 3) PROVIDE INSULATING BUSHING, TERMINATE CONDUIT PER UTILITIES SPEC. UGS-311.
- 4) P.U. ELECTRIC WILL MAKE SERVICE CONNECTIONS IN UGS BOX FOR NON-METERED SERVICE, AND WILL MAKE CONNECTIONS AT UGS BOX
- 5) ELECTRIC SERVICE BOX, SIZE PER PUBLIC UTILITIES STANDARDS.
- 6) MIN. 2" SERVICE CONDUIT PER CITY STDS.; DB BELOW GRADE, HDG ABOVE GRADE, HDG WRAPPED SWEEPS.
- 7) LINE SIZE HDG CONDUIT WITH 3-#8 CU THW WIRES, PER UTILITIES STANDARDS. ID NEUTRAL.
- 8) LOAD SECTION.
- 9) SERVICE SECTION.
- 10) MINIMUM 3 PIPE STRAPS
- 11) METER PEDESTAL PER E.U.S.E.R.C. DRAWING #308. SUBMIT CATALOG CUTS TO P.U.-UTILITIES FOR APPROVAL PRIOR TO INSTALLATION.
- 12) LINE SIZE WRAPPED HDG SWEEP ELL, MIN. 9" RAD. (TYP.)
- 13) EXISTING SERVICE CONDUIT.
- 14) LOW VOLTAGE IRRIGATION CONTROL WIRE & CONDUIT PER PUBLIC WORKS STD. SPECS.
- 15) USE CONTROLLER ENCLOSURE DETAILS #2017 OR #2018 AS REQUIRED PER PROJECT.

Approved	Date
P.V.	5/27/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE
NON-METERED / METERED ELECTRIC SERVICE

Detail No.
2016



CONSTRUCTION NOTES:

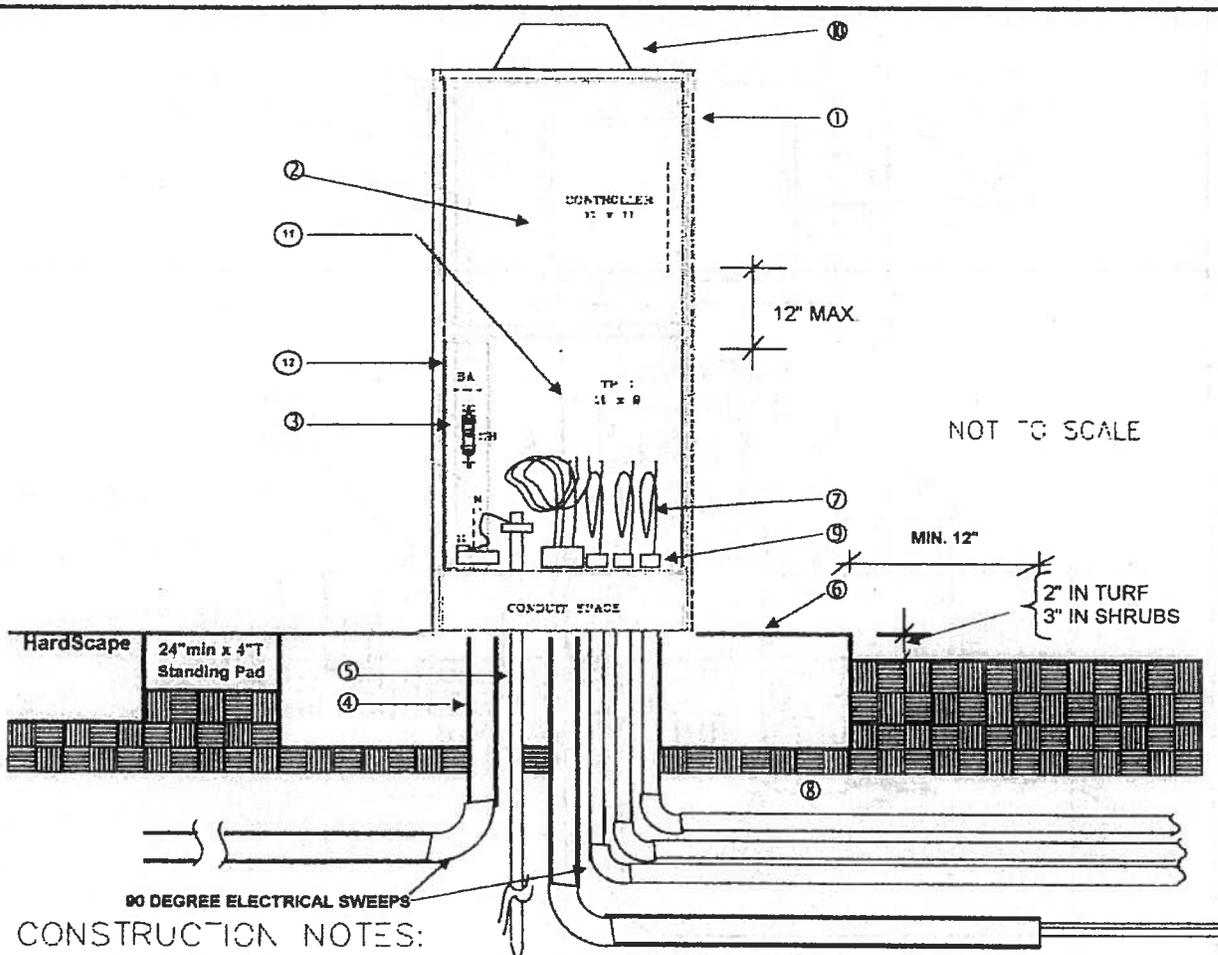
NOT TO SCALE

- ① STAINLESS STEEL ENCLOSURE PER PUBLIC WORKS STDS., MODEL SIZE TO FIT CONTROLLER, WITH SERVICE ADDRESS STENCILED ON LOCKING HINGED DOOR. SECURELY ANCHOR ENCLOSURE TO CONCRETE PAD.
- ② WEATHER PROOF AUTOMATIC IRRIGATION CONTROLLER PER PUBLIC WORKS STDS., SECURELY WALL MOUNTED TO ENCLOSURE.
- ③ SQUARE D BREAKER BOX MODEL Q02-4L70S, OR APPROVED EQUAL WITH SINGLE 15 AMP BREAKER. MAKE 120 V POWER AND GROUND CONNECTION AT BREAKER BOX. MOUNT IN ENCLOSURE.
- ④ 3 - #8 CU COPPER WIRES IN MIN. 2" SCH 40 PVC CONDUIT FROM CONTROLLER TO POWER SOURCE. BOND SERVICE TO BREAKER BOX.
- ⑤ #8 CU COPPER WIRE AND 5/8" BY 8' LONG DRIVEN COPPER GROUNDING ROD WITHIN ENCLOSURE. DRIVE ROD PRIOR TO INSTALLATION OF ENCLOSURE.
- ⑧ CONCRETE PAD, EXTEND SUFFICIENT DISTANCE IN FRONT OF ENCLOSURE TO ALLOW UNOBSTRUCTED AREA FOR DOOR SWING FREE OF PLANTINGS, 6" MIN. BEYOND ENCLOSURE ON ALL SIDES.
- ⑦ LOW VOLTAGE DIRECT BURIAL WIRES TO CONTROL VALVES.
- ⑧ 90 DEGREE WRAPPED HDG SWEEP ELL, SIZED TO FIT WIRE FOR NUMBER OF STATIONS ON THE CONTROLLER, PLUS SPARES AND COMMON.
- ⑨ THREE FOOT EXPANSION LOOP OF CONTROL WIRE, NEATLY LACED WITH ZIP-LOCKS. MAKE CONNECTIONS DIRECTLY TO IRRIGATION CONTROLLER TERMINALS FOR 12 STATION & SMALLER. USE TERMINAL STRIPS FOR CONTROLLERS LARGER THAN 12 STATIONS.
- ⑩ PROVIDE INSULATING ELECTRICAL BUSHINGS AT CONTROLLER AND END OF CONDUITS.
- ⑪ RAIN GAGE INSTALLED IN PROTECTIVE COVER ON CONTROLLER OR MOUNTED ON 12' POLE PER PLANS. PROTECT FROM SPRINKLER OVER SPRAY

Approved	Date
P.V.	5/27/08
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE
NON-CALSENSE IRRIGATION CONTROLLER

Detail No.
2017



CONSTRUCTION NOTES:

- ① MYERS POWER PRODUCTS CAT No. MEUG22X-ENC-RIV S.S. ENCLOSURE TO SUPPORT ALL MATERIALS REQUIRED BY ALL CITY AGENCIES OR EQUAL. ENCLOSURE SHALL BE MOUNTED ON A MYERS PADMOUNT BASE (PART NUMBER 519100) ENCASED CONCRETE.
- ② CALSENSE CONTROLLER AS SPECIFIED ON THE LEGEND AND OR SPECIFICATIONS, WEATHER PROOF AUTOMATIC CONTROLLER, WALL MOUNT TYPE, SECURELY MOUNTED TO THE ENCLOSURE.
- ③ SQUARE-D 15 AMP SINGLE BREAKER BOX. MAKE 120v. POWER AND GROUND CONNECTION AT BREAKER BOX THEN TO TP-110 SURGE PROTECTION DEVICE.
- ④ 3-#8 CU THW WIRES IN MIN. 2" SCH 40 PVC CONDUIT FROM CONTROLLER TO POWER SOURCE. BOND SERVICE TO BREAKER BOX.
- ⑤ #8 CU COPPER GROUND WIRE AND MIN (1) 5/8" BY 8' LONG DRIVEN COPPER GROUNDING ROD WITHIN ENCLOSURE. DRIVE ROD PRIOR TO INSTALLATION OF ENCLOSURE.
- ⑥ CONCRETE PAD, EXTEND EDGE MIN. 8" FROM ENCLOSURE TO ALLOW UNOBSTRUCTED AREA FOR DOOR TO SWING FREE. MIN. 6" THICK. NO PLANTING WITHIN 15" FROM THE FOOTING ON ALL SIDES.
- ⑦ LOW VOLTAGE ELECTRICAL SWEEP TO EXTEND MIN. 12" FROM EDGE OF FOOTING. THREE FOOT EXPANSION LOOP ON ALL CONTROLLER WIRES. RAIN BUCKETS, ET-GAUGE AND FLOW-SENSORS NEATLY LACED WITH ZIP-LOCKS. MAKE CONNECTION TO TP-1 BOARD.
- ⑧ THE ET-GAUGE, RAIN BUCKET, AND FLOW SENSOR CONTROL WIRES SHALL BE INSTALLED IN SCH 40 GRAY PVC CONDUIT AS A CONTINUOUS RUN.
- ⑨ PROVIDE INSULATING ELECTRICAL BUSHINGS AT CONTROLLER END OF CONDUITS.
- ⑩ LR-DOME-RR ANTENNA.
- ⑪ TP-1 BOARD. THE DISTANCE BETWEEN THE CONTROLLER AND THE TP-1 BOARD SHALL NOT EXCEED 12".
- ⑫ TP-110 LINE SURGE PROTECTOR.

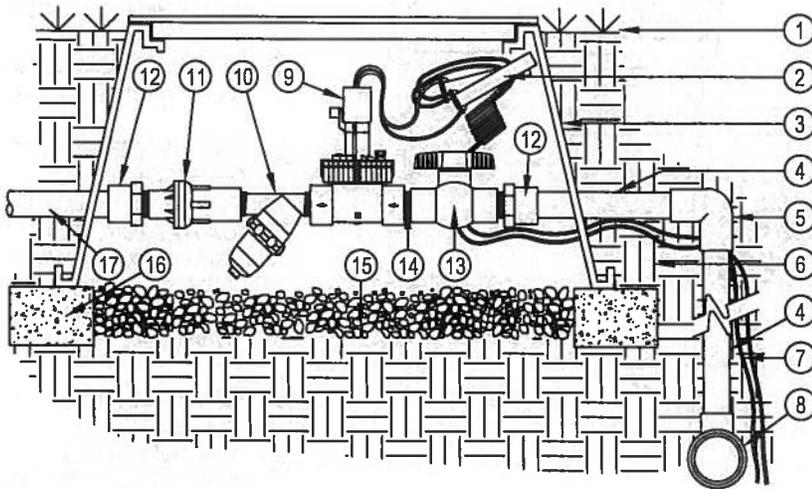
(INSTALLATION SHALL BE CERTIFIED BY THE CONTROLLER MANUFACTURER IN WRITING)

Approved	Date
P.V.	5/27/08
Revised	Date
P.V.	12/18/08

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

IRRIGATION CONTROLLER (NON-METERED) DETAIL (CS)

Detail No.
2018



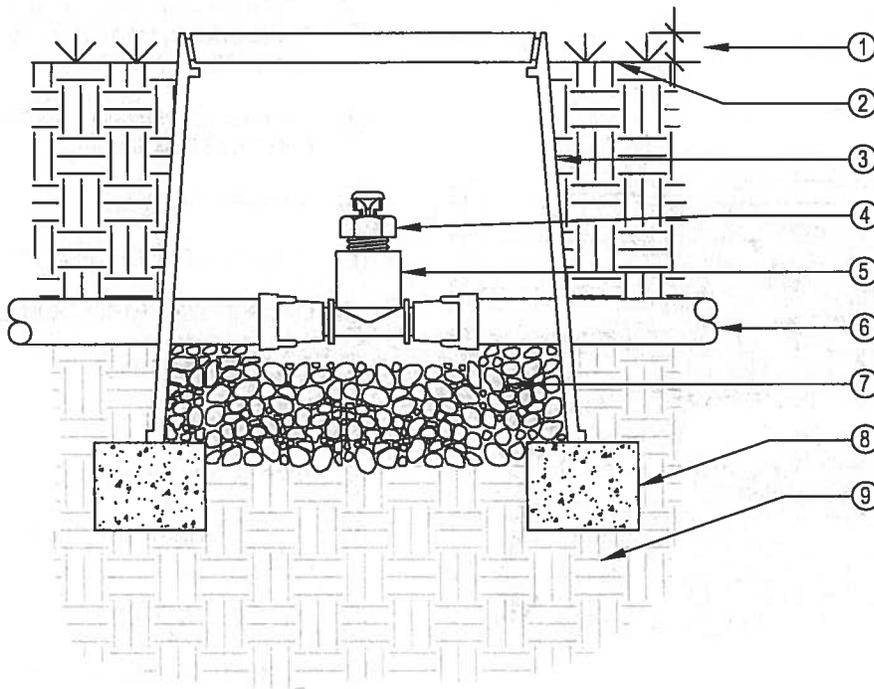
ELEVATION/SECTION
NOT TO SCALE

- ① FINISH GRADE.
 - ② CONTROL WIRES WITH 36" SERVICE COIL AND WATER PROOF WIRE CONNECTIONS, DBY OR EQUAL.
 - ③ RECTANGULAR PLASTIC VALVE BOX. HEAT BRAND STATION NUMBER ON LID IN 2" HIGH CHARACTERS.
 - ④ PVC MAINLINE PER SPECIFICATIONS (LENGTH AS REQUIRED).
 - ⑤ SCH 40 PVC ELL (SxS).
 - ⑥ NATIVE SOIL PER SPECIFICATIONS.
 - ⑦ CONTROL WIRES TO CONTROLLER.
 - ⑧ PVC MAINLINE FITTING.
 - ⑨ TORO 700-1 INLINE VALVE (*).
 - ⑩ TORO 150 MESH Y-FILTER (*).
 - ⑪ TORO 25 PSI LOW FLOW PRESSURE REGULATOR (*).
 - ⑫ SCH 40 PVC MALE ADAPTER.
 - ⑬ SCH 40 PVC BALL VALVE (*).
 - ⑭ SCH 80 PVC CLOSE NIPPLE (*).
 - ⑮ PEA GRAVEL SUMP, MINIMUM 6" DEEP.
 - ⑯ BRICK SUPPORTS (4 COMMON BRICKS REQUIRED).
 - ⑰ LATERAL LINE TO DRIP SYSTEM.
- (*) PARTS IN DRIP ZONE KIT.

Approved	Date
R.F.	3/21/12
Revised	Date

Public Works Department, Forestry and Landscape Division CITY OF RIVERSIDE
TORO TYPICAL DRIP ZONE KIT DETAIL

Detail No.
2019



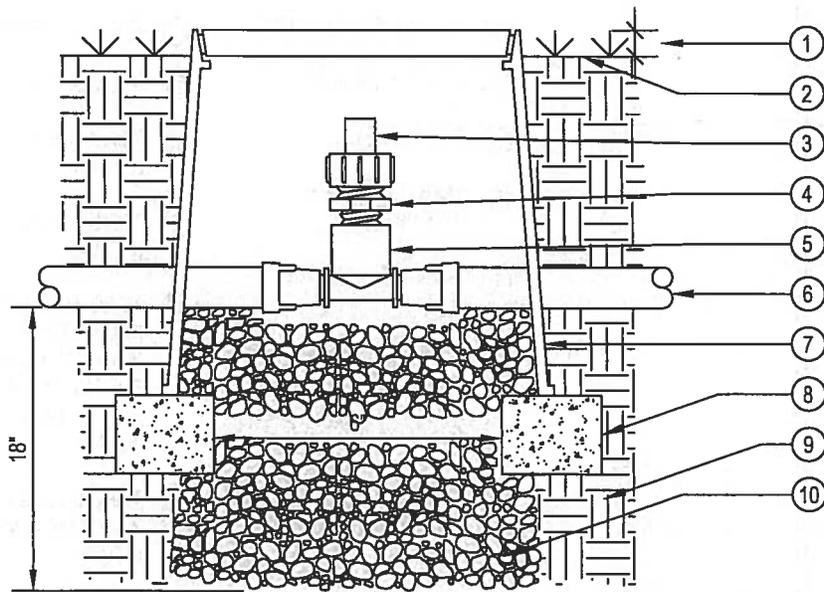
- ① 1" ABOVE FINISH GRADE.
- ② FINISH GRADE.
- ③ 6" ROUND PLASTIC VALVE BOX. HEAT BRAND "AR" ON LID IN 1" HIGH CHARACTERS.
- ④ TORO DL2000 AIR/VACUUM RELIEF VALVE (YD-500-34).
- ⑤ TORO LOC-EZE X 1/2" FPT TEE (FTF16).
- ⑥ TORO DL2000 TUBING (RGP-XX-XXX) OR TORO BLUE STRIPE POLY TUBING (EHD1645-XXX) AIR-RELIEF LATERAL.
- ⑦ PEA GRAVEL SUMP (6" DEEP).
- ⑧ BRICK SUPPORTS (2 COMMON BRICKS REQUIRED).
- ⑨ NATIVE SOIL PER SPECIFICATIONS.

SECTION/ELEVATION
NOT TO SCALE

Approved	Date
R.F.	3/21/12
Revised	Date

Public Works Department, Forestry and Landscape Division CITY OF RIVERSIDE
TORO TYPICAL AIR/VACUUM RELIEF VALVE

Detail No.
2020



- ① 1" ABOVE FINISH GRADE.
- ② FINISH GRADE.
- ③ TORO DL2000 FLUSH VALVE (FCH-H-FIPT).
- ④ PVC SCH 40 REDUCING NIPPLE, 3/4"-1/2" (T x T).
- ⑤ TORO LOC-EZE X 1/2" FPT TEE (FTF16).
- ⑥ TORO DL2000 TUBING (RGP-XX-XXX) OR TORO BLANK POLY TUBING (EHD1645-XXX).
- ⑦ 6" ROUND PLASTIC VALVE BOX . HEAT BRAND "FV" ON LID IN 1" HIGH CHARACTERS.
- ⑧ BRICK SUPPORTS (2 COMMON BRICKS REQUIRED).
- ⑨ NATIVE SOIL PER SPECIFICATIONS.
- ⑩ PEA GRAVEL SUMP (6" x 18").

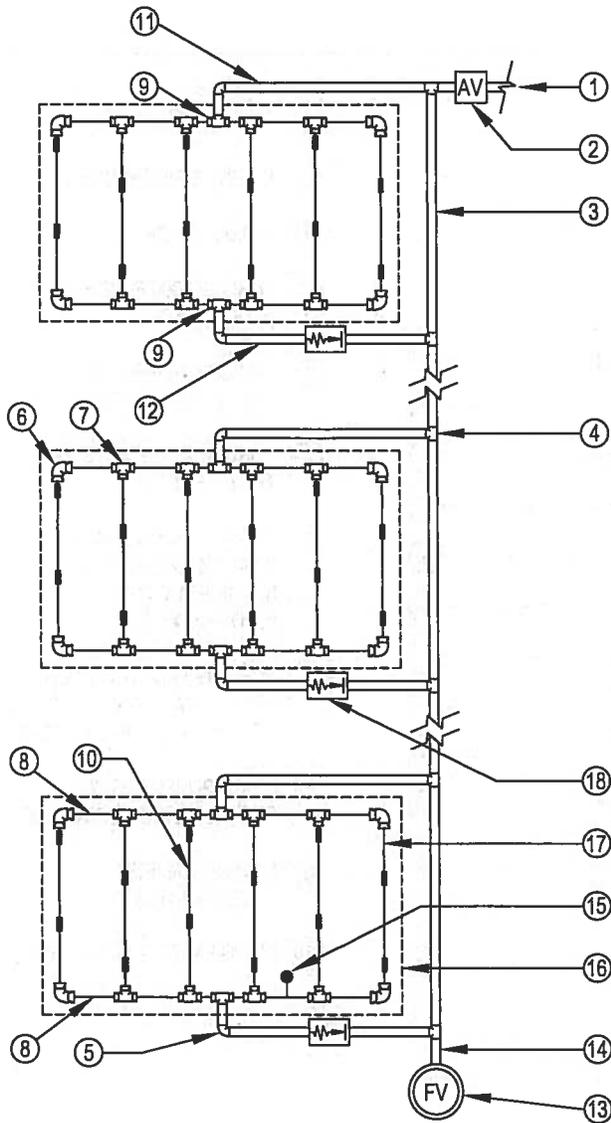
SECTION/ELEVATION
NOT TO SCALE

Approved	Date
R.F.	3/21/12
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

TORO TYPICAL FLUSH VALVE ON TUBING

Detail No.
2021



PLAN
NOT TO SCALE

- ① PVC LATERAL LINE FROM DRIP ZONE KIT.
- ② TORO DL2000 AIR/VACUUM RELIEF VALVE (YD-500-34) PLUMBED TO SUPPLY MANIFOLD AT HIGH POINT.
- ③ PVC SUPPLY MANIFOLD.
- ④ PVC TEE (SxSxS).
- ⑤ PVC ELL (SxS).
- ⑥ TORO LOC-EZE ELL (FEE16).
- ⑦ TORO LOC-EZE TEE (FTT16).
- ⑧ TORO BLUE STRIPE POLY TUBING (EHD1645-XXX) AT SUPPLY AND FLUSH END OF EACH ISLAND.
- ⑨ TORO LOC-EZE TEE X 1/2" SLIP ADAPTER (FTV16).
- ⑩ PVC LATERAL LINE FROM DRIP ZONE KIT.
- ⑪ TORO DL2000 AIR/VACUUM RELIEF VALVE (YD-500-34) PLUMBED TO SUPPLY MANIFOLD AT HIGH POINT.
- ⑫ PVC SUPPLY MANIFOLD.
- ⑬ PVC TEE (SxSxS).
- ⑭ PVC ELL (SxS).
- ⑮ TORO LOC-EZE ELL (FEE16).
- ⑯ TORO LOC-EZE TEE (FTT16).
- ⑰ TORO BLUE STRIPE POLY TUBING (EHD1645-XXX) AT SUPPLY AND FLUSH END OF EACH ISLAND.
- ⑱ TORO LOC-EZE TEE X 1/2" SLIP ADAPTER (FTV16).

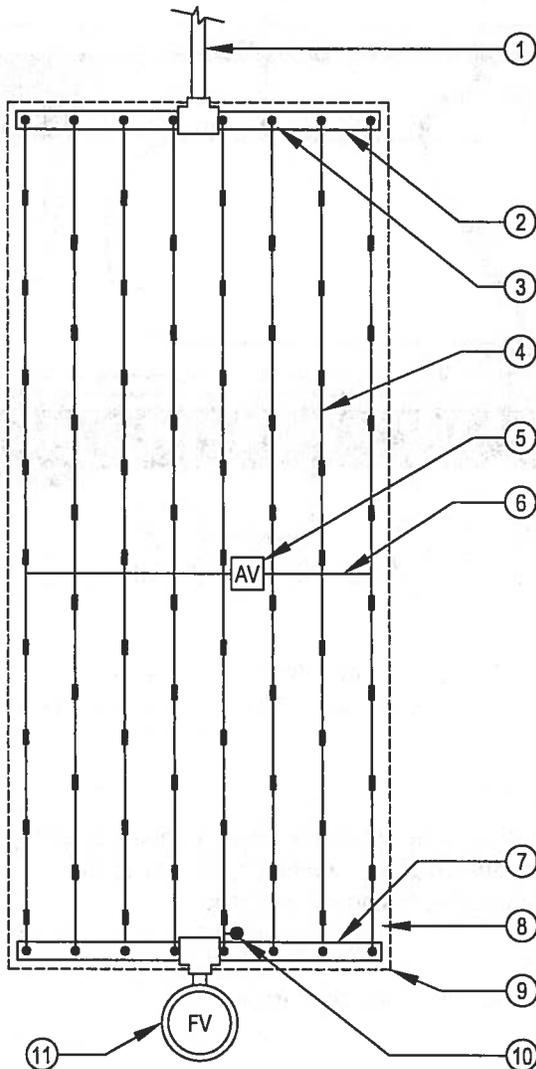
NOTE:
THE TOTAL LENGTH OF ALL INTERCONNECTED DRIP LINE SHALL NOT EXCEED THE MAXIMUM RUN LENGTH. SEE TORO SUBSURFACE IRRIGATION DESIGN GUIDE (FORM #ALT111).

Approved	Date
R.F.	3/21/12
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

TORO TYPICAL ISLAND LAYOUT

Detail No.
2022



- ① PVC LATERAL LINE FROM DRIP ZONE KIT.
- ② PVC SUPPLY MANIFOLD.
- ③ TORO DL2000 MANIFOLD-TO-ELBOW CONNECTION (TYP).
- ④ TORO DL2000 DRIPLINE LATERAL (RGP-XXX-XX).
- ⑤ TORO DL2000 AIR/VACUUM RELIEF VALVE (YD-500-34) PLUMBED TO TORO BLUE STRIPE POLY TUBING (EHD1645-XXX) AT EACH HIGH POINT.
- ⑥ AIR/VACUUM RELIEF LATERAL, TORO BLUE STRIPE POLY TUBING (EHD1645-XXX) CENTERED ON MOUND OR BERM.
- ⑦ PVC FLUSH MANIFOLD.
- ⑧ PERIMETER LATERALS 2" TO 4" FROM EDGE.
- ⑨ AREA PERIMETER.
- ⑩ TORO DL2000 OPERATION INDICATOR (DL-MP9), OPTIONAL.
- ⑪ TORO DL2000 AUTOMATIC FLUSH VALVE (FCH-H-FIPT) PLUMBED TO FLUSH MANIFOLD AT LOW POINT.

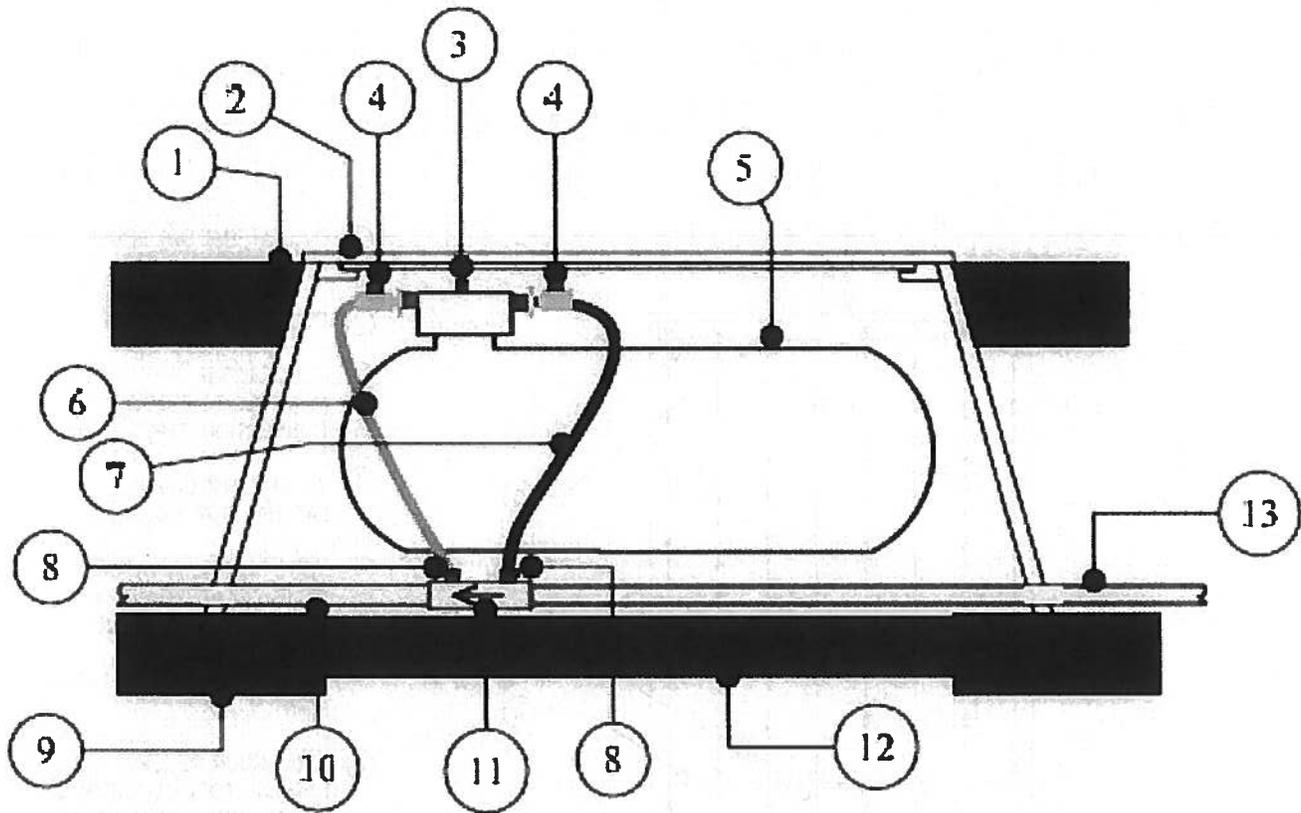
PLAN
NOT TO SCALE

Approved	Date
R.F.	3/21/12
Revised	Date

Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE

TORO TYPICAL END-FEED LAYOUT

Detail No.
2023



NOT TO SCALE

- 1) Finish Grade to top of valve box shall be min. 1" in turf and min. 3" in shrub areas.
- 2) Concrete valve box with locking non-hinged cast iron cover, min 17"L x 12"D x 1 1/4"W inside dimensions.
- 3) Proportioning cap with feed adjustment.
- 4) Ez-Flo shut off valves
- 5) Ez-Flo fertilizer injector system as required by EZ-Flo
- 6) Fertilizer Out - Connect clear tube to green connections on proportioning cap and coupling
- 7) Water In - Connect black tube to blue connections on proportioning cap and coupling
- 8) 1/4" Tubing Clamp - Both the green and blue coupling tubing connections
- 9) Concrete Brick Min. 4ea.
- 10) PVC Sch 40 main line size, to valve manifold.
- 11) EZ Coupling Connector - Install according to water flow direction arrow
- 12) Pea Gravel (Min. 1CU. FT.).
- 13) PVC Main line from back flow preventor.

Construction Notes

- A) Items 3 thru 8 are included with the EZ-Flo system. Item 11 is purchased separately.
- B) The installation shall be certified in writing by EZ-Flo Fertilizing Systems, Inc.
- C) A Min. 3' separation between Injector and other irrigation components is required.

Approved	Date
R.F.	3/21/12
Revised	Date

Public Works Department, Street Services Division
CITY OF RIVERSIDE
EZ-FLO TYPICAL FERTILIZER INJECTOR 1.5G

Detail No.
2024

NODE

Number of Stations: **1, 2, 4, 6**
 Type: **Battery Operated, Fixed**

FEATURES

- Type: Fixed
- Battery Operated
- Number of stations: 1, 2, 4, 6
- Enclosure: Outdoor plastic
- Independent programs: 3
- Start times per program: 4
- Max. station run time: 6 hrs
- One touch manual start and advance
- Master Valve operation (available in 2, 4, 6 station models)
- Solar Panel Kit (SPNODE) provides maintenance-free operation
- Accepts single or double 9-volt batteries for extended battery life
- Solenoid wire length up to 100' (use 18 AWG wire)
- Programmable off mode
- Submersible to 12' (IP68 rated)
- Battery life indicator
- Protective rubber cover
- Warranty period: 2 years
- ▶ Easy Retrieve™ memory
- ▶ Seasonal Adjustment: Global



NODE-100
 Diameter: 3½"
 Height: 2½"



NODE-200
NODE-400
NODE-600
 Diameter: 3½"
 Height: 2½"



NODE-100-Valve
 Diameter: 3½"
 Height: 2½"



SPNODE
 Height: 3¼"
 Width: 3"
 Depth: 5/8"

ELECTRICAL SPECIFICATIONS

- Operates DC latching solenoids only (P/N 458200)
- P/MV
- Sensor inputs: 1
- Operating temperature: 0° F to 140° F
- Power source: 9-volt battery (up to two) or Solar Panel
- Solar Panel Kit SPNODE eliminates the need for batteries and provides maintenance-free operation

APPROVALS

- CE
- ▶ = *Advanced Feature descriptions on pages 81 and 82*

NODE	
Model	Description
NODE-100	Single station controller (DC latching solenoid included)
NODE-200	2-Station controller (DC latching solenoid ordered separately)
NODE-400	4-Station controller (DC latching solenoid ordered separately)
NODE-600	6-Station controller (DC latching solenoid ordered separately)
NODE-100-VALVE	Single station controller with PGV-101-G valve and DC latching solenoid (NPT threads)
NODE-100-VALVE-B	Single station controller with PGV-101-GB valve and DC latching solenoid (BSP threads)

MAXIMUM WIRE RUNS	
Wire Size	Max. Distance (ft.)
18 AWG	100

OPTIONS (SPECIFY SEPARATELY)	
Options*	Description
458200	DC latching solenoid
SPNODE	Solar Panel Kit for Node

CONTROLLERS



Material Submittal Sheet

Product: Summit Stabilized D.G. **Source:** Decorative Stone Solutions

Job: **Date:** ; **No of Pgs:** 1

Submitted to: **Submitted by:** |



Summit Stabilized D.G. is a Decorative Stone Solutions product consisting of 3/8"-Minus bank run fines. Each ton of this golden/tan D.G. comes pre-blended with 12 lbs of organic stabilizer binder for pedestrian use. Product will be delivered in pre-blended form.

Please contact us with any questions

Decorative Stone Solutions, Inc.

306 W. El Norte Pkwy #434
Escondido, Ca 92026

Phone: 800/699-1878 Fax: 909/356-1449 randy@decorativestonesolutions.com



CITY OF RIVERSIDE

**PUBLIC UTILITIES DEPARTMENT
WATER DIVISION**

SPECIFICATION NO. 205

**FOR THE DESIGN AND INSTALLATION
OF POTABLE WATER DISTRIBUTION SYSTEMS**

PAGES 20-21, 44 AND 47-51 ONLY

October 2009

SECTION 210 - PAINT AND PROTECTIVE COATINGS

210-1.5 Paint Systems

210-1.6 PAINT AND PROTECTIVE COATINGS

4.06.1 Painting Schedule. All paint and protective coatings shall be holiday free. The following paint schedule shall apply to Water Division facilities:

- a. Gate Box Caps & Rims - 1 coat Rust-Oleum #1069 Primer and 2 coats of no marking paint, traffic blue, # 6703, or City approved equal.
- b. Air Valves - 1 coat Rust-Oleum #1069 Primer and 2 coats of Rust-Oleum #7638, Forest Green, Fuller O'Brien #312-81, Shutter Green, or Pervo #2428, Industrial Green.
- c. Fire Hydrants - 1 coat Rust-Oleum #1069 Primer and 2 coats of either Fire Hydrant Pervo #2420, Rust-Oleum #7644 Federal Safety Yellow or Fuller O'Brien #312-74 Hi-Way Yellow.
- d. Guard Posts: 1 coat of Rust-Oleum #1069, Primer and 2 coats of: Fuller O'Brien #312-81, Shutter Green, or Rust-Oleum #7638, Forest Green, or Pervo #2428, Industrial Green
- e. Vault Covers: 1 coat of Rust-Oleum #1069, Primer and 2 coats of: Rust-Oleum #473, Industrial Aluminum, or Pervo #2404, Aluminum
- f. Above Grade Piping: 1 coat of Dunn Edwards #43-5, Alkyd Primer and 2 coats of: Dunn Edwards, Syn-Lustro 10 Series, San Tan
- g. Fire Hydrants: 1 coat of Rust-Oleum #1069, Primer and 2 coats of: Fuller O'Brien #312-74, Hi-Way Yellow, or Rust-Oleum #7644, Federal Safety Yellow, or Pervo #2420, Fire Hydrant Yellow
- h. Blowoff Hydrants - 1 coat of Rust-Oleum #1060 Primer and 2 coats Rustoleum #7644, Federal Safety Yellow, Pervo #2420, or Fuller O'Brien #312-74, Hi-Way Yellow. (Top of Hydrant) Fuller

- O'Brien #312-80, National Blue Paint.
- i. Valves and Piping - Koppers #50, or City approved equal.
 - j. Curb Marking - Traffic Blue #6703, Vista Paint or City approved equal.
 - k. Miscellaneous Appurtenances - "Tnemec" Pota-Pox Plus series 140F epoxy coating, or City approved equal.
 - l. All paint and protective coatings shall be holiday free.
 - m. Suppliers
 - (1) Pervo Paint, Los Angeles - (213) 758-1147
 - (2) Fuller O'Brien, Fullerton - (714) 992-0720
 - (3) Vista Paint, Riverside - (951) 689-2501
 - (4) Decratrend, San Bernardino - (909) 888-3211

All the above paints, with the exception of red and black primer shall be **industrial strength**. A minimum thickness of 5 mils shall be attained after the final paint coat has dried.

~~**SECTION 250 - VALVING, APPURTENANCES AND MISCELLANEOUS MATERIALS**~~

~~**250-1 NUTS AND BOLTS.**~~

~~Where nuts and bolts are to be furnished for fastening flanged joints, they shall be hexagonal head machine bolts and hexagonal nuts. Steel Standard ASTM A-307 Grade B; dimensions of bolts and nuts, ANSI B-18.2.1; threads of bolts and nuts, ANSI B1.1 coarse thread series, Class 2A fit on bolts and Class 2B fit on the nuts; nuts and bolts shall be cadmium plated conforming to ASTM A-165, type TS; electroplated zinc per ASTM B-633, SC 1; or hot dip galvanized per ASTM A-153, Class C. Minimum bolt lengths shall be three or four threads showing after completely tightened. Break-off bolts shall have a hole drilled in the shank with the dimensions of 11/32 inch (for 5/8 inch bolts) and 13/32 inch (for 3/4 inch bolts) and 2 3/8 inch deep and shall be supplied filled with silicone.~~

~~**250-1.1 Check Valves.** Check valves 2 1/2 inch and larger shall conform to the following:~~

- ~~1. Valves shall be of a swing type with grooved ends complying with A.W.W.A. C-508. Valve bodies for valves up to 4 inches shall be bronze. Valve bodies for valves 6 inches to 12 inches shall be ductile iron.~~
- ~~2. Valves shall be designed for a working pressure of 175 psi.~~

- ~~7. Contractor shall show valve locations using "valve installation ties" per Section 306.9.11.~~

306-9.4 VALVE BOX INSTALLATIONS

1. The Contractor shall install valve box cap, sleeves, riser and valve operator extensions of the type indicated in the Standard Drawings at each valve location shown on the Plans.
2. Operator extensions and sleeves shall be centered and set plumb over the valve operator nut.
3. Shaft extension is required where the distance between the finished ground surface to the top of the valve operator nut is greater than 3.5 feet.
4. Operator extensions shall be fitted with an AWWA 2-inch square operating nut and a tapered socket end for the valve operating nut. The extension shaft shall extend from the valve nut to within 18-inches of the finished ground surface.
5. Operator extension shaft, nut, socket and centering guide shall be painted with one coat of red primer after fabrication.
6. The valve box caps shall be set flush to 1/4" above the finished pavement surface.
7. Where valve box installations are not within paved areas, a 3 foot square by 4-inch thick concrete pad shall be formed around the cap, set flush with finish elevation.
8. The valve box cap shall be painted per Section 310.
9. Valve box caps shall fit securely in the slip sleeves, to prevent displacement due to traffic loads.

306-9.4.1 Valve Box Adjustments

Valve boxes within an area to be paved will be set to the finished pavement grade by the Contractor after paving of the street. Repaving required as the result of adjusting the valve boxes to grade shall be the responsibility of the Contractor.

~~306-9.5 BLOW-OFF INSTALLATIONS~~

- ~~1. The Contractor shall install blow-off installations at the locations shown on the plans in accordance with Standard Drawings.~~
- ~~2. Temporary blow-offs may be used for pressure testing, flushing and disinfecting the main. City Forces will remove the temporary blow-off when making the tie-in to the existing City System. Temporary blow-off installation materials will be returned to the Contractor at the job site.~~

- ~~6. Saddles shall be used for all service connections of 2 inches or less.~~
- ~~7. Where meter boxes are located in sidewalk areas, a meter spacer and meter coupling shall be installed and a sleeve of sufficient diameter shall be laid beyond the sidewalk prior to sidewalk installation.~~
- ~~8. Due to a change in the Driveway (D/W) Approach Standard 302 by the PW department to conform with ADA requirements, the placement of the meter boxes are revised as follows:~~

~~Where the meter box falls with a D/W approach and the sidewalk being installed is curb sidewalk, (this is Type Curb-I typical section), the front of the meter box needs to be placed 3 feet from the back of the curb. This will allow the box to fit in the flat sidewalk area of the D/W. The service run and angle ball meter stop will need to be set back accordingly. Ultimately, the Public Works inspector will need to make final acceptance of these installations.~~

306-9.13 PRECAST VAULT, MANHOLE & METER BOX INSTALLATIONS

1. The Contractor shall install precast vaults, manholes and meter boxes at the locations shown on the Plans or Standard Drawings.
2. The Plans or Standard Drawing shall indicate the station, location and size of the installation.
3. Cement for vault and manhole footings shall be Type II. Concrete shall be 480-B-2000, and poured against undisturbed or well compacted soil to the dimensions shown on the Plans or Standard Drawings.
4. All vaults and meter boxes located in sidewalk or paved areas shall be set flush with the existing surface.

~~306-9.14 CONNECTIONS TO EXISTING MAINS~~

~~The Water Division will make all wet tap connections to existing mains (except large services installed by contractor) and make closures thereto unless otherwise shown on the Plans.~~

~~The Contractor shall verify the station, offset, and depth of the existing connection prior to laying the last 100 feet toward that station.~~

~~The Contractor shall make necessary cut to fit, adjusting line and grade as necessary.~~

~~After the chlorination and pressure tests have passed inspection, but prior to final paving, the system connection closures will be made by the City of Riverside Field Forces unless specified otherwise on the plans. **If City Forces have to make corrections to the line or**~~

~~grade to make the system connections then all labor and materials to perform the work shall be charged to the Contractor.~~

~~306-10 PROTECTIVE COATING~~

~~All ferrous metal fittings and joints (valves, couplings, flanges, etc.) in contact with the soil shall be coated with one coat of Koppers #50 bitumastic after assembly to the main line pipe and shall be wrapped with two layers of 8 mil polyethylene which shall be secured to the pipe with two inch wide Scotchwrap #50 or City approved equal.~~

~~306-11 FIRE HYDRANT INSTALLATIONS~~

- ~~1. The Contractor shall install fire hydrants at the locations shown on the Plans in accordance with Standard Drawings.~~
- ~~2. The Plans shall indicate the outlet station, type, direction and location of the fire hydrant assembly.~~
- ~~3. The lateral between the outlet valve and the Fire Hydrant bury shall be a continuous run of all ductile iron pipe with approved joints.~~
- ~~4. The Contractor shall use non-breakaway flanged spools to adjust the Fire Hydrant to proper grade.~~
- ~~5. Fire Hydrant shall be painted per Section 310.~~
- ~~6. The bolts used to attach the Fire Hydrant to bury shall be counterbore knock off bolt type. Bolts shall be installed with threads pointing up and pack the counter bore with no oxide grease, silicon, or approved equal.~~
- ~~7. The number and position of guard posts will be shown on the plans.~~
- ~~8. Warf Head hydrants shall be installed only with the approval of the Engineer.~~
- ~~9. Contractor shall install hydrant markers in conformance with State of California, Department of Transportation State Standard Specifications, Section 85, and Standard Drawing No. C.W.D. 700.~~

310 PAINTING

310-1 General

310-1.5 Painting Schedule

<u>Item</u>	<u>Color (1)</u>	<u>No. of Coats</u>
-------------	------------------	---------------------

Gate Box Caps and Rims	Red (primer)	1
	Blue	2
Air Valves	Red (primer)	1
	Green	2
Air Valve Guard Posts	Red (primer)	1
	Green	2
Vault Covers (top)	Red (primer)	1
	Aluminum	2
Guard Posts	Red (primer)	1
	Yellow	2
Vault Covers (underside)	Black	2
Fire Hydrants	Red (primer)	1
	Yellow	2
Fire Hydrant Guard Posts	Red (primer)	1
	Yellow	2
Manhole Covers	Red (primer)	1
	Green	2
Meter Piping and Valves	Black	2
Witness Posts	Sealant	1
	White	2

(1) Refer to Section 210 for description of color designation, approved manufacturers, and thickness of final application.

310-5.6 Painting Traffic Striping, Pavement Markings and Curb Markings

Striping and pavement markings for temporary detours and pavement restoration, shall conform to the provision of Sections 210, "Paint and Protective Coatings". Pavement Markings and Curb Markings" of the Standard Specifications and these special provisions. Striping and marking shall be under the direction of the City of Riverside Public Works, Chief Construction Inspector, phone (951) 826-5346.

The Contractor shall provide for temporary or permanent striping on the same day the street is paved or resurfaced. Under no circumstances shall the traveled way be without lane delineation.

Permanent and/or temporary striping shall be placed on the pavement surface within 48 hours after notification by the Engineer. Pursuant to this requirement, the Contractor's attention is directed to Section 7-10 "Public Convenience And Safety" of the Standard Specifications.

As an option, reflective adhesive tape may be utilized for temporary striping. For dashed four (4) inch lane lines a minimum three (3) foot strip of tape shall be placed at twelve (12) foot intervals (gaps) regardless of the posted speed for the zone requiring temporary striping.

The Contractor shall be required to remove all reflective adhesive tape applied to the pavement surface.

Temporary striping shall also include the designation (paint or tape) of crosswalks at signalized intersections. Implementation shall be as directed by the Engineer.

If the job is suspended because of weather or for any other reason, the Contractor shall be responsible for applying temporary striping as specified herein, and to maintain (repaint/retape) the temporary striping as directed by the Engineer. Said Section 7-10.1 of the Standard Specifications will apply.

In addition to the requirements of Section 310-5.6.8 "Application of Paint" for bituminous seal coats, the Contractor shall apply two coats of paint to any new pavement surface. There shall be a minimum of 2 days between applications. This requirement shall not apply when painting over existing paint and/or existing untreated pavement surface. The two (2) applications requirement applies to permanent striping and pavement markings.

"Cat tracking" (premarking) for permanent and temporary striping shall consist of placing spots of paint not more than 3 inches in width and not more than 5 feet apart along the line established. Paint for "cat tracks" shall be the same as that used for the traffic stripe for which it is placed. If painting is scheduled on the same day as "cat tracking", the spray can method may be used in lieu of the requirements specified herein.

The Contractor is responsible for a straight layout with smooth long radius curves with no abrupt radius changes. Connecting curves shall be an appropriate radius to provide for smooth traffic flow at prevailing speeds. All transitions shall be approved by the Public Works Inspector prior to painting. Angle points and off-sets in the striping will not be allowed.

Striping details not shown on the plans or specified in Sec. 310-5.6.4 shall be done in conformance with the Traffic Manual as published by Caltrans.

All paint premarking ("cat tracking") for permanent striping is subject to the approval of the Public Works inspector prior to painting. The rope used for premarking shall have a minimum length of 500 feet of continuous fabrication, or longer if needed for smooth layout.

Drips, overspray or improper markings shall be immediately removed from the pavement surface by blast cleaning or methods approved by the Public Works Inspector at the Contractor's expense.

The lengths of the gaps and individual stripes that form broken traffic stripes shall not deviate more than 3 inches from the lengths shown on the plans.

The lengths of the gaps and individual stripes shall be of such uniformity throughout the entire length of each broken traffic stripe that a "suitable" striping machine will be able to repeat the pattern and superimpose additional coats of paint upon the traffic stripe being painted.

Where the traffic stripe is of such a nature, either due to configuration or location, as to render the striping machine unsuitable for use, traffic paint and glass spheres may be applied by other approved methods and equipment. The Public Works inspector will determine if the striping machine is unsuitable for a particular use.

All stencils and templates shall conform in configuration and size to the state of California, Department of Transportation "legends."

The Public Works Inspector has the discretion to require random testing and sampling of the items covered herein. 10 percent, or greater, failure of samples of items shall be cause for rejection.

310-5.7 Traffic Stripe and Pavement Marker Removal

Temporary construction zone traffic stripes and pavement markings shall be removed as directed by the Engineer.

Removal of traffic striping shall be accomplished through the method of wet "sandblasting" or other approved methods. The sandblasting operation shall be continued until all of the stripes, markers, debris or other materials are removed to the satisfaction of the Engineer. When sandblasting within 10 feet of a lane occupied by public traffic, the residue, including dust, shall be removed immediately after contact between the sand and the surface being treated. Striping equipment shall meet all applicable standards of the United States Environmental Protection Agency and the Riverside County Air Pollution Control District.

Areas of removed striping shall be feathered as not to leave a distinct shape of the removed painted item.

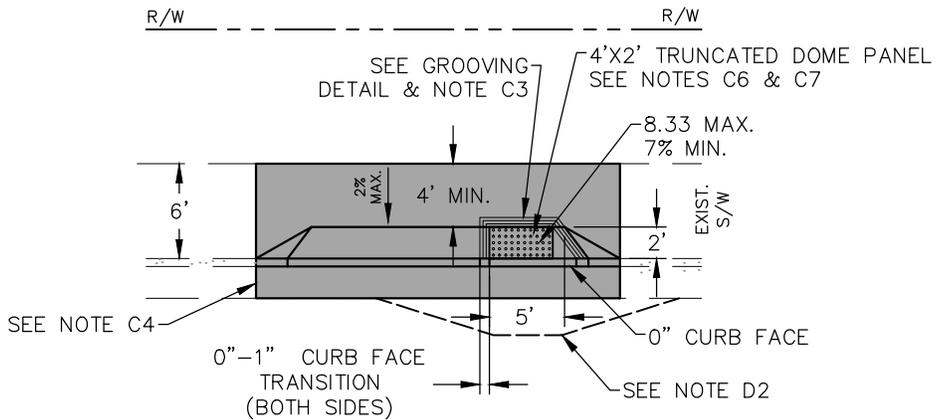
Measurement of the double yellow centerline shall be 0.667 square foot per linear foot.

Beach sand containing salt or excessive amounts of silt will not be allowed.

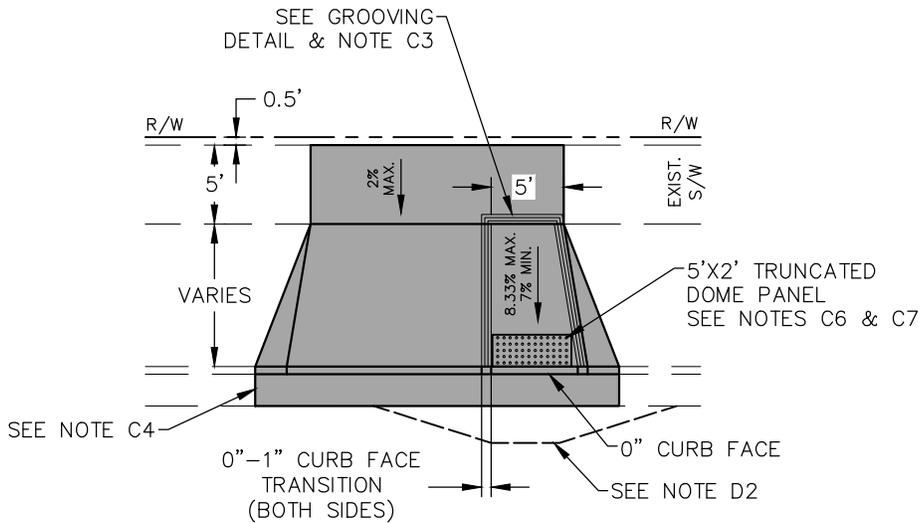
The development of a water supply and all water required for the striping work and its application shall be by a method approved by the Engineer. All equipment used for the application of water shall be equipped with a positive means of shutoff. If the Contractor elects to use water from the City water system, he shall make arrangements with the Public Utilities Department of the City of Riverside and pay for all water used and comply with NPDES requirements.

313 "AS BUILT" DRAWINGS

~~After construction has been completed, and before pressure test can be scheduled, "As Built" drawings shall be submitted by the contractor showing pipe size, material, class and/or pipe thickness, the actual locations (invert elevations) and stations of all valves, tees, and special fittings. Service connections to the main are stationed on pipeline stationing. The Contractor shall show lengths of installed services and stationing of service corp stops, and note any deviations from the original plans on the "As Built" drawings. "As Built" drawings shall be prepared on a clean print and shall be legibly marked in red ink.~~



TYPE VII @ MID-BLOCK DWY
 W/ CURB SIDE SIDEWALK
 (REFER TO STD. DWG. 302 FOR DWY)
 (SEE STD. DWG. 304 FOR NOTES REFERENCED HEREON)



TYPE VII @ MID-BLOCK DWY
 W/ PROPERTY LINE SIDEWALK
 (REFER TO STD. DWG. 302 FOR DWY)
 (SEE STD. DWG. 304 FOR NOTES REFERENCED HEREON)

CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT
PEDESTRIAN RAMP TYPE VII
TO ACCOMPANY CITY STD. 304 Sheet 1 of 1

CITY OF RIVERSIDE
 BEST MANAGEMENT PRACTICES
 FOR TYPICAL CONSTRUCTION ACTIVITIES

The discharge of any pollutants into the City storm drain system or natural drainage areas is prohibited per Section 14 of the City Municipal Code and the Riverside County Area-Wide Municipal Storm water permit issued by the State Water Resources Control Board. Drainage from construction sites and construction activities is prohibited from entering the City storm drain system and natural drainage areas. Any violations of the above provisions are subject to fines by the City and by the State Water Resources Control Board.

The following best management practices (BMPs) are to be implemented for the construction activities listed. These BMPs are considered to be a minimum of the activities necessary to protect the City storm drain system. The contractor may be required to implement further BMPs to assure no pollutant discharges enter the storm drain system. The contractor needs to work closely with the City inspector to identify any further BMPs, which may be necessary.

CONSTRUCTION ACTIVITIES	BEST MANAGEMENT PRACTICE
Portable Toilets	<ul style="list-style-type: none"> - The toilets may not be located in the street right of way. Perimeter protection must be placed around the toilet area to contain any drainage from toilet cleaning activities.
Sawcutting, grinding, paving	<ul style="list-style-type: none"> - Debris from these types of activities are to be swept or vacuumed daily (at a minimum) and disposed of at a landfill. - Drainage from these activities shall be contained or the catch basins down stream of these activities will be protected with sand bags. - Drainage contained shall be vacuumed daily (at a minimum) and the remaining debris disposed of at a landfill.
Concrete wash outs	<ul style="list-style-type: none"> - A washout/spoil area on site must be identified that will contain the concrete washout wastewater. The debris shall be removed at the end of the day, or; - The washout must be contained and removed off site daily.
Trenching	<ul style="list-style-type: none"> - Perimeter protection of the trenching spoil or trench area itself must be provided to prevent any erosion from the site, and - Catch basin protection must be provided to prevent drainage from entering the storm

	<p>drain system.</p> <ul style="list-style-type: none"> - Any sediment or debris shall be swept up daily at a minimum.
Spoil piles	<ul style="list-style-type: none"> - Spoil piles with the potential for draining off-site shall have perimeter erosion control and may need temporary cover.
Tracking	<ul style="list-style-type: none"> - Tracking pads are required for larger jobs as well as a continual sweeping plan. - Smaller jobs must sweep daily.
Vehicle maintenance	<ul style="list-style-type: none"> - Regularly scheduled vehicle maintenance activities such as oil changes and fluid refills shall be conducted off-site. - Any chemicals leaking from faulty equipment will be contained and repaired immediately. - A spill response plan must be identified that properly contains and disposes of any potential spill or leaks of hazardous materials including at a minimum oil, grease, hydraulic fluid, etc.
Vehicle washing	<ul style="list-style-type: none"> - Vehicle washing shall not occur on site
Sloped areas	<ul style="list-style-type: none"> - Sloped areas shall at a minimum be protected by perimeter erosion control. Larger slopes may also need erosion control at the top of slopes. These BMPs shall stay in place and be maintained until after the landscaping has completely been established.

Contractor Name/Logo

NOTICE OF CONSTRUCTION

Project Name – Bid Number

Contractor Name has been contracted by the City of Riverside Public Works Department to construct the **Project Name and Bid Number**.

List type of work - example below;

The project consists of removal and replacement of damaged curb, gutter, sidewalk, driveway approaches, cross gutters, ADA non-compliant wheelchair ramps and construction of new wheelchair ramps where needed, in addition, work will include the rehabilitation of the asphalt pavement including striping, markings and signing in your area.

List locations and dates example below;

Insert Location/s
Insert Working Dates

Temporary No Parking signs will be posted at least 48 Hours in advance of the actual work on your street. Dates and times that parking is restricted will also be posted. Access for emergency vehicles, pedestrians and traffic will be maintained at all times. Also, trash pick-up service will not be impacted. We ask that you refrain from running excess water in the gutters during construction as it may delay the work.

Please keep children and pets away from construction zones. Please note that asphalt paving products contain oil and are very hot and sticky to the touch when applied. Once asphalt is placed it needs ample time to cool down.

Should you have any questions, please call our **Contractor Name** at **XXX XXX-XXXX** or if your concern is of an emergency nature please call **Contact Name** at **XXX XXX-XXXX** 24 hours. Thank you in advance for your cooperation during construction. We look forward to completion of a successful project.



City of Riverside

NOPC # _____

FOR CITY USE ONLY	
Received by _____	Date _____

NOTICE OF POTENTIAL CLAIM

TO	CONTRACT BID NUMBER	DATE
----	---------------------	------

This is a Notice of Potential Claim for additional compensation pursuant to Section 3-7 of the Special Provisions.

The particular circumstances of this potential claim are described in detail as follows:

The reasons for which I believe additional compensation and/or time may be due are:

The nature of the costs involved and the amount of the potential claim are described as follows:
(If accurate cost figures are not available, provide an estimate, or describe the types of expenses involved.)

The undersigned originator (Contractor or Subcontractor as appropriate) certifies that the above statements are made in full cognizance of the California False Claims Act, Government Code sections 12650-12655. The undersigned further understands and agrees that this potential claim to be further considered unless resolved, must be restated as a claim in response to the City's proposed final estimate in accordance with Section 9-4 of the Standard Specifications.

SUBCONTRACTOR or CONTRACTOR
(Circle One)

(Authorized Representative)

For subcontractor notice of potential claim

This notice of potential claim is acknowledged and forwarded by

PRIME CONTRACTOR

(Authorized Representative)

EXHIBIT "F"

FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT (FFATA)

The Federal Funding Accountability and Transparency Act (FFATA or "Transparency Act") was signed on September 26, 2006. The FFATA legislation requires information on federal awards (federal financial assistance and expenditures) be made available to the public via a single, searchable website, which is www.USASpending.gov.

The FFATA Subaward Reporting System (FSRS) is the reporting tool Federal prime awardees (i.e. prime contractors and prime grants recipients) use to capture and report subaward and executive compensation data regarding their first-tier subawards to meet the FFATA reporting requirements. Prime contract awardees will report against sub-contracts awarded and prime grant awardees will report against sub-grants awarded. The sub-award information entered in FSRS will then be displayed on www.USASpending.gov associated with the prime award furthering Federal spending transparency.

The Transparency Act requires information disclosure concerning entities receiving Federal financial assistance through Federal awards such as Federal contracts, sub-contracts, grants, and sub-grants.

Specifically, the Transparency Act's section 2(b)(1) requires the City to provide the following information about each sub-award(s) greater than \$25,000:

- Name of the entity receiving the award;
- Amount of the award;
- NAICS code for contracts / CFDA program number for grants;
- Information on the award including purpose of the funding action;
- Location of the entity receiving the award and primary location of performance under the award;
- Unique identifier (DUNS #) of the entity receiving the award and the parent entity of the recipient;
- Names and total compensation of the five most highly compensated officers of the entity;

OR, the requirement will also apply if an entity, in the preceding fiscal year, received 80 percent or more of its annual gross revenues in Federal awards; and \$25,000,000 or more in annual gross revenues from Federal awards; and the public does not have access to this information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986.

THE TRANSPARENCY ACT REQUIRES THAT ANY FEDERAL AWARD OR SUB-AWARD RECIPIENT, FOR AN AMOUNT GREATER THAN \$25,000, IS REQUIRED TO PROVIDE THE INFORMATION SET FORTH IN THE (ABOVE) BULLET LIST. ACCORDINGLY, PLEASE COMPLETE THE FOLLOWING:

I, _____ (print name), hereby agree that:

I read and understand the information provided above.

I acknowledge and agree that:
(Please check one of the following)

_____ (agency name) does not meet the above threshold requiring names and total compensation of the five most highly compensated officers of the entity if the entity.

_____ (agency name) does meet the above threshold* requiring names and total compensation of the five most highly compensated officers of the entity if the entity.

*If agency meets the above threshold, the agency MUST complete the section below identifying the names and total compensation of the five most highly compensated officers of the entity, signed and dated by the one of the following: President; Executive Director; CEO; Board Chairperson; Finance Director; CFO; or Treasurer.

	Names of Executive	Total Compensation
1.		
2.		
3.		
4.		
5.		

Signature of President/Executive Director/Board Chair

Date

Printed Name of President/Executive Director/Board Chair

EXHIBIT C

CDBG ATTACHMENTS

- **C-1: SPECIAL EQUAL OPPORTUNITY PROVISIONS**
- **C-2: FEDERAL LABOR STANDARDS PROVISIONS**
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SPECIAL EQUAL OPPORTUNITY PROVISIONS

A. Activities and Contracts Not Subject to Executive Order 11246, as Amended

(Applicable to Federally assisted construction contracts and related subcontracts of \$10,000 and under)

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor shall take affirmative action to ensure that applicants for employment are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
2. The Contractor shall post in conspicuous places, available to employees and applicants for Employment, notices to be provided by Contracting Officer setting forth the provisions of this nondiscrimination clause. The Contractor shall state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
3. Contractors shall incorporate foregoing requirements in all subcontracts.

B. Executive Order 11246 (contracts/subcontracts above \$10,000)

1. Section 202 Equal Opportunity Clause

During the performance of this contract, the Contractor agrees as follows:

- a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment, or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous place, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- b. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration without regard to race, color, religion, sex, or national origin.
- c. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice to be provided to the Contract Compliance Officer advising the said labor union or workers' representatives of the Contractor's commitment under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- d. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- e. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and others.
- f. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- g. The Contractor will include the provisions of the sentence immediately preceding paragraph (1) and the provision of paragraphs (1) through (7) in every subcontract or purchase order unless excepted by rules, regulations, or orders of the Secretary of labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Department may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Department, the Contractor may request the United States to enter into such litigation to protect the interest of the United States.

2. Notice or Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246). (Applicable to contracts, subcontracts exceeding \$10,000)

- a. The Offertory's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- b. The goals and timetable for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation (See Vol. 45, No. 194, Federal Register, pages 65976-65991, 10/3/80)

Goals for female participation (6.9%, See Vol. 45, No. 251, Federal Register, pages 85750-85751, 12/3/80)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area. If the Contractor performs construction work in a geographic area located outside of the covered area, it shall apply the goals established for such geographic area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its Federally involved and non-Federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.d (a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- c. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.
- d. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed, giving the State, County, and City, if any).

3. Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)

a. As used in these specifications:

- (1) "Covered area" means the geographical area described in the solicitation from which this contract resulted;

"Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

- (2) "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

- (3) "Minority" includes:

(4)

- (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
- (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or Origin, regardless of race);
- (iii) Asian and Pacific Islander (all persons having origins in Any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

- (iv) American Indian or Alaskan native (all persons having Origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identifications).
 - b. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
4. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations of all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades, which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees, The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
 5. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing contracts in geographical areas where they do not have a Federal or Federally assisted construction contract shall apply the minority and female goals established for the geographic area where the contract is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
 6. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

7. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
8. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee program relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meeting, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to school with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignment and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and supplier, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
9. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation shall not be a defense for the Contractor's noncompliance.

10. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
11. The Contractor shall not use the goals and timetables or affirmative actions standards to discriminate against any person because of race, color, religion, sex, or national origin.
12. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
13. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
14. The Contractor, in fulfilling its obligations under these specifications, shall implement Specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
15. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee, the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number where assigned, social security number, race, sex, status (e.g. mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and location at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
16. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

C. Certification of Non-segregated Facilities (Over \$10,000)

By the submission of this bid, the bidder, Offertory, applicant or subcontractor certifies that he/she does not maintain or provide for his/her establishments, and that he/she does not permit employees to perform their services at any location, under his/her control, where segregated facilities are maintained. He/she certifies further that he/she will not maintain or provide for employees any segregated facilities at any of his/her establishments, and he/she will not permit employees to perform their services at any location under his/her control where segregated facilities are maintained. The bidder, Offertory, applicant or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause of this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, transportation and housing facilities provided for employees which are segregated on the basis of race, color, religion, or are in fact segregated on the basis of race, color, religion, or otherwise (parking lots, drinking fountains, recreation or entertainment areas). He/she further agrees that (except where he/she has obtained identical certifications from proposed subcontractors for specific time periods) he/she will obtain identical certification from proposed subcontractors prior to the award of subcontract exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause; that he/she will retain such certifications in his/her files; and that he/she will forward the following notice to such proposed subcontractors (except where proposed subcontractors have submitted identical certifications for specific time periods).

D. Civil Rights Act of 1974

Under Title VI of the Civil Rights Act of 1974, no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

E. Section 109 of the Housing and Community Development Act of 1974

No person in the United States shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title.

F. "Section 3" Compliance in the Provision of Training, Employment and Business Opportunities

1. The work to be performed under this contract is on a project assisted under the State CDBG program which provides Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project.

2. The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR 134, and all applicable rules and orders of the Department issued there under prior to the execution of this contract. The parties to this contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.
3. The contractor will send to each labor organization or representative or workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising said labor organization or workers' representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.
4. The contractor will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR part 135. The contractor will not subcontract with any subcontractor where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.
5. Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued hereunder prior to the execution of the contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its contractors or subcontractors, its successors and assigns to those sanctions specified by the grant or loan agreement or contract through which federal assistance is provided, and to such sanctions as are specified by 24 CFR part 135.

G. Age Discrimination Act of 1975

No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits or, or be subjected to discrimination under, any program or activity receiving Federal financial assistance.

H. Section 504 Handicapped (if \$2,500 or over) Affirmative Action for Handicapped Workers

1. The contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals

Without discrimination based upon their physical or mental handicap in all employment practices such as the following: layoff or termination, rates of pay or other forms of, compensation and selection for training, including apprenticeship.

2. The contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of labor issued pursuant to the Act.
3. In the event of the contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of labor issued pursuant to the Act.
4. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.
5. The contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the contractor is bound by the terms of Section 503 of the Rehabilitation Act of 1973, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.
6. The contractor will include the provisions of this clause in every subcontract or purchase order of \$2,500 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to Section 503 of the Act, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

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Rev. 11/1/05

Federal Labor Standards Provisions

U.S. Department of Housing and Urban Development Office of Labor Relations

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) **Minimum Wages.** All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. **Withholding.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract in the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) **Payrolls and basic records.** Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/eisa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. **Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. **Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. **Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

9. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) **Certification of Eligibility.** By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(e)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(e)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. **Complaints, Proceedings, or Testimony by Employees.** No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. **Contract Work Hours and Safety Standards Act.** The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) **Withholding for unpaid wages and liquidated damages.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assiated contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1928 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

SPECIAL CONDITIONS PERTAINING TO HAZARDS SAFETY STANDARDS AND ACCIDENT PREVENTION

A. Lead-Based Paint Hazards

(Applicable to contracts for construction or rehabilitation of residential structures)

The construction or rehabilitation of residential structures is subject to all HUD Lead-Based Paint regulations including The Lead-Based Paint Poisoning Prevention Act of 1971, The Residential Lead-Based paint Hazard Reduction Act of 1992, and 24 CFR Part 35 "Requirements for Notification, Evaluation and Reduction of Lead-Based paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance", effective September 15, 2000. In particular, but not limited to, the Consultant shall comply with the provisions for the notifications, evaluations, reductions, and abatement of lead-base hazards under Subpart J of said regulation pertaining to rehabilitation.

B. Use of Explosives (Modify as Required)

When the use of explosives is necessary for the prosecution of the work, the Consultant shall observe all local, state and Federal laws in purchasing and handling explosives. The Consultant shall take all necessary precaution to protect completed work neighboring property, water lines, or other underground structures. Where there is danger to structures or property from blasting, the charges shall be reduced and the material shall be covered with suitable, timber, steel or rope mats.

The Consultant shall notify all owners of public utility property of intention to use explosives at least eight hours before blasting is done, close to such property. Any supervision or direction of use of explosives by the Engineer does not in any reduce the responsibility of the Consultant or his Surety for damages that may be caused by such use.

C. Danger Signals and Safety Devices (Modify as Required)

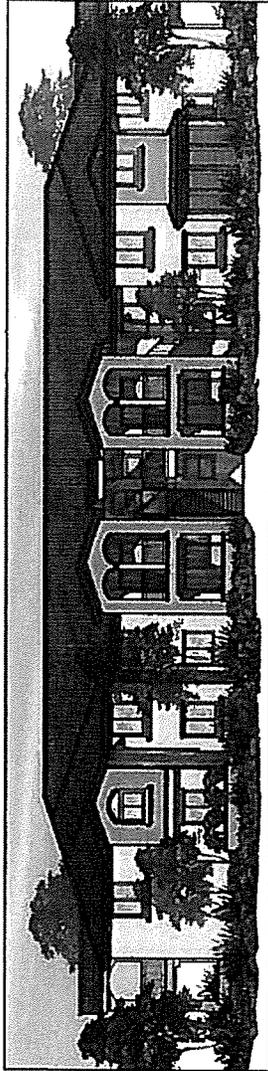
The Consultant shall make all necessary precautions to guard against damages to property and injury to persons. He shall put up and maintain in good condition, sufficient red or warning lights at night, suitable barricades and other devices necessary to protect the public. In case the Consultant fails or neglects to take such precautions, the Owner may have such lights and barricades installed and charge the cost of this work to the Consultant. Such action by the Owner does not relieve the Consultant of any liability incurred under these specifications or contract.

INVESTING IN OUR FUTURE



City of Arts & Innovation

Vintage at Snowberry Senior Apartments



- Affordable senior housing development • 224 apartments
- Estimated completion Spring 2012

Funded by: Redevelopment Housing Fund and the City of Riverside - U.S. Department of Housing and Urban Development
Home Investment Partnerships Program - Equal Opportunity - Affirmative Action Employer
Executive Order 11246 and Section 3 Housing and Urban Development Act of 1968

WARD 5 PROJECT
COUNCILMEMBER

CHRIS MAC ARTHUR

MAYOR

RONALD O. LOVERIDGE

COUNCIL MEMBERS

MIKE GARDNER

ANDY MELENDREZ

RUSTY BAILEY

PAUL DAVIS

NANCY HART

STEVE ADAMS

CITY MANAGER

BRADLEY J. HUDSON

REDEVELOPMENT AT WORK

PROJECT AREA TRAINEES, EMPLOYEES AND BUSINESSES

The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in, the area of the project.

The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR Part 135, and all applicable rules and orders of the Housing and Urban Development Department issued thereunder prior to the execution of this contract. The parties to this contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.

The Contractor shall send to each labor organization or representative of workers with which Contractor has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers= representative of Contractor=s commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

Contractor shall include this Section 3 clause in every subcontract for work in connection with the project and shall, at the direction of the City, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR Part 135. Contractor shall not subcontract with any subcontractor where Contractor has notice or knowledge that the latter has been found in violation of regulations under 24 CFR Part 135 and shall not let any subcontract unless the subcontractor has first provided Contractor with a preliminary statement of ability to comply with the requirements of these regulations.

Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Housing and Urban Development Department issued thereunder prior to the execution of the contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the City, its successors, and assigns. Failure to fulfill these requirements shall subject the City, its successors and assigns, and Contractor and Contractor=s subcontractors, to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided, and to such sanctions as are specified by 24 CF Part 135.

NOTE: The project area is defined as the city limits of the City of Riverside, California.

NOTICE TO ALL EMPLOYEES



Working on Federal or Federally Financed Construction Projects

MINIMUM WAGES

You must be paid not less than the wage rate in the schedule posted with this Notice for the kind of work you perform.

OVERTIME

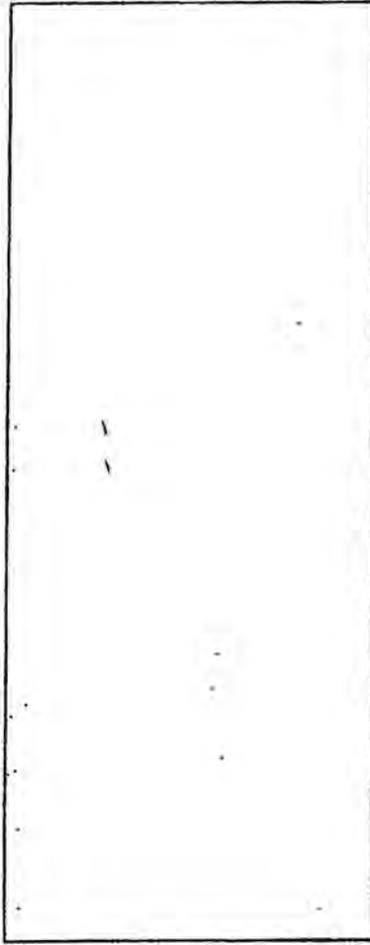
You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 a week. There are some exceptions.

APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

PROPER PAY

If you do not receive proper pay, contact the Contracting Officer listed below:



or you may contact the nearest office of the Wage and Hour Division, U.S. Department of Labor. The Wage and Hour Division has offices in several hundred communities throughout the country. They are listed in the U.S. Government section of most telephone directories under:

**U.S. Department of Labor
Employment Standards Administration**

WH Publication 1321
Revised January 1986

★ U.S. GOVERNMENT PRINTING OFFICE: 1985-209-856

EXHIBIT C-6

U.S. Department of Labor
Employment Standards
Administration
Wage and Hour Division



NOTICIA A TODOS EMPLEADOS



Trabajo en Proyectos de Construcción Federales o Financiados Federalmente

SALARIO MINIMO

Usted debe ser pagado no menos del salario listado en la programación acompañando esta NOTICIA por el tipo de trabajo que usted hace.

TIEMPO EXTRA (OVERTIME)

Usted debe ser pagado no menos que tiempo y medio de su salario básico por todas horas trabajadas arriba de 40 en una semana. Hay algunas excepciones.

APRENDIZES

Salario de aprendiz se aplica solamente a aprendizes apropiadamente registrados en programas de aprendizaje aprobados por agencias Estatales o Federales.

UELDO PROPIADO

Si no recibe el seuld apropiado comuníquese con el Agente de Contratos nombrado abajo. Se habla español.

Gwendolyn P. Tolbert, Director
(213) 894-8000, Ext. 3200

O comuníquese con la oficina más cercana de la División de Salario y Hora del Departamento de Asuntos Laborales de los Estados Unidos (Wage and Hour Division, U.S. Department of Labor). La División de alario y Hora tiene oficinas en cienes de comunidades por todo el país. Ellas estan listadas en la sección de gobierno de los Estados Unidos en la mayoría de directorios telefónicos bajo:

**U.S. Department of Labor
Employment Standards Administration**

U.S. Department of Labor
Employment Standards
Administration
Wage and Hour Division



EXHIBIT C-8

Federal (Davis Bacon) Wage Decision

The most current Federal Wage Decision in effect 10 days prior to the bid opening date must be appended to the Bid Specification and Contract.

The most current Federal Wage Decision in effect 10 days prior to the bid opening date must be appended to the Bid Specification and Contract

Federal (Davis Bacon) Wage Decision

EXHIBIT C-8

General Decision Number: CA150036 09/04/2015 CA36

Superseded General Decision Number: CA20140036

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

County: Riverside County in California.

BUILDING CONSTRUCTION PROJECTS; DREDGING PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/02/2015
1	01/16/2015
2	01/23/2015
3	02/20/2015
4	03/27/2015
5	05/08/2015
6	06/19/2015
7	07/10/2015
8	07/17/2015
9	07/24/2015
10	07/31/2015
11	08/07/2015
12	08/14/2015
13	09/04/2015

ASBE0005-002 06/30/2014

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems).....	\$ 35.44	19.36
Fire Stop Technician (Application of Firestopping Materials for wall openings and penetrations in walls, floors, ceilings and curtain walls).....	\$ 24.34	16.09

ASBE0005-004 06/24/2013

	Rates	Fringes
Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)....	\$ 16.95	10.23

BOIL0092-003 10/01/2012

	Rates	Fringes
BOILERMAKER.....	\$ 41.17	28.27

* BRCA0004-011 05/01/2015

	Rates	Fringes
BRICKLAYER; MARBLE SETTER.....	\$ 37.15	13.02

*The wage scale for prevailing wage projects performed in Blythe, China lake, Death Valley, Fort Irwin, Twenty-Nine Palms, Needles and 1-15 corridor (Barstow to the Nevada State Line) will be Three Dollars (\$3.00) above the

standard San Bernardino/Riverside County hourly wage rate

BRCA0018-004 06/01/2014

	Rates	Fringes
MARBLE FINISHER.....	\$ 28.45	11.38
TILE FINISHER.....	\$ 23.78	9.84
TILE LAYER.....	\$ 35.14	14.33

BRCA0018-010 09/01/2013

	Rates	Fringes
TERRAZZO FINISHER.....	\$ 26.59	10.34
TERRAZZO WORKER/SETTER.....	\$ 33.63	11.13

CARP0409-001 07/01/2010

	Rates	Fringes
CARPENTER		
(1) Carpenter, Cabinet Installer, Insulation Installer, Hardwood Floor Worker and acoustical installer.....	\$ 37.35	11.08
(2) Millwright.....	\$ 37.85	11.08
(3) Piledrivermen/Derrick Bargeman, Bridge or Dock Carpenter, Heavy Frammer, Rock Bargeman or Scowman, Rockslinger, Shingler (Commercial).....	\$ 37.48	11.08
(4) Pneumatic Nailer, Power Stapler.....	\$ 37.60	11.08
(5) Sawfiler.....	\$ 37.44	11.08
(6) Scaffold Builder.....	\$ 28.55	11.08
(7) Table Power Saw Operator.....	\$ 37.45	11.08

FOOTNOTE: Work of forming in the construction of open cut sewers or storm drains, on operations in which horizontal lagging is used in conjunction with steel H-Beams driven or placed in pre- drilled holes, for that portion of a lagged trench against which concrete is poured, namely, as a substitute for back forms (which work is performed by piledrivers): \$0.13 per hour additional.

CARP0409-002 07/01/2008

	Rates	Fringes
Diver		
(1) Wet.....	\$ 663.68	9.82
(2) Standby.....	\$ 331.84	9.82
(3) Tender.....	\$ 323.84	9.82
(4) Assistant Tender.....	\$ 299.84	9.82

Amounts in "Rates" column are per day

CARP0409-005 07/01/2010

	Rates	Fringes
Drywall		
DRYWALL INSTALLER/LATHER....	\$ 37.35	11.08
STOCKER/SCRAPPER.....	\$ 10.00	6.67

CARP0409-008 08/01/2010

	Rates	Fringes
Modular Furniture Installer.....	\$ 17.00	7.41

ELEC0440-001 12/01/2014

	Rates	Fringes
ELECTRICIAN		
INSIDE ELECTRICIAN.....	\$ 36.09	22.07
INTELLIGENT TRANSPORTATION SYSTEMS		
Electrician.....	\$ 36.09	22.07
Technician.....	\$ 27.07	21.80

ZONE PAY: Zone A: Free travel zone for all contractors performing work in Zone A.

Zone B: Any work performed in Zone (B) shall add \$12.00 per hour to the current wage scale. Zone (B) shall be the area from the eastern perimeter of Zone (A) to a line which runs north and south beginning at Little Morongo Canyon (San Bernardino/Riverside County Line), Southeast along the Coachella Tunnels, Colorado River Aqueduct and Mecca Tunnels to Pinkham Wash then South to Box Canyon Road, then southwest along Box Canyon Road to Highway 195 west onto

195 south to Highway 86 to Riverside/Imperial County Line.

ELEC0440-004 05/26/2014

COMMUNICATIONS AND SYSTEMS WORK

	Rates	Fringes
Communications System		
Installer.....	\$ 28.38	4%+11.45
Technician.....	\$ 30.18	4%+11.45

SCOPE OF WORK:

Installation, testing, service and maintenance of systems utilizing the transmission and/or transference of voice, sound, vision and digital for commercial, educational, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call systems, radio page, school intercom and sound, burglar alarms, fire alarms, and low voltage master clock systems in commercial buildings. Communication Systems that transmit or receive information and/or control systems that are intrinsic to the above listed systems; inclusion or exclusion of terminations and testings of conductors determined by their function; excluding all other data systems or multiple systems which include control function or power supply; excluding installation of raceway systems, conduit systems, line voltage work, and energy management systems. Does not cover work performed at China Lake Naval Ordnance Test Station.

ELEC1245-001 06/01/2015

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer..	\$ 52.85	15.53
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment).....	\$ 42.21	14.32

(3) Groundman.....	\$ 32.28	14.03
(4) Powderman.....	\$ 47.19	14.60

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and day after Thanksgiving, Christmas Day

ELEV0018-001 01/01/2015

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 49.90	28.38

FOOTNOTE:

PAID VACATION: Employer contributes 8% of regular hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for 6 months to 5 years of service.
PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

ENGI0012-003 07/06/2015

	Rates	Fringes
OPERATOR: Power Equipment (All Other Work)		
GROUP 1.....	\$ 39.95	23.35
GROUP 2.....	\$ 40.73	23.35
GROUP 3.....	\$ 41.02	23.35
GROUP 4.....	\$ 42.51	23.35
GROUP 5.....	\$ 41.86	23.35
GROUP 6.....	\$ 41.83	23.35
GROUP 8.....	\$ 42.84	23.35
GROUP 9.....	\$ 42.19	23.35
GROUP 10.....	\$ 42.96	23.35
GROUP 11.....	\$ 42.31	23.35
GROUP 12.....	\$ 43.13	23.35
GROUP 13.....	\$ 43.23	23.35
GROUP 14.....	\$ 43.26	23.35
GROUP 15.....	\$ 43.34	23.35
GROUP 16.....	\$ 43.46	23.35
GROUP 17.....	\$ 43.63	23.35
GROUP 18.....	\$ 43.73	23.35
GROUP 19.....	\$ 43.84	23.35
GROUP 20.....	\$ 43.96	23.35
GROUP 21.....	\$ 44.13	23.35

GROUP 22.....	\$ 44.23	23.35
GROUP 23.....	\$ 44.34	23.35
GROUP 24.....	\$ 44.46	23.35
GROUP 25.....	\$ 44.63	23.35
OPERATOR: Power Equipment (Cranes, Piledriving & Hoisting)		
GROUP 1.....	\$ 41.30	23.35
GROUP 2.....	\$ 42.08	23.35
GROUP 3.....	\$ 42.37	23.35
GROUP 4.....	\$ 42.51	23.35
GROUP 5.....	\$ 42.73	23.35
GROUP 6.....	\$ 42.84	23.35
GROUP 7.....	\$ 42.96	23.35
GROUP 8.....	\$ 43.13	23.35
GROUP 9.....	\$ 43.30	23.35
GROUP 10.....	\$ 44.30	23.35
GROUP 11.....	\$ 45.30	23.35
GROUP 12.....	\$ 46.30	23.35
GROUP 13.....	\$ 47.30	23.35
OPERATOR: Power Equipment (Tunnel Work)		
GROUP 1.....	\$ 41.80	23.35
GROUP 2.....	\$ 42.58	23.35
GROUP 3.....	\$ 42.87	23.35
GROUP 4.....	\$ 43.01	23.35
GROUP 5.....	\$ 43.23	23.35
GROUP 6.....	\$ 43.34	23.35
GROUP 7.....	\$ 43.46	23.35

PREMIUM PAY:

\$3.75 per hour shall be paid on all Power Equipment Operator work on the following Military Bases: China Lake Naval Reserve, Vandenberg AFB, Point Arguello, Seely Naval Base, Fort Irwin, Nebo Annex Marine Base, Marine Corp Logistics Base Yermo, Edwards AFB, 29 Palms Marine Base and Camp Pendleton

Workers required to suit up and work in a hazardous material environment: \$2.00 per hour additional. Combination mixer and compressor operator on gunite work shall be classified as a concrete mobile mixer operator.

SEE ZONE DEFINITIONS AFTER CLASSIFICATIONS

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bargeman; Brakeman; Compressor operator; Ditch Witch, with seat or similar type equipment; Elevator

operator-inside; Engineer Oiler; Forklift operator
(includes loed, lull or similar types under 5 tons;
Generator operator; Generator, pump or compressor plant
operator; Pump operator; Signalman; Switchman

GROUP 2: Asphalt-rubber plant operator (nurse tank operator);
Concrete mixer operator-skip type; Conveyor operator;
Fireman; Forklift operator (includes loed, lull or similar
types over 5 tons; Hydrostatic pump operator; oiler crusher
(asphalt or concrete plant); Petromat laydown machine; PJU
side dum jack; Screening and conveyor machine operator (or
similar types); Skiploader (wheel type up to 3/4 yd.
without attachment); Tar pot fireman; Temporary heating
plant operator; Trenching machine oiler

GROUP 3: Asphalt-rubber blend operator; Bobcat or similar
type (Skid steer); Equipment greaser (rack); Ford Ferguson
(with dragtype attachments); Helicopter radioman (ground);
Stationary pipe wrapping and cleaning machine operator

GROUP 4: Asphalt plant fireman; Backhoe operator (mini-max or
similar type); Boring machine operator; Boxman or mixerman
(asphalt or concrete); Chip spreading machine operator;
Concrete cleaning decontamination machine operator;
Concrete Pump Operator (small portable); Drilling machine
operator, small auger types (Texoma super economatic or
similar types - Hughes 100 or 200 or similar types -
drilling depth of 30' maximum); Equipment greaser (grease
truck); Guard rail post driver operator; Highline cableway
signalman; Hydra-hammer-aero stomper; Micro Tunneling
(above ground tunnel); Power concrete curing machine
operator; Power concrete saw operator; Power-driven jumbo
form setter operator; Power sweeper operator; Rock Wheel
Saw/Trencher; Roller operator (compacting); Screed operator
(asphalt or concrete); Trenching machine operator (up to 6
ft.); Vacuum or much truck

GROUP 5: Equipment Greaser (Grease Truck/Multi Shift).

GROUP 6: Articulating material hauler; Asphalt plant
engineer; Batch plant operator; Bit sharpener; Concrete
joint machine operator (canal and similar type); Concrete
planer operator; Dandy digger; Deck engine operator;
Derrickman (oilfield type); Drilling machine operator,
bucket or auger types (Calweld 100 bucket or similar types
- Watson 1000 auger or similar types - Texoma 330, 500 or
600 auger or similar types - drilling depth of 45'
maximum); Drilling machine operator; Hydrographic seeder
machine operator (straw, pulp or seed), Jackson track

maintainer, or similar type; Kalamazoo Switch tamper, or similar type; Machine tool operator; Maginnis internal full slab vibrator, Mechanical berm, curb or gutter(concrete or asphalt); Mechanical finisher operator (concrete, Clary-Johnson-Bidwell or similar); Micro tunnel system (below ground); Pavement breaker operator (truck mounted); Road oil mixing machine operator; Roller operator (asphalt or finish), rubber-tired earth moving equipment (single engine, up to and including 25 yds. struck); Self-propelled tar pipelining machine operator; Skiploader operator (crawler and wheel type, over 3/4 yd. and up to and including 1-1/2 yds.); Slip form pump operator (power driven hydraulic lifting device for concrete forms); Tractor operator-bulldozer, tamper-scraper (single engine, up to 100 h.p. flywheel and similar types, up to and including D-5 and similar types); Tugger hoist operator (1 drum); Ultra high pressure waterjet cutting tool system operator; Vacuum blasting machine operator

GROUP 8: Asphalt or concrete spreading operator (tamping or finishing); Asphalt paving machine operator (Barber Greene or similar type); Asphalt-rubber distribution operator; Backhoe operator (up to and including 3/4 yd.), small ford, Case or similar; Cast-in-place pipe laying machine operator; Combination mixer and compressor operator (gunite work); Compactor operator (self-propelled); Concrete mixer operator (paving); Crushing plant operator; Drill Doctor; Drilling machine operator, Bucket or auger types (Calweld 150 bucket or similar types - Watson 1500, 2000 2500 auger or similar types - Texoma 700, 800 auger or similar types - drilling depth of 60' maximum); Elevating grader operator; Grade checker; Gradall operator; Grouting machine operator; Heavy-duty repairman; Heavy equipment robotics operator; Kalamazoo balliste regulator or similar type; Kolman belt loader and similar type; Le Tourneau blob compactor or similar type; Loader operator (Athey, Euclid, Sierra and similar types); Mobark Chipper or similar; Ozzie padder or similar types; P.C. slot saw; Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pumpcrete gun operator; Rock Drill or similar types; Rotary drill operator (excluding caisson type); Rubber-tired earth-moving equipment operator (single engine, caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator (multiple engine up to and including 25 yds. struck); Rubber-tired scraper operator (self-loading paddle wheel type-John Deere, 1040 and similar single unit); Self-propelled curb and gutter machine operator; Shuttle buggy;

Skiploader operator (crawler and wheel type over 1-1/2 yds. up to and including 6-1/2 yds.); Soil remediation plant operator; Surface heaters and planer operator; Tractor compressor drill combination operator; Tractor operator (any type larger than D-5 - 100 flywheel h.p. and over, or similar-bulldozer, tamper, scraper and push tractor single engine); Tractor operator (boom attachments), Traveling pipe wrapping, cleaning and bending machine operator; Trenching machine operator (over 6 ft. depth capacity, manufacturer's rating); trenching Machine with Road Miner attachment (over 6 ft depth capacity); Ultra high pressure waterjet cutting tool system mechanic; Water pull (compaction) operator

GROUP 9: Heavy Duty Repairman

GROUP 10: Drilling machine operator, Bucket or auger types (Calweld 200 B bucket or similar types-Watson 3000 or 5000 auger or similar types-Texoma 900 auger or similar types-drilling depth of 105' maximum); Dual drum mixer, dynamic compactor LDC350 (or similar types); Monorail locomotive operator (diesel, gas or electric); Motor patrol-blade operator (single engine); Multiple engine tractor operator (Euclid and similar type-except Quad 9 cat.); Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Pneumatic pipe ramming tool and similar types; Prestressed wrapping machine operator; Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Rubber tired earth moving equipment operator (multiple engine, Euclid, caterpillar and similar over 25 yds. and up to 50 yds. struck), Tower crane repairman; Tractor loader operator (crawler and wheel type over 6-1/2 yds.); Woods mixer operator (and similar Pugmill equipment)

GROUP 11: Heavy Duty Repairman - Welder Combination, Welder - Certified.

GROUP 12: Auto grader operator; Automatic slip form operator; Drilling machine operator, bucket or auger types (Calweld, auger 200 CA or similar types - Watson, auger 6000 or similar types - Hughes Super Duty, auger 200 or similar types - drilling depth of 175' maximum); Hoe ram or similar with compressor; Mass excavator operator less tha 750 cu. yards; Mechanical finishing machine operator; Mobile form traveler operator; Motor patrol operator (multi-engine); Pipe mobile machine operator; Rubber-tired earth- moving equipment operator (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck); Rubber-tired

self-loading scraper operator (paddle-wheel-auger type
self-loading - two (2) or more units)

GROUP 13: Rubber-tired earth-moving equipment operator
operating equipment with push-pull system (single engine,
up to and including 25 yds. struck)

GROUP 14: Canal liner operator; Canal trimmer operator;
Remote-control earth-moving equipment operator (operating
a second piece of equipment: \$1.00 per hour additional);
Wheel excavator operator (over 750 cu. yds.)

GROUP 15: Rubber-tired earth-moving equipment operator,
operating equipment with push-pull system (single engine,
Caterpillar, Euclid, Athey Wagon and similar types with any
and all attachments over 25 yds. and up to and including 50
yds. struck); Rubber-tired earth-moving equipment operator,
operating equipment with push-pull system (multiple
engine-up to and including 25 yds. struck)

GROUP 16: Rubber-tired earth-moving equipment operator,
operating equipment with push-pull system (single engine,
over 50 yds. struck); Rubber-tired earth-moving equipment
operator, operating equipment with push-pull system
(multiple engine, Euclid, Caterpillar and similar, over 25
yds. and up to 50 yds. struck)

GROUP 17: Rubber-tired earth-moving equipment operator,
operating equipment with push-pull system (multiple engine,
Euclid, Caterpillar and similar, over 50 cu. yds. struck);
Tandem tractor operator (operating crawler type tractors in
tandem - Quad 9 and similar type)

GROUP 18: Rubber-tired earth-moving equipment operator,
operating in tandem (scrapers, belly dumps and similar
types in any combination, excluding compaction units -
single engine, up to and including 25 yds. struck)

GROUP 19: Rotex concrete belt operator (or similar types);
Rubber-tired earth-moving equipment operator, operating in
tandem (scrapers, belly dumps and similar types in any
combination, excluding compaction units - single engine,
Caterpillar, Euclid, Athey Wagon and similar types with any
and all attachments over 25 yds. and up to and including 50
cu. yds. struck); Rubber-tired earth-moving equipment
operator, operating in tandem (scrapers, belly dumps and
similar types in any combination, excluding compaction
units - multiple engine, up to and including 25 yds. struck)

GROUP 20: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 21: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

GROUP 22: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, up to and including 25 yds. struck)

GROUP 23: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating with the tandem push-pull system (multiple engine, up to and including 25 yds. struck)

GROUP 24: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 25: Concrete pump operator-truck mounted; Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

CRANES, PILEDIVING AND HOISTING EQUIPMENT CLASSIFICATIONS

GROUP 1: Engineer oiler; Fork lift operator (includes loed, lull or similar types)

GROUP 2: Truck crane oiler

GROUP 3: A-frame or winch truck operator; Ross carrier operator (jobsite)

GROUP 4: Bridge-type unloader and turntable operator; Helicopter hoist operator

GROUP 5: Hydraulic boom truck; Stinger crane (Austin-Western or similar type); Tugger hoist operator (1 drum)

GROUP 6: Bridge crane operator; Cretor crane operator; Hoist operator (Chicago boom and similar type); Lift mobile operator; Lift slab machine operator (Vagtborg and similar types); Material hoist and/or manlift operator; Polar gantry crane operator; Self Climbing scaffold (or similar type); Shovel, backhoe, dragline, clamshell operator (over 3/4 yd. and up to 5 cu. yds. mrc); Tugger hoist operator

GROUP 7: Pedestal crane operator; Shovel, backhoe, dragline, clamshell operator (over 5 cu. yds. mrc); Tower crane repair; Tugger hoist operator (3 drum)

GROUP 8: Crane operator (up to and including 25 ton capacity); Crawler transporter operator; Derrick barge operator (up to and including 25 ton capacity); Hoist operator, stiff legs, Guy derrick or similar type (up to and including 25 ton capacity); Shovel, backhoe, dragline, clamshell operator (over 7 cu. yds., M.R.C.)

GROUP 9: Crane operator (over 25 tons and up to and including 50 tons mrc); Derrick barge operator (over 25 tons up to and including 50 tons mrc); Highline cableway operator; Hoist operator, stiff legs, Guy derrick or similar type (over 25 tons up to and including 50 tons mrc); K-crane operator; Polar crane operator; Self erecting tower crane operator maximum lifting capacity ten tons

GROUP 10: Crane operator (over 50 tons and up to and including 100 tons mrc); Derrick barge operator (over 50 tons up to and including 100 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 50 tons up to and including 100 tons mrc), Mobile tower crane operator (over 50 tons, up to and including 100 tons M.R.C.); Tower crane operator and tower gantry

GROUP 11: Crane operator (over 100 tons and up to and including 200 tons mrc); Derrick barge operator (over 100 tons up to and including 200 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 100 tons up to and including 200 tons mrc); Mobile tower crane operator

(over 100 tons up to and including 200 tons mrc)

GROUP 12: Crane operator (over 200 tons up to and including 300 tons mrc); Derrick barge operator (over 200 tons up to and including 300 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 200 tons, up to and including 300 tons mrc); Mobile tower crane operator (over 200 tons, up to and including 300 tons mrc)

GROUP 13: Crane operator (over 300 tons); Derrick barge operator (over 300 tons); Helicopter pilot; Hoist operator, stiff legs, Guy derrick or similar type (over 300 tons); Mobile tower crane operator (over 300 tons)

TUNNEL CLASSIFICATIONS

GROUP 1: Skiploader (wheel type up to 3/4 yd. without attachment)

GROUP 2: Power-driven jumbo form setter operator

GROUP 3: Dinkey locomotive or motorperson (up to and including 10 tons)

GROUP 4: Bit sharpener; Equipment greaser (grease truck); Slip form pump operator (power-driven hydraulic lifting device for concrete forms); Tugger hoist operator (1 drum); Tunnel locomotive operator (over 10 and up to and including 30 tons)

GROUP 5: Backhoe operator (up to and including 3/4 yd.); Small Ford, Case or similar; Drill doctor; Grouting machine operator; Heading shield operator; Heavy-duty repairperson; Loader operator (Athey, Euclid, Sierra and similar types); Mucking machine operator (1/4 yd., rubber-tired, rail or track type); Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pneumatic heading shield (tunnel); Pumpcrete gun operator; Tractor compressor drill combination operator; Tugger hoist operator (2 drum); Tunnel locomotive operator (over 30 tons)

GROUP 6: Heavy Duty Repairman

GROUP 7: Tunnel mole boring machine operator

ENGINEERS ZONES

\$1.00 additional per hour for all of IMPERIAL County and the portions of KERN, RIVERSIDE & SAN BERNARDINO Counties as

defined below:

That area within the following Boundary: Begin in San Bernardino County, approximately 3 miles NE of the intersection of I-15 and the California State line at that point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Continue W in a straight line to that point which is the SW corner of the northwest quarter of Section 6, T27S, R42E, Mt. Diablo Meridian. Continue North to the intersection with the Inyo County Boundary at that point which is the NE corner of the western half of the northern quarter of Section 6, T25S, R42E, MDM. Continue W along the Inyo and San Bernardino County boundary until the intersection with Kern County, as that point which is the SE corner of Section 34, T24S, R40E, MDM. Continue W along the Inyo and Kern County boundary until the intersection with Tulare County, at that point which is the SW corner of the SE quarter of Section 32, T24S, R37E, MDM. Continue W along the Kern and Tulare County boundary, until that point which is the NW corner of T25S, R32E, MDM. Continue S following R32E lines to the NW corner of T31S, R32E, MDM. Continue W to the NW corner of T31S, R31E, MDM. Continue S to the SW corner of T32S, R31E, MDM. Continue W to SW corner of SE quarter of Section 34, T32S, R30E, MDM. Continue S to SW corner of T11N, R17W, SBM. Continue E along south boundary of T11N, SBM to SW corner of T11N, R7W, SBM. Continue S to SW corner of T9N, R7W, SBM. Continue E along south boundary of T9N, SBM to SW corner of T9N, R1E, SBM. Continue S along west boundary of R1E, SMB to Riverside County line at the SW corner of T1S, R1E, SBM. Continue E along south boundary of T1s, SBM (Riverside County Line) to SW corner of T1S, R10E, SBM. Continue S along west boundary of R10E, SBM to Imperial County line at the SW corner of T8S, R10E, SBM. Continue W along Imperial and Riverside county line to NW corner of T9S, R9E, SBM. Continue S along the boundary between Imperial and San Diego Counties, along the west edge of R9E, SBM to the south boundary of Imperial County/California state line. Follow the California state line west to Arizona state line, then north to Nevada state line, then continuing NW back to start at the point which is the NW corner of Section 1, T17N, R14E, SBM

\$1.00 additional per hour for portions of SAN LUIS OBISPO, KERN, SANTA BARBARA & VENTURA as defined below:

That area within the following Boundary: Begin approximately 5 miles north of the community of Cholame, on the Monterey County and San Luis Obispo County boundary at the NW corner of T25S, R16E, Mt. Diablo Meridian. Continue south along the west side of R16E to the SW corner of T30S, R16E, MDM. Continue E to SW

corner of T30S, R17E, MDM. Continue S to SW corner of T31S, R17E, MDM. Continue E to SW corner of T31S, R18E, MDM. Continue S along West side of R18E, MDM as it crosses into San Bernardino Meridian numbering area and becomes R30W. Follow the west side of R30W, SBM to the SW corner of T9N, R30W, SBM. Continue E along the south edge of T9N, SBM to the Santa Barbara County and Ventura County boundary at that point which is the SW corner of Section 34. T9N, R24W, SBM, continue S along the Ventura County line to that point which is the SW corner of the SE quarter of Section 32, T7N, R24W, SBM. Continue E along the south edge of T7N, SBM to the SE corner to T7N, R21W, SBM. Continue N along East side of R21W, SBM to Ventura County and Kern County boundary at the NE corner of T8N, R21W. Continue W along the Ventura County and Kern County boundary to the SE corner of T9N, R21W. Continue North along the East edge of R21W, SBM to the NE corner of T12N, R21W, SBM. Continue West along the north edge of T12N, SBM to the SE corner of T32S, R21E, MDM. [T12N SBM is a thin strip between T11N SBM and T32S MDM]. Continue North along the East side of R21E, MDM to the Kings County and Kern County border at the NE corner of T25S, R21E, MDM, continue West along the Kings County and Kern County Boundary until the intersection of San Luis Obispo County. Continue west along the Kings County and San Luis Obispo County boundary until the intersection with Monterey County. Continue West along the Monterey County and San Luis Obispo County boundary to the beginning point at the NW corner of T25S, R16E, MDM.

\$2.00 additional per hour for INYO and MONO Counties and the Northern portion of SAN BERNARDINO County as defined below:

That area within the following Boundary: Begin at the intersection of the northern boundary of Mono County and the California state line at the point which is the center of Section 17, T10N, R22E, Mt. Diablo Meridian. Continue S then SE along the entire western boundary of Mono County, until it reaches Inyo County at the point which is the NE corner of the Western half of the NW quarter of Section 2, T8S, R29E, MDM. Continue SSE along the entire western boundary of Inyo County, until the intersection with Kern County at the point which is the SW corner of the SE 1/4 of Section 32, T24S, R37E, MDM. Continue E along the Inyo and Kern County boundary until the intersection with San Bernardino County at that point which is the SE corner of section 34, T24S, R40E, MDM. Continue E along the Inyo and San Bernardino County boundary until the point which is the NE corner of the Western half of the NW quarter of Section 6, T25S, R42E, MDM. Continue S to that point which is the SW corner of the NW quarter of Section 6, T27S, R42E, MDM.

Continue E in a straight line to the California and Nevada state border at the point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Then continue NW along the state line to the starting point, which is the center of Section 18, T10N, R22E, MDM.

REMAINING AREA NOT DEFINED ABOVE RECIEVES BASE RATE

 ENGI0012-004 08/01/2015

	Rates	Fringes
OPERATOR: Power Equipment (DREDGING)		
(1) Leverman.....	\$ 49.50	23.60
(2) Dredge dozer.....	\$ 43.53	23.60
(3) Deckmate.....	\$ 43.42	23.60
(4) Winch operator (stern winch on dredge).....	\$ 42.87	23.60
(5) Fireman-Oiler, Deckhand, Bargeman, Leveehand.....	\$ 42.33	23.60
(6) Barge Mate.....	\$ 42.94	23.60

 IRON0377-002 07/01/2015

	Rates	Fringes
Ironworkers:		
Fence Erector.....	\$ 27.08	20.21
Ornamental, Reinforcing and Structural.....	\$ 33.50	28.85

PREMIUM PAY:

\$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland, Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

\$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base,

Naval Post Graduate School - Monterey, Yermo Marine Corps
Logistics Center

\$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0300-005 01/01/2014

	Rates	Fringes
Asbestos Removal Laborer.....	\$ 28.00	15.25

SCOPE OF WORK: Includes site mobilization, initial site cleanup, site preparation, removal of asbestos-containing material and toxic waste, encapsulation, enclosure and disposal of asbestos- containing materials and toxic waste by hand or with equipment or machinery; scaffolding, fabrication of temporary wooden barriers and assembly of decontamination stations.

LABO0345-001 07/01/2014

	Rates	Fringes
LABORER (GUNITE)		
GROUP 1.....	\$ 34.79	17.92
GROUP 2.....	\$ 33.84	17.92
GROUP 3.....	\$ 30.30	17.92

FOOTNOTE: GUNITE PREMIUM PAY: Workers working from a Bosn'n's Chair or suspended from a rope or cable shall receive 40 cents per hour above the foregoing applicable classification rates. Workers doing gunite and/or shotcrete work in a tunnel shall receive 35 cents per hour above the foregoing applicable classification rates, paid on a portal-to-portal basis. Any work performed on, in or above any smoke stack, silo, storage elevator or similar type of structure, when such structure is in excess of 75'-0" above base level and which work must be performed in whole or in part more than 75'-0" above base level, that work performed above the 75'-0" level shall be compensated for at 35 cents per hour above the applicable classification wage rate.

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Rodmen, Nozzlemen

GROUP 2: Gunmen

GROUP 3: Reboundmen

* LABO1184-001 08/01/2015

	Rates	Fringes
Laborers: (HORIZONTAL DIRECTIONAL DRILLING)		
(1) Drilling Crew Laborer...	\$ 32.60	12.16
(2) Vehicle Operator/Hauler.	\$ 32.77	12.16
(3) Horizontal Directional Drill Operator.....	\$ 34.62	12.16
(4) Electronic Tracking Locator.....	\$ 36.62	12.16
Laborers: (STRIPING/SLURRY SEAL)		
GROUP 1.....	\$ 33.76	15.04
GROUP 2.....	\$ 35.06	15.04
GROUP 3.....	\$ 37.07	15.04
GROUP 4.....	\$ 38.81	15.04

LABORERS - STRIPING CLASSIFICATIONS

GROUP 1: Protective coating, pavement sealing, including repair and filling of cracks by any method on any surface in parking lots, game courts and playgrounds; carstops; operation of all related machinery and equipment; equipment repair technician

GROUP 2: Traffic surface abrasive blaster; pot tender - removal of all traffic lines and markings by any method (sandblasting, waterblasting, grinding, etc.) and preparation of surface for coatings. Traffic control person: controlling and directing traffic through both conventional and moving lane closures; operation of all related machinery and equipment

GROUP 3: Traffic delineating device applicator: Layout and application of pavement markers, delineating signs, rumble and traffic bars, adhesives, guide markers, other traffic delineating devices including traffic control. This category includes all traffic related surface preparation (sandblasting, waterblasting, grinding) as part of the

application process. Traffic protective delineating system installer: removes, relocates, installs, permanently affixed roadside and parking delineation barricades, fencing, cable anchor, guard rail, reference signs, monument markers; operation of all related machinery and equipment; power broom sweeper

GROUP 4: Striper: layout and application of traffic stripes and markings; hot thermo plastic; tape traffic stripes and markings, including traffic control; operation of all related machinery and equipment

LABO1184-002 07/01/2014

	Rates	Fringes
LABORER (TUNNEL)		
GROUP 1.....	\$ 35.74	16.48
GROUP 2.....	\$ 36.06	16.48
GROUP 3.....	\$ 36.52	16.48
GROUP 4.....	\$ 37.21	16.48
LABORER		
GROUP 1.....	\$ 30.19	16.48
GROUP 2.....	\$ 30.74	16.48
GROUP 3.....	\$ 31.29	16.48
GROUP 4.....	\$ 32.84	16.48
GROUP 5.....	\$ 33.19	16.48

LABORER CLASSIFICATIONS

GROUP 1: Cleaning and handling of panel forms; Concrete screeding for rough strike-off; Concrete, water curing; Demolition laborer, the cleaning of brick if performed by a worker performing any other phase of demolition work, and the cleaning of lumber; Fire watcher, limber, brush loader, piler and debris handler; Flag person; Gas, oil and/or water pipeline laborer; Laborer, asphalt-rubber material loader; Laborer, general or construction; Laborer, general clean-up; Laborer, landscaping; Laborer, jetting; Laborer, temporary water and air lines; Material hose operator (walls, slabs, floors and decks); Plugging, filling of shee bolt holes; Dry packing of concrete; Railroad maintenance, repair track person and road beds; Streetcar and railroad construction track laborers; Rigging and signaling; Scaler; Slip form raiser; Tar and mortar; Tool crib or tool house laborer; Traffic control by any method; Window cleaner; Wire mesh pulling - all concrete pouring operations

GROUP 2: Asphalt shoveler; Cement dumper (on 1 yd. or larger mixer and handling bulk cement); Cesspool digger and installer; Chucktender; Chute handler, pouring concrete, the handling of the chute from readymix trucks, such as walls, slabs, decks, floors, foundation, footings, curbs, gutters and sidewalks; Concrete curer, impervious membrane and form oiler; Cutting torch operator (demolition); Fine grader, highways and street paving, airport, runways and similar type heavy construction; Gas, oil and/or water pipeline wrapper - pot tender and form person; Guinea chaser; Headerboard person - asphalt; Laborer, packing rod steel and pans; Membrane vapor barrier installer; Power broom sweeper (small); Riprap stonepaver, placing stone or wet sacked concrete; Roto scraper and tiller; Sandblaster (pot tender); Septic tank digger and installer(lead); Tank scaler and cleaner; Tree climber, faller, chain saw operator, Pittsburgh chipper and similar type brush shredder; Underground laborer, including caisson bellower

GROUP 3: Buggymobile person; Concrete cutting torch; Concrete pile cutter; Driller, jackhammer, 2-1/2 ft. drill steel or longer; Dri-pak-it machine; Gas, oil and/or water pipeline wrapper, 6-in. pipe and over, by any method, inside and out; High scaler (including drilling of same); Hydro seeder and similar type; Impact wrench multi-plate; Kettle person, pot person and workers applying asphalt, lay-kold, creosote, lime caustic and similar type materials ("applying" means applying, dipping, brushing or handling of such materials for pipe wrapping and waterproofing); Operator of pneumatic, gas, electric tools, vibrating machine, pavement breaker, air blasting, come-alongs, and similar mechanical tools not separately classified herein; Pipelayer's backup person, coating, grouting, making of joints, sealing, caulking, diapering and including rubber gasket joints, pointing and any and all other services; Rock slinger; Rotary scarifier or multiple head concrete chipping scarifier; Steel headerboard and guideline setter; Tamper, Barko, Wacker and similar type; Trenching machine, hand-propelled

GROUP 4: Asphalt raker, lute person, ironer, asphalt dump person, and asphalt spreader boxes (all types); Concrete core cutter (walls, floors or ceilings), grinder or sander; Concrete saw person, cutting walls or flat work, scoring old or new concrete; Cribber, shorer, lagging, sheeting and trench bracing, hand-guided lagging hammer; Head rock slinger; Laborer, asphalt- rubber distributor boot person; Laser beam in connection with laborers' work; Oversize concrete vibrator operator, 70 lbs. and over; Pipelayer

performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, metallic or non-metallic, conduit and any other stationary type of tubular device used for the conveying of any substance or element, whether water, sewage, solid gas, air, or other product whatsoever and without regard to the nature of material from which the tubular material is fabricated; No-joint pipe and stripping of same; Prefabricated manhole installer; Sandblaster (nozzle person), water blasting, Porta Shot-Blast

GROUP 5: Blaster powder, all work of loading holes, placing and blasting of all powder and explosives of whatever type, regardless of method used for such loading and placing; Driller: All power drills, excluding jackhammer, whether core, diamond, wagon, track, multiple unit, and any and all other types of mechanical drills without regard to the form of motive power; Toxic waste removal

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Batch plant laborer; Changehouse person; Dump person; Dump person (outside); Swamper (brake person and switch person on tunnel work); Tunnel materials handling person; Nipper; Pot tender, using mastic or other materials (for example, but not by way of limitation, shotcrete, etc.)

GROUP 2: Chucktender, cabledtender; Loading and unloading agitator cars; Vibrator person, jack hammer, pneumatic tools (except driller); Bull gang mucker, track person; Concrete crew, including rodder and spreader

GROUP 3: Blaster, driller, powder person; Chemical grout jet person; Cherry picker person; Grout gun person; Grout mixer person; Grout pump person; Jackleg miner; Jumbo person; Kemper and other pneumatic concrete placer operator; Miner, tunnel (hand or machine); Nozzle person; Operating of troweling and/or grouting machines; Powder person (primer house); Primer person; Sandblaster; Shotcrete person; Steel form raiser and setter; Timber person, retimber person, wood or steel; Tunnel Concrete finisher

GROUP 4: Diamond driller; Sandblaster; Shaft and raise work

LABO1184-004 07/01/2014

Rates Fringes

Brick Tender.....\$ 29.12 15.78

LABO1414-001 08/05/2015

Rates Fringes

LABORER

PLASTER CLEAN-UP LABORER...\$ 30.16 17.11
PLASTER TENDER.....\$ 32.71 17.11

Work on a swing stage scaffold: \$1.00 per hour additional.

PAIN0036-001 07/01/2015

Rates Fringes

Painters: (Including Lead
Abatement)

(1) Repaint (excludes San
Diego County).....\$ 27.29 12.83
(2) All Other Work.....\$ 30.72 12.83

REPAINT of any previously painted structure. Exceptions:
work involving the aerospace industry, breweries,
commercial recreational facilities, hotels which operate
commercial establishments as part of hotel service, and
sports facilities.

PAIN0036-008 10/01/2014

Rates Fringes

DRYWALL FINISHER/TAPER.....\$ 35.18 15.91

PAIN0036-015 06/01/2015

Rates Fringes

GLAZIER.....\$ 40.70 20.92

FOOTNOTE: Additional \$1.25 per hour for work in a condor,
from the third (3rd) floor and up Additional \$1.25 per
hour for work on the outside of the building from a swing
stage or any suspended contrivance, from the ground up

PAIN1247-002 01/01/2015

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 29.85	13.56

 PLAS0200-009 08/05/2015

	Rates	Fringes
PLASTERER.....	\$ 38.44	13.77

 PLAS0500-002 07/01/2015

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 32.30	20.65

 PLUM0016-001 07/01/2015

	Rates	Fringes
PLUMBER/PIPEFITTER Plumber and Pipefitter All other work except work on new additions and remodeling of bars, restaurant, stores and commercial buildings not to exceed 5,000 sq. ft. of floor space and work on strip malls, light commercial, tenant improvement and remodel work.....	\$ 45.96	20.71
Work ONLY on new additions and remodeling of bars, restaurant, stores and commercial buildings not to exceed 5,000 sq. ft. of floor space.....	\$ 44.54	19.73
Work ONLY on strip malls, light commercial, tenant improvement and remodel work.....	\$ 35.16	18.06

 PLUM0345-001 07/01/2014

	Rates	Fringes
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PLUMBER

Landscape/Irrigation Fitter.\$ 29.27	19.75
Sewer & Storm Drain Work....\$ 33.24	17.13

ROOF0036-002 08/01/2014

Rates Fringes

ROOFER.....\$ 35.02	13.57
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FOOTNOTE: Pitch premium: Work on which employees are exposed to pitch fumes or required to handle pitch, pitch base or pitch impregnated products, or any material containing coal tar pitch, the entire roofing crew shall receive \$1.75 per hour "pitch premium" pay.

SFCA0669-002 07/01/2013

Rates Fringes

SPRINKLER FITTER.....\$ 34.10	19.38
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SHEE0105-003 07/01/2015

LOS ANGELES (South of a straight line drawn between Gorman and Big Pines)and Catalina Island, INYO, KERN (Northeast part, East of Hwy 395), MONO ORANGE, RIVERSIDE, AND SAN BERNARDINO COUNTIES

Rates Fringes

SHEET METAL WORKER

(1) Commercial - New Construction and Remodel work.....\$ 41.26	25.38
(2) Industrial work including air pollution control systems, noise abatement, hand rails, guard rails, excluding aritechtrual sheet metal work, excluding A-C, heating, ventilating systems for human comfort...\$ 41.26	25.38

TEAM0011-002 07/01/2014

Rates Fringes

TRUCK DRIVER

GROUP 1.....	\$ 27.99	24.14
GROUP 2.....	\$ 28.14	24.14
GROUP 3.....	\$ 28.27	24.14
GROUP 4.....	\$ 28.46	24.14
GROUP 5.....	\$ 28.49	24.14
GROUP 6.....	\$ 28.52	24.14
GROUP 7.....	\$ 28.77	24.14
GROUP 8.....	\$ 29.02	24.14
GROUP 9.....	\$ 29.22	24.14
GROUP 10.....	\$ 29.52	24.14
GROUP 11.....	\$ 30.02	24.14
GROUP 12.....	\$ 30.45	24.14

WORK ON ALL MILITARY BASES:

PREMIUM PAY: \$3.00 per hour additional.

[29 palms Marine Base, Camp Roberts, China Lake, Edwards AFB, El Centro Naval Facility, Fort Irwin, Marine Corps Logistics Base at Nebo & Yermo, Mountain Warfare Training Center, Bridgeport, Point Arguello, Point Conception, Vandenberg AFB]

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Truck driver

GROUP 2: Driver of vehicle or combination of vehicles - 2 axles; Traffic control pilot car excluding moving heavy equipment permit load; Truck mounted broom

GROUP 3: Driver of vehicle or combination of vehicles - 3 axles; Boot person; Cement mason distribution truck; Fuel truck driver; Water truck - 2 axle; Dump truck, less than 16 yds. water level; Erosion control driver

GROUP 4: Driver of transit mix truck, under 3 yds.; Dumpcrete truck, less than 6-1/2 yds. water level

GROUP 5: Water truck, 3 or more axles; Truck greaser and tire person (\$0.50 additional for tire person); Pipeline and utility working truck driver, including winch truck and plastic fusion, limited to pipeline and utility work; Slurry truck driver

GROUP 6: Transit mix truck, 3 yds. or more; Dumpcrete truck, 6-1/2 yds. water level and over; Vehicle or combination of

vehicles - 4 or more axles; Oil spreader truck; Dump truck,
16 yds. to 25 yds. water level

GROUP 7: A Frame, Swedish crane or similar; Forklift driver;
Ross carrier driver

GROUP 8: Dump truck, 25 yds. to 49 yds. water level; Truck
repair person; Water pull - single engine; Welder

GROUP 9: Truck repair person/welder; Low bed driver, 9 axles
or over

GROUP 10: Dump truck - 50 yds. or more water level; Water
pull - single engine with attachment

GROUP 11: Water pull - twin engine; Water pull - twin engine
with attachments; Winch truck driver - \$1.25 additional
when operating winch or similar special attachments

GROUP 12: Boom Truck 17K and above

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses
(29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification
and wage rates that have been found to be prevailing for the
cited type(s) of construction in the area covered by the wage
determination. The classifications are listed in alphabetical
order of "identifiers" that indicate whether the particular
rate is a union rate (current union negotiated rate for local),
a survey rate (weighted average rate) or a union average rate
(weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

CONTRACT RELATED DOCUMENTS

PERFORMANCE BOND

Bond No.

Premium:

KNOW ALL PERSONS BY THESE PRESENTS THAT:

WHEREAS, on _____, 2015, the CITY OF RIVERSIDE ("CITY") awarded to _____ ("PRINCIPAL") a contract for performance of the work described as _____; Bid No. _____ ("CONTRACT"), the terms and conditions of which are incorporated herein by reference; and

WHEREAS, the CONTRACT requires PRINCIPAL to furnish this Performance Bond ("BOND") to guarantee PRINCIPAL's faithful performance of all provisions of the CONTRACT; and

WHEREAS, _____ ("SURETY"), a corporation legally authorized to execute and furnish performance bonds as sole surety in the State of California, is willing to act as PRINCIPAL's SURETY in the making and giving of this BOND.

NOW, THEREFORE, we PRINCIPAL and SURETY hereby hold and firmly bind ourselves to pay to CITY in lawful United States currency the principal sum of _____ Dollars (\$_____), for which payment well and truly to be made to CITY or CITY's successors or assigns we hereby bind ourselves and our heirs, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS BOND IS THAT IF PRINCIPAL or PRINCIPAL's heirs, legal representatives, successors or assigns shall in all things stand to, abide by, and well and truly keep and faithfully perform all of the covenants, conditions and promises in the CONTRACT, including its work Guaranty, and all alterations thereof made as therein provided on PRINCIPAL's part to be kept and performed at the time and in the manner specified therein, and in all respects according to their true intent and meaning, and shall indemnify and save harmless CITY and CITY's officers, employees and agents as therein specified, then this obligation shall become null and void; otherwise, it shall be and remain in full force and binding effect.

SURETY hereby agrees that no change in the terms of the CONTRACT or the work to be performed thereunder, or any extension of time for completion thereof, shall in any way relieve it of its obligations under this BOND, and hereby waives notice of any change or extension thereof, and further waives the provisions of California Civil Code sections 2819 and 2845.

If lawsuit is brought by CITY on this BOND, PRINCIPAL and SURETY shall pay to CITY, over and above the principal sum hereof, reasonable costs and attorney's fees which the court is hereby authorized to award.

IN WITNESS WHEREOF, we sign and seal this BOND on _____ .

Correspondence or claims relating to this BOND should be sent to SURETY at the following address:

Telephone Number _____

Principal

By _____ (Seal)

Typed Name and Title

Surety

Attorney-In-Fact (Seal)

Typed Name and Title

Note: Signatures of those executing for SURETY must be acknowledged, and a Power of Attorney attached.

PAYMENT BOND

Bond No.

Premium:

KNOW ALL PERSONS BY THESE PRESENTS THAT:

WHEREAS, on _____, 2015, the CITY OF RIVERSIDE ("CITY") awarded to _____ ("PRINCIPAL") a contract for performance of the work described as _____; Bid No. _____ ("CONTRACT"), the terms and conditions of which are incorporated herein by reference; and

WHEREAS, the CONTRACT requires PRINCIPAL to furnish this Payment Bond ("BOND") to secure payment of the claims of persons described in California Civil Code section 3248(b); and

WHEREAS, _____ ("SURETY"), a corporation legally authorized to execute and furnish payment bonds as sole surety in the State of California, is willing to act as PRINCIPAL's SURETY in the giving of this BOND.

NOW, THEREFORE, we PRINCIPAL and SURETY hold and firmly bind ourselves unto CITY and all persons and entities described in California Civil Code section 3248(b) whose claims are not paid by PRINCIPAL in the total sum of _____ Dollars (\$ _____), for which payment well and truly to be made we bind ourselves and our heirs, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS BOND IS THAT IF PRINCIPAL or PRINCIPAL's successors, assigns, or subcontractors fail to pay any of the persons described in California Civil Code section 3181, any amounts due under the California Unemployment Insurance Code with respect to work or labor performed under the CONTRACT or any amounts required to be deducted, withheld and paid over to the California Employment Development Department from the wages of employees of PRINCIPAL and PRINCIPAL's subcontractors pursuant to California Unemployment Insurance Code section 13020 with respect to such work and labor, SURETY will pay for the same in an amount not exceeding the sum stated above, plus all costs and reasonable attorney's fees awarded by any court of competent jurisdiction in any lawsuit brought upon this BOND.

THIS BOND SHALL INURE TO the benefit of all persons and entities described in California Civil Code section 3248(b) so as to give them or their assigns a right of action in any lawsuit brought upon this BOND, and is executed and filed to comply with the Public Works Payment Bond provisions of Chapter 7, Title 15, Part 4, Division 3 of the California Civil Code (commencing at Section 3247) and all amendments thereto, which provisions are incorporated herein by this reference.

IN WITNESS WHEREOF, we sign and seal this BOND on _____ .

Correspondence or claims relating to this BOND should be sent to SURETY at the following address:

Principal

By _____ (Seal)

Typed Name and Title

Surety

Attorney-In-Fact (Seal)

Telephone Number _____

Typed Name and Title

Note: Signatures of those executing for SURETY must be acknowledged, and a Power of Attorney attached.

**GENERAL AND/OR AUTOMOBILE LIABILITY
ADDITIONAL INSURED ENDORSEMENT**

CITY OF RIVERSIDE

Named Insured and Address: Contractor's Name: Contractor's Address: General description of agreement(s) and/or activity(s) insured:
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Notwithstanding any inconsistent statement in the policy to which this endorsement pertains or in any endorsement now or hereafter attached thereto, it is agreed as follows:

1. The City of Riverside and its officers and employees are additional insured thereunder in relation to those operations, uses, occupations, acts, and activities described generally above with regard to operations performed by or on behalf of the named insured.
2. Such insurance shall be primary, and not contributing with any other insurance maintained by the additional insured.
3. The policy shall apply separately to each insured against whom claim is made or suit is brought except with respect to the limits of the company's liability.
4. The policy shall not be subject to cancellation, change in coverage, reduction of limits or non-renewal except after written notice to the Risk Manager of the City of Riverside by certified mail, return receipt requested, not less than thirty (30) days prior to the effective date thereof.

ADDRESS CANCELLATION NOTICE AS FOLLOWS:

Risk Manager
City of Riverside
City Hall, 3900 Main Street
Riverside, California 92522

ISSUE ENDORSEMENT TO:

City of Riverside
c/o City Attorney
City Hall, 3900 Main Street
Riverside, California 92522

Except as stated above and not in conflict with this endorsement, nothing contained herein shall be held to waive, alter or extend any of the limits, agreements, or exclusions of the policy.

Endorsement No.	Effective Date:	Policy No.:
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TYPE OF COVERAGE TO WHICH
THIS ENDORSEMENT ATTACHES

POLICY PERIOD:
FROM: _____ TO: _____

LIMITS OF LIABILITY:

**GENERAL AND/OR AUTOMOBILE LIABILITY
ADDITIONAL INSURED ENDORSEMENT
CITY OF RIVERSIDE**

The following inclusions, exclusions, extensions or specific provisions relate to the above coverage. Aggregate limits and separate deductibles, if applicable, are to be noted after the stated coverage. (Attach additional pages if space is insufficient.) Scheduled items or locations are to be identified on an attached sheet.

INCLUDES:

- | | |
|---|--|
| <input type="checkbox"/> Premises & Operations | <input type="checkbox"/> Incidental Medical Malpractice |
| <input type="checkbox"/> Contractual Liability | <input type="checkbox"/> Explosion Hazard |
| <input type="checkbox"/> Independent Contractors | <input type="checkbox"/> Collapse Hazard |
| <input type="checkbox"/> Products/Completed Operations | <input type="checkbox"/> Underground Hazard |
| <input type="checkbox"/> Broad Form Property Damage | <input type="checkbox"/> Garagekeepers Legal Liability
(Primary) \$ |
| <input type="checkbox"/> Personal Injury | <input type="checkbox"/> Owned Automobiles |
| <input type="checkbox"/> Broad Form Liability Endorsement | <input type="checkbox"/> Non-owned Automobiles |
| <input type="checkbox"/> Fire Legal Liability | <input type="checkbox"/> Hired Automobiles |
| <input type="checkbox"/> Watercraft Liability | <input type="checkbox"/> |
| <input type="checkbox"/> _____ | <input type="checkbox"/> |

EXCLUDES:

DEDUCTIBLE: A deductible or self-insured retention (strike out one) of \$
applies to _____ coverage.

DEDUCTIBLE APPLIES PER CLAIM (), PER OCCURRENCE ().

Insurance Company

Address

I, _____ (type or print name) hereby declare under penalty of perjury, under the laws of the State of California, that I have the authority to bind the above-named insurance company to this endorsement and by my execution hereof, do so bind said company.

Signature of Authorized Representative
(Original Signature only; No Facsimile Signature or Initialed Signature Accepted)

Executed at _____, _____ on _____, 2015.

Phone No.: (_____) _____

AGREEMENT FOR
PROJECT TITLE BID NO. _____
NAME OF PROJECT
(A CDGB Funds Funded Project)
NAME OF ENTITY

On this ____ day of _____, 20____, the CITY OF RIVERSIDE, a California charter city and municipal corporation ("City"), and NAME AND ADDRESS OF ENTITY, State Contractor's License No. _____ ("Contractor"), mutually agree as follows:

1. **Scope of Work.** Contractor shall furnish all labor, equipment and materials for, and perform the work of 20____-20____ CDBG PROJECT NAME which is covered in Contractor's Bid Proposal (the "Work"), Contractor shall perform the Work in accordance with the provisions and requirements of the following Contract Documents: Notice Inviting Bids (Bid No. _____); City's Public Works Department Special Provisions, Addenda, Standard Drawings, Proposal Forms, and Plan Nos. _____; the 2012 Edition of the Standard Specifications for Public Works Construction ("Standard Specifications") written by Public Works Standards, Inc.; specifically identified sections of the State of California Department of Transportation 2006 Standard Specifications and Standard Plans, Contractor's Proposal and Bid Schedule; Non-Collusion Declaration; this Agreement; and all documents, maps, texts and items referred to in the foregoing documents. These Contract Documents are incorporated herein by reference and are intended to be correlative and constitute Contractor's performance obligations. The provisions of the Public Works Department Special Provisions ("Special Provisions") shall take precedence over any conflicting provisions in the Standard Specifications and the specific terms and conditions of this Agreement shall control and have precedence over any contradictory or inconsistent terms or conditions included in any of the Contract Documents and shall be controlling in questions of interpretation.

2. **Compensation.** City shall pay Contractor the Contract Price of _____ Dollars (\$ _____), which includes all California sales or use tax and County and City taxes, for the performance of all of the Work according to the terms and conditions contained or referred to herein, the completion of the improvements in strict conformity with the provisions hereof and the guarantee of the Work and improvements for the periods set forth in the Project Specifications. Monthly progress payments shall be made in accordance with Section 9-3.2 of the Standard Specifications, as modified by Section 9-3.5 of the Project Specifications.

3. **Securities.** In accordance with Section 22300 of the California Public Contract Code, Contractor may substitute securities for any moneys withheld by City to ensure performance of the Contract Work. Such substitution shall be made at the request and expense of Contractor. Securities equivalent to the amount withheld may be deposited with City or with a California or federally chartered bank as escrow agent. Securities eligible for substitution shall include those listed in Section 16430 of the Government Code, bank or saving and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit or any other security mutually agreed to by Contractor and City.

4. **Notice of Completion.** _____ (_____) days thereafter, City will process a final

payment to Contractor for the amounts City deducted and retained from its progress payments, except such sums thereof which are required by law or authorized by this Agreement to be further retained.

5. **Business License.** As a condition of this Agreement, Contractor and all subcontractors shall secure business licenses to operate in the City of Riverside, and shall also secure any other licenses or permits which may be required.

6. **Business Tax and Penalties.** Contractor acknowledges and agrees that with respect to any business tax or penalties thereon, utility charges, invoiced fee or other debt which is owed, or which becomes owed, by Contractor to City, City reserves the right to withhold and offset said amounts from any payments, refunds or reimbursements owed by City to Contractor under this Agreement. Written notice to Contractor of such withholding and offset shall promptly be given by City. In the event of a dispute as to the amount owed or whether such amount is owed to City, City will hold such disputed amount until either the appropriate appeal process has been completed or until the dispute has been resolved.

7. **Extra Materials.** Contractor shall not be compensated for any extra materials used or time expended, over and above the Contract Price, unless prior written approval for the same has been granted by City.

8. **Notice to Proceed.** In accordance with the time allowed per the various Bid Schedules Items, Contractor shall complete all of the Work of the Contract within _____ (____) calendar days after the date specified to Contractor in the Notice to Proceed issued by City, and shall guarantee the various portions of the Work and material for the periods set forth in the Special Provisions.

9. **Liquidated Damages.** Failure of Contractor to complete the Work within the time allowed will result in damages being sustained by City. Such damages are, and will continue to be, impracticable and extremely difficult to determine. For each consecutive calendar day in excess of the time specified for the completion of Work, as adjusted in accordance with Section 6-6 of the Standard Specifications, Contractor shall pay to City, or have withheld from monies due Contractor, the sum of _____ (\$_____.00). Execution of this Agreement shall constitute agreement by City and Contractor that said sum is the minimum value of the costs and actual damage caused by the failure of Contractor to complete the Work within the allotted time. Such sum is liquidated damages and shall not be construed as a penalty, and may be deducted from payments due Contractor if such delay occurs.

10. **Bonds.** Prior to City's execution of this Agreement, Contractor shall furnish City completed forms of the two (2) surety bonds included within the Project Specifications, one (1) as security for the faithful performance of the Contract and one (1) as security for the payment of all persons performing labor and furnishing materials in connection with the Contract. Both bonds shall be in the amount of one hundred percent (100%) of the Contract Price and shall be subscribed by a corporate surety which is authorized to transact surety insurance business in the State of California with a policy holder's Rating of A or higher and a Financial Class of VII or larger. Should any bond

or surety become insufficient, Contractor shall furnish City a new bond within ten (10) days after receiving notice from City. No payments will be due or paid under this Agreement until any and all bond deficiencies have been remedied. Contractor, by execution of this Agreement, acknowledges that bonds are not Contract Documents, but are separate and independent obligations.

11. **Worker's Compensation Insurance.** By executing this Agreement, Contractor certifies that Contractor is aware of and will comply with Section 3700 of the Labor Code of the State of California requiring every employer to be insured against liability for workers' compensation or to undertake self-insurance before commencing any of the Work. Contractor shall comply with Labor Code section 1861 by signing and filing the workers' compensation certification with the City Attorney.

Prior to City's execution of this Agreement, Contractor shall file with City either 1) a certificate of insurance for self-insurance evidencing that such insurance is in effect, or that Contractor is self-insured for such coverage; or 2) a certified statement that Contractor has no employees, and acknowledging that if Contractor does employ any person, the necessary certificate of insurance will immediately be filed with City. Any certificate filed with the City shall provide that City shall be given ten (10) days prior written notice before modification or cancellation thereof.

Contractor's Workers' Compensation carrier shall be authorized to transact insurance business in the State of California with a policy holder's Rating of A or higher and a Financial Class of VII or larger.

12. **Indemnification.** Except as to the sole negligence, active negligence or willful misconduct of City, Contractor shall defend, indemnify and hold the City, City's officers and employees, harmless from any and all loss, damage, claim for damage, liability, expense or cost, including attorneys' fees, which arises out of or is in any way connected with the performance of Work under this Agreement by Contractor or any of Contractor's employees, subcontractors or agents, and from all claims by Contractor's employees, subcontractors or agents for compensation for services rendered to Contractor in the performance of the Contract, notwithstanding that City may have benefitted from their services. This indemnification provision shall apply to any acts or omissions, willful misconduct or negligent conduct, whether active or passive, on the part of Contractor or any of Contractor's employees, subcontractors or agents.

The parties expressly agree that any payment, attorney fee, cost or expense City incurs or makes to or on behalf of an injured employee under City's self-administered workers' compensation program is included as a loss, expense or cost for the purposes of this Section, and that this Section shall survive the expiration or early termination of the Contract.

13. Contractor agrees, at its cost and expense, to promptly defend the City and the City's employees, officers, managers, agents and council members (collectively the "Parties to be defended") from and against any and all claims, allegations, lawsuits or other legal proceedings which arise out of, or are related to, or are in any manner connected with: (1) the work, activities, operations, or duties of Contractor, or of anyone employed by or working under the Contractor, or (2) any breach of this Agreement by Contractor. This duty to defend shall apply whether or not such

claims, allegations, lawsuits or proceedings have merit or are meritless, or which involve claims or allegations that any of the Parties to be defended were actively, passively or concurrently negligent, or which otherwise assert that the Parties to be defended are responsible, in whole or in part, for any loss, damage or injury. Contractor agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to the City.

14. Commercial General, Automobile Liability Insurance and Builder's Risk Insurance. Prior to City's execution of this Agreement, Contractor shall secure, and shall thereafter maintain until completion of the Contract, such commercial general and automobile liability insurance as shall protect Contractor from claims for damages for personal injury, including accidental death, as well as from claims for property damage which may arise from or which may concern operations under the Contract, whether such operations be by or on behalf of Contractor, any subcontractor or anyone directly or indirectly employed by, connected with or acting for or on behalf of any of them.

All liability insurance shall be issued by an insurance company or companies authorized to transact liability insurance business in the State of California with a policy holder's Rating of A or higher and a Financial Class of VII or larger.

Contractor's policy for commercial general liability shall cover both bodily injury (including death) and property damage (including but not limited to premises-operations liability, products-completed operations liability, independent contractors liability, personal injury liability, and contractual liability), in an amount not less than \$1,000,000 per-occurrence limit/\$2,000,000 aggregate.

Contractor's automobile liability policy shall cover both bodily injury and property damage in an amount not less than \$1,000,000 per-occurrence limit, unless otherwise approved by the City's Risk Manager, or his designee.

Builders Risk Insurance. Shall be written in the amount of the initial Contract Price, plus the value of subsequent Contract Modifications and cost of materials supplied or installed by others, comprising the total value for the entire Work at the Site on a replacement cost basis (including code upgrades) without optional deductibles or coinsurance provisions. The policy shall include coverage for fire, theft, extended coverage, vandalism and malicious mischief. If the property insurance requires deductibles/self-insured retention, the Contractor shall pay such deductibles. The amount of such deductibles shall not exceed \$25,000.00.

Policies or original certificates of insurance and completed forms of the Additional Insured Endorsement included within the Special Provisions (or insurance company equivalent acceptable to City) evidencing the coverage required by this Agreement for both commercial general and automobile liability, which coverage is more particularly set forth in Section 7-3 of the Special Provisions, shall be filed with City and shall include City as an additional insured. The policy or policies shall be in the usual form of commercial general liability insurance, but shall also include the following provisions:

“Solely with respect to work done by and on behalf of the named insured for the City of Riverside, it is agreed that the City of Riverside and its officers and employees are added as additional insureds under this policy.”

The policies shall not be canceled unless thirty (30) days prior written notification of intended cancellation has been given to City by certified or registered mail.

The insurance policy or policies shall also comply with the following provisions:

(A) Policies shall include premises/operations, products completed operations, independent contractors, owners and contractors’ protection, explosion, collapse, underground hazard, broad form contractual, personal injury with employment exclusion deleted, and broad form property damage.

(B) The policy shall be endorsed to waive any right of subrogation against the City and its sub-consultants, employees, officers, agents and directors for work performed under this Contract.

(C) If policies are written on a claim made basis, the certificate should so specify and the policy must continue in force for one year after completion of the project. The retroactive date of the coverage must also be limited.

(D) The policy shall specify that the insurance provided by Contractor will be considered primary and not contributory to any other insurance available to the City of Riverside. Contractor shall provide Form No. CG 20010413 to City.

15. **Prevailing Wage.** Contractor and all subcontractors are required to pay the higher of federally established prevailing wage rates or California general prevailing wage rates of per diem wages and overtime and holiday wages as determined by the U.S. Department of Labor in General Wage Decision No. **CA 100036 (9/30/2011 C36)** as modified, or by the Director of the Department of Industrial Relations under Section 1720 et seq. of the California Labor Code and implemented by Resolution No. 13346 of the City Council of the City of Riverside. A copy of the above stated federal General Wage Decision is attached hereto as Exhibit “A” and made a part hereof. The Director’s determination of prevailing rates is on file and open to inspection in the office of the City Clerk and is referred to and made a part hereof; the wage rates ascertained, determined and specified in both of those documents are referred to and made a part hereof as though fully set forth herein.

16. **Certified Payroll(s).** Contractor and all subcontractors are required to submit weekly certified payrolls on U.S. Department of Labor Form WH-347, including the Statement of Compliance, to document compliance with prevailing wage requirements. A copy of Department of Labor Form WH-347 is attached hereto as Exhibit “B” and incorporated herein by reference.

If Contractor fails to submit satisfactory payroll records, City shall retain an amount equal to ten percent (10%) of the estimated value of the work performed (excluding Mobilization) from Contractor's payment. This retention shall not exceed \$10,000 nor be less than \$1,000. Retention for failure to submit satisfactory payroll records shall be in addition to all other retentions provided for under this Agreement. The retention for failure to submit satisfactory payroll records for any work period will not be released for payment until all the unsatisfactory payroll records for which the retention was made are corrected, re-submitted and deemed acceptable by the City. Payment of the retention will be made on the next monthly payment due the Contractor following City's receipt of satisfactory payroll records.

17. **Compliance with Laws.** Contractor shall keep fully informed of federal, state and local laws and ordinances and regulations which in any manner affect those employed by Contractor, or in any way affect the performance of services by Contractor pursuant to this Agreement. Contractor shall at all times observe and comply with all such laws, ordinances and regulations, and shall be solely responsible for any failure to comply with all applicable laws, ordinances and regulations. In addition, Contractor is aware of and stipulates that Contractor will comply with the Federal Labor Standards Provisions published by the U.S. Department of Housing and Urban Development attached hereto as Exhibit "C" and incorporated herein by reference.

Contractor further stipulates that Contractor will comply with the following sections of the California Labor Code:

- (A) Section 1775 prescribing sanctions for failure to pay prevailing wage rates;
- (B) Section 1776 requiring the making, keeping and disclosing of detailed payroll records and prescribing sanctions for failure to do so;
- (C) Section 1777.5 prescribing the terms and conditions for employing registered apprentices;
- (D) Section 1810 providing that eight hours of labor shall be a day's work; and
- (E) Section 1813 prescribing sanctions for violations of the provisions concerning eight-hour work days and forty-hour work weeks.
- (F) Sections 1725.5 and 1771.1 requiring all general contractors and subcontractors to be registered with DIR. Registration can be accomplished through the DIR website by using this link: <http://www.dir.ca.gov/PublicWorks/PublicWorks.html>

18. Contractor shall be responsible for posting the wage decision and Department of Labor "Notice to Employee" at the job site in a location that is easily accessible to all workers employed at the project and where the wage decision and notice will not be destroyed by inclement weather. A copy of the Department of Labor "Notice to Employees" is attached hereto as Exhibit "D" and incorporated by reference.

19. Contractor shall erect a sign at the job site in conformance with the detail and specifications entitled "Construction Site Sign for HUD Funded Projects" attached hereto as Exhibit "E" and incorporated by reference.

20. Contractor shall maintain all books, documents, papers and records of Contractor's operations and financial activities directly pertinent to this Agreement in accordance with the requirements of the Federal granting agency and the regulations promulgated by or for it. Such books, documents, papers and records shall be open to inspection, audit, examination, excerpt and transcription by the authorized representatives of City, the Federal granting agency and the Controller General of the United States during regular working hours. Contractor shall keep and maintain said books, documents, papers and records for at least three years after City makes final payments pursuant to this Agreement and all other pending matters are closed or such greater period of time as may be required by the Federal granting agency.

21. Contractor and its subcontractors shall comply with the Special Equal Opportunity Provisions, attached hereto as Exhibit "F" and incorporated herein by reference and implementing Executive Order 11246, as amended, Certification of Non-segregated Facilities, civil rights Act of 1974, Section 109 of the Housing and Community Development Act of 1974, Section 3 of the Housing and Urban Development Act, as amended, Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973.

22. Contractor shall comply with the Special Conditions Pertaining to Hazards Safety Standards and Accident Prevention, regarding lead based paint hazards, use of explosives, and danger signals and safety devices, attached hereto as Exhibit "G" and incorporated herein by reference.

23. Contractor shall comply with the Project Area Trainees, Employees and Businesses requirements of the Housing and Urban Development Act of 1968, as amended, attached hereto as Exhibit "H" and incorporated by reference.

24. Contractor shall comply with the Federal Funding Accountability and Transparency Act (FFATA) of 2006 which requires information on Federal awards be made available to the public via a single, searchable website, which is www.USASpending.gov. Contractor and all subcontractors shall complete and submit the required information for contracts greater than \$25K per requirements attached hereto as Exhibit "I" and incorporated by reference.

25. **Non-Discrimination.** Except as provided in Section 12940 of the California Government Code, Contractor shall not discriminate on the grounds of race, religious creed, color, national origin, ancestry, age, physical handicap, medical condition, including the medical condition of Acquired Immune Deficiency Syndrome (AIDS) or any condition related thereto, marital status, sex or sexual orientation, genetic information, gender, gender identity or gender expression in the performance of the Contract or in the selection and retention of labor forces or the procurement of materials and equipment connected with the performance of any work under the Contract. Contractor shall also comply with the Americans with Disabilities Act.

26. **Notices.** Service of any notices, bills, invoices or other documents required or permitted under this Agreement shall be sufficient if sent by one party to the other by United States mail, postage prepaid and addressed as follows:

City

City of Riverside
Public Works Director
3900 Main Street
Riverside, California 92522

Contractor

Name
Address
City, State, Zip

27. **Venue.** Any action at law or in equity brought by either of the parties hereto for the purpose of enforcing a right or rights provided for by this Agreement shall be tried in a court of competent jurisdiction in the County of Riverside, State of California, and the parties hereby waive all provisions of law providing for a change of venue in such proceedings to any other county

28. **Waiver.** No action or failure to act by the City shall constitute a waiver of any right or duty afforded City under this Agreement, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically provided in this Agreement or as may be otherwise agreed in writing.

29. **Authority.** The individuals executing this Agreement and the instruments referenced herein on behalf of Contractor each represent and warrant that they have the legal power, right and actual authority to bind Contractor to the terms and conditions hereof and thereof.

30. **Independent Contractor.** Contractor shall at all times during its performance of the Work retain its status as an independent contractor. Contractor's employees and agents shall under no circumstances be considered or held to be employees or agents of City and City shall have no obligation to pay or withhold state or federal taxes or provide workers' compensation or unemployment insurance for or on behalf of Contractor or its employees and agents.

31. **Severability.** Each provision, term, condition, covenant and/or restriction, in whole and in part, in this Agreement shall be considered severable. In the event any provision, term, condition, covenant and/or restriction, in whole and/or in part, in this Agreement is declared invalid, unconstitutional, or void for any reason, such provision or part thereof shall be severed from this Agreement and shall not affect any other provision, term, condition, covenant and/or restriction of this Agreement and the remainder of the Contract shall continue in full force and effect.

32. **Entire Agreement.** This Agreement contains the entire Agreement of the parties hereto, and supersedes any prior written or oral agreements between them concerning the subject matter contained herein. There are not representations, agreements, arrangements, or understandings, oral or written, between the parties hereto, relating to the subject of this Agreement which are not fully expressed herein.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be duly executed on the day and year first above written.

CITY OF RIVERSIDE, a California
charter city and municipal corporation

NAME
Entity

By _____
City Manager

By _____
(Signature)

Name and Title

Attest _____
City Clerk

By _____
(Signature)

Name and Title

APPROVED AS TO FORM:

By _____
Deputy City Attorney

WORKERS' COMPENSATION CERTIFICATION

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

Dated: _____

NAME OF ENTITY

By _____

Printed Name:

Title:

CORPORATE CERTIFICATE
(If a Corporation)

STATE OF)
)
COUNTY OF) SS:

I _____ HEREBY CERTIFY as follows:

1. That I am the Corporate Secretary for _____, a corporation duly organized, existing and in good standing under the laws of the State of _____;
2. That on _____, a meeting was held by the Board of Directors for _____ corporation wherein the following resolution was duly passed and adopted:

“RESOLVED, that _____, as _____ of corporation, be and is hereby authorized to execute the foregoing document entitled _____ on behalf of the Corporation, and that his/her execution thereof shall be the official act and deed of this Corporation.” (A true and correct copy of said Resolution is attached hereto and incorporated herein by reference.)

I further certify that said Resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the corporation this _____, day of _____, 20_____.

By: _____

Printed Name: _____

Secretary for: _____

(Corporate Seal)

PROPOSAL FORMS

Date: _____

PROPOSAL FOR CONSTRUCTING

2014-2015 CDBG Street Improvements, ADA Footpath Improvements and Jackson Avenue Parkway Landscape and Irrigation Improvements from SR-91 to Magnolia Avenue

TO THE HONORABLE MAYOR AND CITY COUNCIL OF THE CITY OF RIVERSIDE:

In compliance with the Notice Inviting Bids, published by your Purchasing Services Manager, the undersigned (hereinafter, "Bidder") hereby proposes to furnish all materials, equipment, labor and methods and do all things necessary for the proper construction and completion of the work in strict and complete accord with the specifications now on file with the Purchasing Services Manager at the prices set forth in the attached bid schedule. This proposal shall remain good and shall not be withdrawn for **sixty (60) days** after the date the proposals are opened by the Purchasing Services Manager.

Bidder hereby declares that Bidder has examined the specifications and understands that all items to be furnished shall be for the bid price, and that Bidder has also checked all figures shown and understands that neither the City of Riverside nor any officer thereof will be responsible for any errors or omissions in submitting this proposal.

Bidder understands that the City Council reserves the rights to reject any and all proposals, to waive any irregularities in bidding or to award the Contract to other than the lowest bidder.

Enclosed is the proposal guaranty, made payable to the City of Riverside, for the sum of \$ _____, which is not less than ten percent of the total amount of this bid.

Bidder hereby agrees that if Bidder is awarded the Contract, Bidder will sign the Contract Agreement in duplicate counterparts and return the counterparts, together with completed Contract surety bonds and insurance confirmations, within **fifteen (15) calendar days** from the date the City mails, or by other means delivers, the Contract Documents to Bidder. Bidder acknowledges that the proposal guaranty submitted herewith is subject to forfeiture for failure to submit these Contract Documents in completed form within the above-required time limit.

Bidder hereby agrees that if Bidder is awarded the Contract, Bidder will commence work under the Contract on the date specified in the written "Notice to Proceed" to be issued by the City and will complete the project within **Sixty (60) working days** thereafter as required by the Specifications. Bidder further agrees to pay as liquidated damages the sum of **\$2,500 for each calendar day** thereafter during which the project remains incomplete.

Contractor

Date: _____

BIDDER INFORMATION:

DATE: _____

BIDDER'S NAME, ADDRESS & PHONE

STATE CONTRACTOR'S LIC. NO. _____

CLASS OF LICENSE: _____

EXPIRATION DATE: _____

Name on license must agree with company name shown at right.

DIR Registration Number: _____

TELEPHONE: _____
(Area Code)

CITY BUSINESS TAX REGISTRATION
(if available)

IS BIDDER A CERTIFIED DBE: Y N
(Circle One)

Bidder hereby certifies that Bidder is currently the holder of a valid license as a Contractor in the State of California, and that the license covers the proposed work. When the appropriateness of a particular license is in question, Bidder understands that the determination of the State of California, Department of Consumer Affairs, Contractors State License Board shall govern. These terms and conditions shall also apply to any subcontractors listed by Bidder.

Bidder is: (check one)

- An Individual Owner _____
- A Joint Venture _____
- A Partnership _____
- A Corporation _____

The Bidder shall be required to provide a signed copy of the following documents to the Purchasing Department prior to bid opening:

- Bid Proposal documents and any other documents required
- Original Bid Bond (Notarized) or if (Bid Security is in the form of a "Cashier's check" or "Certified check" must be delivered to the Purchasing Manager before bid due date and time).
- Non-Collusion Declaration
- Contractor Customer Service Standards Acknowledgment
- Any other documents called out in the specifications

Any Bidder who fails to acknowledge all addenda will be declared non-responsive and their bid will not be considered.

**Acknowledge any addenda received here:

Contractor

Date: _____

SUBCONTRACTOR INFORMATION SHEET

In accordance with the requirements of the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100 et seq.), the following subcontractors are listed:

**SUBCONTRACTORS NAME
AND BUSINESS ADDRESS**

**WORK TO BE SUBCONTRACTED, LICENSE
NUMBER, DIR REGISTRATION (if
applicable) SUBCONTRACTED AMOUNT**

Name: _____
Address: _____

License No.: _____
Subcontracted Amount: _____
DIR Registration Number: _____
Work to be Performed: _____
Certified DBE (Yes or No): _____

Name: _____
Address: _____

License No.: _____
Subcontracted Amount: _____
DIR Registration Number: _____
Work to be Performed: _____
Certified DBE (Yes or No): _____

Name: _____
Address: _____

License No.: _____
Subcontracted Amount: _____
DIR Registration Number: _____
Work to be Performed: _____
Certified DBE (Yes or No): _____

Name: _____
Address: _____

License No.: _____
Subcontracted Amount: _____
DIR Registration Number: _____
Work to be Performed: _____
Certified DBE (Yes or No): _____

Name: _____
Address: _____

License No.: _____
Subcontracted Amount: _____
DIR Registration Number: _____
Work to be Performed: _____
Certified DBE (Yes or No): _____

Name: _____
Address: _____

License No.: _____
Subcontracted Amount: _____
DIR Registration Number: _____
Work to be Performed: _____
Certified DBE (Yes or No): _____

**2014-2015 CDBG
Street Improvements, ADA Footpath Improvements and
Jackson Avenue Parkway Landscape and Irrigation Improvements From SR-91 to Magnolia Avenue**

Bid No. 7348

Contractor
Date: _____

Amount rounded to Nearest: \$0.01

Plan No M-480, M-481, XL-732, R-4338, R-4339, R-4340, R-4341, R-4342, R-4343

No.	CONTRACT BID ITEMS	Quantity	Unit	Unit Price	Amount
1	Note: All items subject to any special notes or footnotes appearing on this Engineer's estimate included with the bid documents.	.....	.....
2	Note: The Contract lump sum or unit price for each Contract Bid Item shall include full compensation for all labor, materials, tools, taxes, profit, overhead, incidentals and appurtenant work necessary for performing and completing the work of the Contract Bid Item as required by the Project Plans, Specifications, Special Provisions and other Contract Documents. Such compensation shall also include or take into consideration any additional provisions or conditions specifically stated immediately following the Contract Bid Item.	.....	.....
3	Note: In the absence of a specific bid item or specific payment provisions for any portion of the work required by the Contract Documents, the bidder shall include the bidder's compensation for that portion of the Contract work in the Contract unit price(s) and/or lump sum price(s) of the bid item(s) that require such work, or are closely related to such work. Therefore, no separate or additional payment will be made to the Contractor for any such work on the premise that such work lacks specific bid item(s) or specific payment provisions.	.....	.....
4	Note: "(F)" adjacent to a Contract bid item designates a Final Pay Quantity per Section 9-3.2.1 of the Special Provisions.	.....	.....
5	Note: "(P)" adjacent to a Contract bid item designates a "Partial Pay Item" per Section 9-3.2 of the Special Provisions.	.....	.....
6	Note: "(S)" adjacent to a Contract bid item designates a "Specialty Item" per Section 2-3.2 of the Special Provisions.	.....	.....
7	Note: Bid Items 8 through 15 are for Plan M-480, Bid Items 16 through 47 are for Plans R-4338 and XL-732(Sheet 1), Bid Items 48 through 74 are for Plans R-4339 and XL-732(Sheet 2), Bid Items 75 through 92 are for Plans R-4340 and XL-732(Sheet 3), Bid Items 93 through 115 are for Plans R-4341 and XL-732(Sheet 4), Bid Items 116 through 137 are for Plan M-481, Bid Items 138 through 163 are for Plans R-4342, XL-732(Sheet 5), Bid Items 164 through 184 are for Plans R-4343, XL-732(Sheet 6&7).	.....	.....

2014-2015 ADA Footpath Improvements (M-480)

8	Mobilization, (P)	1	LS		
9	Clearing & Grubbing	1	LS		
10	Traffic Control and Access, (P)	1	LS		
11	Water Pollution Control	1	LS		
12	PCC Wheelchair Ramp, per City Std. 304. (Includes new ramps and all locations identified as remove and replace. Includes removal and re-stripping of stop bars as needed.)	40	EA		
13	Construct Type VII Wheelchair Ramp per Special Provisions - Includes relocation of mailboxes outside of driveway wing, retaining curb, driveway matchups, and modifications as necessary. Shall only be used at the discretion of the Engineer	600	SF		
14	Reconstruct Front of Concrete Parkway Drain per City Std 410 (Includes sawcutting, doweling, epoxing, and joining to the existing structure.)	1	EA		
15	Relocate Sign – No Post, (S)	2	EA.		
Sub-Total: 2014-2015 ADA Footpath Improvement Items (M-480)					

**2014-2015 CDBG-Ward 1 Street Improvements for Eleventh, Twelfth, Chestnut and Almond Streets
(R-4338, XL-732(Sheet 1))**

16	Mobilization, (P)	1	LS		
17	Clearing & Grubbing	1	LS		
18	Traffic Control and Access, (P)	1	LS		
19	Water Pollution Control	1	LS		
20	Asphalt Pavement (DGAC)	1,100	Ton		
21	Asphalt Pavement (DGAC) - For Additional Removal Areas If Needed Shall only be used at the discretion of the Engineer	110	Ton		
22	Crack Fill/Repair Per Linear Foot of Street Centerline	3,000	LF		
23	Cold Milling, Type CM1 (10' Wide / Depth Per Plan)	330	LF		

**2014-2015 CDBG
Street Improvements, ADA Footpath Improvements and
Jackson Avenue Parkway Landscape and Irrigation Improvements From SR-91 to Magnolia Avenue**

Bid No. 7348

Contractor
Date: _____

Amount rounded to Nearest: \$0.01

Plan No M-480, M-481, XL-732, R-4338, R-4339, R-4340, R-4341, R-4342, R-4343

No.	CONTRACT BID ITEMS	Quantity	Unit	Unit Price	Amount
24	Cold-Milling Type CM2, 0.15' Min. Depth	97,000	SF		
25	Cold-Milling Type CM2, 0.15' Min. Depth - For Additional Removal Areas If Needed Shall only be used at the discretion of the Engineer	9,700	SF		
26	Adjust Sewer or Storm Drain Manhole to Grade	10	EA		
27	Adjust Water Valve Frame and Cover to Grade	30	EA		
28	Construct Curb & Gutter - Std. 200 (C.F. varies)	535	LF		
29	Construct Cross Gutter - Std. 220	120	SF		
30	Construct Concrete Driveway per City Std 302	300	SF		
31	Construct Concrete Sidewalk per City Std 325 (Includes parkway slope grading in conformance with the plans and the Standard 325. Also includes sidewalk of 6" thickness where indicated or required for the driveway approach.)	2,520	SF		
32	Construct PCC Wheelchair Ramp - Std. 304	16	EA		
33	Install Roadside Sign (No Post), (S)	2	EA		
34	Install Roadside Sign (One Post), (S)	5	EA		
35	Install Street Name Sign, (S)	9	EA		
36	Relocate Sign (No Post), (S)	1	EA		
37	Relocate Sign (One Post), (S)	1	EA		
38	Remove Sign, (S)	14	EA		
39	Double Yellow Stripe (Thermo) - Detail 22 w/ RPM(s), (S)	2,705	LF		
40	4" Solid White Stripe (Thermo), (S)	280	LF		
41	12" Solid Stripe White or Yellow (Thermo), (S)	305	SF		
42	Pavement Legends / Markings (Thermo), (S)	198	SF		
43	Type "D" Detector Loop, (S)	1	EA		
44	Type "E" Detector Loop, (S)	2	EA		
45	SC - Splice new to existing conductors, (S)	1	EA		
46	DLC - Detector Loop Cable, (S)	25	LF		
47	2-Channel Detector Card, (S)	1	EA		
Sub-Total: CDBG Ward 1 Street Improvements Items (R-4338, XL-732(Sheet 1))					
2014-2015 CDBG-Ward 2 Street Improvements for Twelfth Street, Thirteenth Street, Howard Avenue and Park Avenue (R-4339, XL-732(Sheet 2))					
48	Mobilization, (P)	1	LS		
49	Clearing & Grubbing	1	LS		
50	Traffic Control and Access, (P)	1	LS		
51	Water Pollution Control	1	LS		
52	Asphalt Pavement (DGAC)	1,000	Ton		
53	Asphalt Pavement (DGAC) - For Additional Removal Areas If Needed only be used at the discretion of the Engineer	90	Ton		
54	Crack Fill/Repair Per Linear Foot of Street Centerline	2,600	LF		
55	Cold Milling, Type CM1 (10' Wide / Depth Per Plan)	220	LF		
56	Cold-Milling Type CM2, 0.15' Min. Depth	78,000	SF		
57	Cold-Milling Type CM2, 0.15' Min. Depth - For Additional Removal Areas If Needed Shall only be used at the discretion of the Engineer	7,600	SF		
58	Adjust Sewer or Storm Drain Manhole to Grade	7	EA		
59	Adjust Water Valve Frame and Cover to Grade	21	EA		
60	Construct Curb & Gutter - Std. 200 (C.F. varies)	250	LF		
61	Construct Concrete Sidewalk per City Std 325 (Includes parkway slope grading in conformance with the plans and the Standard 325. Also includes sidewalk of 6" thickness where indicated or required for the driveway approach.)	430	SF		
62	Install Roadside Sign (No Post), (S)	1	EA		
63	Install Roadside Sign (One Post), (S)	4	EA		
64	Relocate Sign (No Post), (S)	1	EA		
65	Remove Sign, (S)	5	EA		

**2014-2015 CDBG
Street Improvements, ADA Footpath Improvements and
Jackson Avenue Parkway Landscape and Irrigation Improvements From SR-91 to Magnolia Avenue**

Bid No. 7348

Contractor
Date: _____

Amount rounded to Nearest: \$0.01

Plan No M-480, M-481, XL-732, R-4338, R-4339, R-4340, R-4341, R-4342, R-4343

No.	CONTRACT BID ITEMS	Quantity	Unit	Unit Price	Amount
66	Double Yellow Stripe (Thermo) - Detail 22 w/ RPM(s), (S)	750	LF		
67	12" Solid Stripe White or Yellow (Thermo), (S)	725	SF		
68	Pavement Legends / Markings (Thermo), (S)	242	SF		
69	Painted Curb, (S)	40	LF		
70	Type "D" Detector Loop, (S)	2	EA		
71	Type "E" Detector Loop, (S)	4	EA		
72	SC - Splice new to existing conductors, (S)	2	EA		
73	DLC - Detector Loop Cable, (S)	90	LF		
74	2-Channel Detector Card, (S)	2	EA		
Sub-Total: CDBG Ward 2 Street Improvements Items (R-4339, XL-732(Sheet 2))					

**2014-2015 CDBG-Ward 3 Street Improvements for Potomac Street and Mt. Vernon Street
(R-4340, XL-732(Sheet 3))**

75	Mobilization, (P)	1	LS		
76	Clearing & Grubbing	1	LS		
77	Traffic Control and Access, (P)	1	LS		
78	Water Pollution Control	1	LS		
79	Asphalt Pavement (DGAC)	480	Ton		
80	Asphalt Pavement (DGAC) - For Additional Removal Areas If Needed only be used at the discretion of the Engineer	50	Ton	Shall	
81	Crack Fill/Repair Per Linear Foot of Street Centerline	1,400	LF		
82	Cold-Milling Type CM2, 0.15' Min. Depth	42,500	SF		
83	Cold-Milling Type CM2, 0.15' Min. Depth - For Additional Removal Areas If Needed Shall only be used at the discretion of the Engineer	4,250	SF		
84	Adjust Sewer or Storm Drain Manhole to Grade	4	EA		
85	Adjust Water Valve Frame and Cover to Grade	6	EA		
86	Construct Curb & Gutter - Std. 200 (C.F. varies)	40	LF		
87	Construct Concrete Sidewalk per City Std 325 (Includes parkway slope grading in conformance with the plans and the Standard 325. Also includes sidewalk of 6" thickness where indicated or required for the driveway approach.)	1,700	SF		
88	Construct PCC Wheelchair Ramp - Std. 304	1	EA		
89	Install Roadside Sign (One Post), (S)	4	EA		
90	Remove Sign, (S)	4	EA		
91	12" Solid Stripe White or Yellow (Thermo), (S)	55	SF		
92	Pavement Legends / Markings (Thermo), (S)	66	SF		
Sub-Total: CDBG Ward 3 Street Improvements Items (R-4340, XL-732(Sheet 3))					

**2014-2015 CDBG-Ward 5 Street Improvements for Farnham Place from Magnolia Avenue to Andrew Street
(R-4341, XL-732(Sheet 4))**

93	Mobilization, (P)	1	LS		
94	Clearing & Grubbing	1	LS		
95	Traffic Control and Access, (P)	1	LS		
96	Water Pollution Control	1	LS		
97	Asphalt Pavement (DGAC)	480	Ton		
98	Asphalt Pavement (DGAC) - For Additional Removal Areas If Needed only be used at the discretion of the Engineer	48	Ton	Shall	
99	Crack Fill/Repair Per Linear Foot of Street Centerline	1,400	LF		
100	Cold Milling, Type CM1 (10' Wide / Depth Per Plan)	30	LF		
101	Cold-Milling Type CM2, 0.15' Min. Depth	42,500	SF		
102	Cold-Milling Type CM2, 0.15' Min. Depth - For Additional Removal Areas If Needed Shall only be used at the discretion of the Engineer	4,250	SF		
103	Adjust Sewer or Storm Drain Manhole to Grade	2	EA		
104	Adjust Water Valve Frame and Cover to Grade	5	EA		
105	Construct Curb Only - Std. 200 (C.F. varies)	40	LF		

**2014-2015 CDBG
Street Improvements, ADA Footpath Improvements and
Jackson Avenue Parkway Landscape and Irrigation Improvements From SR-91 to Magnolia Avenue**

Bid No. 7348

Contractor
Date: _____

Amount rounded to Nearest: \$0.01

Plan No M-480, M-481, XL-732, R-4338, R-4339, R-4340, R-4341, R-4342, R-4343

No.	CONTRACT BID ITEMS	Quantity	Unit	Unit Price	Amount
106	Construct Curb & Gutter - Std. 200 (C.F. varies)	40	LF		
107	Construct Concrete Driveway per City Std 302	550	SF		
108	Construct Concrete Sidewalk per City Std 325 (Includes parkway slope grading in conformance with the plans and the Standard 325. Also includes sidewalk of 6" thickness where indicated or required for the driveway approach.)	1,050	SF		
109	Construct PCC Wheelchair Ramp - Std. 304	1	EA		
110	Install Roadside Sign (One Post), (S)	2	EA		
111	Install Street Name Sign, (S)	1	EA		
112	Relocate Sign (No Post), (S)	1	EA		
113	Remove Sign, (S)	3	EA		
114	12" Solid Stripe White or Yellow (Thermo), (S)	50	SF		
115	Pavement Legends / Markings (Thermo), (S)	44	SF		
Sub-Total: CDBG Ward 5 Street Improvements Items (R-4341, XL-732(Sheet 4))					

**2014-2015 CDBG - PHASE 1 Ward 5 Jackson Avenue Parkway Landscape and Irrigation Improvements
from SR 91 to Magnolia Avenue (M-481) ** BASE JACKSON BID ****

116	Mobilization, (P)	1	LS		
117	Clearing & Grubbing	1	LS		
118	Traffic Control and Access, (P)	1	LS		
119	Unclassified Excavation, (F)	1	LS		
120	Water Pollution Control	1	LS		
121	Planting - 1 Gallon, (S)	335	EA		
122	Tree - 24" Box, (S)	7	EA		
123	Soil Prep / Fine Grading, (S)	9,000	SF		
124	Design, Furnish and Install Irrigation System, (S)	1	LS		
125	Plant Establishment, (S)	9,000	SF		
126	Wood Mulch (2" Layer), (S)	9,000	SF		
Sub-Total: CDBG - Phase 1 Ward 5 Landscape and Irrigation Improvements Items (M-481)					

**2014-2015 CDBG - PHASE 2 Ward 5 Jackson Avenue Parkway Landscape and Irrigation Improvements
from SR 91 to Magnolia Avenue (M-481) ** OPTIONAL JACKSON BID ****

127	Mobilization, (P)	1	LS		
128	Clearing & Grubbing	1	LS		
129	Traffic Control and Access, (P)	1	LS		
130	Unclassified Excavation, (F)	1	LS		
131	Water Pollution Control	1	LS		
132	Planting - 1 Gallon, (S)	280	EA		
133	Tree - 24" Box, (S)	7	EA		
134	Soil Prep / Fine Grading, (S)	7,500	SF		
135	Design, Furnish and Install Irrigation System, (S)	1	LS		
136	Plant Establishment, (S) Plant establishment period shall be as indicated in the Special Provisions and independent of the time	7,500	SF		
137	Wood Mulch (2" Layer), (S)	7,500	SF		
Sub-Total: CDBG - Phase 2 Ward 5 Landscape and Irrigation Improvements Items (M-481)					

2014-2015 CDBG-Ward 6 Street Improvements for Jones Avenue from Wells Avenue to Hole Avenue (R-4342, XL-732(Sheet 5))

138	Mobilization, (P)	1	LS		
139	Clearing & Grubbing	1	LS		
140	Traffic Control and Access, (P)	1	LS		
141	Water Pollution Control	1	LS		
142	Asphalt Pavement (DGAC)	1,200	Ton		
143	Asphalt Pavement (DGAC) - For Additional Removal Areas If Needed	Shall 120	Ton		
144	Crack Fill/Repair Per Linear Foot of Street Centerline	3,050	LF		
145	Cold Milling, Type CM1 (10' Wide / Depth Per Plan)	310	LF		
146	Cold-Milling Type CM2, 0.15' Min. Depth	108,000	SF		

**2014-2015 CDBG
Street Improvements, ADA Footpath Improvements and
Jackson Avenue Parkway Landscape and Irrigation Improvements From SR-91 to Magnolia Avenue**

Bid No. 7348

Contractor
Date: _____

Amount rounded to Nearest: \$0.01

Plan No M-480, M-481, XL-732, R-4338, R-4339, R-4340, R-4341, R-4342, R-4343

No.	CONTRACT BID ITEMS	Quantity	Unit	Unit Price	Amount
147	Cold-Milling Type CM2, 0.15' Min. Depth - For Additional Removal Areas If Needed	10,800	SF		
148	Adjust Sewer or Storm Drain Manhole to Grade	25	EA		
149	Adjust Water Valve Frame and Cover to Grade	15	EA		
150	Adjust Sewer or Storm Drain Cleanout to Grade	1	EA		
151	Construct Curb & Gutter - Std. 200 (C.F. varies)	280	LF		
152	Construct PCC Wheelchair Ramp - Std. 304	2	EA		
153	Install Roadside Sign (One Post), (S)	7	EA		
154	Install Street Name Sign, (S)	3	EA		
155	Remove Sign, (S)	10	EA		
156	Double Yellow Stripe (Thermo) - Detail 22 w/ RPM(s), (S)	2,810	LF		
157	12" Solid Stripe White or Yellow (Thermo), (S)	540	SF		
158	Pavement Legends / Markings (Thermo), (S)	352	SF		
159	Type "D" Detector Loop, (S)	1	EA		
160	Type "E" Detector Loop, (S)	2	EA		
161	SC - Splice new to existing conductors, (S)	1	EA		
162	DLC - Detector Loop Cable, (S)	35	LF		
163	2-Channel Detector Card, (S)	1	EA		
Sub-Total: CDBG Ward 6 Street Improvements Items (R-4342, XL-732(Sheet 5))					
2014-2015 CDBG Ward 7 Street Improvements for Sunnyslope Avenue, Easy Street, Nebraska Avenue, Bogart Avenue and Bushnell Avenue from Bogart Avenue to Mitchell Avenue (R-4343, XL-732(Sheet 6&7))					
164	Mobilization, (P)	1	LS		
165	Clearing & Grubbing	1	LS		
166	Traffic Control and Access, (P)	1	LS		
167	Water Pollution Control	1	LS		
168	Asphalt Pavement (DGAC)	1,300	Ton		
169	Asphalt Pavement (DGAC) - For Additional Removal Areas If Needed	Shall 130	Ton		
170	Crack Fill/Repair Per Linear Foot of Street Centerline	3,800	LF		
171	Cold Milling, Type CM1 (10' Wide / Depth Per Plan)	270	LF		
172	Cold-Milling Type CM2, 0.15' Min. Depth	112,000	SF		
173	Cold-Milling Type CM2, 0.15' Min. Depth - For Additional Removal Areas If Needed	11,200	SF		
174	Adjust Sewer or Storm Drain Manhole to Grade	13	EA		
175	Adjust Water Valve Frame and Cover to Grade	30	EA		
176	Construct Concrete Sidewalk per City Std 325	240	SF		
177	Install Roadside Sign (No Post), (S)	2	EA		
178	Install Roadside Sign (One Post), (S)	4	EA		
179	Install Street Name Sign, (S)	7	EA		
180	Relocate Sign (One Post), (S)	1	EA		
181	Remove Sign, (S)	11	EA		
182	Double Yellow Stripe (Thermo) - Detail 22 w/ RPM(s), (S)	415	LF		
183	12" Solid Stripe White or Yellow (Thermo), (S)	305	SF		
184	Pavement Legends / Markings (Thermo), (S)	308	SF		
Sub-Total: CDBG Ward 7 Street Improvements Items (R-4343, XL-732(Sheet 6&7))					
TOTAL FOR ALL CONTRACT BID ITEMS					

Contractor

Date: _____

BID ADJUSTMENT SHEET

Please use the space provided to specify any changes to line item pricing or subcontractor pricing. Be sure to show the new bid total after the adjustment(s).

The Purchasing Division will apply any adjustments shown below to the prices listed in your submitted bid package and evaluate all other bids prior to posting results.

Pricing updated on this sheet shall be considered final.

NOTE: PLEASE BE SURE CLEARLY PRINT ALL INFORMATION

Adjustment to Bid

Adjusted Price

Adjusted Bid Total

\$ _____

Authorized Signature/Title:

Contractor

Date: _____

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

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 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 therefor, 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 of the laws of the State of California that the above information is true and correct and that this declaration is executed on _____ (date) at _____ (city), _____(state).

Contractor: _____

By: _____
(Signature)

Title: _____

CITY OF RIVERSIDE

Bid No. 7348

**CONTRACTOR CUSTOMER SERVICE STANDARDS
ACKNOWLEDGMENT**

Customer Service is important to the City of Riverside and has resulted in the adoption of our motto and mission statement:

**"People Serving People"
The City of Riverside will provide high quality
Municipal services in a responsive and cost-effective manner.**

The City and its Contractors shall at all times strive to represent the City in a professional, courteous, friendly, efficient, and cost-effective manner. The following customer service standards shall be enforced by Contractors:

1. Abide by the City's mission statement and customer standards as noted herein.
2. Furnish sufficient supervisory and working personnel capable of promptly accomplishing on schedule, to the satisfaction of the director / designee, all work required under the contract.
3. Have competent working supervisors on the job at all times work is being performed who are capable of communicating and discussing effectively, both in written and oral English, matters pertaining to the contract.
4. Remove from the work site any employees deemed careless, incompetent, or who generate multiple customer service complaints.
5. Have supervisors carry identification which clearly indicates to the public the name of the Contractor responsible for the project.
6. Have Contractor's vehicles assigned to the project clearly identified.
7. As applicable, with department's approval, issue a notice in business and residential areas in advance of project commencement stating work project, general time frame, company name, telephone number, job site contact person, City contact person and telephone number.
8. Endeavor to maintain good public relations at all times. Conduct work in a proper and efficient manner to create the least possible inconvenience to the general public.

Bidder shall return a signed copy of this form to the Purchasing Manager prior to bid opening.

Company Name: _____

Authorized Representative (Please Print): _____

Signature: _____ Date: _____

Contractor

Date: _____

Name of Project:

This is a HUD-funded project. The law requires the City to collect information on the ethnicity of all bidders and their proposed subcontractors. No Contractor will be considered for an award of the construction Contract unless the required information is supplied. For ethnicity, use the abbreviation as shown below.

_____ Prime Contractor	_____ Ethnicity	_____ Female Owned Percent	_____ Federal I.D. Number
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List information for subcontractors below:

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

W = White, B = Black, H = Hispanic, A = Asian/Pacific Island, AM = American Indian,
O = Other Minority