

CITY OF PHOENIX, ARIZONA
OFFICE OF THE CITY ENGINEER



PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS

AVENIDA RIO SALADO / BROADWAY ROAD – PHASE II
PROJECT NO. ST85100371 – 1

MAYOR

GREG STANTON

CITY COUNCIL

DISTRICT NO. 1 – THELDA WILLIAMS
DISTRICT NO. 2 – JIM WARING
DISTRICT NO. 3 – DEBRA STARK
DISTRICT NO. 4 – LAURA PASTOR

DISTRICT NO. 5 – DANIEL VALENZUELA
DISTRICT NO. 6 – SAL DICICCIO
DISTRICT NO. 7 – MICHAEL NOWAKOWSKI
DISTRICT NO. 8 – KATE GALLEG0

CITY MANAGEMENT

CITY MANAGER
CITY ENGINEER

ED ZUERCHER
KINI L. E. KNUDSON, PE

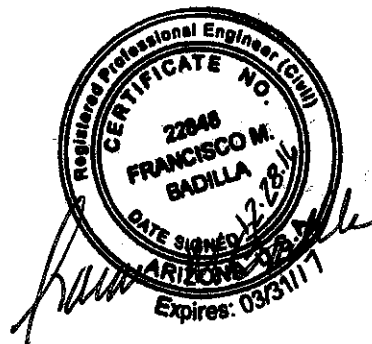


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PROJECT NO.: ST85100371-1

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NOTE:

Soil Reports, Material Logs and Pothole Hole Reports are available from the City upon request.



CALL FOR BIDS

AVENIDA RIO SALADO PARKWAY – PHASE II DESIGN BID BUILD

PROJECT NO. ST85100371-1

BIDS WILL BE DUE: TUESDAY, JANUARY 24, 2017 AT 2:00 P.M., LOCAL TIME
PHOENIX CITY HALL
200 WEST WASHINGTON STREET, 6th FLOOR
PHOENIX, AZ. 85003-1611

The City of Phoenix is seeking a qualified contracting firm to perform the project listed below.

SCOPE OF WORK

At a minimum, the Contractor will be expected to successfully perform the following construction services, including but not limited to: 99,811 SY of subgrade preparation, 41,844 tons of asphalt concrete, 56,984 SY of Microseal, 91,805 SF of concrete sidewalk, 51,593 SF of concrete driveways, 43,624 LF of concrete curb, 77 street light poles, traffic control, traffic signal installation, 7,606 LF of various size storm drain pipe and other associated work.

A Small Business Enterprise goal of **11%** has been established for this project.

PRE-BID CONFERENCE

A pre-bid conference will be held on **Monday, January 9, 2017, at 8:00 a.m.**, local time, at DCM Gecko Conference Room, located at 1034 East Madison Street, Phoenix, AZ. At this meeting, staff will discuss the scope of work, general contract issues and respond to questions from the attendees. As City staff will not be available to respond to individual inquiries regarding the project scope outside of this pre-bid conference, it is strongly recommended that interested firms send a representative to the pre-bid conference.

REQUEST FOR BID PACKET

The bid packet will be available for download on the City of Phoenix Street Transportation web page as of Thursday, December 29, 2016. The web address is:

<https://www.phoenix.gov/streets/procurement/current-opportunities>

Firms receiving a copy of the bid packet through any other means must download the bid packet from the City webpage in order to register as a plan holder for the project. The plan holder list is available for viewing within the project's folder on the Street Transportation Department Contract Procurement Section's "Current Opportunities" website address listed above.

GENERAL INFORMATION


The City reserves the right to award the contract to the lowest responsible responsive bidder or all bids will be rejected, as soon as practicable after the date of opening bids.

The City of Phoenix will provide reasonable accommodations for alternate formats of the bid packet by calling Debra Russell at (602) 256-3444 or calling TTY System (602) 256-4286. Requests will only be

honored if made within the first week of the advertising period. Please allow a minimum of seven calendar days for production.

Questions pertaining to process or contract issues should be directed to Debra Russell at (602) 256-3444.

ED ZUERCHER
City Manager

By 
KINI L. E. KNUDSON, PE
City Engineer

Published: The Arizona Business Gazette
Date: December 29, 2016
Date: January 5, 2017
(Districts 7 and 8)

INFORMATION FOR BIDDERS

1. **102 BIDDING REQUIREMENTS AND CONDITIONS**, Add the following to **MAG and COP Supplement to MAG Section 102 BIDDING REQUIREMENTS AND CONDITIONS**:

INFORMATION FOR BIDDERS

A. **QUESTIONS ON PLANS AND SPECIFICATIONS**

Neither the Engineer nor the City of Phoenix will be held responsible for any oral instructions. Any changes to the plans and specifications will be in the form of an addendum. All Addenda will be posted online within the project folder at the following website:

<https://www.phoenix.gov/streets/procurement/current-opportunities>

A Planholder List is available within the project folder on the Street Transportation Department website under "Current Opportunities". The web address is:

<https://www.phoenix.gov/streets/procurement/current-opportunities>

For additional information prior to submitting your bid, contact:

Plans, Technical/Special Provisions, Proposal or Specifications:

NAME: Debra Russell, Contract Procurement Section

ADDRESS: 200 W. Washington Street, 6th Floor, Phoenix, AZ 85003-1611

PHONE: (602) 256-3444 E-MAIL: Debra.Russell@phoenix.gov

SBE Utilization contact:

Equal Opportunity Department: (602) 262-6790

All questions regarding the plans and specifications must be received (in writing) at a minimum 7 calendar days prior to bid opening. Questions received after that time may not be given any consideration.

B. **REQUEST FOR SUBSTITUTIONS**

Paragraph A, B, and C of MAG Section 106.4 are deleted and the following paragraphs substituted:

1. The Engineer will consider written request(s), by a prime bidder only, for substitution(s) which is/are considered equivalent to the item(s) specified in the Contract documents. The written request will be considered only if it is received at least twelve (12) calendar days prior to the established bid date. Notification of acceptable substitutions will be made by addendum issued no fewer than 7 calendar days prior to the established bid date. (A.R.S. 34-104)
2. The prime bidder, at his own expense, will furnish the necessary data of substitution and validate that the physical, chemical, and operational qualities of each substitute item is such that this item will fulfill the originally specified required function.
3. The substitution, if approved, will be authorized by a written addendum to the Contract documents and will be made available to all bidders. The bid date and the scheduled completion time will not be affected by any circumstances developing from this substitution.

4. The request will be submitted to the Design and Construction Procurement Section, Attention: Debra Russell, Contracts Specialist, Sixth Floor, Phoenix City Hall, 200 W. Washington Street, Phoenix, Arizona 85003-1611 or via email to Debra.Russell@phoenix.gov.

C. **BID BOND**

Bidders must submit a properly completed proposal guarantee, certified check, cashier's check or on the surety bond provided, for an amount not less than ten (10) percent of the total amount bid included in the proposal as a guarantee that the contractor will enter into a contract to perform the proposal in accordance with the plans and specifications. Surety bonds submitted for this project will be provided by a company which has been rated "A- or better for the prior four quarters" by the A.M. Best Company. ***A bid will be deemed non-responsive if not accompanied by this guarantee.***

The surety bond will be executed solely by a surety company or companies holding a certificate of authority to transact surety business in the State of Arizona, issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1. The surety bond will not be executed by an individual surety or sureties even if the requirements of Section 7-101 are satisfied. The City Clerk will return the certified check, cashier's check, or surety bond to the contractors whose proposals are not accepted, and to the successful contractor upon the execution of a satisfactory bond and contract.

When providing a Surety Bond, ***failure to provide an "A- or better for the prior four quarters" bond will result in bid rejection.***

D. **LIST OF MAJOR SUBCONTRACTORS AND SUPPLIERS & LIST OF ALL SUBCONTRACTORS AND SUPPLIERS**

A bid will be deemed non-responsive if not accompanied by a properly completed and signed "List of Major Subcontractors and Suppliers" form.

To assist in eliminating the practice of bid shopping on City construction projects, the bidder will list all Major Subcontractors and Suppliers (including SBE) to whom the bidder intends to contract with that are equal to or greater than 5% of the base bid. The list of major subcontractors and suppliers will be provided on the "List of Major Subcontractors" form. ***Failure to properly complete and sign this form will result in bid rejection.*** This form is due with the bid.

If substantial evidence exists that bid shopping occurred on this project, the Bidder will be ineligible to bid on City construction projects for a period of one year.

The list of All Subcontractors and Suppliers will be provided on the "**List of All Subcontractors and Suppliers**" form. ***Failure to properly complete and sign this form will result in bid rejection. This form is due 3 days after bid opening by 5:00 p.m.*** A bid will be deemed non-responsive if a properly completed and signed "**List of All Subcontractors and Suppliers**" form is not submitted.

E. **BID SUBMITTAL**

The properly completed bid documents along with the ten (10) percent bid guarantee will be submitted in a sealed envelope. The outside of the envelope will be marked as follows:

Bid of (Firm's Name, Address and Phone Number)
For: Avenida Rio Salado / Broadway Road – Phase II
City of Phoenix Project Number: ST85100371-1

Sealed bids will be submitted to the bid box located by the Street Transportation Department Reception Desk located on the Sixth Floor of the Phoenix City Hall Building, 200 W. Washington Street, Phoenix, Arizona, 85003 prior to the time and date specified for bid opening.

F. **BID WITHDRAWALS**

MAG Section 102-10, Withdrawal or Revision of Proposal, is hereby deleted and the following paragraph is submitted:

"No bidder may withdraw or revise a proposal after it has been deposited with the City except as provided in Phoenix City Code Chapter 2, Section 190.2. Proposals, read or unread, will not be returned to the bidders until after determination of award has been made.

G. **ADDENDA**

Acknowledge all addenda; a bid will be deemed non-responsive if all issued addenda for this project are not acknowledged in writing on Page P. -1.

The City of Phoenix will not be responsible for any oral responses or instructions made by any employees or officers of the City of Phoenix regarding bidding instructions, plans, drawings, specifications or contract documents. A verbal reply to an inquiry does not constitute a modification of the Invitation for Bid (IFB). Any changes to the plans, drawings and specifications will be in the form of an addendum.

It will be the responsibility of the prospective bidder to determine, prior to the submittal of its bid, if any addenda to the project have been issued by the Street Transportation Department Contract Procurement Section. All addenda issued will be acknowledged by the bidder on Page P-1. All addenda (if any) will be available online within each project's folder at the following website:

<https://www.phoenix.gov/streets/procurement/current-opportunities>

The contractors and/or consultants are responsible for ensuring they have all addenda and/or notifications for all projects they are submitting on. Prospective bidders are strongly encouraged to check the Street Transportation Department Contract Procurement website in order to ascertain if any addenda have been issued for the project.

H. **BID SUBMITTAL CHECKLIST**

BID SUBMITTAL CHECKLIST

This checklist is provided to remind bidders of several of the required elements of the bid packages. It is not intended to be a comprehensive list of all of the contract documents. Bidders are encouraged to review all of the Bid Instructions to determine compliance therein.

- Acknowledge all addenda? (Page P-1)
- Completed all of the Bid Proposal forms? (Pages P-1 to P-9 and P.S. - 1)
- Included your Bid Bond (rated A- or better for the prior four quarters) or Guarantee Cashier's Check? (Page S.B.-1)
- Completed SBE Utilization form or a fully documented waiver package? (Page S.B.U.-1)

- Completed List of Major Subcontractors and Suppliers form? (Page L.O.S.-1)
- Completed Letter of Intent to Perform as Subcontractor/Supplier (L.O.I-1)

PLEASE DO NOT SUBMIT THE ENTIRE SPECIFICATION BOOK WHEN SUBMITTING YOUR BID. INCLUDE ONLY THE REQUIRED BIDDING DOCUMENTS.

POST-BID SUBMITTAL CHECKLIST

All bidders wishing to remain in contention for award of the contract must submit completed contracts documents listed below. The documents must be submitted to the Street Transportation Department Contract Procurement Section, 6th Floor, or can be sent by email to Debra.Russell@phoenix.gov.

- Completed List of All Subcontractors and Suppliers form (L.O.S.-2) (3 days after bid opening by 5:00 p.m.)
- Bidders Disclosure Statement? (Pages B.D.S.-1 to 4) (3 days after bid opening by 5:00 p.m.)
- Submit Affidavit of Identity (if you are a sole proprietor) (Page A.O.I. – 1) (3 days after bid opening by 5:00 p.m.)

I. CANCELLATION OF CONTRACT FOR CONFLICT OF INTEREST

All parties hereto acknowledge that this Agreement is subject to cancellation by the City of Phoenix pursuant to the provisions of Section 38-511, Arizona Revised Statutes.

J. CONTRACTOR'S LICENSE AND PRIVILEGE LICENSE AND CERTIFICATIONS

Prior to bidding on this project, the bidder must possess the correct license to perform the work described in the plans and specifications. Prior to award of the contract, the successful bidder must provide to the Contract Procurement Section its Contractor's License Classification and number, its City of Phoenix Privilege License number and Federal Tax Identification number.

Bidder will submit the Bidder's Disclosure Statement as set forth in Pages B.D.S. - 1 to B.D.S. - 4 within 3 days of bid opening by 5:00 p.m.

Unless provided otherwise in this solicitation, Bidder will be deemed non-responsive and the bid rejected if Bidder fails to possess the proper Contractor's and Business Licenses at the time of bid or fails to submit a substantially completed Bidder's Disclosure Statement as specified above.

K. TAX LIABILITIES; DISCLOSURE OF CONVICTIONS AND BREACH(S) OF CONTRACT

On or before the award of the contract for this project, the successful bidder will: (i) file all applicable tax returns and will make payment for all applicable State of Arizona and Maricopa County Transaction Taxes (ARS Sec. 41-1305) and City of Phoenix Privilege License Taxes (Phoenix City Code Sec.14-415); (ii) disclose any civil fines, penalties or any criminal convictions, other than for traffic related offenses, for violation of federal, state, county or city laws, rules or regulations including, but not limited to, environmental, OSHA, or labor compliance laws (collectively "Laws") by Bidder, Bidder's directors, managing members, responsible corporate officers or party who will be responsible for overseeing and administering this project (collectively "Bidder"); and (iii) disclose any material breach(s) of an

agreement with the City of Phoenix, any termination for cause or any litigation involving the City of Phoenix occurring within the past three calendar years. Unless provided otherwise in this solicitation, the successful bidder will be deemed non-responsible and the bid rejected for any of the following: (i) Bidder's civil or criminal conviction, other than for traffic related offenses, for a violation of Laws within the past three calendar years; (ii) liability or culpability resulting in payment of fines or penalties in the cumulative total amount of \$100,000 or greater for a violation of "Laws" within the past three calendar years; (iii) material breach of a City of Phoenix agreement, termination for cause or litigation with the City of Phoenix within the past three calendar years; and (iv) Bidder's failure to disclose the information as required by this provision. Further, after award of contract, in addition to any other remedy, Bidder's failure to remit proper taxes to the City of Phoenix may result in the City withholding payment pursuant to Phoenix City Charter Chapter XVIII, Section 14 until all delinquent taxes, interest, and penalties have been paid.

State and Local Transaction Privilege Taxes:

In accordance with applicable state and local law, transaction privilege taxes may be applicable to this transaction. The state and local transaction privilege (sales) tax burden is on the person who is conducting business in Arizona and the City of Phoenix. The legal liability to remit the tax is on the person conducting business in Arizona. Any failure by the Contractor to collect applicable taxes from the City will not relieve the Contractor from its obligation to remit taxes.

It is the responsibility of the prospective bidder to determine any applicable taxes. The City will look at the price or offer submitted and will not deduct, add or alter pricing based on speculation or application of any taxes, nor will the City provide advice or guidance.

If you have questions regarding your tax liability, please seek advice from a tax professional prior to submitting your bid. You may also find information at <https://www.phoenix.gov/finance/plt> or <https://www.azdor.gov/Business.aspx>. Once your bid is submitted, the Offer is valid for the time specified in this Solicitation, regardless of mistake or omission of tax liability.

If the City finds over payment of a project due to tax consideration that was not due, the Contractor will be liable to the City for that amount, and by contracting with the City agrees to remit any overpayments back to the City for miscalculations on taxes included in a bid price.

Tax Indemnification:

Contractor will, and require the same of all subcontractors, pay all federal, state and local taxes applicable to its operation and any persons employed by the Contractor. Contractor will, and require the same of all subcontractors, hold the City harmless from any responsibility for taxes, damages and interest, if applicable, contributions required under federal, and/or state and local laws and regulations and any other costs including transaction privilege taxes, unemployment compensation insurance, Social Security and Worker's Compensation.

Tax Responsibility Qualification:

Contractor may be required to establish, to the satisfaction of City, that any and all fees and taxes due to the City or the State of Arizona for any License or Transaction Privilege taxes, Use Taxes or similar excise taxes, are currently paid (except for matters under legal protest).

Contractor agrees to a waiver of the confidentiality provisions contained in the City Finance Code and any similar confidentiality provisions contained in Arizona statutes relative to State Transaction Privilege Taxes or Use Taxes.

Contractor agrees to provide written authorization to the City Finance Department and to the Arizona State Department of Revenue to release tax information relative to Arizona Transaction Privilege Taxes or Arizona Use Taxes in order to assist the Department in

evaluating Contractor's qualifications for and compliance with contract for duration of the term of contract.

L. STANDARD SPECIFICATIONS AND DETAILS

Except as otherwise required in these specifications, bid preparation and construction of this project will be in accordance with all applicable Maricopa Association of Governments' (MAG) Uniform Standard Specifications and Uniform Standard Details, latest revision, and the City of Phoenix Supplements to the MAG Uniform Standard Specifications and Details, latest revision.

M. PRECEDENCE OF CONTRACT DOCUMENTS

In case of a discrepancy or conflict, the precedence of contract documents is as follows:

1. Change Orders or Supplemental Agreements
2. Addenda
3. Contract Specifications/Special Provisions/Technical Provisions
4. The Plans
5. COP Supplement to MAG Standard Specifications and Details, latest revision
6. MAG Standard Specifications and Details, latest revision

The precedence of any Addenda falls within the category of which it represents.

N. CONFIDENTIALITY OF PLANS & SPECIFICATIONS

Any plans generated for this project must include the following statement in the Title Block on every page: "Per City of Phoenix City Code Chapter 2, Section 2-28, these plans are for official use only and may not be shared with others except as required to fulfill the obligations of Contractor's contract with the City of Phoenix."

O. AUDIT AND RECORDS

Records of the Contractor's direct personnel payroll, bond expenses, and reimbursable expenses pertaining to this Project, and records of accounts between the City and Contractor will be kept on the basis of generally accepted accounting principles and must be made available to the City and its auditors for up to three years following Final Acceptance of the Project.

The City, its authorized representative, and/or any federal agency, reserves the right to audit the Contractor's records to verify the accuracy and appropriateness of all cost and pricing data, including data used to negotiate the Contract and any change orders.

The City reserves the right to decrease Contract price and/or payments made on this Contract and/or request reimbursement from the Contractor following final contract payment on this Contract if, upon audit of the Contractor's records, the audit discloses the Contractor has provided false, misleading, or inaccurate cost and pricing data.

The Contractor will include a similar provision in all of its Agreements with subcontractors and suppliers providing services or supplying materials under the Contract Documents to ensure that the City, its authorized representative, and/or the appropriate federal agency has access to the Subcontractor's and Supplier's records to verify the accuracy of all cost and pricing data.

The City reserves the right to decrease the Contract price and/or payments made on this Contract and/or request reimbursement from the Contractor following final contract payment

on this Contract if the above provision is not included in the Subcontractor's and Supplier's contracts, and one or more Subcontractors or Suppliers refuse to allow the City to audit their records to verify the accuracy and appropriateness of cost and pricing data.

If, following an audit of this Contract, the audit discloses the Contractor has provided false, misleading or inaccurate cost and pricing data, and the cost discrepancies exceed 1% of the total Contract billings, the Contractor will be liable for reimbursement of the reasonable, actual cost of the audit.

P. IMMIGRATION REFORM AND CONTROL ACT

Compliance with Federal Laws Required. Contractor understands and acknowledges the applicability of the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act to it. Contractor agrees to comply with these Federal Laws in performing under this Agreement and to permit City inspection of its personnel records to verify such compliance.

Q. LEGAL WORKER REQUIREMENTS

The City of Phoenix is prohibited by A.R.S. § 41-4401 from awarding a contract to any contractor who fails, or whose subcontractors fail, to comply with A.R.S. § 23-214(A). Therefore, Contractor agrees that:

1. Contractor and each subcontractor it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with § 23-214, subsection A.
2. A breach of a warranty under paragraph 1 will be deemed a material breach of the contract that is subject to penalties up to and including termination of the contract.
3. The City of Phoenix retains the legal right to inspect the papers of any Contractor or subcontractor employee who works on the contract to ensure that the Contractor or subcontractor is complying with the warranty under paragraph 1.

R. CONTRACTOR AND SUBCONTRACTOR WORKER BACKGROUND SCREENING

Background Screening Requirements and Criteria

The City has established levels of risk and associated Background Screening. For Contractor services in the right-of-way, the risk level and Background Screening required is Minimum Risk. **The risk level and background screening required for this project is Minimum.**

Terms of This Section Applicable to all of Contractor's Contracts and Subcontracts Contractor will include the terms of this Section for Contract Worker Background Screening in all contracts and subcontracts for services furnished under this Agreement including, but not limited to, supervision and oversight services.

(1.) Contract Worker Background Screening

Contractor agrees that all contract workers and subcontractors (collectively "Contract Worker(s)") that Contractor furnishes to the City pursuant to this Agreement will be subject to background and security checks and screening (collectively "Background Screening") at Contractor's sole cost and expense as set forth in this Section. The Background Screening provided by Contractor will comply with all applicable laws, rules and regulations. Contractor further agrees that the Background Screening required in this Section is necessary to preserve and protect public health, safety and welfare. The Background Screening requirements set forth in this Section are the minimum

requirements for this Agreement. The City in no way warrants that these minimum requirements are sufficient to protect Contractor from any liabilities that may arise out of Contractor's services under this Agreement or Contractor's failure to comply with this Section. Therefore, in addition to the specific measures set forth below, Contractor and its Contract Workers will take such other reasonable, prudent and necessary measures to further preserve and protect public health, safety and welfare when providing services under this Agreement. The City may, in its sole discretion, accept or reject any or all of the Contract Workers proposed by Contractor to perform work under this Agreement, as well those Contract Workers actually providing services during the term of this Agreement.

Minimum Risk Background Screening requirements include the following:

A Minimum Risk Background Screening will be performed when the Contract Worker: (i) will not have direct access to City facilities or information systems; or (ii) will not work with vulnerable adults or children; or (iii) when access to City facilities is escorted by City workers. The Background Screening for minimum risk will consist of the screening required by Arizona Revised Statutes §§ 41-4401 and following to verify legal Arizona worker status.

(2.) Materiality of Background Screening Requirements; Indemnity

The Background Screening requirements of this Section are material to City's entry into this Agreement and any breach of this Section by Contractor will be deemed a material breach of this Agreement. In addition to the indemnity provisions set forth in Supplementary Conditions Section 7.G of this Agreement, Contractor will defend, indemnify and hold harmless the City for any and all Claims (as defined in Supplementary Conditions Section 7.G arising out of this Background Screening Section including, but not limited to, the disqualification of a Contract Worker by Contractor or the City for failure to satisfy this Section.

(3.) Continuing Duty; Audit

Contractor's obligations and requirements that Contract Workers satisfy this Background Screening Section will continue throughout the entire term of this Agreement. Contractor will notify the City immediately of any change to a Maximum Risk Background Screening of a Contract Worker previously approved by the City. Contractor will maintain all records and documents related to all Background Screenings and the City reserves the right to audit Contractor's compliance with this Section pursuant to Information for Bidders Section 1.M.

S. LAWFUL PRESENCE REQUIREMENT

Pursuant to A.R.S. §§ 1-501 and 1-502, the City of Phoenix is prohibited from awarding a contract to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of contract award. This requirement does not apply to business organizations such as corporations, partnerships or limited liability companies.

T. LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED)

If practical, the contractor will provide an easily accessible area to serve the construction site that is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, glass, plastics, metals, and designate an area specifically for construction and demolition waste recycling. The contractor must provide documentation that the materials have been taken to a Maricopa County approved recycling facility.

U. **NO ISRAEL BOYCOTT**

By entering into this contract, the Engineer/Contractor certifies that they are not currently engaged in, and agrees for the duration of the Contract to not engage in, a boycott of Israel.

V. **CITY OF PHOENIX EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENT**

1. In order to do business with the City, Contractor must comply with Phoenix City Code, 1969, Chapter 18, Article V, as amended, Equal Employment Opportunity Requirements. Contractor will direct any questions in regard to these requirements to the Equal Opportunity Department, (602) 262-6790.
2. Any Contractor in performing under this contract will not discriminate against any worker, employee or applicant, or any member of the public, because of race, color, religion, sex, national origin, age, or disability nor otherwise commit an unfair employment practice. The Contractor will ensure that applicants are employed, and employees are dealt with during employment without regard to their race, color, religion, sex, national origin, age, or disability and will adhere to a policy to pay equal compensation to men and women who perform jobs that require substantially equal skill, effort, and responsibility, and that are performed within the same establishment under similar working conditions. Such action will include but not be limited to the following: Employment, promotion, 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 further agrees that this clause will be incorporated in all subcontracts with all labor organizations furnishing skilled, unskilled and union labor, or who may perform any such labor or services in connection with this contract.

If the Contractor employs more than thirty-five employees, the following language will apply as the last paragraph to the clause above:

The Contractor further agrees not to discriminate against any worker, employee or applicant, or any member of the public, because of sexual orientation or gender identity or expression and will ensure that applicants are employed, and employees are dealt with during employment without regard to their sexual orientation or gender identity or expression.

3. *Documentation.* Contractor may be required to provide additional documentation to the Equal Opportunity Department affirming that a nondiscriminatory policy is being utilized.
4. *Monitoring.* The Equal Opportunity Department will monitor the employment policies and practices of suppliers and lessees subject to this article as deemed necessary. The Equal Opportunity Department is authorized to conduct on-site compliance reviews of selected firms, which may include an audit of personnel and payroll records, if necessary.

W. **PROTEST PROCEDURES**

A bidder wishing to file a protest for the subject project will comply with Phoenix City Code Chapter 2, Section 188.

X. **DATA CONFIDENTIALITY**

As used in the Contract, "data" means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to the Contractor or its subcontractors in the performance of this Contract.

The parties agree that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to the Contractor or its subcontractors in connection with the Contractor's or its subcontractor's performance of this Contract is confidential and proprietary information belonging to the City.

Except as specifically provided in this Contract, the Contractor or its subcontractors will not divulge data to any third party without prior written consent of the City. The Contractor or its subcontractors will not use the data for any purposes except to perform the services required under this Contract. These prohibitions will not apply to the following data provided the Contractor or its subcontractors have first given the required notice to the City:

- A. Data which was known to the Contractor or its subcontractors prior to its performance under this Contract unless such data was acquired in connection with work performed for the City;
- B. Data which was acquired by the Contractor or its subcontractors in its performance under this Contract and which was disclosed to the Contractor or its subcontractors by a third party, who to the best of the Contractor's or its subcontractor's knowledge and belief, had the legal right to make such disclosure and the Contractor or its subcontractors are not otherwise required to hold such data in confidence; or
- C. Data which is required to be disclosed by virtue of law, regulation, or court order, to which the Contractor or its subcontractor's are subject.

In the event the Contractor or its subcontractors are required or requested to disclose data to a third party, or any other information to which the Contractor or its subcontractors became privy as a result of any other contract with the City, the Contractor will first notify the City as set forth in this section of the request or demand for the data. The Contractor or its subcontractors will give the City sufficient facts so that the City can be given an opportunity to first give its consent or take such action that the City may deem appropriate to protect such data or other information from disclosure.

The Contractor, unless prohibited by law, within ten calendar days after completion of services for a third party on real or personal property owned or leased by the City, the Contractor or its subcontractors will promptly deliver, as set forth in this section, a copy of all data to the City. All data will continue to be subject to the confidentiality agreements of this Contract.

The Contractor or its subcontractors assume all liability for maintaining the confidentiality of the data in its possession and agrees to compensate the City if any of the provisions of this section are violated by the Contractor, its employees, agents or subcontractors. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this section will be deemed to cause irreparable harm that justifies injunctive relief in court. Contractor agrees that the requirements of this Section will be incorporated into all subcontracts entered into by Contractor. A violation of this Section may result in immediate termination of this Contract without notice.

Personal Identifying Information-Data Security

Personal identifying information, financial account information, or restricted City information, whether electronic format or hard copy, must be secured and protected at all times. At a minimum, Contractor must encrypt and/or password protects electronic files. This includes data saved to laptop computers, computerized devices or removable storage devices.

When personal identifying information, financial account information, or restricted City information, regardless of its format, is no longer necessary, the information must be

redacted or destroyed through appropriate and secure methods that ensure the information cannot be viewed, accessed, or reconstructed.

In the event that data collected or obtained by Contractor or its subcontractors in connection with this Contract is believed to have been compromised, Contractor or its subcontractors will immediately notify the Project Manager and City Engineer. Contractor agrees to reimburse the City for any costs incurred by the City to investigate potential breaches of this data and, where applicable, the cost of notifying individuals who may be impacted by the breach.

Contractor agrees that the requirements of this Section will be incorporated into all subcontracts entered into by Contractor. It is further agreed that a violation of this Section will be deemed to cause irreparable harm that justifies injunctive relief in court. A violation of this Section may result in immediate termination of this Contract without notice.

The obligations of Contractor or its subcontractors under this Section will survive the termination of this Contract.

Y. **PROJECT MANAGEMENT INFORMATION SYSTEM (PROMIS)**

The Street Transportation Department's Design and Construction Management (DCM) Project Manager may determine that use of PROMIS will be required during this contract. The following information provides a guideline for utilization. Any questions related to the requirements of PROMIS should be directed to the DCM Project Manager.

1. The contractor will be required to maintain all project records in electronic format. The City provides an Application Service Provider (ASP) web based project management database which the contractor will be required to utilize in the fulfillment of the contract requirements. Although this electronic platform does not fulfill this requirement in its entirety, the contractor will be required to utilize this platform as the basis for this work.
2. The contractor can expect to use this ASP to process all primary level tri-partite contract documents related to the design or construction phase of the Project including but not limited to: requests for interpretation/information, potential Change Orders, construction meeting minutes, Submittals, Design Professional's supplemental instructions, and Payment Requests.
3. The contractor will be required to process information into electronic digital form. In order to fulfill this requirement, the contractor will provide all necessary equipment to perform the functions necessary to generate, convert, store, maintain, connect to web based ASP and transfer electronic data.
4. The contractor will provide a computerized networked office platform with broadband internet connectivity. Wired or wireless is acceptable. This platform will function well in a web based environment utilizing an internet browser compatible with the City PROMIS ASP system.

PROMIS training will be provided through the City of Phoenix. Contact information will be provided to the firms under contract, to establish the set up with a log-in and password.

CONSTRUCTION TRADE IDENTIFICATION WORKSHEET

PROJECT TITLE: Avenida Rio Salado/Broadway Road – Phase II

PROJECT NO.: ST85100371-1 (DBB)

**Below is a listing of possible trade areas for this project.
These were the trade areas identified in the goal setting process.
However, the contractor may identify additional trade areas to be used.**

Site Preparation / Earthwork / Excavation
Asphalt Paving
Demolition / Wrecking
Masonry
Manholes
Concrete
Landscape Material / Irrigation System / Granite
Pipeline / Underground Utilities
Hauling
Fencing
Metals: Steel / Aluminum Fabrication / Erection
Electrical
Uniformed Police Officer
Street Lighting and Traffic Control
Surveying and Layout
Traffic Control Devices

Only SBE subcontractors certified by the City of Phoenix under Chapter 18, Article VII of the Phoenix City Code are eligible to fulfill the participation goal as stated. A firm's certification must Be current and in force at the date and time of the bid. The most current electronic listing of all Certified SBE firms can be accessed through the Internet at:

<https://phoenix.diversitycompliance.com>

SBE: 11 %

SUPPLEMENTARY CONDITIONS

1. **103 AWARD AND EXECUTION OF CONTRACT**, Add the following to **Subsection 103.3 AWARD OF CONTRACT**:

Contract award will be made to a responsive and responsible bidder based on the low total base bid or on the low combination of the total base bid and any selected alternate(s), whichever is in the best interest of the City. If unit pricing is required in the proposal, the extensions and additions will be verified to assure correctness. Award will be based on the revised total if any errors are found. Additionally, the Contractor will meet the minimum SBE subcontracting goal set for this contract or have been granted a full or partial waiver of the goal. The City expressly reserves the right to cancel this agreement without recourse or prejudice to Contractor until all parties have executed the agreement in full.

Any bidder that currently contracts with the City must be in good standing for its proposal to be considered responsive. For the purpose of this Invitation to Bid, good standing means compliance with all contractual provisions, including payment of financial obligations.

2. **103 AWARD AND EXECUTION OF CONTRACT**, Add the following to **Subsection 103.5, REQUIREMENT OF CONTRACT BONDS**:

A. **PERFORMANCE BOND AND LABOR AND MATERIAL BOND**

Prior to the execution of a contract, the successful bidder must provide a performance bond and a labor and material bond, each in an amount equal to the full amount of the contract. Each such bond will be executed by a surety company or companies holding a certificate of authority to transact surety business in the State of Arizona issued by the Director of the Department of Insurance. A copy of the Certificate of Authority will accompany the bonds. The Certificate will have been issued or updated within two years prior to the execution of the Contract. The bonds will be made payable and acceptable to the City of Phoenix. The bonds will be written or countersigned by an authorized representative of the surety who is either a resident of the State of Arizona or whose principal office is maintained in this state, as required by law, and the bonds will have attached thereto a certified copy of Power of Attorney of the signing official. If one Power of Attorney is submitted, it will be for twice the total contract amount. If two Powers of Attorney are submitted, each will be for the total contract amount. Personal or individual bonds are not acceptable. Failure to comply with these provisions will be cause for rejection of the bidder's proposal.

B. **BONDING COMPANIES**

All bonds submitted for this project will be provided by a company which has been rated "A- or better for the prior four quarters" by the A. M. Best Company. **Failure to provide an "A- or better for the prior four quarters" bond will result in bid rejection.**

3. **103 AWARD AND EXECUTION OF CONTRACT**, Delete **Subsection 103.6, CONTRACTOR'S INSURANCE** in its entirety and substitute the following:

103.6.1 General:

Contractor and subcontractors must procure insurance against claims that may arise from or relate to performance of the work hereunder by Contractor and its agents, representatives, employees and

subconsultants. Contractor and subcontractors must maintain that insurance until all of their obligations have been discharged, including any warranty periods under this Contract.

These insurance requirements are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract.

The City in no way warrants that the minimum limits stated in this section are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Contract by the Contractor, its agents, representatives, employees, or subcontractors. Contractor is free to purchase such additional insurance as may be determined necessary.

A. MINIMUM SCOPE AND LIMITS OF INSURANCE

Contractor must provide coverage with limits of liability not less than those stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a "following form" basis:

1. **Commercial General Liability – Occurrence Form**

Policy must include bodily injury, property damage, broad form contractual liability and XCU coverage.

General Aggregate/for this Project	\$2,000,000
Products – Completed Operations Aggregate	\$1,000,000
Personal and Advertising Injury	\$1,000,000
Each Occurrence	\$1,000,000

a. The policy must be endorsed to include the following additional insured language: "The City of Phoenix is named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including completed operations".

2. **Automobile Liability**

Bodily injury and property damage coverage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

Combined Single Limit (CSL)	\$1,000,000
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a. The policy must be endorsed to include the following additional insured language: "The City of Phoenix is named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including automobiles owned, leased, hired or borrowed by the Contractor".

3. **Worker's Compensation and Employers' Liability**

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	\$100,000
Disease – Each Employee	\$100,000
Disease – Policy Limit	\$500,000

a. Policy must contain a waiver of subrogation against the City of Phoenix.

b. This requirement does not apply when a contractor or subcontractor is exempt under A.R.S. §23-902(E), **AND** when such contractor or subcontractor executes the appropriate sole proprietor waiver form.

4. **No Builders' Risk Insurance required.**

B. **ADDITIONAL INSURANCE REQUIREMENTS**

The policies must include, or be endorsed to include, the following provisions:

1. On insurance policies where the City of Phoenix is named as an additional insured, the City of Phoenix is an additional insured to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Contract.
2. The Contractor's insurance coverage must be primary insurance and non-contributory with respect to all other available sources.
3. With regard to general liability, the City of Phoenix is named as an additional insured for both products completed operations and premises operations.

C. **NOTICE OF CANCELATION**

For each insurance policy required by the insurance provisions of this Contract, the Contractor must provide to the City, within 2 business days of receipt, a notice if a policy is suspended, voided or cancelled for any reason. Such notice will be sent directly to the City of Phoenix Contract Specialist listed on Page I.B.-1 of these specifications and will be sent by certified mail, return receipt requested.

D. **ACCEPTABILITY OF INSURERS**

Insurance is to be placed with insurers duly licensed or authorized to do business in the state of Arizona and with an "A.M. Best" rating of not less than B+ VI. The City in no way warrants that the above-required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.

E. **VERIFICATION OF COVERAGE**

Contractor must furnish the City with certificates of insurance (ACORD form or equivalent approved by the City) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and any required endorsements are to be received and approved by the City before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of contract.

All certificates required by this Contract must be sent directly to the City of Phoenix Contract Specialist listed on Page I.B. - 1 of these specifications. The City project/contract number and project description must be noted on the certificate of insurance. The City reserves the right to require complete, certified copies of all insurance policies required by this Contract, at any time. **DO NOT SEND CERTIFICATES**

OF INSURANCE TO THE CITY'S RISK MANAGEMENT DIVISION.

If the Certificate of Insurance reflecting policy coverage and cancellation notice does not conform to the City's requirements, the contractor must:

- **Submit a current insurance certificated (dated within 15 days of the payment request submittal) with each payment request form. The payment request will be rejected if the insurance certificate is not submitted with the payment request.**

F. SUBCONTRACTORS

Contractors' certificate(s) must include all subcontractors as additional insureds under its policies **or** subcontractors must maintain separate insurance as determined by the Contractor, however, subcontractor's limits of liability must not be less than \$1,000,000 per occurrence/\$2,000,000 aggregate.

G. APPROVAL

Any modification or variation from the insurance requirements in this Contract must be made by the Law Department, whose decision is final. Such action will not require a formal Contract amendment, but may be made by administrative action.

H. OFF-DUTY POLICE OFFICER REQUIREMENTS

Off Duty Police Officer Requirements

It is required that the City provide off-duty police officers for construction projects as defined in the most recent edition of the City of Phoenix Traffic Barricade Manual. The Engineer must competitively procure Off Duty Police with vendors who are Authorized Traffic Coordinators with the City of Phoenix Police Department Off Duty Coordinator. The following requirements must be included in the procurement:

1. Hourly fees charged
2. Administrative fees (administrative fees to be charged as a part of the hourly rate, not billed separately)
 - a. Pay applications requesting reimbursement for Off Duty Police hours worked will be accompanied with itemized documentation indicating officer name, date worked, hours worked, time of day worked and location.
 - b. For audit purposes, contractor's files will contain documentation from the successful off duty vendor that the above items are accounted for in the vendor's price proposal.
3. Insurance Requirements:
 - a. Commercial General Liability – Occurrence Form

Policy must include bodily injury, property damage and broad form contractual liability coverage.

General Aggregate	\$2,000,000
Products – Completed Operations Aggregate	\$1,000,000
Personal and Advertising Injury	\$1,000,000
Each Occurrence	\$1,000,000

The policy must be endorsed to include the City of Phoenix as an additional insured with respect to liability arising out of the activities performed by, or on behalf of, the contract worker.

b. Non-owned Auto Liability \$1,000,000

Coverage must be provided if a City of Phoenix Police vehicle is being used in the performance of the off-duty traffic control services.

The policy must be endorsed to include the City of Phoenix as an additional insured with respect to liability arising out of the use and operation of a City vehicle.

c. Worker's Compensation and Employers' Liability

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	\$100,000
Disease – Each Employee	\$100,000
Disease – Policy Limit	\$500,000

Policy must contain a waiver of subrogation against the City of Phoenix.

103.6.2 Indemnification of City Against Liability

Contractor agrees to indemnify, defend, save and hold harmless the City of Phoenix and its officers, agents and employees (and any jurisdiction or agency issuing permits for any work included in the project, and its officers, agents and employees), ("Indemnitee") from all claims, actions, liabilities, damages, losses or expenses, (including court costs, attorney's fees and costs of claim processing, investigation and litigation) ("Claims") caused or alleged to be caused, in whole or in part, by the wrongful, negligent or willful acts, or errors or omissions of Contractor or any of its owners, officers, directors, agents, employees, or subcontractors in connection with this Contract. This indemnity includes any Claim or amount arising out of or recovered under workers' compensation law or on account of the failure of Contractor to conform to any federal, state or local law, statute, ordinance, rule, regulation, or court decree. Contractor must indemnify Indemnitee from and against any and all Claims, except those arising solely from Indemnitee's own negligent or willful acts or omissions. Contractor is responsible for primary loss investigation, defense and judgment costs where this indemnification applies. In consideration of the City's award of this Contract, Contractor agrees to waive all rights of subrogation against Indemnitee for losses arising from or related to this Contract. The obligations of Contractor under this provision survive the termination or expiration of this Contract.

4. 104 SCOPE OF WORK. Add the following to Subsection 104.1.2 MAINTENANCE OF TRAFFIC:

ADA AND ANSI ACCESS OF PREMISES DURING CONSTRUCTION

Contractor shall maintain existing ADA and ANSI accessibility requirements during construction activities in an occupied building or facility. ADA and ANSI accessibility requirements shall include, but not be limited to, parking, building access, entrances, exits, restrooms, areas of refuge, and emergency exit paths of travel. Contractor shall be responsible for the coordination of all work to minimize disruption to building occupants and facilities.

5. 104 SCOPE OF WORK. Add the following to Subsection 104.1.4 CLEANUP AND DUST CONTROL:

The Contractor shall use a power pick-up broom as part of the dust control effort. No separate measurement

or payment shall be made for cleanup or dust control, or for providing a power pick-up broom on the job.

6. **105 CONTROL OF WORK**, Add the following to **Subsection 105.1, AUTHORITY OF THE ENGINEER**:

A. CONTRACT ADMINISTRATION

The definition of "Engineer" shall read as follows:

"Engineer": All references to "Engineer" in these contract bid documents, including the MAG Specifications, shall mean City Engineer.

B. PRECONSTRUCTION CONFERENCE

After completion of the contract documents, to include bonds, insurance and signatures and prior to the commencement of any work on the project, the Street Transportation Department, DCM Division, (telephone 602-495-2050), shall schedule a Pre-Construction Conference. This shall be held at 1034 East Madison Street, Phoenix, Arizona.

Construction administration shall be provided by City of Phoenix, Street Transportation Department, Design & Construction Management Division (DCM).

The purpose of this conference is to establish a working relationship between the Contractor, utility firms and various City agencies. The agenda shall include critical elements of the work schedule, submittal schedule, cost breakdown of major lump sum items, payment application and processing, coordination with the involved utility firms, emergency telephone numbers for all representatives involved in the course of construction and establishment of the notice to proceed date. The Contractor shall also provide copies of all purchase orders and/or contracts with SBE subcontractors and suppliers used to meet the subcontract goals programmed for this project.

Minimum attendance by the Contractor shall be a responsible company/corporate official, who is authorized to execute and sign documents on behalf of the firm, the job superintendent and the Contractor's safety officer.

C. AUTHORIZATION OF THE ENGINEER

The City may, at its discretion and without cause, order the Contractor in writing to stop and suspend work. Immediately after receiving such notice, the Contractor shall discontinue advancing the work specified under this Agreement.

Such suspension shall not exceed one hundred and eighty (180) consecutive days during the duration of the project.

The Contractor may seek an adjustment of the contract price and time, if the cost or time to perform the work has been adversely impacted by any suspension or stoppage of work by the City.

7. **105 CONTROL OF WORK**, Add the following to **Subsection 105.2 PLANS AND SHOP DRAWINGS**:

The Contractor shall submit as many of the required shop drawings and product data submittals at the Pre-Construction meeting as practical and possible. All shop drawings and product data submittals shall be submitted sufficiently in advance to allow adequate time for City review(s) and approval. The Contractor shall submit early enough to allow enough time for reviews based on the assumption that a submittal may be

marked "Revise and Resubmit" or "Rejected", requiring the Contractor to modify the submittal and resubmit for additional review(s) until acceptance.

A separate transmittal shall be used for each specific item type, class of material or equipment for which a submittal is required. Multiple items under one transmittal shall only be allowed when the items taken together constitute a complete manufacturer's package, or are so functionally related that the entire package should be reviewed as a whole. The contractor shall submit six (6) hard copies of each shop drawing for review. **Email or FAX submittals shall not be accepted.**

The Contractor shall allow up to four (4) weeks for City review for each submittal. Some submittals may be simple and straightforward and may not require the full four (4) weeks, but other more complex submittals may take the full four (4) weeks.

8. **105 CONTROL OF WORK**, Add the following to **Subsection 105.7 COOPERATION BETWEEN CONTRACTORS**

Other Contractors are expected to be working in or near the area of this contract. The Contractor shall conduct his work as specified in MAG Section 105.7.

9. **105 CONTROL OF WORK**, Add the following to **Subsection 105.8, CONSTRUCTION STAKES, LINES AND GRADES:**

A. SURVEY

The City of Phoenix Street Transportation Department, Design & Construction Management Division (DCM) shall set the construction stakes establishing lines, grades, and elevations to include necessary utilities and appurtenances and shall be responsible for their conformance with plans and specifications. DCM shall establish or designate a control line or benchmark of known location and elevation for use as a reference.

B. RECORD DRAWINGS

The Contractor shall maintain a record set of plans at the job site. These shall be kept legible and current and shall show all changes or work added in a contrasting, reproducible color. Two weeks prior to issuance of substantial completion, the Contractor shall submit, prior to final inspection, corrected landscape drawings showing the location of all utility services, controller, pipe, valves and wiring. The Engineer shall be the sole judge as to the acceptability of the record plans and receipt of an acceptable set is a pre-requisite for final payment.

10. **105 CONTROL OF WORK**, Add the following to **Subsection 105.15 ACCEPTANCE, paragraph (B) Final Acceptance:**

A. SUBSTANTIAL COMPLETION

The work may be judged substantially complete when all construction has been completed with the possible exception of final inspection punch list work. The purpose of granting or acknowledging substantial completion is to stop contract time. This is particularly important to the Contractor if contract time is exhausted or nearly so and/or punch list work is anticipated to extend beyond the allotted time. Granting of substantial completion shall eliminate the possibility of incurring liquidated damages or additional liquidated damages beyond the substantial completion date, whichever case may apply.

In the event that the Engineer grants substantial completion, the Contractor shall have thirty (30) days thereafter to complete punch list work, unless additional time is granted--in writing--by the Engineer. In no case shall a Contractor be granted more than thirty (30) days to complete punch list work, unless there are extenuating circumstances such as delay in shipment of a specialized piece of equipment, labor strike, or other circumstances beyond the Contractor's control which would necessitate a further time extension.

B. PENALTY FOR FAILURE TO COMPLETE PUNCH LIST WORK WITHIN SPECIFIED TIME

In the event the Contractor fails to complete the punch list work within thirty (30) days following the contract completion date, or in the case of specialized situations within the additional time allotted by the Engineer, the Contractor may be declared in default, and the Engineer may order the work completed by others.

In the event of default, as described herein, the Engineer shall withhold from the Contractor's final payment, an amount equal to at least twice the estimated cost of the remaining work. In addition, the Engineer shall withhold the retention deducted from contract progress payments until all punch list work has been satisfactorily completed, whereupon twice the amount of the actual cost of completing the work shall be deducted from the Contractor's final payment and the remaining funds, if any, including the contract retention, shall be released in accordance with the conditions set forth in contract retention.

C. CONTRACT RETENTION

This project shall not be considered complete until all work has been completed, including punch list work. Under no circumstances shall a Contractor receive any portion of the legally retained progress payments until the City has granted a final acceptance and/or acknowledged substantial completion. The following conditions shall apply to each case:

1. Substantial Completion: The Engineer may reduce outstanding contract retention to not less than two (2) percent of the total contract amount, upon granting substantial completion, if the value of the punch list work is estimated to be less than two (2) percent of the total contract.
2. Project Acceptance: Project acceptance implies that all punch list work is done and the improvements have been accepted by the City. Under these conditions, the retention shall be fully released to the Contractor subject only to the signing of the standard claims affidavit and hold harmless clause required for all contracts.
3. Final Release of Contract Retention and/or Release of More Than Ninety (90) Percent of the Contract Funds: Prior to final payment and release of monies retained and/or in the case of substantial completion where the Contractor has requested a reduction in contract retention, the Contractor shall be required to sign a claims affidavit agreeing to hold the City harmless from any and all claims arising out of the contract.

11. 107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC, Add the following to Subsection 107.1, LAWS TO BE OBSERVED, paragraph (C):

While every effort has been made to Blue Stake all known utilities, and to research and show on the plans, all existing underground utilities based on the best available information, it shall be the Contractor's responsibility to locate and pothole all existing utilities sufficiently in advance of anticipated new underground construction to identify any potential conflicts and allow reasonable time for the Engineer to determine solutions. Any claims for additional compensation or work required due to the Contractor's non-compliance with this provision shall

not be considered for payment by the City.

12. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**, Add the following new paragraphs to **Subsection 107.1, LAWS TO BE OBSERVED:**

(G) FAIR TREATMENT OF WORKERS

The Contractor shall keep fully informed of all Federal and State laws, County and City ordinances, regulations, codes and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any way affect the conduct of the work. He shall at all times observe and comply with all such laws, ordinances, regulations, codes, orders and decrees; this includes, but is not limited to laws and regulations ensuring fair and equal treatment for all employees and against unfair employment practices, including OSHA and the Fair Labor Standards Act (FLSA). The Contractor shall protect and indemnify the Contracting Agency and its representatives against any claim or liability arising from or based on the violation of such, whether by himself or his employees.

(H) DESERT TORTOISE MITIGATION

As stated in the Arizona Interagency Desert Tortoise Team (AIDTT) Management Plan (1996), if a desert tortoise is found in a project area, activities should be modified to avoid injuring or harming it. If activities cannot be modified, tortoises in harm's way should be moved in accordance with Arizona Game and Fish Department's "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects", revised October 23, 2007 (or the latest revision), included in these contract provisions. Taking, possession, or harassment of a desert tortoise is prohibited by State law, unless specifically authorized by Arizona Game and Fish Department.

(I) BURROWING OWLS MITIGATION – MIGRATORY BIRD TREATY ACT OF 1918

While no burrowing owls have been seen at the project site, small animal burrows likely used by rodents and cottontail rabbits are present. In the event that burrowing owls are found on the site, the project shall comply with the Migratory Bird Treaty Act of 1918 and relocate the birds prior to grading. A contact for relocation of burrowing owls is Bob Fox or Greg Clark of Wild at Heart, 31840 North 45th Street, Cave Creek, AZ 85331, 480-595-5047.

13. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**, Add the following to **Subsection 107.2, PERMITS:**

1. **HAUL PERMIT**

On any project, when the quantity of fill or excavation to be hauled exceeds 10,000 C.Y. or when the duration of the haul is for more than twenty (20) working days, the Contractor shall:

- A. Obtain approval of the proposed haul route, number of trucks, etc., by the Street Transportation Department, and then;
- B. Submit the proposed haul route plan to the Planning and Development Department and pay the appropriate plan-review fee (contact Planning and Development Department at 602-534-5933 for current plan review fee, the cost of which shall be considered incidental to the project), and after their approval;

C. Obtain the written haul permit from the Planning and Development Department.

NOTE: Obtaining the haul permit and the approval by Street Transportation does not release the Contractor from strict compliance with MAG Subsection 108.5, Limitation of Operations.

2. SALT RIVER PROJECT CONSTRUCTION CLEARANCE AGREEMENT

The Contractor shall execute a construction clearance agreement with Salt River Project (SRP) prior to performing any work within SRP's right-of-way. A blank copy of the "Construction Clearance Agreement" is provided. The Contractor shall read and abide by the terms and conditions of this agreement when working on or near SRP facilities.

3. STORM WATER POLLUTION PREVENTION PLAN AND AZPDES PERMIT

Any project that disturbs 1 acre or more of the ground surface requires the Contractor to obtain an AZPDES permit and prepare a SWPPP. This project does require an AZPDES permit and SWPPP.

4. DUST PERMIT

Any project that disturbs more than 1/10 acre of soil requires an earthmoving permit from Maricopa County. Information and forms can be found at:

www.maricopa.gov/aq/divisions/permit_engineering/applications/Default.aspx

To facilitate and encourage strict compliance with the Maricopa County Air Pollution Control Regulations pertaining to fugitive dust control, the Contractor shall submit the following documentation to the Engineer at the Pre-Construction meeting prior to conducting any earth moving or dust generating activities under the Contract.

- a. Copy of a valid Maricopa County Earth Moving (Dust Control) Permit applicable to the work or services under the Contract.
- b. Copy of the Dust Control Plan applicable to the work or services under the Contract.
- c. Documentation that all of the Contractor's on-site project managers have received the Comprehensive or Basic dust control training as required by Maricopa County Rule 310 based on project disturbed acres.

For construction sites where 5-acres or more are disturbed, the Contractor shall designate and identify to the City an individual who has completed the dust control training as required for the site Dust Control Coordinator. The Dust Control Coordinator shall be present on-site all times that earth moving or dust generating activities are occurring and until all ground surfaces at the site have been stabilized.

For construction sites less than 1-acre, the Contractor shall designate an individual who has completed Basic Training to be on site at all times that earth moving or dust generating activities are occurring.

The Contractor shall notify the Engineer within twenty-four (24) hours of any inspection, Notice of Violation, or other contact by the Maricopa County Air Quality Department with it or any of its subcontractors regarding the work or services under the Contract. A copy of any written communications, notices or citations issued to Contractor or any of its subcontractors regarding the work or services under the Contract shall likewise be transmitted to the Engineer within twenty-four (24)

hours.

The Contractor shall prevent any dust nuisance due to construction operations in accordance with MAG Specifications, Section 104.1.3, Cleanup and Dust Control. The Contractor shall use a power pick-up broom as part of the dust control effort. No separate measurement or payment shall be made for cleanup or dust control, or for providing a power pick-up broom on the job.

The Contractor agrees to indemnify and reimburse the City for any fine, penalty, fee or monetary sanction imposed on the City by Maricopa County arising out of, or caused by the performance of work or services under the Contract. The Contractor shall remit payment of the reimbursable sum to the City within thirty (30) days of being presented with a demand for payment from the City.

5. TEMPORARY RESTRICTION AND CLOSURE SYSTEM (TRACS) PERMIT

The Contractor shall obtain a TRACS permit for any construction that restricts access (partial or complete closures) on Major/Collector public streets, or complete closures on Local streets, sidewalks, bike lanes and alleys. The Contractor shall obtain this permit in accordance with the City of Phoenix Traffic Barricade Manual, latest edition. The Contractor shall follow all requirements of the TRACS permit during construction. The Contractor shall obtain this permit before the Notice to Proceed date. Any construction delays caused by non-compliance with the TRACS permit or the City of Phoenix Traffic Barricade Manual requirements shall be the responsibility of the Contractor.

6. DEMINIMUS DISCHARGE PERMIT

As required, if the Contractor anticipates the discharge of any amount of water from the City water or wastewater system during construction, the Contractor shall be responsible for obtaining a DeMinimus Permit from the Arizona Department of Environmental Quality (ADEQ) for any discharge that shall reach "waters of the U.S.", either directly or indirectly, and complying with all requirements of that permit. This includes all compliance reporting required by the permit. No separate payment shall be made for obtaining or complying with this permit.

7. U.S. ARMY CORPS OF ENGINEERS SECTION 404 PERMIT

This project is subject to a U.S. Army Corps of Engineers 404 Permit (or U.S. Army Corps of Engineers Nationwide Permit (NWP)). The permit (or NWP) is included in these project specifications. The Contractor shall comply with all requirements of this permit.

8. OTHER PERMITS

The Contractor may be required to obtain other permits from other agencies, such as the Arizona Department of Transportation (ADOT), the Flood Control District of Maricopa County (FCDMC), Maricopa County Department of Transportation (MCDOT) or a construction clearance agreement with Salt River Project (SRP) prior to performing any work within SRP right of way, before beginning work or restricting traffic in their right-of-way. The Contractor shall be required to obtain these permits and comply with their requirements.

- 14. 107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC, Revise the title of Subsection 107.4 ARCHAEOLOGICAL REPORTS to 107.4 ARCHAEOLOGICAL MONITORING AND DISCOVERIES, and add the following:**

Archaeological monitoring shall be conducted within the limits of the project during construction. The Contractor shall coordinate all ground disturbing work with Ed Checkley, the City Environmental Quality Specialist (602-377-8943), and provide a current work schedule to facilitate the archaeologist's investigation and monitoring of all ground disturbing work. An archaeological monitor is required within the following areas of interest: north of Broadway Rd along 7th Ave, between Sta. 21+30 to 23+60, and on Broadway Rd between Sta. 249+00 to 254+00, Sta. 257+00 to 266+30, Sta. 277+70 to 283+45, and Sta. 288+10 to 292+80. When archaeological materials are discovered, the Contractor shall stop work immediately within a 10-meter zone of the discovery, secure the area, and immediately notify the on-site archaeologist(s), who shall then contact the City Archaeology Office (602-495-0901). The Contractor shall not recommence work in the area of discovery until directed in writing by the City Archaeology Office.

If suspected archaeological materials are discovered during construction without an archaeologist present, the Contractor shall stop work immediately within a 10-meter zone of the discovery, secure the area, and immediately notify the City Archaeology Office (602-495-0901). The Contractor shall not recommence work in the area of discovery until directed in writing by the City Archaeology Office.

15. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC, Modify Subsection 107.8, USE OF EXPLOSIVES** as follows:

Replace the words "Uniform Fire Code" with "Phoenix Fire Code".

16. **107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC, Add the following to Subsection 107.11, CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES:**

A. UNDERGROUND FACILITIES

The Contractor shall make whatever investigation it deems necessary to verify the location of underground utility facilities. If such facilities are not in the location shown in the drawings, then (regardless of whether this is discovered prior to or during construction) the contractor's remedies, if any, pursuant to Art. 6.3, Chapter 2, Title 40, A.R.S. (A.R.S. 40-360.21 through 40-360.32, "Underground Facilities"), shall be the contractor's sole remedy for extra work, delays and disruption of the job, or any other claim based on the location of utility facilities. Locations of utility facilities shown on drawings furnished by the City are to be regarded as preliminary information only, subject to further investigation by the contractor. The City does not warrant the accuracy of these locations, and the contractor, by entering into this contract, expressly waives and disclaims any claim or action against the City under any theory for damages resulting from location of utility facilities.

The Contractor shall be responsible for obtaining all Blue Stake utility location information, and for performing all requirements as prescribed in A.R.S. 40-360.21 through .29, for all underground facilities, including those that have been installed on the current project, until the project is accepted by the City.

At least two (2) working days prior to commencing any excavation, the Contractor shall call the BLUE STAKE CENTER, between the hours of 7:00 a.m. and 4:30 p.m., Monday through Friday for information relative to the location of buried utilities. The number to be called is as follows:

Maricopa County (602) 263-1100

The Contractor shall contact Tom Kelley with Kinder Morgan Energy at (602) 278-8564 or (480) 797-7669 and kelleyt@kindermorgan.com 48 hours prior to any construction at the 51st Avenue Intersection.

The Contractor shall contact Jim Remington with Kinder Morgan Gas at (602) 438-5632 or (480) 267-7331 and james_remington@kindermorgan.com 48 hours prior to construction at the 43rd Avenue intersection.

B. UTILITY-RELATED CONSTRUCTION DELAY DAMAGES CLAIM PROCEDURES

The following procedure is intended to provide a fair and impartial process for the settlement of construction delay claims associated with unknown or improperly located utility facilities.

The Contractor shall immediately notify, in writing, the Project Engineer of any potential utility-related delay claim.

The Contractor shall immediately notify the appropriate liaison of the affected utility verbally, followed by a written notification.

The Contractor shall coordinate an investigation of the situation with the affected utility and the City's Utility Coordinator. After resolution, the Contractor shall provide written notification of the settlement of the claim to all affected parties. If the affected utility makes a decision to handle negotiations for a claim, their personnel shall be responsible for monitoring the project and all negotiations with the Contractor regarding the claim.

The Contractor shall determine to document requirements of the affected utility for their acceptance of responsibility for the claims. The Contractor shall provide four (4) copies of the required documentation to the utility involved and two (2) copies of this documentation to the Project Engineer. The Contractor shall obtain written confirmation from the utility company involved of their documentation requirements.

17. 108 COMMENCEMENT, PROSECUTION AND PROGRESS Add the following to Subsection 108.2, SUBLETTING OF CONTRACT:

(F) PROMPT PAYMENT

1. Contractor Payment to Subcontractor or Supplier

Contractor shall pay its subcontractors or suppliers within seven (7) calendar days of receipt of each progress payment from the City. The Contractor shall pay for the amount of work performed or materials supplied by each subcontractor or supplier as accepted and approved by the City with each progress payment. In addition, any reduction of retention by the City to the Contractor shall result in a corresponding reduction to subcontractors or suppliers who have performed satisfactory work. Contractor shall pay subcontractors or suppliers the reduced retention within fourteen (14) days of the payment of the reduction of the retention to the Contractor. No Contract between Contractor and its subcontractors and suppliers may materially alter the rights of any subcontractor or supplier to receive prompt payment and retention reduction as provided herein. If the Contractor fails to make payments in accordance with these provisions, the City may take any one or more of the following actions and Contractor agrees that the City may take such actions: (1) to hold the Contractor in default under this agreement; (2) withhold future payments including retention until proper payment has been made to subcontractors or suppliers in accordance with these provisions; (3) reject all future bids from the Contractor for a period not to exceed one year from substantial completion date of this project; or (4) terminate agreement.

2. Alternative Dispute Resolution Between Contractor and Subcontractor or Supplier

If Contractor's payment to a subcontractor or supplier is in dispute, Contractor and subcontractor or supplier agree to submit the dispute to any one of the following dispute resolution processes within fourteen (14) calendar days from the date that any party involved gives written notice to the other party(ies): (1) binding arbitration; (2) a form of alternative dispute resolution (ADR) agreeable to all parties; or (3) a City of Phoenix facilitated mediation. When disputed claim is resolved through ADR or otherwise, the Contractor and subcontractor or supplier agree to implement the resolution within seven (7) calendar days from the resolution date.

3. Inspection and Audit

Contractor, its subcontractors and suppliers shall comply with A.R.S. 35-214 and the City shall have all rights and remedies to inspect and audit the records and files of Contractor, subcontractor or supplier, as afforded the State of Arizona in accordance with the provisions of A.R.S. Section 35-214.

4. Non-Waiver

Should the City fail or delay in exercising or enforcing any right, power, privilege, or remedy under this Section, such failure or delay shall not be deemed a waiver, release, or modification of the requirements of this Section or of any of the terms or provisions thereof.

5. Inclusion of provisions in Subcontracts

Contractor shall include these prompt payment provisions in every subcontract, including procurement of materials and leases of equipment for this Agreement.

6. No Third Party Benefits or Rights

Nothing contained in this Agreement is intended to benefit or confer any rights on any person or entity not a party to this Agreement, and no such person or entity, including but not limited to other Contractors, subcontractors or suppliers, may assert any claim, cause of action, or remedy against the City hereunder.

18. 108 COMMENCEMENT, PROSECUTION AND PROGRESS, Add the following to Subsection 108.4, CONTRACTOR'S CONSTRUCTION SCHEDULE:

No later than one (1) week after the Pre-Construction meeting (or one week after the Notice to Proceed date is firmly established), the Contractor shall submit to the Engineer, two (2) copies of a detailed Critical Path Model (CPM) chart outlining the detailed progress of all major and critical elements of the project by weeks, from beginning of project to end. The chart shall begin at the established Notice to Proceed date and progress on a calendar basis, week by week, to the end of the project.

The Contractor shall submit updated CPM charts as required by the Engineer. This shall typically be on a monthly basis. The required submittals of updated CPM charts may be less frequent than monthly, if approved by the Engineer.

Neither the City nor the Engineer shall accept liability or responsibility for the reasonable or workable nature of the CPM schedules prepared and submitted by the Contractor—that responsibility shall remain with the Contractor.

19. 108 COMMENCEMENT, PROSECUTION AND PROGRESS, Add the following to Subsection 108.5, LIMITATION OF OPERATIONS:

A. WORK HOURS

Regular working hours shall be defined as one 8-1/2 hour shift per day, Monday through Friday, exclusive of City holidays.

Work in excess of regular working hours shall be defined as overtime. For overtime which becomes necessary, the Contractor shall make a written request to the Engineer at least eight (8) calendar days before the desired overtime. The request shall include the duration, dates, times, reason for overtime, and a statement of the consequences if overtime is not approved.

The Contractor shall not schedule any overtime work which requires inspection, survey, or material testing without written permission from the Engineer two (2) working days before the proposed overtime work. The Engineer reserves the right to deny the requested overtime. If an overtime request is denied, the Engineer may extend the contract time at no additional cost to the City, including extended overhead costs.

Unscheduled Overtime

Overtime that is not requested and approved in accordance with the above procedure shall be defined as unscheduled overtime. All costs (including appropriate overhead) shall be paid by the Contractor by deduction from the contract.

Emergency Overtime

An emergency is defined as work required for a situation that is not within the Contractor's control.

With the Engineer's approval, the Contractor shall be permitted to work overtime without being responsible for paying the City's costs.

B. NIGHT WORK

Any proposed night work shall be done in accordance with all City of Phoenix Ordinances. No night work shall be allowed in residential areas between 38th Drive and 35th Avenue.

The Contractor shall submit a comprehensive plan at the Preconstruction Conference that details the steps and methods of noise reduction during night working hours. This plan shall address, but not be limited to the following: back-up alarms, equipment noise, scheduling of excessively noisy construction phases, and material delivery times. Spotters, in lieu of back-up alarms, may be required at night.

There shall be no separate measurement or payment for work related to this item, the cost being considered incidental to the cost of contract items.

20. 108 COMMENCEMENT, PROSECUTION AND PROGRESS, Add the following to Subsection 108.10, FORFEITURE AND DEFAULT OF CONTRACT:

City's Right to Perform and Terminate for Cause

If the City provides the Contractor with a written order to provide adequate maintenance of traffic, adequate cleanup, adequate dust control or to correct deficiencies or damage resulting from abnormal weather conditions, and the Contractor fails to comply in a time frame specified, the City may have work accomplished

by other sources at the Contractor's expense.

If Contractor persistently fails to (i) provide a sufficient number of skilled workers, (ii) supply the materials required by the Contract Documents, (iii) comply with applicable Legal Requirements, (iv) timely pay, without cause, Sub-consultants and/or Subcontractors, (v) prosecute the Contract Services with promptness and diligence to ensure that the Contract Services are completed by the Contract Time, as such times may be adjusted, or (vi) perform material obligations under the Contract Documents, then the City, in addition to any other rights and remedies provided in the Contract Documents or by law, shall have the rights set forth below.

Upon the occurrence of an event set forth above, City may provide written notice to Contractor that it intends to terminate the Agreement unless the problem cited is cured, or commenced to be cured, within seven (7) days of Contractor's receipt of such notice.

If Contractor fails to cure, or reasonably commence to cure, such problem, then City may give a second written notice to Contractor of its intent to terminate within an additional seven (7) day period.

If Contractor, within such second seven (7) day period, fails to cure, or reasonably commence to cure, such problem, then the City may declare the Agreement terminated for default by providing written notice to Contractor of such declaration.

Upon declaring the Agreement terminated pursuant to the above, City may enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment, scaffolds, tools, appliances and other items thereon, which have been purchased or provided for the performance of the Work, all of which Contractor hereby transfers, assigns and sets over to City for such purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment and other items.

In the event of such termination, Contractor shall not be entitled to receive any further payments under the Contract Documents until the Work shall be finally completed in accordance with the Contract Documents. At such time, the Contractor shall only be entitled to be paid for Work performed and accepted by the City prior to its default.

If City's cost and expense of completing the Work exceeds the unpaid balance of the Contract Price, then Contractor shall be obligated to pay the difference to City. Such costs and expense shall include not only the cost of completing the Work, but also losses, damages, costs and expense, including attorneys' fees and expenses, incurred by the City in connection with the re-procurement and defense of claims arising from Contractor's default.

21. **108 COMMENCEMENT, PROSECUTION AND PROGRESS**, Add the following to **Subsection 108.11, TERMINATION OF CONTRACT:**

TERMINATION FOR CONVENIENCE

The Owner for its own convenience has the right for any reason and at any time to terminate the contract and require the Contractor to cease work hereunder. Such termination shall be effective at the time and in the manner specified in the notification to the Contractor of the termination. Such termination shall be without prejudice to any claims which the Owner may have against the Contractor. In the event of a termination for convenience, the Contractor shall be paid only the direct value of its completed work and materials supplied as of the date of termination, and Contractor shall not be entitled to anticipated profit or anticipated overhead or any other claimed damages from the Owner, Architect or the Engineer. If the City is found to have improperly terminated the Agreement for cause or default, the termination shall be converted to a termination for convenience in accordance with the provisions of this Agreement.

CANCELLATION OF CONTRACT FOR CONFLICT OF INTEREST

All parties hereto acknowledge that this agreement is subject to cancellation by the City of Phoenix pursuant to the provisions of Section 38-511, Arizona Revised Statutes.

22. 109 MEASUREMENTS AND PAYMENTS Add the following to Subsection 109.2, SCOPE OF PAYMENT:

A. PARTIAL PAYMENTS

The contracting agency shall make a partial payment to the Contractor on the basis of an approved estimate prepared by the Engineer or the Contractor for work completed and accepted through the preceding month. The notice to proceed date, which is designated for the specific project involved, shall be used as the closing date of each partial pay period. Payment shall be made no later than fourteen (14) days after the work is certified and approved. City shall review payment requests and make recommendation of approval or denial within seven (7) calendar days.

B. PAYMENT RETENTION

At the start of construction, ten percent of all pay requests shall be retained by the City to guarantee complete performance of the contract. When the work is fifty percent complete, this amount may be reduced to five percent providing that construction progress and quality of work is acceptable to the City. Any funds which are withheld from the contractor shall be paid no later than sixty days after completion of the contract and settlement of all claims.

In lieu of retention, the contractor may provide as a substitute, an assignment of time certificates of deposit (CDs) from a bank licensed by Arizona, securities guaranteed by the United States, securities of the United States, the State of Arizona, Arizona counties, Arizona municipalities, Arizona school districts, or shares of savings and loan institutions authorized to transact business in Arizona.

Securities deposited in lieu of retention must be deposited into a separate account with a bank having a branch located in the City of Phoenix and be assigned exclusively for the benefit of the City of Phoenix pursuant to the City's form of escrow agreement

CDs assigned to the City must be maintained in the form of time deposit receipt accounts. CDs shall be assigned exclusively for the benefit of the City of Phoenix pursuant to the City's form of escrow agreement.

Escrow Agreement forms may be obtained from the Contract Specialist assigned to the project.

23. 109 MEASUREMENTS AND PAYMENTS, Add the following to Subsection 109.4.3, DUE TO EXTRA WORK:

ALLOWANCE FOR EXTRA WORK

Contract allowance items are provided for the purpose of encumbering funds to cover the costs of possible change order work. The amount of the allowance item is determined by the Engineer and is not subject to individual bid pricing. All bidders shall incorporate the amount pre-entered in the bid proposal and shall reflect the same in the total amount bid for this project.

This allowance item provides an estimated funding to cover unforeseen changes that may be encountered and

corresponding extra work needed to complete the contract per plan. Unforeseen extra work, if any, shall be as approved by the Engineer; for example, extension of unit bid prices, negotiated price or time and material, in accordance with MAG Specification Section 109.4 and 109.5.

It shall be understood that this allowance item is an estimate only and is based on change order history of similar projects. It shall not be utilized without an approved contract change order. It is further understood that authorized extra work, if any, may be less than the allowance item.

24. **109 MEASUREMENTS AND PAYMENTS.** Delete Table 109-1 in **Subsection 109.9, DOLLAR VALUE OF MAJOR ITEM**, and substitute the following:

<u>CONTRACT AMOUNT</u>	<u>MAJOR ITEM IS DEFINED AS ANY ITEM EQUAL TO OR GREATER THAN THE FOLLOWING</u>
Up to \$1 million	\$15,000 or 3%, whichever is greater
\$1 million to \$3 million	3% of the original contract amount to a maximum of \$75,000.00
\$3 million to \$5 million	2.5% of the original contract amount to a maximum of \$90,000.00
Over \$5 million	1.5% of the original contract amount to a maximum of \$125,000.00

CONTINGENCY ITEMS

Contingency items which fall under the definition of a major item are subject to negotiation if decreased by more than twenty (20) percent.

Contingency items shall not increase more than twenty (20) percent without being subject to renegotiation, regardless of the percentage of that item relative to the total contract amount.

25. **110 NOTIFICATION OF CHANGED CONDITIONS AND DISPUTE RESOLUTION** Add the following to **Subsection 110.1 GENERAL:**

SOILS INFORMATION

The material boring logs shown on the plans or included in these specifications are included for the Contractor's convenience only. It is not intended to imply that the character of materials shown in the logs is representative throughout the project. **The soil borings are indicative of the soil characteristics only at the location and to the depth of each of the borings.**

Even if not specifically shown in the geotechnical information provided, the Contractor may encounter large cobbles, boulders, caliche, conglomerate, hard rock, perched groundwater, historic or prehistoric cultural resources, or other differing site conditions on this project. **No additional compensation shall be made for any differing site condition that may be encountered.**

SPECIAL PROVISIONS

1. Add the following new Section, **232 STORM WATER POLLUTION PREVENTION – BEST MANAGEMENT PRACTICES**:

Description

Implementation of “Best Management Practices” (B.M.P.’s) to reduce stormwater pollution shall be undertaken by the Contractor on a multi-tiered, most cost-effective approach. The Contractor shall utilize the lowest-cost acceptable B.M.P. available to address each type of potential stormwater pollution situation encountered on the project. Should this prove ineffective in resolving the stormwater pollution problem, additional, higher-cost B.M.P.’s may need to be employed, upon approval by the City.

Construction Requirements

Typical multi-tiered B.M.P. approaches to construction operations may include:

A. ROADWAY SUBGRADE EXCAVATION:

1. Tier I - The excavated area shall create, in effect, a temporary retention area. This may provide adequate control of storm runoff to prevent sediment from leaving the site. Pumping or other methods utilized to drain the excavation shall employ filter fabric or other filtering method to remove sediment before leaving the site or entering the storm drain system.
2. Tier II - Catch basin inlet protection (utilizing filter fabric, gravel, etc.) may be necessary should Tier I controls prove inadequate. Care shall be exercised to ensure that Tier II B.M.P.’s do not result in blockage of drainage and resultant flooding of adjacent properties.

B. OPEN PIPELINE TRENCHES:

1. Tier I - The open trench itself shall act as a temporary retention area. The Contractor shall provide a low-cost, readily-installed/removed temporary device on the open end of the pipe to prevent sediment-laden stormwater from entering the pipe. This may consist of a temporary “plug” incorporating filter fabric, a temporary weir, or other device capable of removing sediment before allowing stormwater to enter the pipe. Care must be taken to prevent damming of floodwaters in the excavation that could result in “floating” the pipe.
2. Tier II - If Tier I protection does not prove satisfactory, the Contractor may need to install straw bales, sandbag berms, or temporary diversion dikes around the perimeter of the open excavation to prevent sediment-laden stormwater from entering the open excavation. Due to installation/removal time, such devices need only be installed during periods of likely precipitation and runoff. Earthen dikes are the preferred alternate, due to ease of installation and removal. Care must be taken to assure that runoff is not blocked to the extent that flooding of adjacent properties shall result.

C. BACKFILLED PIPELINE TRENCHES:

1. Tier I - As with roadway subgrade excavations, pipeline trenches which have been backfilled but not yet paved shall be several inches lower than adjacent pavement areas, and

shall therefore act as temporary retention areas.

2. Tier II - If the "retention" provided by the backfilled area does not prevent sediment-laden runoff from leaving the excavated area, perimeter controls such as silt fence, straw bales, sandbag berms, or gravel filter berms may need to be installed around the downstream edge(s) of the backfilled area. As with open trenches, the selection of the appropriate measure, extent of its application, and time period during which it is needed shall be dependent upon cost, site conditions, ease of installation/removal, and likelihood of precipitation/runoff. Again, care must be taken to ensure that diversion of stormwater onto adjacent properties does not result from these installations.

Another stormwater control method, which the Contractor may need to consider, is limiting the amount of area disrupted and therefore subject to sediment-laden stormwater runoff at any one time. Should such project phasing prove necessary due to the failure of other B.M.P.'s, the Contractor shall revise his construction activities accordingly, at no additional cost to the City.

Standards for installation of the above B.M.P.'s are provided in the Flood Control District of Maricopa County's "Drainage Design Manual for Maricopa County, Arizona, Volume III, Erosion Control". Installation and operation of B.M.P.'s shall be in accordance with that manual.

Use of individual BMP items shall conform to the Contractor's approved Storm Water Pollution Prevention Plan (SWPPP).

Measurement and Payment

This project includes a pay item "ALLOWANCE FOR STORMWATER POLLUTION PREVENTION BEST MANAGEMENT PRACTICE (BMP'S)". All bidders shall incorporate the amount pre-entered in the bid proposal and shall reflect the same in the total amount bid for this project.

Payment for SWPPP shall be by an allowance. There shall be no separate measurement or payment for the preparation or development of the Storm Water Pollution Prevention Plan, preparing NOI's or NOT's, obtaining the AZPDES Permit, labor or equipment necessary to install, maintain or remove the BMP materials, moving existing BMP materials from one location to another on the same project, or constructing BMP swales or berms.

2. 301 SUBGRADE PREPARATION: Add the following to Subsection 301.1, DESCRIPTION:

The work under Subgrade Preparation consists of all excavating and grading work necessary to bring the existing surface to the section specified on the plans prior to the covering of the prepared subgrade with pavement base materials. It shall also include removal of asphalt concrete millings in areas shown on the plans between 51st Avenue and 43rd Avenue.

3. 301 SUBGRADE PREPARATION, Delete Subsections 301.7, MEASUREMENT, and 301.8, PAYMENT, and substitute the following:

301.7 MEASUREMENT:

Measurement for subgrade preparation shall be made by the square yard of the roadway areas excavated and graded and subsequently covered with pavement base materials. Payment for necessary grading for items outside of the lip of gutter shall be included in the cost of those items.

301.8 PAYMENT

Payment shall be made at the unit price quoted in the bid proposal for the bid item "SUBGRADE PREPARATION".

4. **317 ASPHALT MILLING** Add the following to **Subsection 317.2 CONSTRUCTION REQUIREMENTS** and **Subsection 317.3 MEASUREMENT AND PAYMENT**:

317.2 CONSTRUCTION REQUIREMENTS

The Contractor shall mill existing pavement adjacent to existing gutters to a point approximately 1-inch below the gutter lip. Depth of grinding shall be measured from the top of the concrete gutter. The grinding shall taper to 0-inches at a line 12-feet from the gutter lip. All existing material built up over the gutter shall be removed as part of this work. The Contractor shall also mill a 24-foot width transverse to the traveled roadway at endpoints of overlay, and at intersecting side streets when directed by the Engineer to ensure smooth transition between existing pavement and new overlay pavement.

The Contractor shall protect all milled surfaces from deterioration, and shall repair any damage prior to placing overlay pavement. The Contractor shall also protect adjacent properties from damage that could be caused by loose tailings.

The Contractor shall notify the City of Phoenix Street Transportation Department Traffic Signal Shop (262-6204) and the Engineer prior to milling at signalized intersections, or any other location where traffic signal loop detectors may be damaged by the milling operation. Each of these locations shall be reviewed, and the milling operation may be modified to avoid damage to the loops. This may necessitate the use of smaller milling heads in these locations. Any additional costs associated with handling these special areas shall be considered incidental to the cost of milling. The Contractor shall be responsible for the cost of replacement of damaged signal loops if the Signal Shop and the Engineer are not notified prior to the milling operation.

317.3 MEASUREMENT AND PAYMENT:

Measurement for pavement milling shall be by the square yard. Payment shall be made at the unit price bid for 'ASPHALT CONCRETE PAVEMENT MILLING', and shall be considered compensation in full for all labor, materials, and equipment necessary to satisfactorily complete the work

5. **321 PLACEMENT AND CONSTRUCTION OF ASPHALT CONCRETE PAVEMENT**, Add the following to **Subsection 321.1 DESCRIPTION**:

The permanent asphalt concrete roadway pavement section shall consist of the following:

A base course of 5 ½ inches compacted thickness of Type A-1 ½ dense graded asphalt laid in 2 courses. The first course shall have a compacted thickness of 3 inches; the second course shall have a compacted thickness of 2 ½ inches. The surface course shall consist of 2 inches compacted thickness of Type D-1/2 dense graded asphalt concrete laid in one course. The asphalt concrete surface course (no asphalt concrete base course) shall also be used for driveway connections as shown on the plans.

This Item also includes asphalt concrete paving for stamped asphalt within raised median island with a compacted thickness of 2 ½ inches of Type D-1/2 dense graded asphalt concrete laid in one course. The actual stamping and staining of the asphalt concrete is included and paid for in Section 3420000.

6. **321 PLACEMENT AND CONSTRUCTION OF ASPHALT CONCRETE PAVEMENT**, Refer to 2015 City of Phoenix Supplements for the following item **Subsection 321.10 ACCEPTANCE**:

7. **334 PRESERVATIVE SEAL FOR ASPHALT CONCRETE**, Delete the sentence in **Subsection 334.4 MEASUREMENT**, and substitute the following:

Preservative seal coating shall be measured by the square yard applied.

8. **336 PAVEMENT MATCHING AND SURFACING REPLACEMENT**, Add the following to **Section 336 PAVEMENT MATCHING AND SURFACING REPLACEMENT**:

ASPHALT CONCRETE REPLACEMENT (DRIVEWAY, SIDEWALK AND PARKING LOT CONNECTIONS)

Construction Requirements

Asphalt concrete shall be removed and replaced to match existing asphalt concrete frontage in back of new sidewalks and driveways, as detailed and noted on the plans and as directed by the Engineer. Existing asphalt concrete shall be trimmed and removed in accordance with Section 336.2.2.

Measurement and Payment

Payment shall be made at the bid price per ton for "ASPHALT CONCRETE SURFACE COURSE, TYPE C-3/4" complete-in-place within the areas as specified above, and shall include removal and disposal of existing materials and subgrade preparation. Aggregate base materials, where required, shall be paid under that proposal item.

9. **340 CONCRETE CURB, GUTTER, SIDEWALK RAMPS, DRIVEWAY AND ALLEY ENTRANCE**, Add the following to **Subsection 340.2.1 Detectable Warnings**; **Subsection 340.3.1 Detectable Warnings**; **Subsection 340.5 MEASUREMENT**; and **Subsection 340.6 PAYMENT**:

Add the following to **Subsection 340.2.1 Detectable Warnings**:

The detectable warning material shall be TekWay Dome-Tiles, as manufactured by StrongGo, LLC, or approved equal. The color of the tiles to be used shall be Terracotta.

Add the following to **Subsection 340.3.1 Detectable Warnings**:

TekWay Dome-Tiles detectable warnings (or approved equal) shall be installed per manufacturer's recommended specifications. The layout of tiles shall be determined by the Contractor, and if necessary, pre-cut as needed prior to beginning the installation process. Tiles shall not be cut to less than half their size. Tiles shall be cut with a tile wet saw, or a circular saw with a diamond blade, or as recommended by the manufacturer.

Add the following to **Subsection 340.5 MEASUREMENT and 340.6 PAYMENT**:

Sidewalk Ramps, Measurement and Payment

Sidewalk ramps shall be constructed in accordance with Phoenix Standard Details or special details called out on the plans.

Payment for sidewalk ramps shall be made under the bid items for "SIDEWALK", "CURB AND GUTTER", and TRUNCATED DOMES FOR SIDEWALK RAMPS, and shall include all costs for labor, materials, equipment, forming, placement and finishing for complete sidewalk ramp installation. The cost of any special curb at the back of sidewalk ramps shall be measured by the square foot and paid for as "SIDEWALK".

Decorative pavement or paving stones as shown on the plans and used in sidewalk areas shall be measured by the square foot installed, and paid for under the bid item for "DECORATIVE PAVEMENT FOR LANDSCAPING PER DETAIL", including all subgrade preparation, leveling sand, etc to provide a complete installation.

Concrete Driveway and Sidewalk Slab Connections, Measurement and Payment

This work shall consist of constructing concrete driveway and sidewalk slab connections to match existing at locations shown on the plans or requested by the Engineer. The slab thickness shall conform to the applicable driveway or sidewalk detail.

Measurement and payment for this work shall be made per square foot complete and in place for the appropriate pay item "CONCRETE DRIVEWAY ENTRANCE" or "CONCRETE SIDEWALK".

Mountable Curb and Gutter, Measurement and Payment

Mountable curb and gutter shall be constructed in accordance with MAG Detail 220-2, Type E, where shown on the plans.

Measurement shall be made per linear foot complete in place, and payment shall be made under the bid item for "COMBINED CONCRETE CURB AND GUTTER, STD. DETAIL 220, TYPE 'A', H=6".

10. **345 ADJUSTING FRAMES, COVERS, VALVE BOXES, AND WATER METER BOXES**, Revise **Subsection 345.1 DESCRIPTION**, **Subsection 345.5 MEASUREMENT**, and **Subsection 345.6 PAYMENT** as follows:

Delete **Subsection 345.1 DESCRIPTION** in its entirety, and substitute the following:

Adjustment of manhole frames, covers, clean outs, valve boxes, survey monument boxes (and water meter boxes if located in the pavement) to finish grade shall be done AFTER placement of the final surface course pavement.

Any missing manhole frames or covers and water valve or survey monument box hardware (such as lids, for example) shall be reported in writing to the Engineer during the initial lowering process to allow arrangements to be made to obtain replacement hardware. Missing hardware that is properly reported to the Engineer shall be supplied to the Contractor by the City of Phoenix or the appropriate private utility company.

Replacement of any missing hardware that was not reported to the Engineer initially as specified, that comes up missing later when these facilities are brought back up to finish grade, shall be the full responsibility of the Contractor, at no additional cost to the City.

In addition, all manhole frames and covers, water valve and survey monument boxes or other related hardware removed by the Contractor during the lowering process shall be maintained in a secure area, and the Contractor shall bear full responsibility for this hardware material. Any hardware lost by the Contractor shall be replaced in-kind, at no additional cost to the City.

All areas of existing pavement removed for adjustments that shall be subjected to traffic prior to placement of final concrete collar rings shall be temporarily filled with hot-mix Type D-1/2 asphalt and roller-compacted flush with the adjacent pavement. There shall be no separate measurement or payment for this temporary hot-mix asphalt or placement or subsequent removal, the cost being considered incidental to the cost of the adjustment.

After removal of asphalt pavement in the area of adjustment, and prior to placement of the final concrete collar ring around the frame or valve box (as shown on City of Phoenix Detail P-1391 and MAG Detail 422), the asphalt pavement in proximity of the adjustment shall be rolled with a self propelled, steel wheel roller.

The concrete collar ring around the frame or valve box shall be circular, and shall be a minimum of eight (8) inches thick, placed flush with the adjacent new pavement surface. At a minimum, concrete shall be MAG Class 'AA' on all paved streets. All concrete shall be obtained from plants approved by the Engineer.

A single No. 4 rebar hoop shall be placed in each adjustment collar. The hoop diameter shall be such that its placement is centered between the edge of the manhole frame or valve box, and the outside edge of the concrete collar. The depth of the hoop shall be such that it is centered in the thickness of the collar. Each concrete ring shall be scored radially at quarter-circle points. Score lines shall be ¼-inch wide by ½-inch deep. The concrete collar surface shall be rough broom-finished. All pavement removed for adjustments shall be replaced with concrete.

Traffic shall not be allowed on the collars until the concrete has reached a minimum compressive strength of 2500 psi on residential streets, and 3000 psi on collector and major streets. On major streets, the Contractor shall use "high-early" cement in the concrete mix, approved by the Engineer, to minimize delay in re-opening the street to traffic.

Prior to commencing work on the adjustments, the Contractor shall submit a written adjustment plan and schedule to the Engineer for approval.

Sewer manhole frames and covers shall be matched, kept together, and replaced to their original locations. The Contractor shall remove existing asphalt, chip seal, or other materials from all sewer manhole covers and water valve box lids to be adjusted on this project. The Contractor's method for removal shall be approved by the Engineer prior to actual work. Cover cleaning shall be completed prior to adjustment of frames. Also, all water valve risers shall be thoroughly cleaned to fully expose the valve operating nut.

QUARTER SECTION MAPS FOR WATER AND SEWER LINES

The Contractor may obtain up to three sets of waterline and sewerline quarter section maps for the streets included in this project after the contract is awarded and issued. To order the maps, the Contractor shall bring an official contract specification book and a list of desired quarter section maps to the Technical Support Services counter on the 8th Floor of City Hall, 200 W. Washington Street. Up to three sets of maps shall be provided at no cost to the Contractor. If more than three sets are requested, the Contractor shall purchase the additional sets.

WATER VALVE AS-BUILTS

Upon completion of water valve box adjustments, the Contractor shall provide one complete accurate and clearly legible set of as-built waterline Quarter Section maps to the Engineer. The Contractor shall mark and color code all water valves on the maps as follows:

Blue- All valves shown on the Q.S. map found and adjusted.

Yellow- All valves shown on the Q.S. map but not found in the field.

Red- Any valve not shown on the Q.S. maps but discovered and adjusted. (Draw valve symbol on map at appropriate location and provide offset and location dimensions for valves in this category.)

Delete **Subsections 345.5 MEASUREMENT and 345.6 PAYMENT** and substitute the following:

345.5 MEASUREMENT

Measurement for adjustments shall be per each respective item.

345.6 PAYMENT

Payment for the appropriate item shall be made at the unit price bid for "ADJUST EXISTING MANHOLE FRAME AND COVER, MAG STD 422 AND COP DETAIL P-1430" and ADJUST EXISTING VALVE BOX & COVER". Payment shall include all labor, materials, and equipment necessary to satisfactorily clean and make complete adjustments.

There shall be no separate measurement or payment for adjusting NEW manhole frame & covers, valve boxes, sewer clean-out frame & covers or water meter boxes constructed with the project. Payment for adjusting these new facilities is considered included in the price bid for the appropriate new item.

11. Add the following new **Section 346 ADJUSTING NON-CITY UTILITIES** as follows:

346.1 DESCRIPTION

The utility companies may utilize the Contractor to adjust their frames, covers, and valve boxes for this project.

The Contractor shall coordinate with the Engineer and the representatives of the various utilities regarding the adjustment and the inspection requirements of their facilities. The Contractor shall be responsible for obtaining and adhering to the specifications and any other special requirements from the utility companies.

346.2 MEASUREMENT

Measurement of adjusted private utility features shall be on a per each basis.

346.3 PAYMENT

Payment for this work shall be made at the unit price bid per each item adjusted to grade, under the proposal items "ADJUST EXISTING VALVE BOXES & COVER" and "ADJUST EXISTING MANHOLE FRAME AND COVER, MAG STD DETAIL 422 AND COP DETAIL P-1430", and shall be compensation in full for complete and final adjustment, including any utility inspector costs associated with these adjustments, regardless of the type of manhole or valve. The individual utility companies have the right to accept or reject the Contractor's bid price for their portion of adjustments. If the utility company rejects the Contractor's price, the utility company shall adjust their own facilities and the item quantity shall be adjusted accordingly.

12. Add the following new **Section 362 UNDERGROUND POWER INSTALLATION** as follows:

362.1 TRENCHING FOR UNDERGROUND STREET LIGHT CIRCUITS

Materials and construction shall be in accordance with the Salt River Project (SRP) "Underground Distribution Construction Standards", MAG, City of Phoenix Standard Specifications and these Special Provisions.

The Contractor shall provide all trenching, bedding, backfilling and compacting for street light circuits as shown on the plans. The Contractor shall utilize a commercial-source cement-enriched slurry aggregate backfill for any trench within roadway pavement in the City's right-of-way. The slurry aggregate base course shall be per

Section 728. The slurry shall have a minimum 8-inch slump, and a minimum of 25 psi compressive strength and a maximum of 100 psi based on a 28-day test.

Only commercial-source cement-enriched slurry ABC shall be allowed. Batch mixing of slurry on-site by the Contractor shall not be allowed. The Contractor shall submit the commercial source mix design for cement-enriched slurry ABC at the pre-construction meeting, along with all other required commercial mix designs. The trench shall be backfilled in accordance with City of Phoenix Standard Detail P1200.

The Contractor shall furnish and install ground rods and junction boxes.

The Contractor shall furnish and install 2 ½-inch conduit, sweeps and conduit caps in accordance with the plans, from the junction box to the street light pole and from the junction box to within 2 feet of the SRP power source for the street light system. The Contractor shall also include the running of a mandrel through the conduit system.

The Contractor shall furnish and install flat strap in all conduit runs.

The Contractor shall furnish and install electronic markers at the ends of all conduits coming out of the junction boxes.

SRP shall furnish and install the electrical conductor for the street lights.

The Contractor shall be responsible for obtaining the SRP Standards from the SRP by contacting Steve Leslie at (602) 236-0424.

All work shall be subject to inspection by Salt River Project (SRP) and City of Phoenix forces. The Contractor shall call Steve Leslie at (602) 236-0424 at least five (5) working days prior to starting trench work to meet with the SRP Inspector and review inspection requirements.

The SRP Liaison Agent is Steve Leslie at (602) 236-0424.

Trenching shall be completed prior to sidewalk construction and ahead of pole installation. The Contractor shall backfill and compact the trench in accordance with Section 601. The trench shall be per SRP plans.

Measurement and Payment

Measurement shall be per linear foot, and payment shall be at the unit price bid per linear foot for "TRENCHING FOR STREET LIGHT CIRCUIT" and shall be compensation, in full, for all labor, equipment and materials necessary for the satisfactory completion of trenching and bedding; furnishing and installing conduit and sweeps; furnishing and installing ground rods; installing SRP-provided junction boxes; installing SRP-provided flat strap in conduits and SRP electronic markers at the ends of all conduit runs; any and all related items; and backfilling and compacting in accordance with the plans, Standard Specifications and these Special Provisions.

13. Add the following new **Section 363 STREET LIGHTING INSTALLATION** as follows:

363 STREET LIGHTING INSTALLATION

Description

The Contractor shall furnish and install all above-ground street light equipment (poles, luminaire arms,

luminaires, photocells, etc.) in accordance with the plans.

The Contractor shall submit shop drawings for review and approval by the Engineer and the appropriate Power Company on all street light equipment to be provided by the Contractor.

The Contractor shall coordinate street light equipment installation efforts to avoid any damage to other elements of project construction, and shall provide a complete, connected system installation ready for the Power Company to pull conductor wires and energize the street light system.

All work shall be subject to inspection by the Power Company and City of Phoenix forces. The Contractor shall call the Power Company at least five (5) working days prior to starting work to meet with the Power Company Inspector and review inspection requirements.

Measurement and Payment

Measurement shall be per each complete street light installed, and payment shall be at the unit price bid per each for "FURNISH AND INSTALL STREET LIGHT PER C.O.P. STREET LIGHTING PROCEDURES, STANDARDS AND SPECIFICATIONS MANUAL" and shall be compensation in full for all labor, equipment and materials necessary for the satisfactory installation of street light equipment, including furnishing and installing street light poles, luminaire arms, luminaires, photocells, and all other related equipment items in accordance with the plans, Standard Specifications and these Special Provisions.

14. **401 TRAFFIC CONTROL**, Add the following to **Subsection 401.4 TRAFFIC CONTROL MEASURES:**

SEQUENCE OF CONSTRUCTION

The sequence of construction shall conform to the requirements of the Special Traffic Regulations.

The project shall follow a phasing plan approved by the Engineer. All lanes shall be maintained on a paved surface at all times during construction. This may be accomplished by using existing, new, or temporary asphalt pavement. Trenches shall be completely backfilled and either paved with temporary asphalt pavement, or covered with metal plating as necessary to comply with this requirement and the "Special Traffic Regulations".

Night work shall **not** be allowed on this project.

The right to direct the sequence of construction is a function vested solely with the Engineer. Prior to commencement of the work, the Contractor shall prepare and submit to the Engineer, a written phasing plan and work schedule for the project. This plan and work schedule shall be submitted to the Engineer at the Preconstruction Conference for review.

When approved, the phasing plan and work schedule shall not be changed without the written consent of the Engineer. Orderly procedure of all work to be performed under this contract shall be the full responsibility of the Contractor. The work schedule shall include

TEMPORARY PAVEMENT

Temporary pavement shall be asphalt concrete, Type C-3/4, 2-inches thick. The temporary pavement shall be placed as required to maintain traffic and pedestrians on pavement at all times, or as directed by the Engineer. On this project, it is expected that no more than 600 tons of Type C-3/4 temporary asphalt pavement shall be required.

Payment

The temporary pavement shall be paid for as an allowance under bid item M3211001 ALLOWANCE FOR TEMPORARY ASPHALT CONCRETE PAVEMENT, TYPE C ¾" THICK. If more than the expected amount of temporary asphalt pavement is required by the Engineer, a fair contract unit price based on actual and recent historic unit bid prices for permanent asphalt pavement shall be negotiated and paid to the Contractor.

15. **401 TRAFFIC CONTROL**, add the following to **Subsection 401.5 GENERAL TRAFFIC REGULATION:**

TRAFFIC REGULATIONS

- A. The following shall be considered major streets:
- Avenida Rio Salado / Broadway Road
 - 7th Street
 - 7th Avenue
 - 35th Avenue
 - 43rd Avenue
 - 51st Avenue
- B. All traffic and/or traffic control devices on this project shall be provided, maintained and/or controlled as specified in the City of Phoenix Traffic Barricade Manual, 2007 edition and addendums thereof.
- C. Permission to restrict City streets, sidewalks and alleys (street closure permits) shall be requested as specified in Chapter 3 of the City of Phoenix Traffic Barricade Manual, 2007 edition and addendums thereof.
- D. Unless otherwise provided for in the following "Special Traffic Regulations", all traffic on this project shall be regulated as specified in Chapter 4 of the City of Phoenix Traffic Barricade Manual, 2007 edition and addendums thereof.
- E. No deviation from the "Special Traffic Regulations" shall be allowed or implemented unless submitted to the Engineer for review and approval at least 14 days prior to proposed work.
- F. Only City of Phoenix certified contractors can set, move or remove temporary traffic control devices (signs, barricades, etc.). This annual certification can be scheduled by calling 602-262-6235.
- G. Civil sanctions for temporary traffic control violations apply as follows:

Civil Sanction Per Day	Violation Description
\$1,500	Creating an eminent risk of death or injury to the public within the public right-of-way
\$1,000	Restricting the right-of-way without proper certification or a right-of-way temporary use permit

\$1,000	Restricting traffic during peak traffic hours as described in the <u>Traffic Barricade Manual</u> without authorization
\$1,000	Failing to correct or cure a violation, as listed in this table, within the time period stated on the warning notice
\$1,000	Restricting traffic at signalized intersections without any work occurring
\$500	Closing a sidewalk improperly or closing a sidewalk without proper certification or closing a sidewalk without a right-of-way temporary use permit
\$500	Violating the restriction limits, times and locations, of the right-of-way temporary use permit
\$500	Missing or improper use of advance warning signs
\$500	Missing or improper use of barricades and channelizing devices
\$250	Leaving advanced warning signs facing traffic after restriction has been removed – per one traffic direction
\$250	Leaving traffic control devices in the right-of-way twenty-four hours after right-of-way temporary use permit expires, unless a request for a permit extension is received by the City prior to the expiration of such permit
\$250	Use of “unacceptable” quality traffic control devices as described in the <u>Traffic Barricade Manual</u>
\$250	Rendering a bus stop inaccessible without relocating it or making other accommodations

- H. Parking Meter Fees: To take a parking meter out of service requires a \$35 application fee and \$10 per meter per day.
- I. The City has the authority to remove and store temporary traffic control devices in emergency situations or as a last resort if the barricade owner shall not pick them up. The City shall assess removal and storage fees accordingly.

TRAFFIC RESTRICTIONS

Except during emergency conditions, or otherwise provided for in the special provisions or permit, or approved by the RMP Agent, the following are minimum traffic control requirements for all traffic restrictions:

- A. During WEEKDAY PEAK TRAFFIC HOURS between 6:00 a.m. and 8:30 a.m., and between 4:00 p.m. and 7:00 p.m., TRAFFIC RESTRICTIONS ARE NOT PERMITTED on Major or Collector streets.
- B. During WEEKDAY PEAK TRAFFIC HOURS between 6:00 a.m. and 9:00 a.m., and between 4:00 p.m. and 7:00 p.m., TRAFFIC RESTRICTIONS ARE NOT PERMITTED on streets with reversible lanes.
- C. During WEEKDAY OFF PEAK TRAFFIC HOURS, when one traffic lane is restricted at a multiple lane signalized intersection with left-turn lanes, the left-turn lanes may be used to provide a minimum of four through traffic lanes (two lanes for each direction).

- D. Except as provided for in items A and C above, a minimum of two traffic lanes (one for each direction) shall be maintained on all Major and Collector streets through the week nights and through the weekends.
- E. A minimum of two traffic lanes in the same direction shall be maintained on "one way" streets at all times.
- F. A traffic lane shall not be considered as satisfactorily open to traffic unless it is paved with hot mix or cold mix asphalt.
- G. The CONTRACTOR, utility or other agency shall provide a City of Phoenix approved uniformed off-duty police officer during OFF PEAK traffic hours to assist with traffic control at multiple lane signalized intersections whenever traffic is reduced to one through lane in any one direction. This requirement may be waived by the Engineer when conditions, in his opinion, do not require it.
- H. Local streets may be closed except for local access, when construction or maintenance requires.
- I. Local access shall be maintained to all properties on all streets (Major, Collector and Local) at all possible times. When local access cannot be maintained, the CONTRACTOR, utility or other agency shall notify the affected property owner, resident, or tenant, a minimum of 72 hours in advance and restore access as soon as possible. Unless specifically authorized by the Engineer, access to businesses shall not be closed during business hours.
- J. All CONTRACTORS doing work in the right-of-way shall promptly remove all traffic control devices when the closure or lane restrictions are no longer in effect. When no construction work is being done, all advance warning signs shall be turned so that they are not readable by drivers. All traffic control devices may be temporarily stored in cluster method behind the sidewalk for short periods of time. All temporary traffic control devices shall be collected and removed from the right of way within 24 hours of the expiration of the TRACS permit.
- K. Special Events: If there are special events scheduled to take place during the construction of any project, the CONTRACTOR shall coordinate the construction schedule with these events.

16. **401 TRAFFIC CONTROL**, Add the following to **Subsection 401.5 GENERAL TRAFFIC REGULATION**:

SPECIAL TRAFFIC REGULATIONS

7th Street, 7th Avenue, 35th Avenue, 43rd Avenue and 51st Avenue can be reduced, when construction requires, during the times indicated below:

Two lanes (one each way) plus left-turn lanes at signalized intersections from 8:30 a.m. to 4:00 p.m. weekdays.

Two lanes (one each way) plus left-turn lanes at signalized intersections from 7:00 p.m. to 6:00 a.m. weeknights, and from 7:00 p.m. Friday to 6:00 a.m. Monday.

All lanes shall remain open from 6:00 a.m. to 8:30 a.m., and 4:00 p.m. to 7:00 p.m. weekdays.

All lanes on Broadway Road shall remain open at all times during construction.

Adjacent intersections shall not be restricted from 7th Street and Broadway Road to 7th Avenue and Broadway Road. The 7th Street and 7th Avenue intersections can be constructed at the same time.

Portable Variable Message Boards

Portable Variable Message Boards (VMB) are not required on this project unless otherwise directed by the Engineer.

Police Officer Requirements

The Contractor shall provide one off-duty police officer, as defined in the City of Phoenix Traffic Barricade Manual, 2007 edition, at signalized intersections affected from 6:00 a.m. to 7:00 p.m. weekdays, and during working hours' nights and weekends when traffic is restricted (as described in the City of Phoenix Traffic Barricade Manual, 2007 edition).

When construction activities do not restrict traffic through the intersections, police officer hours may be reduced or suspended at the direction of the Engineer.

Signalized Intersection Requirements

The Contractor shall notify the Engineer and the City Traffic Signal Shop (262-6021) at least 72 hours prior to the start of any construction in the vicinity of a signalized intersection where traffic signals may be affected.

The Contractor shall provide the Engineer and the Traffic Signal Shop a written schedule indicating days, times and specific locations where traffic signals shall be interrupted or modified. **When work has been completed, the Contractor shall immediately notify the Traffic Signal Shop.**

The Contractor shall maintain a 40-degree "cone of vision" at all signalized intersections for full view of intended traffic and signal indication. Motorists driving through signalized intersections in a construction zone must always be able to see at least two (2) traffic signal heads within an angle no greater than 20-degrees either side of the straight-ahead position (40-degree cone of vision). If the traffic control setup cannot provide the required 20-degree cone of vision, the Contractor shall contact the City Traffic Signal Engineer at (602) 262-4693 for instructions.

Local Access Requirements

The Contractor shall maintain local access to all side streets, access roads driveways, alleys, and parking lots at all times and shall notify residents 72 hours in advance of any restrictions which shall affect their access. The Contractor shall restore the access as soon as possible. If the primary access cannot be restored in a timely manner, the Contractor shall provide an alternative which shall be pre-determined with the residents prior to imposing any restrictions. Any local street restrictions imposed shall be such that local area traffic circulation is maintained.

Business Access Requirements

Access shall be maintained to adjacent businesses at all times during their hours of operation. Access may be maintained by such measures as constructing driveways in half sections, or by providing bridging over new concrete. Properties with multiple driveway access shall not have more than one driveway access restricted at any given time. While the one driveway is restricted, access to the other adjacent driveways shall be maintained and unrestricted. Each individual driveway access restriction shall be no more than fourteen (14) calendar days. Any business restrictions shall be coordinated with the affected business in writing at least fourteen (14) days prior to imposing restrictions.

Frontage Road Access Requirements

Local access shall be maintained at all times on frontage roads. Frontage roads shall not be used for through traffic, equipment parking, material storage, or spoil stockpile area. Frontage road closures shall follow the same special provisions as described in "Local Access Requirements".

School Access Requirements

The Contractor shall provide clean and safe school zones, crosswalks, and walkways for students attending nearby schools during all hours of school use.

This may require backfilling trenches, temporary pavement, shoring, plating, or pedestrian bridges with handrails across open trenches.

In addition to school zones and crosswalks, the Contractor shall maintain accessibility to all school bus routes during all hours of school use. The Contractor shall notify the school principal(s) and the school Transportation Director at least fourteen (14) days prior to any restrictions, and shall restore access as soon as possible.

Church Access Requirements

The Contractor shall maintain a high level of access to churches during all hours of church use. The Contractor shall coordinate any access restrictions with the clergy at least fourteen (14) days prior to any restrictions, and shall restore access as soon as possible.

Fire Station and Police Station Access Requirements

The Contractor shall maintain paved emergency vehicle access to and from all fire stations and police stations at all times. The Contractor shall coordinate with the Fire Station and/or Police Station Commander at least fourteen (14) calendar days prior to any restrictions, and again at least 72 hours prior to any restrictions, and shall restore full access as soon as possible.

City Park Access Requirements

The Contractor shall maintain access to Hayden Park at 322 West Tamarisk Street during park hours. Any restrictions shall be coordinated with the appropriate Parks District Supervisor at least fourteen (14) days in advance, and full access shall be restored as soon as possible.

Canal Access Road Requirements

SRP Canal access and maintenance roads shall remain open at all times.

Coordination with Other Agency Projects

The Contractor shall coordinate and schedule work to minimize disruption or conflicts with Agency projects. Any work that may affect this project shall be coordinated with the appropriate Agency contact at least fourteen (14) days in advance.

Sanitation Pick-up

The Contractor shall provide sanitation pick-up for affected residents by relocating trash containers, or by providing alternative measures acceptable to the Public Works Department, Sanitation Division (602) 256-3310.

Special Events

There are special events scheduled to take place during the construction of this project. The Contractor shall coordinate these events with the construction schedule. No additional compensation for delays associated

with special events shall be considered.

Special Sign Requirements

The Contractor shall provide, install and maintain advance notification; public informational; and directional access signs (for businesses, churches, hospitals, schools, etc.) that may be required by the Engineer. These signs may include, but are not limited to portable changeable message signs, radar/speed sensing trailers and other applicable Intelligent Transportation System type devices. The cost shall be included in the bid item for Traffic Control Devices.

Bus Stops

The Contractor shall maintain all existing bus stop locations on this project in a safe manner, or provide alternate bus stop locations and related directional signage as required by the Engineer. Not fulfilling this requirement can lead to civil sanctions.

Flagging of Traffic

No flagging of traffic shall be permitted during the peak traffic hours of 6:00 a.m. to 8:30 a.m. and 4:00 p.m. to 7:00 p.m. weekdays. If construction requires, intermittent flagging shall be allowed from 8:30 a.m. to 4:00 p.m. if approved by the Engineer, to facilitate access for heavy construction equipment.

Traffic Control Plan

The Contractor shall submit a traffic control plan for approval, showing placement of all traffic control devices, including all conflicting signs to be covered/removed or relocated, or other features that may conflict with the placement of temporary signage. This plan shall be professionally drawn on a 24" x 36" reproducible medium, and shall be submitted to the Engineer at the Pre-Construction meeting or before. The Contractor shall allow the Engineer fourteen (14) calendar days for review and approval of an acceptable plan.

Temporary Traffic Control Zone and Safety

At the Pre-Construction conference, the Contractor shall designate an employee, other than the Project Superintendent, who is knowledgeable in the principles and methods of proper traffic control and safety. This employee shall be available on the project site during all periods of construction to coordinate and maintain safe, acceptable and effective temporary barricading whenever construction affects traffic. This person shall be authorized to receive and fulfill instructions from the Engineer and shall supervise and direct traffic control. Instructions and information given by the Engineer to this person shall be considered as having been given to the Contractor.

Failure to maintain temporary traffic control devices in accordance with the City of Phoenix Traffic Barricade Manual, 2007 edition, the approved Traffic Control Plan, and directives by the Engineer shall result in suspension of work and/or civil sanctions until deficiencies are corrected to the satisfaction of the Engineer.

Safety Fencing Requirement for Trenches and Excavations

The Contractor shall provide safety construction fencing around all open trenches and excavations during all non-working hours.

The Contractor shall provide for the safety and welfare of the general public by adequately fencing all

excavations and trenches that are permitted by the Engineer to remain open when construction is not in progress.

Fencing shall be securely anchored to approved steel posts located six (6) feet on centers, having a minimum height of six (6) feet, and shall consist of wire mesh fabric of sufficient weight and rigidity to adequately span a maximum supporting post separation of six (6) feet.

The fencing, when installed about the periphery of excavations and trenches, shall form an effective barrier against intrusion by the general public into areas of construction. Fencing shall not create sight distance restrictions or visual obstructions. At all times when construction is not in progress, the Contractor shall be responsible for maintaining the fencing in good repair, and upon notification by the Engineer, shall take immediate action to rectify any deficiency. Prior to the start of any excavating or trenching required for the execution of the proposed work, the Contractor shall submit to the Engineer for approval, detailed plans showing types of materials and methods of fabrication for the protective fencing.

There shall be no separate measurement or payment for furnishing, installing, or maintaining protective fencing. The cost shall be considered incidental to the cost of the pipe and/or structures.

17. **401 TRAFFIC CONTROL.** Add the following to **Subsection 401.10 PAYMENT:**

ALLOWANCE FOR UNIFORMED, OFF-DUTY LAW ENFORCEMENT OFFICER

This project includes a lump sum "ALLOWANCE FOR UNIFORMED, OFF-DUTY LAW ENFORCEMENT OFFICER. The amount of this allowance is determined by the Engineer, and is not subject to individual bid pricing. All bidders shall incorporate the amount pre-entered in the bid proposal and shall reflect the same in the total amount bid for this project.

Payment for uniformed, off-duty law enforcement officers shall be made from this allowance based on approved invoiced cost plus taxes, and a maximum 10 percent markup for overhead and profit.

TRAFFIC CONTROL

Payment for traffic control shall be on a lump sum basis for "TRAFFIC CONTROL DEVICES".

18. Add the following new **Section 402 ADDITIONAL CONSTRUCTION REQUIREMENTS** as follows:

402.1 FIELD DOCUMENTATION

The Contractor shall document existing conditions within the project area prior to construction. Documentation shall be video tape. The video tape shall not be made from a moving vehicle. One copy of the video tape shall be furnished to the City prior to the start of construction. The cost of the videotaping shall be considered incidental to the cost of the project. No separate measurement or payment shall be made for this item.

402.2 CONTRACTOR COMMUNICATION INFORMATION

The Contractor shall provide a mobile phone to his on-site Project Superintendent to ensure that the Engineer can reach the Contractor's Superintendent. This mobile phone must be accessible by local land-line telephone service. The Superintendent's mobile phone shall remain in service for the duration of the project, and these phone numbers shall be included on the Contractor's list of emergency phone numbers submitted at the pre-construction conference.

402.3 TRENCH PLATING

In paved areas where vehicles shall be driving over trench plating, the plates shall be set to match flush with existing pavement on all sides. Setting plates on top of the pavement surface and installing temporary asphalt ramps around them shall not be allowed.

402.4 TRENCHING IN RIGHT OF WAY

The Contractor shall not be allowed to stockpile trench material or store any equipment other than the mainline track hoe within the right-of-way. The Contractor shall secure temporary 6' chain link fence around the track hoe during non-working hours.

402.5 MAXIMUM OPEN TRENCH

No more than 330 linear feet of open trench shall be allowed on Broadway Road from 43rd Avenue to 35th Avenue. Trenches across driveways shall be plated to maintain access. The cost of these plates shall be considered incidental to the project.

402.7 POWER BROOM

The Contractor may be instructed by the Engineer to provide additional pavement cleaning (in parking lots, or other locations) above and beyond the normal expected cleanup and dust control required by MAG Section 104.1.3. If requested by the Engineer, the Contractor shall clean the requested areas with a power pick-up broom.

Use of the power pick-up broom in the special requested areas only shall be measured and paid for on an hourly basis under the bid item, 'POWER BROOM'. The number of hours listed in the bid proposal is only an estimate. Actual hours requested for this project may vary.

402.9 PUBLIC INFORMATION SERVICES

The City of Phoenix shall provide a public information specialist for the community relations program on this project.

The Contractor shall cooperate with the City's public information specialist firm in the preparation of newsletters, advanced notification for service disruptions, answering questions from the public, etc. He shall also provide schedule update information to the specialist.

The Contractor shall provide representatives as needed for all meetings with the public throughout the contract period.

The City shall pay public information service costs associated with approved contract time extensions; however, if the Engineer determines that delays were caused by the Contractor, the additional costs for public information services shall be deducted from the Contractor's final pay request.

402.11 CONSTRUCTION REQUIREMENTS FOR BUS STOP FURNITURE AND SHELTERS

Description

The Contractor shall be responsible for removing, temporarily storing during construction, and re-installing all existing bus shelters, bus benches, trash receptacles, etc at bus stops and bus bays affected by construction

activities within the project area. The Contractor shall take care in removing these items, loading and unloading them, and protecting them in a safe and secure storage area during construction; and for carefully bringing the items back and re-installing these items after the new project bus stop facilities are completed. Any pre-existing damages on the existing equipment shall be carefully documented and recorded by the Contractor and brought to the attention of the Engineer, in writing, to avoid liability for any pre-existing damages. Any damages caused by the Contractor shall be repaired or replaced at the Contractor's expense prior to project acceptance.

Replace note 4 on COP STD details P1260, P1261, and P1262 with, "Electrical conduits and junction boxes shall be required".

There shall be no separate measurement or payment for this work, the cost being considered incidental to the project.

POLLUTION AWARENESS MARKERS

Pollution Awareness Markers (PAM's) shall be installed by the Contractor for all new catch basins and for each existing catch basin within the project limits that does not have a PAM. The PAM's shall be supplied to the Contractor by the City. PAM's shall be installed at the location identified by the Engineer. For existing catch basins, flat PAM's shall be supplied, and the contractor shall clean the surface with a wire brush, apply appropriate adhesive to the back of the marker, and apply the marker to the clean surface. For new catch basins, PAM's with feet shall be supplied, and the Contractor shall install them as the catch basin is cast.

MEASUREMENT AND PAYMENT

There shall be no separate payment to the CONTRACTOR for installing PAM's.

19. Add the following new **Section 403 SPECIAL TRAFFIC SIGNALS AND STREET LIGHTING INFORMATION** as follows:

403.1 TYPE "SM" AND "SR" SIGNAL POLES AND MAST ARMS

The Contractor is hereby notified that there may be a long lead time required for manufacturing and shipping the Type "SM" and "SR" signal pole foundation cage, poles and signal and luminaire mast arms. The Contractor shall, therefore, order these items as early as possible. In the event there is a delay in delivery, the Contractor shall install a temporary signal. The signal shall be a box span with two (2) 12-inch signal heads per direction with pedestrian heads in all four (4) directions. The Contractor shall coordinate the location and size of the wood poles, heads, etc., with the Street Transportation Department, Traffic Signal Systems Supervisor at 262-4690.

There shall be no separate measurement or payment for temporary signals. The cost being considered incidental to the cost of contract items.

403.4 STREET LIGHTING

It is the intent of the City of Phoenix to maintain a minimum of one (1) side lighting at all times during construction. The Contractor shall coordinate with SRP and the Engineer to accomplish this task.

20. Add the following new **Section 417 ENERGY ABSORBING IMPACT ATTENUATOR** as follows:

417.1 DESCRIPTION

The impact attenuator device to be furnished and installed for this project by the CONTRACTOR shall be a TRACC Impact Attenuator as manufactured by Trinity Industries, Inc. The impact attenuator device shall meet the requirements of NCHRP Report 350, Test Level 3.

417.2 SUBMITTALS

The Contractor shall submit complete shop drawings showing dimensions, materials, foundations and other related items for approval of the Engineer.

417.3 MEASUREMENT

Measurement shall be per each item installed and accepted.

417.4 PAYMENT

TRACC impact attenuator devices shall be paid for at the contract unit price per each under the bid item "TRACC ENERGY ABSORBING END TREATMENT" and shall be full compensation for furnishing all labor, material, tools, equipment, and incidentals for furnishing the impact attenuator devices including, concrete foundation, reinforcing steel, excavation and other related items, complete-in-place.

21. **430 LANDSCAPING AND PLANTING**, Add the following to **Subsection 430.3 PLANT ESTABLISHMENT GUARANTEE AND MAINTENANCE** and **Subsection 430.15 MEASUREMENT AND PAYMENT**:

430.3 PLANT ESTABLISHMENT GUARANTEE AND MAINTENANCE

Prior to final acceptance of the landscaping, the Contractor shall provide the City of Phoenix Streets Department with all water and electrical account numbers and billing information. The Contractor shall also provide current test and certification documentation for all landscaping backflow prevention devices at the end of the plant establishment and maintenance period. Final acceptance shall not be granted until this information is given to the Accounting Division of the Streets Department at 200 West Washington Street in Phoenix, (602) 495-5191.

The plant establishment guarantee and maintenance period shall last for 12 months.

430.15 MEASUREMENT AND PAYMENT

Measurement and payment for plant establishment guarantee and maintenance shall be on a monthly basis for acceptable landscape maintenance under the bid item "PLANT ESTABLISHMENT GUARANTEE AND MAINTENANCE". No payment shall be made for unacceptable maintenance. When acceptable corrections have been made for the monthly inspection, the monthly payment shall be released. Upon final acceptance, the final monthly payment shall be made.

22. Add the following new **Section 434 ADDITIONAL LANDSCAPING REQUIREMENTS** as follows:

434.1 PLANT SWALES AND TREE STAKING

Prior to preparing plant swales and staking trees, the Contractor shall have a representative sample of tree and shrub swales, and tree staking inspected and approved by the Engineer and Landscape Architect for conformance with project plans and specifications.

The Contractor shall correct any swales or staking that do not conform to the approved representative samples.

There shall be no separate measurement or payment for swales or staking. The cost shall be considered incidental to the cost of the plant materials.

434.2 TRIMMING NEWLY PLANTED TREES

The Contractor shall trim all newly planted trees as necessary prior to staking so that low branches are removed where standard trees are required. Trees shall be trimmed so that the tree is balanced and a central leader is maintained. When necessary, excess branching shall be thinned so that a strong branching structure shall develop. The Contractor shall trim with a hand-held pruner. Trimming shall be done to the satisfaction of the Engineer and the Landscape Architect.

There shall be no separate measurement or payment for trimming new trees. The cost of the work shall be considered incidental to the cost of furnishing and/or installing new trees.

23. 470 GENERAL REQUIREMENTS FOR TRAFFIC SIGNAL AND INTERSECTION LIGHTING SYSTEMS

470.1 DESCRIPTION:

It is the purpose of this section to provide general information necessary for completion of the installation of traffic signals, High Intensity Activated Crosswalk (HAWK) Pedestrian Beacon systems and intersection lighting in accordance with the details shown on the Approved Traffic Signal Plan, requirements of these specifications, and City of Phoenix Specifications for Public Works Construction, latest version; which is a combination of the Phoenix Supplement to the MAG Specifications in concert with the MAG Specifications.. All electrical systems and appurtenances shall be complete, functional and in operating condition at the time of acceptance.

470.2 DEFINITIONS:

The words defined in the following section shall for the purpose of these specifications have the meanings ascribed to them pertaining to signals and lighting.

470.2.1 Actuation: The operation of any type of controller initiated by a detector.

470.2.2 Back Plate: A thin metal strip extending outward parallel to the signal face on all sides of a signal housing to provide suitable background for the signal indications.

470.2.3 Controller: That part of the controller assembly, which performs the basic timing and logic functions for the operation of the traffic signal.

470.2.4 Controller Assembly: The complete assembly for controlling the operation of a traffic signal, consisting of a controller unit, and all auxiliary and external equipment housed in a weatherproof cabinet.

470.2.5 Coordinated Traffic Signal System: A group of signals timed together to provide a specific relationship among signal phases.

470.2.6 Cycle: A complete sequence of signal indications.

470.2.7 Detector: A device for indicating the passage or presence of vehicles or pedestrians.

470.2.7.1 Inductive Loop Detector: A detector capable of sensing the passage or presence of a vehicle (or bicycle for loop placed in an exclusive bike lane) by a change in the inductance characteristics of the wire loop.

470.2.7.2 Pedestrian Detector (Pedestrian Push Button): A detector for pedestrians, usually of the push button type.

470.2.7.3 Accessible Pedestrian Signal Detector (APS Push Button): A pedestrian detector that has added capabilities to meet the requirements of the MUTCD Section 4E.

470.2.7.4 Video Detector: Video Camera capable of detecting the presence or passage of vehicles or pedestrians.

470.2.7.5 Other Detector: A combination of a sensor and system processor capable of detecting the presence or passage of vehicles, bicycles, or pedestrians. Examples of such detection systems include, but are not limited, to a wireless embedded detector in pavement, infrared camera images, radar detection, or other detection devices used in concert with system processors.

470.2.8 Flasher: A device used to open and close signal circuits at a repetitive rate.

470.2.9 Flashing Feature: This feature, when operated, discontinues normal signal operation and causes a predetermined combination of flashing signal lights.

470.2.10 Interval: The part or parts of the signal cycle during which signal indications do not change.

470.2.11 Luminaire: The assembly, which houses the light source and controls the light emitted from the light source. Luminaires consist of a housing, lamp socket, reflector, lamp, photo cell, and glass globe or refractor when specified.

470.2.12 Manual Operation: The operation of a signal controller unit by means of a hand-operated switch.

470.2.13 Mounting Assembly: The framework and hardware required to mount the signal face(s) and pedestrian signal(s) to the pole.

470.2.14 Pedestrian Signal: A traffic control signal for the exclusive purpose of directing pedestrian traffic at signalized locations.

470.2.15 Pre-timed Controller Assembly: A controller assembly for operating traffic signals in accordance with a predetermined fixed-time cycle.

470.2.16 Red Clearance Interval: A clearance interval, which follows the yellow, change interval displaying a red indication to both the terminating phase and all conflicting phases prior to display of green for the next right-of-way phase.

470.2.17 Signal Face: An assembly controlling traffic in a single direction and consisting of one or more signal sections. Circular and arrow indications may be included in a signal assembly. The signal face assembly shall include back plate and visors.

470.2.18 Signal Indication: The illumination of a signal section or other device, or of a combination of

sections or other devices at the same time.

470.2.19 Signal Section: A complete unit for providing a signal indication, consisting of a housing, lens, reflector, lamp receptacle and lamp, or LED unit.

470.2.20 Traffic Phase: A part of the time cycle allotted to any traffic movement or combination of movements receiving the right-of-way during one or more intervals.

470.2.21 Traffic-Actuated Controller Assembly: A controller assembly for operating traffic signals in accordance with the varying demands of traffic as registered with the controller unit by detectors.

470.2.22 Vehicle: Any motor vehicle normally licensed for highway use.

470.2.23 Yellow Change Interval: The first interval following the green right-of-way interval in which the signal indication for the phase is yellow.

470.3 REGULATIONS AND CODES:

All electrical equipment shall conform to the current standards of the National Electrical Manufacturers Association (NEMA), National Electric Safety Code (NESC), Underwriters' Laboratory Inc. (UL), when applicable. All material and workmanship shall conform to the requirements of the National Electric Code (NEC), Illumination Engineers Society (IES), Standards of the American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO), requirements of the Approved Traffic Signal Plan, these specifications, the special provisions, and to any other codes, standards, or ordinances which may apply. Whenever references are made to any of the standards mentioned, the reference shall be interpreted to mean the code, ordinance, or standard that is in effect at the time of the bid advertisement.

470.4 SOURCE OF SUPPLY:

The Contractor shall furnish all traffic signal material and equipment required to complete the work except as noted on the Foundation Sheet of the Approved Traffic Signal Plan.

470.4.1 Quality Requirements: Only materials and equipment conforming to the requirements of these specifications shall be incorporated into the work. Material and equipment shall be new except as may be provided in the special provisions.

City of Phoenix reserves the right to reject proposed traffic signal material or equipment if, in the judgment of the Traffic Signal Engineer or designee any or all the following may apply:

The equipment does not meet the requirements of the specifications.

2) The material or equipment's past field performance has been unsatisfactory.

In addition, City of Phoenix reserves the right to pre-approve traffic signal material and equipment by brand name model or part number which in the judgment of the Traffic Signal Engineer or designee meets the intended purpose of these specifications.

Deviations from the pre-approved materials list, if any, shall be listed in the project special provisions or construction plans.

470.4.2 Approval of Material and Equipment: All traffic signal materials and equipment shall be approved by the Traffic Signal Engineer or designee prior to incorporation in the work. Any work in which materials or

equipment not previously approved are used shall be performed at the Contractor's risk and may be considered as unauthorized and unacceptable and not subject to the payment provisions of the contract. Such materials or equipment may be subject to removal at the discretion of the Traffic Signal Engineer or designee.

The Contractor shall obtain the Traffic Signal Engineer's or designee's approval before ordering or installing any material or equipment. The Contractor shall submit three (3) copies of each proposed material and/or equipment list, including shop drawings. Each set shall include a three ring binder with section tabs separating the documentation for each major item being submitted. Submittal shall be to the City prior to or at the pre-construction conference. Allow two (2) weeks for the City to review the submitted documentation for each submittal. To be acceptable, the list shall be complete and comprehensive containing all items to be supplied on the project by the Contractor, including pre-approved items. COP reserves the right to reject any incomplete or unclear material submittal. All items on the list shall be identified by manufacturer's part number, model, accessories, specification, or other pertinent catalogue information. The materials from any catalog cuts shall be clearly indicated by the contractor. If standard manufacturer documentation does not specifically address all the product requirements that are required, then the Contractor shall obtain a letter from the manufacturer certifying compliance with each referenced requirement that is not indicated on the standard documentation. One (1) copy shall be returned to the Contractor for further action.

All equipment or material specified or shown on approved signal plans, or other drawings, by brand name, part number, or model number is intended to be descriptive of the type and quality of material or equipment desired. Another equal brand name, part number, or model number may be substituted so long as it is in accordance with these specifications and is equal in form, fit, function, performance, reliability, and is approved by the Engineer.

The contractor shall provide complete wiring diagrams for controller assemblies and auxiliary controller cabinets at the time of delivery for testing. Four (4) sets of prints shall be provided with each controller assembly. The wiring diagram shall illustrate all circuits and components in detail. All components shall be identified by name or number so as to be clearly noted in the drawings.

Final approval, in writing by the COP Traffic Signal Engineer or designee, on all items within the submitted documentation is required to be obtained by the Contractor.

It is the Contractor's responsibility to ensure adequate lead time in ordering signal equipment to prevent project delay. The Contractor shall notify the Traffic Signal Engineer or designee in the event signal equipment is not received in a timely manner.

470.4.3 Warranties and Guaranties: In addition to the requirements of Section 108.8, the following is required by the City of Phoenix for traffic signal related items. The warranty period shall begin the day the Work of this Section is accepted by the City of Phoenix. Submit all manufacturer warranties to the City of Phoenix prior to installation. Expiration of the contractor's warranty under this section does not relieve the manufacturer should the manufacturer warranties exceed that of the contractor. The warranty period for the following items are extended beyond the Section 108.8 one-year requirement as noted herein.

470.4.3.1 LED Indications Warrant all LED indication modules furnished by the Contractor for five years following commencement of the warranty period against manufacturing and installation defects.

470.4.3.2 Pedestrian Signal Heads Warrant the entire pedestrian signal head assemblies, including the housing, doorframe, and visor for two years from the date of acceptance by the COP against defects in workmanship and/or Material.

470.4.3.3 Traffic Signal Heads Warrant the entire traffic signal head assembly, including the housing, doorframe, and visor for two years from the date of acceptance by the COP against defects in workmanship and/or Material.

470.4.3.4 Detectors Warrant all detectors, including loops, video detection cameras, pedestrian buttons and APS Pushbuttons for two years from the date of acceptance by the COP against defects in workmanship and/or Material.

470.5 CITY OF PHOENIX FURNISHED MATERIAL AND EQUIPMENT:

Traffic signal material and equipment furnished by City of Phoenix or tested by City of Phoenix that is to be installed by the contractor shall be made available at the following address:

City of Phoenix Traffic Signal Shop
2141 E. Jefferson St.
Phoenix, Arizona 85034

The Contractor shall contact the City of Phoenix Traffic Signal Supervisor (602) 262-6733 five working days prior to desired pick-up date to confirm the item list, availability, date and time. Warehouse hours for pick-up and delivery are 8:00 am – 2:00 pm Monday through Friday.

The cost of handling and placing all material and equipment, including pick-up by the Contractor is included in the contract price of the associated pay item. The Contractor using the Contractor's equipment shall load the furnished materials (poles, mast arms, etc.) onto the Contractor's vehicle for transportation to the project site. COP personnel shall not load the materials. The Contractor shall be responsible for any damage that occurs during the loading process.

The Contractor shall be held responsible for all material and equipment received. The Traffic Signal Supervisor or designee shall issue a receipt for the materials provided. All materials shall be issued in serviceable condition; the Contractor shall note any exceptions on the receipt. The receipt shall be placed in the project file and a copy given to the Contractor. The cost to make good any shortages or deficiencies, from any cause whatsoever and for any damage which may occur after receipt shall be deducted from any monies due or becoming due to the Contractor.

470.6 INSTALLATION OF TRAFFIC SIGNALS AND RELATED ITEMS:

470.6.1 General: The Contractor shall furnish labor and supervision with experience in the construction of the traffic signals and all materials, equipment, tools, transportation, and supplies required to complete the work in an acceptable manner; within the time specified, and in full compliance to these specifications, terms of the contract, the Approved Traffic Signal Plan and COP Traffic Signal Details.

The contractor shall have a competent supervisor capable of reading and thoroughly understanding the plans and specifications and thoroughly experienced in the construction of traffic signals assigned to the project. The Contractor's supervisor shall possess a current International Municipal Signal Association (IMSA) Level II Traffic Signal Electrician Certification. The Contractor shall have a complete set of construction drawings including current City of Phoenix standards and Traffic Signal Details on site at all times during signal & lighting systems construction.

A Level II IMSA certified Technician/Electrician must be on each Work Site at all times while work is being performed on traffic signal and other traffic control systems installed within the City of Phoenix.

Conductor splices and terminations may only be made by a qualified Journeyman Electrician, who has successfully completed a recognized four (4) year electrical apprenticeship program or equivalent training, or

by a person enrolled in a recognized four (4) year electrical apprenticeship program, while under the direct supervision of a Journeyman Electrician

470.6.2 Traffic Signal Plan: The Approved Traffic Signal Plan graphically describes the location of signal component parts, the equipment and materials to be used, and the standards for construction. The plans shall be supplemented by City of Phoenix Traffic Signal Standard Details or other drawing(s) deemed necessary for the acceptable completion of the work.

After completion of the project, the Contractor shall provide the Traffic Signal Engineer with a set of as-built drawings on clean prints of the original drawings. The as-built drawing shall indicate in a neat and accurate manner all changes and revisions in the original design. As-built drawings shall be submitted before final payment for completed work shall be made.

470.7 MAINTENANCE OF TRAFFIC SIGNALS AND RELATED ITEMS DURING CONSTRUCTION:

Unless otherwise specified, the City of Phoenix shall operate and maintain the existing traffic signal equipment during construction. Once new traffic signal equipment is in place and accepted, the City of Phoenix shall assume operation and maintenance responsibilities.

Unscheduled traffic signal work or maintenance calls performed by the City caused by contractor damage or negligence to an existing signalized intersection shall be billed directly to the contractor.

24. 471 ELECTRICAL UNDERGROUND INSTALLATION

471.1 DESCRIPTION:

The work under this section shall consist of furnishing and installing electrical conduit, and pull boxes for traffic signals and intersection lighting including jacking, drilling, excavating, placing, and compacting backfill material in accordance with the locations shown on the Approved Traffic Signal Plan.

471.2 MATERIALS:

471.2.1 Electrical Conduit: All conduit and conduit fittings shall be listed by UL, and conform to NEC standards. Except as specified below, all conduit to be installed underground or in concrete structures shall be rigid polyvinyl chloride (PVC) conforming to the requirements of UL 651 for Rigid Nonmetallic Conduit. PVC conduit and conduit fittings shall be Schedule 40, heavy wall, manufactured from high impact material and shall be rated for use at 90° C.

All exposed conduit and conduit fittings to be installed above ground shall be rigid metallic type manufactured of galvanized steel conforming to requirements of UL 6 for Rigid Metallic Conduit and to NEC standards.

471.2.2 Pull Boxes: Pull boxes, pull box covers, and pull box extensions shall be constructed of polymer concrete with reinforced heavy-weave fiberglass. Pull boxes and covers shall be concrete gray color, rated for and meet AASHTO H-20 specifications. Pull boxes shall be stackable for extra depth. Box sizes shall be acceptable industry standard and use nominal lid sizes of:

- #3.5 Junction box 10" x 15"
- # 5 Junction box 13" x 24"
- #7 Junction box 17" x 30"

Additionally, boxes shall be a minimum of 12" in depth, and have no floors or mouse holes.

Covers shall be cast to allow securing with two (2) corrosion resistant metallic hex bolts with corrosion resistant metallic washers and nuts. Covers shall also be cast with a non skid resistant surface and have a nominal thickness of two inches and meet AASHTO H-20 specifications.

The words "TRAFFIC SIGNAL" shall be cast in the pull box covers in 1-inch high letters.
At the request of the Engineer, the Contractor shall furnish pull box plans and specifications.

Chipped or cracked pull boxes, covers, and extensions shall not be accepted.

Metal covers are **NOT** acceptable.

471.2.3 Detectable Mule Tape: A detectable mule tape is a flat, woven, polyester tape with an insulated locating conductor. The conductor shall be a metallic 22 gauge insulated wire. The mule tape shall be a minimum ¼" width with a pull strength of 400 pounds.

471.3 CONSTRUCTION REQUIREMENTS:

471.3.1 General Requirements for Installation of Electrical Conduit: Conduit shall be furnished and installed at the locations and of the sizes shown on the Approved Traffic Signal Plan. Unless changes are necessary to avoid underground obstructions all underground conduit shall be installed in a straight line from pull box to pull box and/or from foundation to pull box and shall be of one continuous size. Any change in conduit routing must be approved by the Engineer and documented by the Contractor on as-built traffic signal plans.

Conduit shall be placed in a variety of locations such as under existing pavement or sidewalk, under sod or other pervious surface, under new pavement or attached to a structure such as a bridge pier, metal or wood pole. Conduit under existing pavement or sidewalk requires additional labor and materials over that which would be required under new pavement, sod, or other pervious surface. The payment for this section shall be divided into three categories, Under Existing Pavement, Under New Pavement or Landscaping, and Attached to Structure. The contractor can choose the method of construction for each type.

All PVC conduits shall be stored and handled in an approved manner to minimize ultraviolet deterioration due to exposure to sunlight.

The PVC conduit shall be cut square and trimmed to remove all rough edges. PVC conduit connections shall be of the solvent weld type. Purple primer conforming to the requirements of ASTM F 656 shall be applied to the joined surfaces prior to use of cement. The joint cement shall be the gray PVC cement conforming to the requirements of ASTM D 2564. Where a connection is made to rigid metallic conduit, the coupling used shall be a PVC female adapter.

All existing conduits and conduit embedded in concrete structures shall be cleaned out with a mandrel and blown out with compressed air.

Field PVC conduit bends shall be made without crimping or flattening, using the longest radius practical but not less than specified by the NEC. Collapsed conduit, no matter how small, is not acceptable. The number of bends between pull boxes or between pull box and foundations shall not contain more than equivalent of two quarter bends (180 degrees, total), including the bends at the pull boxes or foundations, unless authorized by the Engineer.

Conduit entering a pull box or foundation shall be fitted with a factory made 90-degree elbow with a minimum sweep radius per the table below:

<u>Conduit Size</u>	<u>Sweep Radius</u>
2 inches	15 inches
2 ½ inches	18 inches
3 inches	21 inches

Conduit entering pull boxes shall terminate a minimum of 3" inside the box wall. The conduit shall be between 2" and 4" above the bottom. Conduit entering through the bottom of a pull box shall be located near the sides and ends and extend no more than 4" above the bottom of the pull box including the length of the conduit bell end in order to leave the major interior portion clear. At all outlets, conduits shall enter from the direction of the run and allow for expansion and contraction.

Conduit for future use shall have a detectable mule tape. All conduits shall have a No. 10 AWG bare copper wire installed that extends 36 inches beyond each end of the PVC conduit run between pull boxes and foundations. The pull rope, if needed, and bond wire shall be coiled and inserted into the conduit so as to be easily recovered from either end. Conduit ends shall be capped with conduit end cap fittings after the pull rope is installed. Conduit end cap shall remain in place until wiring is started. When end caps are removed, PVC ends shall be provided with an approved conduit end bell. End bells shall be installed prior to the installation of the conductors. Approved insulated grounding bushings shall be used on steel conduit ends.

The Contractor shall place a warning tape in all open trenches in which conduit is placed. All warning tape shall be buried at a depth of 6" to 8" below final grade.

Where conduit is to be installed under existing roadway pavement by jacking or drilling methods, the jacking and/or drilling pits shall be kept 2 feet clear of the edge of the pavement.

Conduit stub-outs under curbs or roadway edges for loop detection lead-in conductors shall conform to the requirements of COP Standard Details

Installation of conduit for underground electrical service shall be in accordance with the Traffic Signal Standard Details, as shown on the Approved Traffic Signal Plan and in accordance with the requirements of the utility company providing electrical service. Conduit installed in railroad right-of-way shall be installed in accordance with the requirements of the railroad company.

471.3.2 Conduit Depth Requirements: Conduits installed in protected areas such as behind curbs, under sidewalks, etc. that are not subject to any vehicular traffic shall be at a minimum depth of 24 inches below final grade. Conduits installed under roadways, driveways, or any open area where there is the possibility of vehicular traffic, shall be installed at a minimum depth of 24 inches below final grade. Unless otherwise stated on the plans, conduit depths shall not exceed 40 inches. When conduit cannot be installed at the minimum depth, it shall be completely encased in 4" of class C concrete in accordance with Section 725.

471.3.3 Trenching, Backfilling, and Compaction: Trenches shall not be excavated wider than necessary for the proper placement of conduit and pull boxes. Trenching shall be done in accordance with Section 601. Backfilling, compaction, and bedding of conduit runs shall be in accordance with Section 601.4.9.

Open trench excavation across any existing paved areas, shall have two (2) parallel cuts made at a distance not to exceed 16 inches. All removal and replacement of existing paved areas shall be in accordance with Section 336.

Open trench excavation across an existing Portland concrete area shall have two (2) parallel cuts made at a distance not to exceed 16 inches. All removal and replacement of existing Portland concrete areas shall be done in accordance with Section 336.

After each excavation is complete and materials in place, the Contractor shall notify the Engineer for inspection, and under no circumstances shall any underground material or equipment be covered with fill without proper approval.

471.3.4 Installation of Pull Boxes: Pull boxes of the type specified on the Approved Traffic Signal Plan shall be furnished and installed at the locations shown on the Plan. Pull boxes shall be installed in accordance with COP Traffic Signal Standard Details. All relocation of pull boxes to avoid driveways and/or other structures shall be approved by the Engineer and documented by the Contractor on the as-built traffic signal plans.

Pull boxes shall be set and adjusted so that they are flush at curb or sidewalk grade. When no grade is established, pull boxes shall be set as requested by the Engineer. All pull box covers shall be secured with the required bolts and washers before final acceptance of the project. All pull boxes shall be left in a clean condition, free of dirt and debris upon completion of the work. Drainage sump 18" required as per COP Traffic Signal Detail Sheet.

471.4 MEASUREMENT:

Conduit shall be measured by the linear foot by diameter size and by type of installation; Under New Pavement or Landscaping; Under Existing Pavement, or Attached to Structure. Pull boxes shall be measured as a unit for each pull box size.

471.5 PAYMENT:

The accepted quantities of conduit, measured as provided above, shall be paid for at the contract unit price per linear foot by type of installation (Under New Pavement or Landscaping, Under Existing Pavement, Attached to Structure), which shall be full compensation for the supply and installation of the item, COMPLETE IN PLACE, including excavation, all backfill material, warning tape, pull rope, bond wire, structural attachments, and any incidentals necessary to complete the work. No direct payment shall be made for rigid metallic conduit bends or rigid non-metallic conduit bends at pull boxes, expansion fittings and coupling fittings, the cost being considered as included in the contract price for the conduit items.

The accepted quantities for pull boxes, measured as provided above, shall be paid for at the contract unit price, each, which shall be full compensation for the supply and installation of the item, COMPLETE IN PLACE, including any excavating, backfilling, and landscaping necessary to complete the work.

25. 472 TRAFFIC SIGNAL FOUNDATIONS

472.1 DESCRIPTION:

The work under this section shall consist of furnishing all materials and constructing all traffic signal foundations and other designated pole foundations including signal poles, as well as cabinet and electrical service pedestal foundations for the traffic signals in accordance with the locations and details designated on the Foundation Sheet of the Approved Traffic Signal Plan. Pole foundations shall include all conduits, conduit elbows, anchor bolts, re-bar cages, grounding electrode, and forms required for construction of the foundation. The traffic signal pole foundations shall conform to the requirements of COP Traffic Signal Details or ADOT Standards for ADOT approved poles and related pole foundations.

The controller and power service pedestal cabinet foundations shall conform to the requirements of COP Traffic Signal Details.

472.2 MATERIALS:

472.2.1 Excavation and Backfill: Trenches shall not be excavated wider than necessary for the proper

placement of conduit and pull boxes. Trenching, backfilling, and compaction shall be done in accordance with Section 601.

All excavations within the roadway shall be backfilled and compacted in accordance with Section 211.

472.2.2 Concrete: Concrete used for all foundations shall be class 'A', 3000 psi concrete with a 5" slump and shall be in accordance with the requirements of MAG Section 725.

472.2.3 Anchor Bolts: All anchor bolts shall be in accordance with referenced details, for the relevant traffic signal foundations.

All anchor bolts shall be threaded at the top and conform to the plans.

472.2.4 Rebar Cage: All rebar cages shall be in accordance with referenced details.

472.2.5 Electrical Conduit: All electrical conduit and conduit fittings shall be sized as per the plans sheets and in accordance with these specifications. All foundation conduits shall be grey Schedule 40 PVC.

472.2.6 Grounding Electrode: The grounding electrode shall be in accordance with these specifications and COP Traffic Signal Details.

A 25-foot coil of #4 AWG stranded bare copper grounding electrode shall be installed at the base of the signal pole foundations and extend centered, two feet above the top of the foundation.

Traffic signal controller and power service pedestal foundations shall have a 1 inch PVC ground rod sleeve and a 5/8-inch x 8 foot bonded copper grounding rod installed.

472.3 CONSTRUCTION REQUIREMENTS:

The excavations required for the installation of foundations and other items shall be performed in such a manner as to avoid any unnecessary damage to streets, sidewalks, landscaping and other improvements. Any damage by the contractor's operation shall be replaced or reconstructed where determined by the Traffic Signal Engineer or designee at the expense of the contractor. The trenches shall not be excavated wider than necessary for the proper construction of the foundations and other equipment. Excavation shall not be performed until immediately before construction of foundations. The material from the excavation shall be placed in a position that shall minimize obstructions to traffic and interference with surface drainage.

All surplus excavated material shall be removed and properly disposed of within 48 hours by the contractor, as directed by the Traffic Signal Engineer or designee. After each excavation is completed, the contractor shall notify the Engineer for inspection. Under no circumstances shall any underground materials or equipment be covered with fill without the approval of the Traffic Signal Engineer or designee.

At the end of each working period, all excavations shall be barricaded or covered, or both, to provide safe passage for pedestrian and vehicular traffic.

Excavations in the street or highway shall be performed in such a manner that not more than one traffic lane is restricted at any time, unless otherwise provided in the Special Provisions.

Sidewalk and pavement excavations shall be kept well covered and protected to provide safe passage for pedestrian and vehicular traffic until permanent repairs are made.

The elevation of signal pole foundations shall be set as follows unless otherwise noted within the construction

plans or special provisions. Signal pole foundations shall be set flush ($\pm \frac{1}{2}$ ") with the existing or new sidewalk when sidewalk is present. Where curb exists without sidewalk, the foundations shall be set flush with a surface defined by a 1.5% upward slope from the top of curb ($\pm \frac{1}{2}$ "). Where there is no curb or sidewalk pole foundations shall be as shown on the project plans. The dimensions and locations of foundations shall be as specified on the project plans; however, the Traffic Signal Engineer or designee may direct that changes be made in locations due to obstructions or other existing conditions. Any change in locations shall be documented by the contractor on as-built traffic signal plans. The contractor shall verify top of foundation elevations with the Traffic Signal Engineer or designee prior to foundation construction.

Prior to pouring concrete, the grounding electrode shall be placed at least 6" below the required depth of the foundation and covered with 6" of soil.

Concrete shall be placed in holes which have been augured against undisturbed earth. If the material in the bottom of the hole is not firm and stable, it shall be compacted or treated as directed by the Traffic Signal Engineer or Designee. The walls and the bottoms of the holes shall be thoroughly moistened prior to placing concrete.

If the soil is not stable, a deeper foundation than specified may be required or forms shall be used as determined by the Traffic Signal Engineer or designee. The forms shall be of the proper size and dimensions and shall be rigid and securely braced.

Foundation forming material shall extend no more than 20 inches below the foundation final grade and shall be removed after placement and curing of concrete.

Anchor bolts shall be oriented such that the bolt pattern sides are both parallel and perpendicular to the roadway centerlines unless otherwise specified on the Approved Traffic Signal Plan. A 25-foot coil of No. 4 AWG bare copper conductor shall be installed 4" below the foundation and covered with 4 "of fill material such that no part of the coils shall be in contact with the concrete foundation. An extension of the No. 4 AWG bare copper wire shall extend into the pole. Anchor bolts, conduit, and rebar cage shall be centered within the foundation, set at the specified height and plumb within $\pm 1/2$ degree. During placement of concrete, anchor bolts shall be securely held in proper alignment, position, and height with a suitable template.

After excavations are completed and anchor bolts and conduit installed, the Contractor shall notify the Traffic Signal Engineer or designee for inspection. Under no Circumstances shall concrete be placed without approval of the Traffic Signal Engineer or designee.

The concrete pour shall be continuous and consolidated by means of vibrators. All exposed surfaces of the foundation shall receive a finish that is smooth, level, and free of form marks.

Type 'A' and 'Pedestrian' pole foundations, cabinet foundation, and service pedestal foundation shall set for a minimum of five (5) days prior to installation of poles and/or cabinets. Type 'LM', 'SM', 'SR', 'SQ' and standard ADOT pole foundations shall set for ten (10) days prior to installation of poles.

472.4 MEASUREMENT:

Foundations for traffic signal poles and cabinets shall be measured as a unit for each type of foundation constructed.

472.5 PAYMENT:

The accepted quantities of foundations for traffic signal poles and cabinets, measured as provided above, shall be paid for at the contract unit price. Payment shall be full compensation for the work, COMPLETE IN PLACE, including excavations, backfill, anchor bolts, re-bar cages, conduit within foundation, grounding

system and incidentals necessary to complete the work.

26. 474 TRAFFIC SIGNAL POLES AND ACCESSORIES

474.1 DESCRIPTION:

The work under this section shall consist of furnishing and installing traffic signal poles, extensions, and mast arms in accordance with the Equipment Sheet of the Approved Traffic Signal Plans, the COP Traffic Signal Standard Details, and ADOT Standards.

Poles shall include a shaft, mast arms (if required), extensions and hardware required to construct an integral shaft and mast arm(s) and attach it to the base.

474.2 GENERAL STANDARD:

Steel poles for traffic signals and lighting shall include pole shafts, mast arms, and extension. Materials supplied shall conform to the requirements of the COP Standard Details.

474.3 TYPES OF POLES:

Types of poles to be furnished are as follows:

1. Type 'A' - furnished and installed by COP Signal Crews for non-Federal Aid Projects
2. Type 'PB' – furnished and installed by COP Signal Crews for non-Federal Aid Projects
3. Type 'LM'
4. Type 'SM'
5. Type 'SR'
6. Type 'SQ'
7. ADOT Type 'J','K','R',and 'Q' – uses a Type 'SR' foundation
8. ADOT Type 'V' and 'W' – uses foundation as shown on ADOT Drawing TS4-18&19

474.3.1 Pole Shafts: Pole shafts shall be fabricated according to the requirements shown on the COP Traffic Signal Standard Details for Types 1 through 6 and ADOT Standards for Type 7 and 8. An 'LM' pole shall come with a 5' extension unless otherwise noted to come with a longer extension (paid for separately). Types 4 through 6 shall be supplied with a 5' extension unless noted on the plans to exclude the extension. A blank plate shall be required when riser is excluded on the plans.

Hand holes in the base of the poles shall conform to the details shown on the Traffic Signal Standard Details. All welds shall be continuous and any exposed welds, except fillet welds, shall be ground flush with the base metal.

A metal tag shall be permanently attached to the pole above the hand hole stating the manufacturer's name, pole type per the Department's approved traffic signal plan, pole drawing number, shaft length, and inches of material thickness.

474.3.2 Mast Arms: Mast arms shall be fabricated according to the requirements shown on the COP Traffic Signal Standard Details for Types 4 through 6 and on ADOT Standards for Type 7 and 8.

474.3.3 Luminaire Mast Arms: The mast arms for the luminaires shall be fabricated as per COP Traffic Signal Standard Details for Types 4 through 6. All bolts, washers, and nuts for luminaire mast arms Types 4 through 6 shall conform to the requirements of the COP Traffic Signal Standard Details. For ADOT Type 7 and 8, the mast arms for the luminaires shall be fabricated as per ADOT Standards. All bolts, washers, and nuts for luminaire mast arms for Type 7 and 8 shall conform to the requirements of ADOT Standards.

474.3.4 10' and 20' Extensions: The extensions for the LM pole shaft to accommodate luminaire mast arms, LED illuminated street signs, wireless mesh radios, CCTV, or devices shall be fabricated as per COP Traffic Signal Standard Details. All hardware to attach the extensions to the pole shafts shall conform to the requirements of the COP Traffic Signal Standard Details.

474.3.5 Finish: Pole shafts, mast arms, extensions, and luminaire mast arms shall be finished with a 2.5 mil powder coat (color shall be confirmed by the Traffic Signal Shop). The visual appearance of the finish shall be uniform. Discoloration of the finish such as dark areas, dark streaks, dark rings, or transportation handling marks, which are considered excessive by the Traffic Signal Engineer or designee, shall not be allowed. Pole shafts, mast arms, and luminaire mast arms that have a finish unacceptable to the Traffic Signal Engineer or designee shall either be repaired or replaced to the satisfaction of the Traffic Signal Engineer or designee at no additional cost to the Department.

474.4 CONSTRUCTION REQUIREMENTS:

474.4.1 Base Plates and Poles: High strength bolts, nuts, and washers for bases shall be assembled as specified in the COP Traffic Signal Standard Details and shall be torqued as required by the COP Traffic Signal Standard Details. Anchor bolts, washers, and nuts required for relocating existing poles shall be furnished by the contractor.

Poles shall be drilled and tapped for mounting hardware as shown on the COP Traffic Signal Standard Details.

Poles shall be installed and assembled in accordance with the manufacturer's specifications and as show on the Equipment Sheet of the Approved Traffic Signal plans and COP Traffic Signal Standard Details.

All scratches, mars, or abrasions to the finish of poles and mast arms shall be repaired satisfactory to the COP Traffic Signal Engineer or designee prior to acceptance.

After erection and wiring, all of the pole types shall be grouted to seal the gap between the pole base and the foundation or sidewalk. Grout material shall be 12:1 sand /cement mix.

Sidewalks, curbs, gutters, pavement, base material, lawns, plants, and any other improvements removed, broken, or damaged by the contractor's operations shall be replaced or reconstructed with materials in accordance with these specifications. The replaced or reconstructed improvements shall be left in a serviceable condition satisfactory to the Traffic Signal Engineer or designee, and conform to these specifications where applicable.

Where existing pole installations are to be modified, materials and equipment shall be used, salvaged, or disposed of as specified in Section 479 or as directed by the Traffic Signal Engineer or designee.

If any poles are damaged by the contractor's operations, such repairs or replacements shall be at no additional cost to the Department.

New poles that are damaged by improper drilling of holes shall be rejected.

474.4.2 Signal Poles and Mast Arms: Poles, mast arms, extensions and luminaire mast arms shall be of the type shown on the Equipment Sheet of the Approved Traffic Signal Plan and shall be installed in accordance with the COP Traffic Signal Standard Details for types 1 through 6, ADOT Standards for Type 7 and 8, and these specifications.

All poles shall be plumbed to the vertical with all mast arms, signal heads, extensions, luminaires, and other

devices indicated on the plans to be on the pole have been installed. When mast arms are bolted to the pole shaft, the mast arm end over the roadway shall adjust to the horizontal.

Poles shall be drilled and tapped for mounting of signal equipment. The use of a welding torch is not authorized.

474.4.3 Drilling of Poles:

474.4.3.1 Wire entrance holes may be drilled for pole-mounted signals when a coupling is not available.

474.4.3.2 Wire entrance holes shall be drilled to provide connection to the traffic signal head through the lower bracket arm.

474.4.3.3 Where drilling is required, the hole shall be angled downward in poles.

474.4.3.4 Drilled holes shall be de-burred and all sharp edges removed.

474.5 MEASUREMENT:

Poles, mast arms, luminaire mast arms, and 10' and 20' extensions for traffic signals shall be measured as individual units for each pole, mast arm by length, luminaire mast arm, and extensions by length installed, COMPLETE IN PLACE

474.6 PAYMENT: The accepted quantities of poles, mast arms by length, luminaire mast arm and extensions by length shall be paid for at the contract unit price each. Payment shall be full compensation for the work, COMPLETE IN PLACE. The poles include all materials to install base plates, nuts for anchor bolts, 5' extensions (for Types 3 through 6) and any other incidentals for installing the pole. The mast arm, luminaire mast arm and 10' and 20' extensions required shall include all mounting hardware to attach the unit to the pole shaft and any other incidentals for installing the mast arm, luminaire mast arm or extension to the pole.

27. 479 REMOVAL AND SALVAGE OF EXISTING TRAFFIC RELATED FACILITIES

479.1 DESCRIPTION:

It is the purpose of this section to provide information necessary for completion of the removal and disposal of traffic signal equipment and materials as shown on the Approved Traffic Signal Plan to be removed.

479.2 REMOVAL AND SALVAGE OF EXISTING TRAFFIC RELATED FACILITIES:

479.2.1 General: All removals shall be done in accordance with Section 350, as shown on the Approved Traffic Signal Plan, and as detailed below. Any item noted on the Approved Traffic Signal Plan or these Details Specifications to be salvaged shall be delivered to the COP Traffic Signal Shop or as directed by the Traffic Signal Engineer or designee. Delivery to the Traffic Signal warehouse shall include unloading the salvaged materials at a designated warehouse location by the Contractor using the Contractor's own equipment. Two working days (forty-eight hours minimum) in advance of the intended date of delivery, the Contractor shall coordinate the proposed date, time, and items to be delivered with the COP Traffic Signal Supervisor (602) 262-6733. Warehouse hours for receiving deliveries are 8:00 am – 2:00 pm Monday through Friday. The address for the City warehouse is:

City of Phoenix Traffic Signal Shop
2141 E. Jefferson St.
Phoenix, Arizona 85034

Remove, deliver and unload in good condition any existing equipment identified by the COP as salvageable by to the location designated by the COP. Dispose of all signal hardware identified by the COP as non-salvageable or scrap material. Non-salvageable material becomes the property of the contractor. Cost of providing for its proper storage and ultimate disposal to meet Federal or State requirements is incidental to the payment for the removal of the item.

Deliveries of salvaged or obsolete traffic signal equipment to the location designated by the COP shall be done in accordance with a schedule submitted to and approved by the COP no less than 24 hours in advance of the action.

Material shall be inventoried upon delivery and identified with the intersection from which the material was removed.

479.2.2 Signal Poles: For signal poles, remove, transport and unload mast arm poles, mast arms, poles and posts identified as salvageable by the COP as described in these Specifications. Disassemble mast arm poles and mast arms before transporting. Leave hand hole covers in place. Remove all signal mounting hardware from poles and mast arms before transporting. Attaching hardware and anchor bolt nuts and washers may be bulk packed for delivery.

479.2.3 Controller Cabinet and Power Pedestal: For controller cabinets including internal electronics and power pedestals identified as salvageable by the COP the field wiring shall be disconnected, and all loose electronics in the control cabinet shall be removed. Both the controller cabinet or power pedestal may be ground mounted or pole mounted. The controller cabinet, loose electronic devices, and power pedestals shall be transported and unloaded as described in these Specifications.

479.2.4 Foundations: Foundations within the ultimate curb and gutter of the roadway shall be part of roadway plans and removed in accordance with Section 350. The Approved Traffic Signal Plans shall identify foundations to be removed in accordance with this section. Existing Type "A" poles, pedestrian push-button poles, power pedestals, and controller cabinets shall be removed in their entirety as well as any other foundations less than 42 inches in depth. Deeper foundations such as those for mast arm poles must be removed to a minimum of 10 inches below the finished grade of the sidewalks or landscaping. Voids created by the removal of the foundations shall be backfilled with natural material compacted to match the density of the surrounding material.

479.2.5 Incidental Traffic Items: This item provides for the removal of all incidental traffic items some of which shall be salvageable such as signal heads, pedestrian heads, luminaires, pedestrian push buttons and non-salvageable such as junction boxes, conduit, wiring, loops, and loop lead-ins. Prior to removal of any items, the contractor shall meet with COP Traffic Signal Engineer or designee to identify specific salvageable materials which shall be transported to the location noted above. Items identified as non-salvageable, shall become the property of the contractor and disposed of in accordance with applicable State or Federal regulations.

Junction boxes rendered obsolete by the signal construction shall be removed and disposed of by the contractor. Conduit runs shallower than 24 inches shall be removed. Existing conduit runs with 24 inches or more of cover (when compared to the finished grade) may be abandoned in place. The Contractor shall remove all wire and cable from conduits to be abandoned in place. The Contractor shall dispose of all conduit, wire, and cable removed. For loops and loop lead-ins in saw cut they are to be abandoned in place. Conduit for twisted pair loop lead-in must be cleared of wire, and may be abandoned in place or removed, at the Contractor's choice. If removed, any damage to existing pavement to remain is to be repaired at the Contractor's expense.

479.3 Measurement: Removal of identified existing facilities specified in 474.2.2 (Signal Poles) and 474.2.3 (Cabinets and Power Pedestals) shall be measured on an each basis by type of facility. The cost of transport for salvaged material or disposal of the removed item is incidental to the payment for removal. The method of

measurement for 479.3.4 (Foundations) shall be by cubic yard of material removed. The cost of transport for salvaged material or disposal of the removed item is incidental to the payment for removal. The method of measurement for removal of traffic items specified in 474.2.5 shall be by lump sum for Incidental Traffic Items Removal by intersection. The cost of transport or disposal of the removed items is incidental to the payment for removal

479.4 Payment: Removal of existing facilities by type, measured as provided above, shall be paid for at the contract price. Said price shall be full compensation for the removal and delivery of salvaged items or the removal and the disposal of removed items not scheduled to be salvaged as specified and shown on the project plans.

28. **505 CONCRETE STRUCTURES**, Add the following to **Section 505 CONCRETE STRUCTURES**:

CONCRETE BARRIER PER SPECIAL DETAIL

Description

The work under this item shall consist of furnishing all labor and materials for construction of the special 32" concrete barrier as shown on the project plans. All work under this item shall conform to Section 910 – Concrete Barriers of the Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, 2008 Edition.

Measurement

This item shall be measured by linear foot as shown on the project plans.

Payment

Payment shall be made at the linear foot price quoted in the proposal for bid item "CONCRETE BARRIER PER SPECIAL DETAIL", complete in place, including excavation, backfill, structural concrete, reinforcing steel, anchors, anchor assemblies and dowels.

29. Add the following to **MAG Subsection 505.12 PAYMENT**:

CATCH BASINS

Storm drain catch basins shall be paid for at the unit price bid for each type of catch basin, as represented by the respective bid item, regardless of dimensional or other differences occurring within a particular type. The unit price to be paid under these items shall be compensation in full for furnishing and placing catch basin structures as shown on the plans and as specified, including, when applicable, all removal and replacement of existing curb, gutter and sidewalk, concrete, reinforcing steel, forming, vibrating, finishing, curing, access opening frame and cover, embedded angles, grating, anchor bolts, structural excavation, backfill, compaction, pavement replacement and any necessary modifications of catch basin structures during construction. Where shown on the plans, the Contractor shall install 3-inch diameter standard strength iron pipe through the catch basin. This pipe shall project a minimum of 6-inches past the outside wall.

30. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following to **Subsection 601.2.6 Grading and Stockpiling** after the first paragraph:

During excavation, material suitable for backfilling shall be piled in an orderly manner, a sufficient distance back from the edges of trenches, to avoid overloading and to prevent slides or cave-ins. Material unsuitable for backfilling, or excess material, shall be hauled from the job site and disposed of by the Contractor.

31. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following to **Subsection 601.2.7 Shoring and Sheeting:**

The Contractor shall do such trench bracing, sheathing or shoring necessary to perform and protect the excavation as required for safety and conformance to governing laws. The bracing, sheathing or shoring shall not be removed in one operation, but shall be done in successive stages as determined by the Engineer to prevent overloading of the pipe during backfilling operations. The cost of the bracing, sheathing or shoring and the removal of same shall be included in the unit price for the pipe.

32. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following to **Subsection 601.2.8 Open Trench:**

Except where otherwise noted in the special provisions, or approved in writing by the Engineer, the maximum length of open trench, where the construction is in any stage of completion (excavation, pipe laying or backfilling), shall not exceed 330 feet in the aggregate at any one location.

Any excavated area shall be considered open trench until all ABC or suitable backfill for pavement replacement has been placed and compacted. With the approval of the Engineer, pipe laying may be carried on at more than one separate location, the restrictions on open trench applying to each location. Trenches across streets shall be completely backfilled as soon as possible after pipe laying.

Substantial steel plates with adequate trench bracing shall be used to bridge across trenches at street crossings where trench backfill and temporary patches have not been completed during regular work hours. Safe and convenient passage for pedestrians shall be provided. The Engineer may designate a passage to be provided at any point he deems necessary.

33. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following new **Subsection 601.2.9 Pavement and Concrete Cutting and Removal:**

601.2.9 Pavement and Concrete Cutting and Removal: Where trenches lie within the Portland cement concrete section of streets, alleys, driveways or sidewalks, etc., such concrete shall be sawcut to neat, vertical, true lines in such a manner that the adjoining surface shall not be damaged. The minimum depth of cut shall be 1 ½ inches or ¼ of the thickness, whichever is greater.

Asphalt pavement shall be clean-cut with approved equipment and by approved methods in accordance with the requirements of Section 336.

No ripping or rooting shall be permitted outside limits of cuts. Surfacing materials removed shall be hauled from the job site immediately, and shall not be permitted in the backfill.

34. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following to **Subsection 601.3.3 Bedding for Storm Sewers Maintained by the City of Phoenix:**

All Controlled Low Strength Material (CLSM) shall be provided by a commercial-source. No on-site mixing or addition of cement to aggregate base course slurry in transit mixers shall be allowed.

35. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following to **Subsection 601.3.4 Backfill:**

BACKFILL TYPE REQUIREMENTS FOR PIPE TRENCHES

Type "B" backfill, as shown on City of Phoenix Detail P1200, shall be used for all mainline pipe installations across major, collector, or other signalized intersections. At a minimum, the extent of the Type "B" backfill shall be from curb-return-to-curb-return through the intersection, unless noted otherwise on the plans or in the special provisions. Type "B" backfill shall also be used for all lateral pipe connections in ALL streets. Type "A-Modified" backfill (suitable native material as specified in City of Phoenix Supplement to MAG Specification Section 601.3.2, except that no piece larger than 3 inches shall be allowed), as shown on City of Phoenix Detail P1200, may be used at all other locations, from the top of bedding to the specified pavement subgrade level, unless noted otherwise on the plans or in the special provisions. There is no separate measurement or payment for pipe backfill. The cost is considered included in the bid price for furnishing and installing the pipe. The pavement replacement section shall be as specified on the plans or in the special provisions, and shall be paid for by the square yard or by the ton, whichever is indicated in the special provisions and on the bid proposal.

36. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following new **Subsection 601.4.5 Cutting Newly Placed Pavement for Pipe Installation:**

601.4.5 Cutting Newly Placed Pavement for Pipe Installation: In the event temporary or base course pavement must be cut in order to install pipe, the cost of sawcutting, removing and replacing the asphalt shall be considered incidental to the cost of the pipe.

37. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following new **Subsection 601.6 PROTECTION OF EXISTING UTILITIES:**

601.6.1 Utilities: Unless otherwise shown on the plans or stated in the specifications, all utilities, underground or overhead, shall be maintained in continuous service throughout the entire contract period. The Contractor shall be responsible and liable for any damages to or interruption of service caused by the construction.

If the Contractor desires to simplify his operation by temporarily or permanently relocating or shutting down any utility or appurtenance, he shall make the necessary arrangements and agreements with the owner and shall be completely responsible for all costs concerned with the relocation or shutdown and reconstruction. All property shall be reconstructed in its original or new location as soon as possible and to a condition at least as good as its previous condition. This cycle of relocation or shutdown and reconstruction shall be subject to inspection and approval by both the Engineer and the owner of the utility.

The Contractor shall be entirely responsible for safeguarding and maintaining all conflicting utilities that are shown on the plans (Sections 107 and 105 apply). This includes overhead wires and cables and their supporting poles whether they are inside or outside of the open trench. If, in the course of work, a conflicting utility line that was not shown on the plans is discovered, the Contracting Agency shall either negotiate with the owner for relocation, relocate the utility, change the alignment and grade of the trench or as a last resort, declare the conflict as "extra work" to be accomplished by the Contractor in accordance with Section 104.

601.6.2 Irrigation Ditches, Pipes and Structures: The Contractor shall contact the owners of all irrigation facilities, and make arrangements for necessary construction clearances and/or dry-up periods.

All irrigation ditches, dikes, headgates, pipe, valves, checks, etc., damaged or removed by the Contractor, shall be restored to their original condition or better, by the Contractor at no additional cost to the Contracting Agency.

601.6.3 Building, Foundations and Structures: Where trenches are located adjacent to building,

foundations and structures, the Contractor shall take all necessary precaution against damage to them. The Contractor shall be liable for any damage caused by the construction.

Except where authorized in the special provisions or in writing by the Engineer, water settling of backfill material in trenches adjacent to structures shall not be permitted.

There shall be no separate measurement or payment for this work. The Contractor shall include all associated costs in the unit bid price for the pipe installation.

601.6.4 Permanent Pipe Support Options and Encasements: Where 18-inch or larger mainline pipes (or other pipes as directed by the Engineer) cross under existing sanitary sewerlines (vitrified clay pipe 12-inches or smaller), the Contractor shall permanently support the sanitary sewerline per MAG Detail 403-1, 403-2 or 403-3. If the ductile iron pipe replacement option is used (403-3), and the required crossing length is more than one joint of pipe, concrete pipe supports as detailed in MAG Details 403-1 or 403-2 shall be used in addition to the ductile iron pipe. For a single joint of standard 20-foot-long ductile iron pipe replacement, the maximum trench width allowed at the point of the sewer line crossing shall be 9-feet, unless otherwise directed by the Engineer. Mechanical or restrained joints shall be required on all multiple-joint ductile iron pipe crossings.

Where waterlines, reclaimed waterlines or sanitary sewer lines (new or existing) cross over or under each other, pipeline encasements shall be provided as necessary in accordance with MAG Detail 404.

When the ductile iron pipe replacement option is used for the sewer lines, the new pipe shall be properly blocked at each end with one or more bricks resting on undisturbed or 95% compacted soil haunches outside the trench walls to prevent differential settlement.

The interior of all ductile iron pipe used for sewer lines shall be coated per the specification, "LINING FOR DUCTILE IRON PIPE USED FOR SEWER LINES" in these Special Provisions.

Upon completion of a sanitary sewer line support or encasement, including backfilling and compacting, but prior to permanent pavement replacement, the Contractor shall request, through the Engineer, a televising of the line by the City Water Services Department to ensure proper line and grade of the sanitary sewer pipe. If the pipe is out of alignment, it shall be the Contractor's responsibility to remedy the situation at no cost to the City.

If the sanitary sewer line is less than 8-inches in diameter, the Contractor shall provide the necessary equipment and televise the line to determine proper pipe alignment. The Engineer shall be present during the televising, and a video tape of the televising shall be made for the City Water Services Department for confirmation that the pipe is properly aligned. The cost of televising the line and preparing the video tape shall be included in the bid price paid for the pipe support or encasement.

Permanent pipe supports shall be paid for at the unit price bid for each unit installed regardless of type. Encasements shall be paid for at the unit price bid per linear foot installed regardless of type. The unit price bid for either item of work shall be compensation in full for providing complete and satisfactory permanent pipe supports or encasements, including ductile iron pipe and fittings, concrete, reinforcing steel, forming, vibrating, any required earthwork, televising and videotaping, and any other incidental items necessary.

601.6.5 Electronic, Telephonic, Telegraphic, Electrical, Oil and Gas Lines: During trenching operations, underground facilities such as electronic, telephonic, telegraphic, electrical, oil and gas lines shall be supported and protected by the Contractor. Support for plastic pipes shall be continuous along the bottom of the pipe. Support for metal pipe and electrical conduit may be continuous or nylon webbing may be used for

suspension at no greater than ten-foot intervals.

The Contractor shall avoid damaging any pipes, conduits or duct bank facilities during excavation, foundation and bedding placement, and trench backfilling and compaction.

601.6.6 Measurement and Payment:

There shall be no measurement or payment for this work. The Contractor shall include all associated costs in the unit bid price for the pipe installation.

38. **601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION**, Add the following new **Subsection 601.7 CONTRACTOR CERTIFICATION OF INSTALLATION PROCEDURES**:

601.7 CONTRACTOR CERTIFICATION OF INSTALLATION PROCEDURES

When requested in the Special Provisions or by the Engineer prior to installation, the Contractor shall furnish to the Contracting Agency an affidavit (certification) from the pipe manufacturer (or his designee) stating that the Contractor is familiar with the manufacturer's suggested installation methods and procedures and the installation complies with those procedures and is consistent with MAG requirements.

Also, when required in the Special Provisions or requested by the Engineer, the pipe manufacturer or his designee shall review the Contractor's methods and procedures for pipe installation in the field. The Contractor shall make any adjustments in the installation as recommended by the manufacturer or his representative. If necessary, the Contractor may be required to reinstall or provide corrections to pipe installed prior to the field review at no cost to the Agency. Once the manufacturer or his representative has reviewed the Contractor's installation methods and the Contractor has adjusted his installation methods as recommended by the same, the manufacturer or his representative shall furnish to the Contracting Agency an affidavit (certification) that the Contractor's installation methods and procedures, at the time of the review, complied with the manufacturer's installation practices. The affidavit must provide the name of the manufacturer's representative witnessing the pipe installation.

39. **610 WATERLINE CONSTRUCTION**, Add the following to **Subsection 610.4 CONSTRUCTION METHODS: WATER MAIN REALIGNMENT (CONTINGENT ITEM)**

Description

In the event of unavoidable conflict between proposed construction and an existing water main, the Contractor shall vertically and/or horizontally realign the water main in accordance with COP Detail P1370 and Section 610. No concrete thrust blocks shall be allowed. All pipe shall be ductile iron with restrained joints.

The water main realignment shall include, but not be limited to, excavation, backfill, compaction, pipe, fittings, offsets, couplings, sleeves, joint restraint and hardware. The realigned water main shall be visually inspected for leaks under line pressure prior to backfilling.

The Contractor shall arrange with the Engineer to have the line shut down in order to perform the work. At no cost to the Contractor, the City Water Services Department shall provide necessary valve cut-ins, take the line out of service and flush the relocated line prior to placing it back in service.

Materials for water main realignment shall be ductile iron in accordance with COP Supplement to MAG Subsection 750.2 DUCTILE IRON WATER PIPE.

Measurement and Payment

Measurement shall be made per each realignment constructed for the various water main sizes encountered.

Payment for realignment of water mains shall be made at the unit price bid per each under proposal items "WATERLINE REALIGNMENT, 6" AND 8", CONTINGENT ITEM"; and "WATERLINE REALIGNMENT, 10" AND 12", CONTINGENT ITEM".

40. **610 WATER LINE CONSTRUCTION**, Add the following to **Subsection 610.7 VALVES**:

LOCATING, CLEANING AND INSTALLING WATER VALVE BOX DEBRIS CAP WITH LOCATOR COIL

The Contractor shall furnish and install a debris cap with a locator coil in all new water valve boxes installed; in all existing water valve boxes adjusted to grade; and in all other existing water valve boxes within the project limit right-of-way, even if not called out for adjustment to grade. The debris cap shall be in accordance with City of Phoenix Supplement to MAG Detail P-1165 and shall include a locator coil.

Prior to installation of the debris cap, valve risers shall be thoroughly cleaned, fully exposing the operating nut. In addition, the Contractor shall attempt to locate all unexposed water valves within the project limits, as indicated by City of Phoenix Water Services Department water valve Quarter-Section maps. In attempting to locate unexposed valve boxes, the Contractor shall excavate a minimum depth of eighteen (18) inches from the surface. Unexposed valve boxes found shall be brought up to finish grade; cleaned to fully expose the operating nut; and a debris cap with locator coil shall be installed.

Measurement for debris caps furnished and installed in water valve boxes (adjusted to grade or not) shall be per each unit, including locating and cleaning. The Contractor shall obtain the appropriate Water Services Department water valve Quarter-Section maps at Phoenix City Hall, 200 W. Washington Street, 8th Floor, at no additional cost to the City, and shall make a diligent effort to locate all existing unexposed water valves shown on these maps. The Contractor shall clearly mark all unexposed water valve boxes actually located on record plans and copies of the water valve Quarter-Section maps showing specific found location information, and these plans shall be provided to the Engineer. The cost for the Contractor to extend any risers on found unexposed valve boxes to bring them up to finish grade shall also be considered incidental.

Payment for this work shall be made under the bid item, "DEBRIS CAP, INCLUDING LOCATOR COIL, INSTALL". There shall be no separate measurement or payment for any labor, materials or equipment used in attempting to locate valves shown on the Quarter-Section maps that are not actually found. Valve locating attempts that do not produce any resulting "finds" shall be considered incidental.

41. **610 WATER LINE CONSTRUCTION**, Add the following to **Subsection 610.10 CONNECTION TO EXISTING MAINS**:

WATER MAIN SHUTDOWN

For shutdowns that are necessary to accomplish the work, the Contractor shall make written request to Water Distribution at least three (3) calendar weeks before the shutdown. Requests shall specify location, size of line, duration, date, and time for each shutdown. Within one (1) week, Water Distribution shall schedule shutdown and give written notification to the Contractor. Any schedule revisions requested by the Contractor must be in writing. Water Distribution's revised schedule shall be available within one (1) week. The City does not guarantee a totally dry line. The Contractor shall be prepared to de-water as necessary to accomplish the work.

The Contractor shall be responsible for maintaining accessibility to the valve operating nuts for all valves within the project boundaries. Failure to maintain accessibility to valves shall be cause for canceling shutdown, and the Contractor shall be required to request a revised schedule.

The Water Services Department is indemnified for any and all resultant costs incurred by the Contractor such as, but not limited to traffic control, delays, loss of incentives, standby and penalties if the Contractor did not properly request a shutdown; failure to maintain accessibility to valves; or if the Contractor's scheduled work did not progress to the anticipated shutdown schedule.

42. **610 WATER LINE CONSTRUCTION**, Add the following to **Subsection 610.11(D) METER SERVICE CONNECTIONS**:

HORIZONTAL BORING FOR METER SERVICE CONNECTIONS

For meter service pipes 1-inch or larger in diameter, the maximum bore hole size permissible shall be twice the internal diameter of the service line being installed. For meter service pipes smaller than 1-inch in diameter, the maximum borehole size shall be two (2) inches in diameter.

43. **610 WATER LINE CONSTRUCTION**, Add the following to **Subsection 610.19 MEASUREMENT AND PAYMENT**:

(H) Ductile Iron Fittings: Any additional waterline fittings that become necessary during construction, beyond what is shown on the plans for water main construction; and any fittings needed for new fire hydrant installations, shall be paid for separately under the bid item, "ALLOWANCE FOR EXCESS DUCTILE IRON FITTINGS, FURNISH AND INSTALL". Payment for these fittings shall be made from this allowance based on approved invoiced cost of the materials only, plus bonds, insurance and taxes, and a maximum 15 percent markup for overhead and profit. All other waterline fittings as shown on the plans shall be considered incidental to the cost of the water pipe.

44. **618 STORM SEWER CONSTRUCTION WITH PRE-CAST CONCRETE PIPE, HIGH DENSITY POLYETHYLENE PIPE, OR STEEL REINFORCED POLYETHYLENE PIPE**:

Revise all references to the term, "storm sewer" to read, "storm drain."

45. **618 STORM SEWER CONSTRUCTION WITH PRE-CAST CONCRETE PIPE, HIGH DENSITY POLYETHYLENE PIPE, OR STEEL REINFORCED POLYETHYLENE PIPE**, Add the following to **Subsection 618.3.4 Structures**:

REBUILD MANHOLE TOP

If new finish grade of a facility varies two (2) feet or more from existing where existing manholes are located, the adjustment to new finish grade shall not be accomplished by adjusting rings alone. In these cases, the top of the manholes shall be reconstructed as necessary to accommodate the large grade difference. This may require removal of existing adjustment rings and removal of the manhole cone, and the addition or deletion of a section of manhole shaft to make up the necessary grade adjustment. These major adjustments shall be measured by the each and paid for under the bid item, "REBUILD MANHOLE GRADE ADJUSTMENT", and shall be compensation in full for all labor, materials and equipment necessary to rebuild the manhole to the new finish grade.

46. **618 STORM SEWER CONSTRUCTION WITH PRE-CAST CONCRETE PIPE, HIGH DENSITY POLYETHYLENE PIPE, OR STEEL REINFORCED POLYETHYLENE PIPE,** Add the following to **Subsection 618.6 MEASUREMENT:**

(F) Pipe Plugs: Pipe plugs, per MAG Detail 427, shall be measured per each unit installed, regardless of dimensional differences.

47. **618 STORM SEWER CONSTRUCTION WITH PRE-CAST CONCRETE PIPE, HIGH DENSITY POLYETHYLENE PIPE, OR STEEL REINFORCED POLYETHYLENE PIPE,** Add the following to **Subsection 618.7 PAYMENT:**

(F) Pipe Plugs: Pipe plugs, per MAG Detail 427, shall be paid for at the unit price bid for each plug, and price shall be compensation in full for providing complete, satisfactory pipe plugs including brick or block work, concrete, grout or mortar, vitrified clay or plastic plugs, band seal couplings, any required earthwork, end-of-pipe marker, or any other incidental items necessary.

48. **620 STORM SEWER CONSTRUCTION WITH CAST-IN-PLACE CONCRETE PIPE:**

Revise all references to the term “storm sewer” to read “storm drain.”

49. **625 MANHOLE CONSTRUCTION AND DROP SEWER CONNECTIONS,** Add the following to **Subsection 625.2 MATERIALS:**

Per City of Phoenix Water Services Department, “MAG Standard Detail 425: 24” Aluminum Manhole Frame and Cover” is **not approved** and shall not be used in the City of Phoenix.

50. **625 MANHOLE CONSTRUCTION AND DROP SEWER CONNECTIONS,** Add the following to **Subsection 625.3.1 MANHOLES:**

If steps are inadvertently installed, they shall be removed and the holes shall be filled with epoxy or Class “B” concrete.

51. **625 MANHOLE CONSTRUCTION AND DROP SEWER CONNECTIONS,** Add the following to **Subsection 625.3.1, MANHOLES:**

REBUILD MANHOLE TOP

If new finish grade of a facility varies two (2) feet or more from existing where existing manholes are located, the adjustment to new finish grade shall not be accomplished by adjusting rings alone. In these cases, the top of the manholes shall be reconstructed as necessary to accommodate the large grade difference. This may require removal of existing adjustment rings and removal of the manhole cone, and the addition or deletion of a section of manhole shaft to make up the necessary grade adjustment. These major adjustments shall be measured by the each and paid for under the bid item, “REBUILD MANHOLE GRADE ADJUSTMENT”, and shall be compensation in full for all labor, materials and equipment necessary to rebuild the manhole to the new finish grade.

52. **625 MANHOLE CONSTRUCTION AND DROP SEWER CONNECTIONS,** Add the following to **Subsection 625.3.1, MANHOLES:**

SANITARY SEWER MANHOLE ADJUSTMENTS

On all existing sewer manholes adjusted to new finish grade, the entire new portion of the adjusted manhole

shall be seal coated in accordance with COP Supplement to MAG Specification Sections 626 and 627.

53. **625 MANHOLE CONSTRUCTION AND DROP SEWER CONNECTIONS**, Delete the first paragraph in **Subsection 625.5 PAYMENT** and replace with the following:

Manholes shall be paid for at the unit price bid for each type, as represented by the respective bid item, regardless of dimensional or other differences occurring within a particular type. The unit price to be paid under these items shall be compensation in full for furnishing and placing manhole structures as shown on the plans and as specified, including concrete, reinforcing steel, forming, vibrating, finishing, curing, cast iron manhole frame and cover, frame adjustment to grade, structural excavation, backfill, compaction and any pavement replacement in excess of the applicable pay widths assigned to the adjacent pipes.

54. **631 WATER TAPS AND METER SERVICE CONNECTIONS**, Add the following **Subsection 631.3 Excavation and Backfill**:

Bedding and backfill shall be full depth ABC for water services installed under pavement using open trench method. The cost of the ABC material, labor and compaction shall be included in the cost of the water service work.

55. **631 WATER TAPS AND METER SERVICE CONNECTIONS**, Add the following new **Subsection 631.9 REPLACEMENT, EXTENSION AND RELOCATION OF EXISTING WATER SERVICES AND METERS** as follows:

631.9 REPLACEMENT, EXTENSION AND RELOCATION OF EXISTING WATER SERVICES AND METERS

Extension or Replacement of Existing Water Service Lines

The Contractor shall extend or replace existing water service lines at the stations listed in these specifications or on the plans in accordance with Detail P1342. All existing lines must be replaced from the main to the meter.

The water service extension or replacement shall include, but is not limited to, locating the present tap, trenching, bedding, backfilling, disconnecting the existing service pipe from the corporation stop, furnishing and installing new service pipe, new appurtenant fittings, new curb stop and new meter coupling, and re-connection to the meter. The existing tapping saddle and corporation stop shall remain, but the Contractor shall not use any other salvaged service connection components. If the saddle is a single strap, the saddle shall be replaced with a double strap saddle. In the event there is no tapping saddle, The Contractor shall install one. The cost of the saddle and reinstallation of the corporation stop shall be considered incidental to the water service replacement.

Inserts or adapters required to connect to the corporation stop are available at the Water Services Department yard at no cost to the Contractor. The Contractor must obtain a written order (AVO) from the Engineer before picking up said items.

Bedding and backfill shall be full depth aggregate base course. Payment for furnishing and compacting the aggregate base course shall be included in the bid item for replacing or extending existing water service lines.

The Contractor shall schedule work so that no open trenches are left overnight.

Materials for water service lines shall conform to Sections 610 and 754. Joints in the copper tubing shall be made by the use of approved compression fittings such as flared joints or pack joints.

Water Meter Relocation

Water meter relocation consists of disconnecting the meter, moving the meter, meter box and cover from the existing location to the new location and reconnecting in accordance with Details P1342 and P1363. The meter box and cover shall be set to match the grade at the new location.

Any water meter boxes and/or covers damaged by the Contractor during the course of construction shall be replaced in kind at the Contractor's expense.

It is anticipated that some water meter boxes and/or covers may require replacement due to prior damages not due to the fault of the Contractor. The Water Services Department shall furnish replacement water meter boxes and covers at no cost for these; however, the Contractor must first obtain a written order (Field Directive) from the Engineer. Then, at no additional cost to the City, the Contractor shall pick up the specified number of units from the Water Distribution Warehouse located at 2500 S. 22nd Avenue.

Water meter boxes and covers shall be Type 1, 2 or 3 in accordance with MAG Standard Details 310, 311, 312, and 320 and City Standard Detail P1315.

All materials and fittings shall conform to the requirements of Sections 610 and 754. No salvaged service connection components shall be used.

Measurement and Payment

Measurement for extending or replacing water service lines shall be made to the nearest linear foot from the point of connection (existing service line or corporation stop, whichever is applicable) to the curb stop.

Payment for extending or replacing water service lines shall be made at the unit price bid per linear foot under the proposal items, "3/4" OR 1" WATER METER SERVICE CONNECT. PIPE AND FITTINGS, MAIN TO METER, FURNISH & INSTALL".

Measurement for water meter relocations shall be made per each water meter relocated, regardless of size, up to and including 2-inch. Payment for water meter relocations shall be made at the unit price bid per each under the proposal item "RELOCATE EXISTING WATER METER, BOX AND COVER", which shall include all sizes encountered on the project up to and including 2-inch.

56. **631 WATER TAPS AND METER SERVICE CONNECTIONS**, Add the following new **Subsection 631.10 NEW WATER METER SERVICES** as follows:

631.10 NEW WATER METER SERVICES

Description

The Contractor shall install new water service lines, meters and boxes at the locations listed in these specifications or on the plans in accordance with Detail P1342.

The work shall include locating the new or existing water main, furnishing and installing a new saddle and corporation stop, tapping the main, furnishing and installing new copper water service pipe from the water main to the meter, connecting the water service pipe to the corporation stop, furnishing and installing a curb stop at the meter box, furnishing and installing a meter box, connecting the water service pipe to the curb stop, connecting the curb stop to the meter, furnishing and installing necessary fittings and couplings, and all trenching, backfill, compaction and surface/pavement restoration necessary for a complete new water meter service.

The Contractor shall not use any salvaged service connection components.

The Contractor shall schedule his work so that no open trenches are left overnight.

To install a new tap, the Contractor shall install a new corporation stop utilizing an all-bronze double-strap tapping saddle.

All water service connections shall be made using Type K copper tubing and fittings which conform to Sections 610 and 754. Joints in the copper tubing shall be made by means of approved compression fittings such as flared joints or pack joints.

Sawcutting of the curb and gutter and sidewalk within the City right of way for installing water service pipe shall not be allowed. Either jacking or boring methods are required. There shall be no additional payment for jacking or boring of the water service, the cost shall be included in the cost of the connection.

Measurement and Payment

The work required to install new water meter services shall be measured per each for new complete water services and corresponding new meter boxes installed. No payment shall be made for tapping sleeves, these shall be considered incidental to the pipe.

Payment shall be made under the bid items, "WATER SERVICE CONNECTION (MAIN TO METER)" and "NEW WATER METER BOX AND COVER, FURNISH AND INSTALL".

57. **631 WATER TAPS AND METER SERVICE CONNECTIONS**, Add the following new **Subsection 631.11 WATER MAIN SHUTDOWN FEES** as follows:

631.11 WATER MAIN SHUTDOWN FEES

All water main shutdown fees for installation of new water services, extension or replacement of existing water service lines, and relocation of existing water meter boxes shall be waived. When it becomes necessary to shut down existing water mains and services to install water service extensions or replacements, no main shall be left out of service for more than one (1) hour, and no individual service shall be disrupted for more than five (5) continuous hours. Main valves shall be operated by representatives of the City's Water Services Department. Shutdowns shall not begin before 8:00 a.m. and shall not extend past 4:00 p.m. It shall be the Contractor's responsibility to notify all customers in advance that the water service shall be turned off. The customers shall be notified in writing at least 24-hours in advance and also verbally the day of the shutdown. Initial notification shall include the reason for the shutdown, the date, the time and duration the water service shall be shut off. A copy of the notification shall be given to the Engineer.

58. **702 BASE MATERIALS** Add the following to **MAG Section 702 BASE MATERIALS**:

All Select Material specified on the plans and Standard Details shall be Type "A" in accordance with Table 702-1.

59. **727 STEEL REINFORCEMENT**, Add the following to **Section 727 STEEL REINFORCEMENT**:

Description

The work under this item consists of fabrication, furnishing and placing steel reinforcement of the quality, grade, type, size and quantity designated, in conformance with the details on the Project Plans, and in accordance with these special provisions and as directed by the Engineer. All work under this Section shall conform to SECTION 605 – STEEL REINFORCEMENT of the Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, 2008 Edition, except as noted herein and on the Project

Plans.

Construction Requirements

Section 605-3 of the ADOT Standard Specifications of modified to add:

605-3.05 Shop Drawings:

The Contractor shall submit shop drawings and lists showing the bending of reinforcement bars, splice locations and details and complete manufacturer's information on proprietary splices to the Engineer for review and approval prior to proceeding with the work. Approval of the submittal shall not relieve the Contractor of responsibility for the correctness of the shop drawings and lists.

60. 727 STEEL REINFORCEMENT Add the following to **Section 727 STEEL REINFORCEMENT**

EARLY STEEL PROCUREMENT

Description

The work under this item consists of early procurement of steel reinforcement. All materials furnished under this section shall conform to SECTION 605 – STEEL REINFORCEMENT and SECTION 1003-REINFORCING STEEL of the Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, 2008 Edition, except as noted herein and on the Project Plans. This specification does not include placement of the steel.

Bonding and Title

All storage facilities for the rebar shall be bonded and insured to cover the replacement cost of the rebar. All storage facilities shall be located within the State of Arizona. The City shall retain title to the rebar.

Quantity

Rebar must meet the standard for all applications for which it is intended to be used. Quantities have been calculated by the Contractor and no additional payment by the City shall be made for additional rebar. Rebar delivered to the site must be in new condition. Any defects from storage shall be remedied by the Contractor at no cost to the City.

Materials

The Contractor shall furnish complete copies, in triplicate, of all mill reports on steel materials furnished.

Storage of Rebar

It is advisable to allocate steel rebar storage a separate area characterized by minimum pedestrian traffic. The rebar stacks should be stored above ground and separated by wooden separators.

If the rebar stacks are to be stored in the open air for more than 2 – 3 weeks, it is recommended to cover them with canvas or dark polyethylene sheets to protect against sunlight, and weather exposure.

The steel rebar shall be stored separately and clearly marked or tagged with "Property of the City of Phoenix" or other such nomenclature as to identify the owner of the steel.

The steel rebar shall be open for inspection by City inspectors with 24-hour notice at any time.

Measurement and Payment

Payment for the steel rebar shall be made by the pound under bid item M5055000. This includes the storage of the rebar, and the delivery to the site when needed for construction. Payment shall be made after the City receives title to the steel rebar.

Payment for the rebar material does not release the Contractor of any responsibility for meeting all testing requirements at the time of installation. Any rebar that does not conform to SECTION 605 – STEEL REINFORCEMENT of the Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, 2008 Edition, at the time of installation shall be replaced at the Contractor's expense.

61. **727 STEEL REINFORCEMENT**, Add the following to **Section 727 STEEL REINFORCEMENT**:

Description

The work under this item consists of fabricating, furnishing and placing steel reinforcement of the quality, grade, type, size and quantity designated, in conformance with the details on the Project Plans, and in accordance with these special provisions and as directed by the Engineer. All work under this Section shall conform to SECTION 605 – STEEL REINFORCEMENT of the Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, 2008 Edition, except as noted herein and on the Project Plans.

Construction Requirements

Section 605-3 of the ADOT Standard Specifications of modified to add:
605-3.05 Shop Drawings:

The Contractor shall submit shop drawings and lists showing the bending of reinforcement bars, splice locations and details and complete manufacturer's information on proprietary splices to the Engineer for review and approval prior to proceeding with the work. Approval of the submittal shall not relieve the Contractor of responsibility for the correctness of the shop drawings and lists.

GUIDELINES FOR HANDLING SONORAN DESERT TORTOISES
ENCOUNTERED ON DEVELOPMENT PROJECTS
Arizona Game and Fish Department
Revised October 23, 2007

The Arizona Game and Fish Department (Department) has developed the following guidelines to reduce potential impacts to desert tortoises, and to promote the continued existence of tortoises throughout the state. These guidelines apply to short-term and/or small-scale projects, depending on the number of affected tortoises and specific type of project.

The Sonoran population of desert tortoises occurs south and east of the Colorado River. Tortoises encountered in the open should be moved out of harm's way to adjacent appropriate habitat. If an occupied burrow is determined to be in jeopardy of destruction, the tortoise should be relocated to the nearest appropriate alternate burrow or other appropriate shelter, as determined by a qualified biologist. Tortoises should be moved less than 48 hours in advance of the habitat disturbance so they do not return to the area in the interim. Tortoises should be moved quickly, kept in an upright position parallel to the ground at all times, and placed in the shade. Separate disposable gloves should be worn for each tortoise handled to avoid potential transfer of disease between tortoises. Tortoises must not be moved if the ambient air temperature exceeds 40 degrees Celsius (105 degrees Fahrenheit) unless an alternate burrow is available or the tortoise is in imminent danger.

A tortoise may be moved up to one-half mile, but no further than necessary from its original location. If a release site, or alternate burrow, is unavailable within this distance, and ambient air temperature exceeds 40 degrees Celsius (105 degrees Fahrenheit), the Department should be contacted to place the tortoise into a Department- regulated desert tortoise adoption program. Tortoises salvaged from projects which result in substantial permanent habitat loss (e.g. housing and highway projects), or those requiring removal during long-term (longer than one week) construction projects, will also be placed in desert tortoise adoption programs. *Managers of projects likely to affect desert tortoises should obtain a scientific collecting permit from the Department to facilitate temporary possession of tortoises.* Likewise, if large numbers of tortoises (>5) are expected to be displaced by a project, the project manager should contact the Department for guidance and/or assistance.

Please keep in mind the following points:

- These guidelines do not apply to the Mohave population of desert tortoises (north and west of the Colorado River). Mohave desert tortoises are specifically protected under the Endangered Species Act, as administered by the U.S. Fish and Wildlife Service.
- These guidelines are subject to revision at the discretion of the Department. We recommend that the Department be contacted during the planning stages of any project that may affect desert tortoises.
- Take, possession, or harassment of wild desert tortoises is prohibited by state law. Unless specifically authorized by the Department, or as noted above, project personnel should avoid disturbing any tortoise.

CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN

Add the following new Section, **233 STORM WATER POLLUTION PREVENTION PLAN SUBMITTAL PROCESS**

233.1 DESCRIPTION

The Contractor shall use the Arizona Department of Environmental Quality (ADEQ) Smart NOI program for all submittals located at this web address:

<https://az.gov/app/smartnoi/>

The location of this process may change and it is the responsibility of the Contractor to verify the correct web address. All fees are the responsibility of the Contractor. The Contractor shall apply for a "Stormwater Construction General Permit" with the project type "MUNICIPAL/PUBLIC".

Before any construction on site begins, the Contractor shall submit the Notice of Intent (NOI) and the SWPPP through the Smart NOI program as the sole permittee. The Contractor shall not commence any construction activities until the ADEQ send a written Notice Of Intent assigning an AZCON number.

As required by ADEQ the Contractor shall submit a Notice of Termination (NOT) through the Smart NOI program. The Contractor shall receive final payment only after receiving a written Notice of Termination Acknowledgement from ADEQ.

Projects Impacting Impaired Waters

Projects that shall have any construction taking place within ¼ mile of the Salt River between 23rd Avenue and the confluence of the Gila River shall impact "Impaired Waters". These projects shall require the Contractor to design, implement, and evaluate a Monitoring Plan for stormwater runoff from their construction activities. The Monitoring Plan must be site specific and shall be submitted to ADEQ as an appendix to the SWPPP. ADEQ is the final authority in the approval of the monitoring plan. A copy of the SWPPP and the Monitoring Plan shall be kept on-site at all times. Additional copies of the Monitoring Plan should be made available to all personnel who anticipate participating in stormwater monitoring activities. The Contractor shall have a copy of the monitoring plan, approved SWPPP, NOI, and ADEQ Authorization to Discharge posted at the jobsite prior to ground disturbance.

Subcontractors

All subcontractors shall comply with all AZPDES requirements under the supervision of the General Contractor, and shall submit a completed, signed subcontractor certification form, thereby designating themselves as co-permittees.

233.2 SAMPLE SWPPP STRUCTURE

The following is a sample outline of the City requirement for a SWPPP submittal modeled after the ADEQ Construction General Permit Checklist. It shall be the Contractor's responsibility to meet all the ADEQ requirements for a SWPPP and retain a qualified consultant to complete the SWPPP if necessary at no additional cost to the City.

1 SITE DESCRIPTION

1.1 Project Name: **CONTRACTOR SHALL FILL IN PROJECT NAME**

Project No(s): **CONTRACTOR SHALL FILL IN PROJECT NUMBER**

1.2 Project Location: **CONTRACTOR SHALL FILL IN FOR PROJECT SITE LOCATION**

1.3 Owner's Name:

City of Phoenix, Street Transportation Department

1.4 Owner's Address:

200 West Washington Street, 5th Floor, Phoenix, Arizona 85003

1.5 Project Description: **CONTRACTOR SHALL FILL IN PROJECT DESCRIPTION**

1.6 Runoff Coefficient and Soils Information:

A. Overall runoff coefficient of upstream drainage area shall be unchanged by project.

B. Surface Soils Information: **(EXAMPLE ONLY, CONTRACTOR SHALL FILL IN FOR PROJECT SITE LOCATION)**

<u>SOIL UNIT</u>	<u>SOIL TYPE (USDA TEXTURE)</u>	<u>PERMEABILITY (IN./HR.)</u>
<u>Laveen</u>	<u>Loam</u>	<u>0.6-2.0</u>
<u>Mohall</u>	<u>Clay Loam</u>	<u>0.2-0.6</u>
<u>Tucson</u>	<u>Clay Loam</u>	<u>0.2-0.6</u>
<u>Vecont</u>	<u>Clay</u>	<u>0.06-0.2</u>

1.7 Name of Receiving Water:

EXAMPLE: SALT RIVER, CONTRACTOR SHALL FILL FOR PROJECT SITE LOCATION

2 CONTROLS

2.1 Erosion and Sediment Controls

2.1.a Stabilization Practices:

Stabilization practices on this site include:

- Permanent planting.

- Save selected existing trees.
- Decomposed granite
- **CONTRACTOR SHALL ADD OR REMOVE STABILIZATION PRACTICES AS NECESSARY**

2.1.b Structural Practices:

May include:

- Temporary retention areas (subgrade excavation areas).
- Temporary catch basin inlet protection.
- Silt fence.
- Gravel filter berm.
- Temporary diversion dike.
- Straw bale barriers.
- Sandbag berm
- **CONTRACTOR SHALL ADD OR REMOVE STABILIZATION PRACTICES AS NECESSARY**

2.1.c Narrative: Sequence of major activities.

CONTRACTOR SHALL COMPLETE NARRATIVE

2.1.d Storm Water Management: **(CONTRACTOR SHALL EDIT AS NECESSARY)**

Storm water drainage on shall be provided by curb and gutter, catch basin inlets, and storm drains. No appreciable changes in runoff coefficients or in finished roadway grades shall take place as a result of this project; therefore, no significant alterations of storm water drainage patterns or runoff quantities are expected.

During construction, storm water runoff shall be managed by the following means, as conditions require:

- Temporary retention shall be provided during roadway construction in areas excavated for subgrade.
- Silt fence, straw bales, sandbag berms, temporary diversion dikes, gravel filter berms or other BMP's as necessary to eliminate erosion may be used to prevent storm runoff from entering open storm drain pipes in excavated trenches. Temporary catch basin inlet protection may also be provided to remove sediment from drainage water before it enters the drainage system. Straw bale protection at outfall pipe locations may be employed during construction.

3 OTHER CONTROLS

3.1 Waste Disposal:

Waste Materials:

All waste materials including trash and construction debris from the site shall be either disposed to a designated area immediately or collected and stored in securely-lidded metal dumpsters. The dumpsters shall meet all local and State solid waste management regulations. The dumpsters shall be emptied a minimum of once per week, or more often if necessary, and the trash shall be hauled to an acceptable dump site. Lids shall be closed at all times after work hours and during rain events. No construction waste materials shall be buried on site. All personnel shall be instructed regarding the correct procedures for waste disposal. Notices stating these practices shall be posted on site, and the site superintendent who manages the day-to-day site operations, shall be responsible for seeing that these procedures are followed.

ENTER PHONE NUMBER AND NAME OF SITE SUPERINTENDENT

Concrete washout shall only be allowed in designated areas. The hardened waste shall be disposed of weekly and before final inspection of the project.

Hazardous Waste:

All hazardous waste materials shall be disposed of in the manner specified by local or State regulations or by the manufacturer. Site personnel shall be instructed in these practices, and the site superintendent who manages day-to-day site operations, shall be responsible for seeing that these practices are followed.

Sanitary Waste:

All sanitary sewage generated on-site shall be collected from the portable units a minimum of twice per week or as required by local regulations. Units shall have a berm placed around them to ensure no spillage can occur.

3.2 Off-Site Vehicle Tracking:

Traffic shall be maintained on paved roadway throughout construction in order to reduce vehicle tracking of sediments. The paved street beyond the start and end of the project shall be swept as often as necessary to remove any excess mud, dirt, or rock that may be tracked from the site by construction vehicles, but not less than once per week. Dump trucks hauling material to or from the construction site shall be covered with tarpaulin before leaving the site.

4 DEMONSTRATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

The following Federal, State, and City regulations are followed in the preparation of this storm water pollution prevention plan:

- Section 402(p) of the Clean Water Act.
- Amended Section 405 of the Water Quality Act.
- "ADEQ Arizona Pollutant Discharge Elimination System General Permit for Discharge from Construction Activities to Waters of the United States, Permit AZG-2008-001."
- Flood Control District of Maricopa County "Drainage Design Manual for Maricopa County, Arizona, Volume III, Erosion Control."
- City of Phoenix Code 32C, "Storm Water Quality Protection."
- City of Phoenix "Grading and Drainage Ordinance for Purpose of Fulfilling NPDES Requirements."

5 MAINTENANCE/INSPECTION PROCEDURES

5.1 Erosion and Sediment Control Practices:

The following is a list of erosion and sediment controls to be used during the construction period:

5.1.a Stabilization practices for this site include:

- Permanent planting.

- Save selected existing trees.
- Decomposed granite.
- **CONTRACTOR TO ADD/DELETE AS NECESSARY**

5.1.b Structural practices for this site shall include:

- Silt fence/straw bale barriers.
- Temporary diversion dike/gravel filter berm.
- Sandbag berm.
- Storm drain, curb and gutter, catch basins.
- Temporary catch basin inlet protection.
- Temporary retention in subgrade excavation areas.
- **CONTRACTOR TO ADD/DELETE AS NECESSARY**

5.2 Erosion and Sediment Control Maintenance and Inspection Practice:

Following is a list of the inspection and maintenance practices that shall be used to maintain erosion and sediment control:

- All control measures shall be inspected at least once every 7 days and within 24 hours after each rain event of 0.1 inch or greater.
- All measures shall be maintained in good working order; if repair is necessary, it shall be initiated within 24 hours of report. All changes shall be completed within 14 days after an observation.
- Built-up sediment shall be removed from silt fence when it has reduced the design capacity by 50%.
- Erosion control fabric and erosion control dikes shall be inspected and any breaches promptly repaired.
- Permanent planting shall be inspected for washout and healthy growth per specification requirements.
- A Compliance Evaluation Report shall be made at each inspection to ensure all BMP's are functioning correctly.
- The site superintendent shall be responsible for inspection, maintenance, and repair activities, and filling out the Compliance Evaluation Report.
- Personnel selected for inspection and maintenance responsibility shall receive training from the site superintendent. They shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used on-site in good working order.
- Only one side of roadways shall be excavated for subgrade preparation at a time. This area shall serve as temporary retention while traffic is maintained on the paved other half of the road. This shall serve to control storm water and minimize tracking of sediments.

6 INVENTORY FOR POLLUTION PREVENTION PLAN (CONTRACTOR TO EDIT AS NECESSARY)

The materials or substances listed below are expected to be present on-site during construction:

- | | |
|----------------------------|------------------------------|
| • Concrete | • Wood |
| • Asphaltic Concrete | • Paints |
| • Fertilizers | • Herbicide/Pesticide |
| • Petroleum-Based Products | • Soil Treatment Products |
| • Cleaning Solvents/Agents | • Other Building Materials |
| • Sealants | • Water Used in Dust Control |

6.1 Spill Prevention

The following are the material management practices that shall be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff:

6.1.a Good Housekeeping:

The following good housekeeping practices shall be followed on-site during the construction period:

- An effort shall be made to store only enough product required to do the immediate job.
- All materials stored on-site shall be stored in a neat, orderly manner in their appropriate containers and, if possible, under proper cover and palletized.
- Liquid products shall be placed on secondary containment pallets.
- Fuel tanks shall be double walled.
- Drip pans shall be used under all spigots unless on secondary containment.
- Products shall be kept in their original containers with the original manufacturers' label.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product shall be used up before disposing of the container.
- Manufacturers' recommendations for proper use and disposal shall be followed.
- The site superintendent shall inspect daily to ensure proper use and disposal of materials.
- Concrete washout shall only be allowed in designated areas. The hardened waste shall be disposed of weekly and before final inspection of the project.

6.1.b Hazardous Products:

These practices are used to reduce the risks associated with hazardous materials:

- Products shall be kept in original containers unless they are not resealable.
- Original labels and material safety data sheets shall be retained.
- If surplus product must be disposed of, manufacturers', or local and State recommended methods for proper disposal shall be followed.
- Products shall be monitored, an inventory shall be conducted regularly, and documentation of all use and disposal shall be maintained.

6.2 Product Specific Practices:

The following product specific practices shall be followed on-site:

6.2.a Petroleum Products:

All on-site vehicles shall be monitored for leaks and receive regular preventative maintenance to reduce any chance of leakage. Petroleum products shall be stored in tightly-sealed containers which are clearly labeled. Any petroleum substances used on-site shall be applied according to the manufacturer's recommendations. Spills and leaks from vehicles shall be stopped immediately. Any leaking vehicle shall have a drip pan placed under the leak until the unit is repaired. Secondary containment shall be provided for all petroleum products stored onsite.

6.2.b Fertilizers, Herbicide, Pesticide, Soil Treatment:

All materials used shall be applied only in the minimum amounts recommended by the

manufacturer or as per specification. Once applied, materials shall be worked into the soil to limit exposure to storm water.

On-site storage shall be covered and palletized to limit contact with storm water. The contents of any partially-used bags or containers shall be transferred to a sealable plastic bin to avoid spills.

6.2.c Paints:

All containers shall be tightly sealed and stored when not required for use. Excess paint shall not be discharged to the storm drain system or on the ground, but shall be properly disposed of according to manufacturers' instructions or State and local regulations.

6.2.d Concrete Trucks:

Concrete trucks shall not be allowed to wash out or discharge surplus concrete or dump wash water other than in a designated wash-out area. The hardened waste shall be disposed of weekly and before final inspection of the project.

6.3 Spill Prevention Practices:

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices shall be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup shall be clearly posted and site personnel shall be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup shall be kept in the material storage area on-site. Equipment and materials shall include, but not be limited to, brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically designed for this purpose.
- All spills shall be cleaned up immediately after discovery using dry cleanup methods.
- The spill area shall be kept well-ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material shall be reported to the appropriate State or local government agency, regardless of the size—ADEQ Hotline: (602) 771-4505; City of Phoenix Hazardous Spills Emergency: 911; City of Phoenix Hazardous Spills Safety Section: (602) 262-7555.
- The spill prevention plan shall be adjusted to include measures to prevent this type of spill from recurring and procedures to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures shall also be included.
- The site superintendent shall be responsible for the day-to-day site operations, shall be the spill prevention and cleanup coordinator. He shall designate other site personnel who shall receive spill prevention and cleanup training.

6.4 Documentation:

Documentation of all inspections, failed BMP's, corrective action and training shall be maintained onsite with the SWPPP at all times during the project, and shall be maintained for not less than three (3) years after the project is complete.

OTHER REQUIRED CERTIFICATIONS

The Contractor shall complete and submit the following certification forms to the City before construction begins:

- Permittee Certification
- Contractor Certification
- Subcontractor Certification (for all Subcontractors as necessary)
- Operator's Compliance Evaluation Report

PERMITTEE'S CERTIFICATION

As Contractor of the Paving and Storm Drain project, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Company

Name: _____

Title: _____

Signature: _____

Date: _____

CONTRACTOR CERTIFICATION

I certify under penalty of law that I understand the terms and condition of the General Arizona Pollutant Discharge Elimination System (AZPDES) Permit that authorizes the storm water discharges associated with industrial activities from the construction site identified as part of this certification. Further, by my signature, I understand that I am the permittee, along with the subcontractors signing such certifications, to the general (AZPDES) Permit for the storm water discharges associated with construction activities of the Paving and Storm Drain project. As permittee, I understand that I, and my company, are legally required under the Clean Water Act, to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under the AZPDES Permit and the terms of the AZPDES Permit.

General Contractor and Responsibility

Name: _____

Title: _____

Signature: _____

SUBCONTRACTOR'S CERTIFICATION

I certify under penalty of law that I understand the terms and conditions of the General Arizona Pollutant Discharge Elimination System (AZPDES) Permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification. Further, by my signature, I understand that I am the permittee, along with the other contractors and subcontractors signing such certifications, to the general AZPDES permit for the storm water discharges associated with construction activities of the Paving and Storm Drain project. As permittee, I understand that I, and my company, are legally required under the Clean Water Act, to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under the AZPDES permit and the terms of the AZPDES permit.

Authorized Representative of Subcontractor: _____

Signature: _____ Date: _____

For (Subcontractor Name): _____

Construction Activities: _____

Verification of Completion and Acceptance of Subcontractor's Work

All work to be performed by _____ (Subcontractor) as part of the _____ (Project) has been completed and accepted. Execution of this form absolves said subcontractor from liability for AZPDES violations which may occur subsequent to this date as a result of activities of the general contractor or other subcontractors.

Authorized Representative of Subcontractor: _____

Signature: _____ Date: _____

For (Subcontractor Name): _____

Verified by (General Contractor): _____

Authorized Representative of General Contractor: _____

Signature: _____ Date: _____

AZG-2008-001 General Permit for Construction Activities Operator's Compliance Evaluation Report

This project requires inspection of storm water pollution controls (BMPs) on a choice of frequency described in the General Permit, Part IV. H. Attach sheets if more space is needed.

Project: _____ Date: _____

Name & Title of Inspector: _____

Qualifications of Inspector: ☐ Attached; or ☐ Shown in Sec. _____ of the SWPPP.

☐ Periodic Inspection; or ☐ Rain Event inspection

Relevant weather information: _____

1. Location(s) of discharge from the site: ☐ None; or ☐ Description: _____

2. Location(s) of and identification of BMPs that need to be maintained; failed to operate or proved to be inadequate:
☐ None; or ☐ Description: _____

3. Location(s) where additional BMPs are needed: ☐ None; or ☐ Description: _____

4. Corrective actions required, including changes and target dates: ☐ None; or ☐ Description: _____

5. Identify all sources of non-storm water and the associated pollution control measures: ☐ None; or ☐
Description: _____

6. Identify material storage areas and evidence of, or potential for pollutant discharge from these areas: ☐ None; or
☐ Description: _____

7. Identify any other apparent incidents of non-compliance: ☐ None; or ☐ Description: _____

8. If no incidents of non-compliance are identified in items 1 through 7 above, the inspector certifies that the construction project is being operated in compliance with the SWPPP and the General Permit.

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certifying Signature: _____ Date: _____

Printed Name: _____



Janice K. Brewer
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
(602) 771-2300 • www.azdeq.gov



Henry R. Darwin
Director

July 24, 2013

401 cert reading file: rs313:032

Applicant: City of Phoenix - Street Transportation Department
Mark A. Glock, P.E., Deputy Director
1034 E. Madison Street
Phoenix, Arizona 85007

COPY

Subject: Waiver of Individual CWA 401 Water Quality Certification for the proposed
Avenida Rio Salado/Broadway Road Improvement Project impacting Salt River.
Latitude: 33° 24' 29.54"; Longitude: 112° 08' 26.62" (changed - application incorrect)
Phoenix, Maricopa County, Arizona.

U.S. Army Corps of Engineers File: **SPL-2012-00272-MWL (non-notifying)**
ADEQ LTF No.: **58503**

Dear Mr. Glock:

The Arizona Department of Environmental Quality (ADEQ), Water Quality Division, has reviewed your request for individual certification pursuant to Section 401 of the Clean Water Act (CWA) for the subject project under Nationwide Permit (NWP) number 14. This letter shall serve as a waiver of individual certification; instead, it is your responsibility to ensure all activities performed as part of this project are completed in accordance with your application and supporting documentation (7/5/13) and the 401 general conditions (copy attached) that are part of the NWP (03/19/12).

Sincerely,

COPY
Robert J. Scalamera

Robert J. Scalamera, Hydrologist
Surface Water Section, Water Quality Division

electronic copies: U.S. Army Corps of Engineers, Regulatory Branch – Attn.: Michael Langley
USEPA, Wetlands Regulatory Office
Agent: AZTEC, Justin Hoppmann

Southern Regional Office
400 West Congress Street • Suite 433 • Tucson, AZ
85701
(520) 628-6733

Printed on recycled paper

State of Arizona 401 Water Quality Conditions for 2012 Section 404 Nationwide Permits

The following 401 General Conditions apply to all waters of the State and all applicable NWP:

- 1) Any discharge occurring as a result of activities certified for the subject project shall not cause an exceedence of any Water Quality Standard (WQS). Applicability of this condition is as defined in A.A.C. R18-11-102.
- 2) This certification does not authorize the discharge of wastewater, process residues or other waste to any WUS.
- 3) Work shall be conducted and monitored to ensure that pollution from the activities certified herein does not cause an exceedence of Arizona WQS in any WUS.
- 4) Activities herein certified shall be performed during periods of low flow (baseflow or less) in any WUS, or no flow in the case of ephemeral and intermittent WUS. No work shall be done, nor shall any equipment or vehicles enter any WUS while flow is present, unless all applicable conditions in this certification are met.
- 5) The effectiveness of all pollution control measures, including erosion and sedimentation, shall be reevaluated after each flow event and repaired/modified as needed.
- 6) Applicant must minimize clearing, grubbing, scraping or otherwise limit exposure of erodible surface to the minimum necessary for each construction phase or location.
- 7) If activities certified herein are likely to cause or contribute to an exceedence of WQS, or create an impediment to the passage of fish or other aquatic life - operations shall cease until the problem is resolved or until control measures have been undertaken.
- 8) Erosion control, sediment control and/or bank protection measures shall be installed before construction and pre-operation activities, and shall be maintained during construction and post-construction periods to minimize channel or bank erosion, soil loss and sedimentation. Control measures shall not be constructed of uncemented or unconfined imported soil, or other materials easily transported by flow.
- 9) For portions of the project utilizing potable water or groundwater for irrigation or dust control, direct runoff of such water shall be limited to the extent practicable and shall not cause downstream erosion or flooding.
- 10) The applicant is responsible for ensuring construction material and/or fill (other than native fill or that necessary to support revegetation) placed in any WUS, shall not include materials that can cause or contribute to pollution of the WUS. Examples of prohibited fill include pollutant-contaminated soil and materials defined as pollutants or hazardous in Arizona Revised Statutes (A.R.S.) § 49-201. Fill used to support vegetation rooting or growth shall be protected from erosion.
- 11) Any washing of fill material must occur outside of any WUS prior to placement and the rinseate from such washing shall be settled, filtered or otherwise treated to prevent migration of pollutants (including sediment) or from causing erosion to any WUS. Other than replacement of native fill or material used to support vegetation rooting or growth, fill placed in locations subject to scour must resist washout whether such resistance is derived via particle size limits, presence of a binder, vegetation, or other armoring.

- 12) Any dredged material or waste material is to be placed and retained in areas outside any WUS. Runoff from this material/area is to be settled, filtered or otherwise treated to prevent migration of pollutants (including sediment) to any WUS.
- 13) Acceptable construction materials that will or may contact water in any WUS are: untreated logs and lumber, crushed stone, crushed clean concrete (recycled concrete), native fill, precast, sprayed or cast-in-place concrete (including soil cement and unmodified grouts), steel (including galvanized), plastic and aluminum. Use of other materials may be allowed, but require application for an individual 401 certification.
- 14) Upon completion of construction the applicant shall ensure no adverse change, due to the subject project, has occurred in the stability with respect to stream hydraulics, erosion and sedimentation, of any WUS including upstream and downstream from the project. If such change has occurred, the applicant shall take steps to restore the pre-project stability of any impacted segments.
- 15) Except where the activities certified herein are intended to permanently alter any WUS, all disturbed areas shall be restored and (re)vegetated as soon as physically practicable. Vegetation shall be maintained on unarmored banks and slopes to stabilize soil and prevent erosion.
- 16) If retention/detention basins are included in the project, applicant will complete the grading necessary to direct runoff towards retention/detention basins no later than immediately following initial land clearing or rough grading.

Retention/detention basins shall be sized to accept storm runoff and capture sediment prior to it entering or moving downstream in any WUS. Detention basins will provide detention by controlling outflow and shall cause no significant change to the hydraulic conditions of the upstream or downstream WUS outside of the project boundaries.

The basins shall be maintained; e.g., have sediment removed, as required to maintain their function.
- 17) Unless specifically permitted to do so when flow is present in any WUS within the project area, the applicant and any contractor will not alter the flow by any means except to prevent erosion or pollution of any WUS.
- 18) Silt laden or turbid water resulting from activities certified herein shall be settled, filtered or otherwise treated to ensure no violation of Arizona WQS in any WUS.
- 19) When flow in any WUS in the work area is sufficient to erode, carry or deposit material, activities certified herein shall cease until:
 - the flow decreases below the point where sediment movement ceases, or
 - control measures have been undertaken; e.g., equipment and materials easily transported by flow are protected with non-erodible barriers or moved outside the flow area.
- 20) The applicant will erect any barriers, covers, shields and other protective devices as necessary to prevent any construction materials, equipment or contaminants/pollutants from falling, being thrown or otherwise entering any WUS.

- 21) The applicant must designate area(s) for equipment staging and storage located entirely outside of any WUS. In addition, the applicant must designate areas, located entirely outside of any WUS, for fuel, oil and other petroleum product storage and for solid waste containment. All precautions shall be taken to avoid the release of wastes, fuel or other pollutants to any WUS.
- 22) Any equipment maintenance, washing or fueling that cannot be done offsite will be performed in the designated area with the following exception: equipment too large or unwieldy to be readily moved; e.g., large cranes, may be fueled and serviced in the WUS (but outside of standing or flowing water) as long as material specifically manufactured and sold as spill containment is in place during fueling/servicing. All equipment shall be inspected for leaks, all leaks shall be repaired and all repaired equipment will be cleaned to remove any fuel or other fluid residue prior to use within (including crossing) any WUS.

The applicant shall have a spill containment plan onsite to ensure that pollutants are prevented from entering any WUS. Any pollutant generated by activities certified herein shall be properly disposed of in accordance with applicable regulations.

A spill response kit will be maintained in this (these) area(s) to mitigate any spills. The kit will include material specifically manufactured and sold as spill adsorbent/absorbent and spill containment. The applicant will ensure that whenever there is activity on the site, that there are personnel on site trained in the proper response to spills and the use of spill response equipment.

- 23) Permanent and temporary pipes and culverted crossings shall be adequately sized to handle expected flow and properly set with end section, splash pads, or headwalls that dissipate water energy to control erosion.
- 24) All temporary structures, within any WUS, constructed of imported materials and all permanent structures within any WUS, including but not limited to, access roadways; culverted and unculverted crossings; staging areas; material stockpiles; berms, dikes and pads, shall be constructed so as to accommodate overtopping and must resist washout of the feature by streamflow.
- 25) Any temporary crossing, other than fords on native material, shall be constructed in such a manner so as to provide armoring of the stream channel. Materials used to provide this armoring shall not include anything easily transportable by flow. Examples of acceptable materials include steel plates, wooden planks, pre-cast concrete planks or blocks; examples of unacceptable materials include clay, silt, sand and gravel finer than cobble (roughly fist-sized). The armoring must, via mass, anchoring systems or a combination of the two, resist washout.

Any ford shall be designed, and maintained as necessary, to carry the proposed traffic without causing erosion or sedimentation of the stream channel while dry or during a flow event equal to or less than the crossing's design event; i.e., the flow event which closes the ford to traffic.

No unarmored ford shall be subject to heavy-truck or equipment traffic after a flow event until the stream bed is dry enough to support the traffic without disturbing streambed material to a greater extent than in dry conditions. Light vehicles (less than 14,000 pounds gross weight) are not restricted by this condition.

Applicant will take measures necessary to prevent approaches to any WUS crossing from causing erosion or contributing sediment to any WUS.

- 26) Temporary structures constructed of imported materials are to be removed no later than upon completion of the permitted activity.
- 27) Temporary structures constructed of native materials, if they provide an obstacle to flow or can contribute to or cause sedimentation or erosion, are to be removed no later than upon completion of the permitted activity.
- 28) Upon completion of the activities certified herein (except as noted in condition 28 -concrete curing), areas within any WUS shall be promptly cleared of all forms, piling, construction residues, equipment, debris or other obstructions.
- 29) If fully, partially or occasionally submerged structures are constructed of cast-in-place concrete instead of pre-cast concrete, applicant will take steps; e.g., sheet piling or temporary dams, to prevent contact between water (instream and runoff) and the concrete until it cures and until any curing agents have evaporated or otherwise cease to be available; i.e., are no longer a pollutant threat. Where practicable, construction work will be during extreme low water conditions or at a time and season with the highest probability of ensuring work is done in "the dry".
- 30) Any permanent WUS crossings other than fords, shall not be equipped with gutters, drains, scuppers or other conveyances that allow untreated runoff (due to events equal to or lesser in magnitude than the design event for the crossing structure) to directly enter a WUS if such runoff can be directed to a local stormwater drainage, containment and/or treatment system.
- 31) Applicant will clear debris as needed from culverts, ditches, dips and other drainage structures in any WUS to prevent clogging or conditions that may lead to washout.

NATIONWIDE PERMIT NUMBER 14

LINEAR TRANSPORTATION PROJECTS



**US Army Corps of Engineers
Los Angeles District
Regulatory Division/Arizona Branch**

A. General Information

This document is an aid to understanding the terms and conditions of your nationwide permit (NWP) by bringing together information issued separately in; (1) the Federal Register (77 FR 10184-10290)*, (2) the Special Public Notice for NWP "Reissuance of the Nationwide Permits and Issuance of Final Regional Conditions for the Los Angeles District"*, and (3) the Clean Water Act Section 401 water quality certification decisions (401 WQCs)* issued by the White Mountain Apache Tribe, Hopi Tribe, Hualapai Tribe, Navajo Nation, U.S. Environmental Protection Agency, and Arizona Department of Environmental Quality. Please note that website addresses enclosed herein may have been changed and updated since publication of the original document.

- 1) Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) and/or Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401 et seq) the U.S. Army Corps of Engineers (Corps) published the "Reissuance of Nationwide Permits" in the Federal Register (77 FR 10184-10290) on February 21, 2012. These NWPs are in effect from March 19, 2012 through March 18, 2017 unless modified, reissued, or revoked before that time. It is incumbent upon the permittee to remain informed of changes to the NWPs.
- 2) The Los Angeles District of the Corps issued a Special Public Notice (March 15, 2012) announcing final regional conditions for NWPs to ensure protection of high value waters within the State of Arizona.
- 3) The Los Angeles District of the Corps requested and obtained for the entire State of Arizona the 401 WQC decision for all NWPs on all tribal lands from the White Mountain Apache Tribe, Hopi Tribe, Hualapai Tribe, Navajo Nation, and U.S. Environmental Protection Agency and on all non-tribal lands from the Arizona Department of Environmental Quality.

A description of all NWPs and 401 WQCs can be found in the "Nationwide Permits for Arizona" Special Public Notice.*

***Note:** For online availability see section "F. Document Availability" of this enclosure.

Key Sections: B. Nationwide Permit Terms (page 1) C. Nationwide Permit General Conditions (page 1)
 D. Nationwide Permit Regional Conditions (page 6) E. 401 Water Quality Certifications (page 7)

B. Nationwide Permit Terms

14. Linear Transportation Projects. Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

C. Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or

more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects from Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of

the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWP. (e) Authorization of an activity by a NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

(Note: Arizona endangered species information is available at <http://www.fws.gov/southwest/es/arizona/Threatened.htm#CountyList>)

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any “take” permits required under the U.S. Fish and Wildlife Service’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such “take” permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed. (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding

national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332. (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment. (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered. (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided. (5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan. (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment. (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs. (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management. (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of

concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWP does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions; (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and (c) The signature of the permittee certifying the completion of the work and mitigation.

31. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either: (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2). (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information: (1) Name, address and telephone numbers of the prospective permittee; (2) Location of the proposed project; (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans); (4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why

compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act (c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used. (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. (2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act. (4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. Nationwide Permit Regional Conditions

Of the ten regional conditions effective within the Los Angeles District of the Corps, six apply to projects within Arizona (1-4, 9 and 10). The remaining four regional conditions apply to specific geographic areas, resources, or species not located in Arizona.

The following regional conditions must be complied with for any authorization by a NWP to be valid in the State of Arizona:

Regional Condition 1: For all activities in waters of the U.S. that are suitable habitat for federally listed fish species, the permittee shall design all road crossings to ensure that the passage and/or spawning of fish is not hindered. In these areas, the permittee shall employ bridge designs that span the stream or river, including pier- or pile-supported spans, or designs that use a bottomless arch culvert with a natural stream bed, unless determined to be impracticable by the Corps.

Regional Condition 2: Nationwide Permits (NWP) 3, 7, 12-15, 17-19, 21, 23, 25, 29, 35, 36, or 39-46, 48-52 cannot be used to authorize structures, work, and/or the discharge of dredged or fill material that would result in the "loss" of wetlands, mudflats, vegetated shallows or riffle and pool complexes as defined at 40 CFR Part 230.40-45. The definition of "loss" for this regional condition is the same as the definition of "loss of waters of the United States" used for the Nationwide Permit Program. Furthermore, this regional condition applies only within the State of Arizona and within the Mojave and Sonoran (Colorado) desert regions of California. The desert regions in California are limited to four USGS Hydrologic Unit Code (HUC) accounting units (Lower Colorado -150301, Northern Mojave-180902, Southern Mojave-181001, and Salton Sea-181002).

Regional Condition 3: When a pre-construction notification (PCN) is required, the appropriate U.S. Army Corps of Engineers (Corps) District shall be notified in accordance with General Condition 31 using either the South Pacific Division PCN Checklist or a signed application form (ENG Form 4345) with an attachment providing information on compliance with all of the General and Regional Conditions. The PCN Checklist and application form are available at: <http://www.spl.usace.army.mil/Missions/Regulatory.aspx>. In addition, the PCN shall include: A written statement describing how the activity has been designed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States; drawings, including plan and cross-section views, clearly depicting the location, size and dimensions of the proposed activity as well as the location of delineated waters of the U.S. on the site. The drawings shall contain a title block, legend and scale, amount (in cubic yards) and area (in acres) of fill in Corps jurisdiction, including both permanent and temporary fills/structures. The ordinary high water mark or, if tidal waters, the mean high water mark and high tide line, should be shown (in feet), based on National Geodetic Vertical Datum (NGVD) or other appropriate referenced elevation. All drawings for projects located within the boundaries of the Los Angeles District shall comply with the most current version of the Map and Drawing Standards for the Los Angeles District Regulatory Division (available on the Los Angeles District Regulatory Division website at: <http://www.spl.usace.army.mil/Missions/Regulatory.aspx>); and numbered and dated pre-project color photographs showing a representative sample of waters proposed to be impacted on the project site, and all waters proposed to be avoided on and immediately adjacent to the project site. The compass angle and position of each photograph shall be documented on the plan-view drawing required in subpart b of this regional condition.

Regional Condition 4: Submission of a PCN pursuant to General Condition 31 and Regional Condition 3 shall be required for all regulated activities in the following locations: a) All perennial waterbodies and special aquatic sites within the State of Arizona and within the Mojave and Sonoran (Colorado) desert regions of California, excluding the Colorado River in Arizona from Davis Dam to River Mile 261 (northern boundary of the Fort Mojave Indian Tribe Reservation). The desert region in California is limited to four USGS HUC accounting units (Lower Colorado -150301, Northern Mojave-180902, Southern Mojave-181001, and Salton Sea-181002). b) All areas designated as Essential Fish Habitat (EFH) by the Pacific Fishery Management Council (i.e., all tidally influenced areas - Federal Register dated March 12, 2007 (72 FR 11092)), in which case the PCN shall include an EFH assessment and extent of proposed impacts to EFH. Examples of EFH habitat assessments can be found at: <http://www.swr.noaa.gov/efh.htm>. c) All watersheds in the Santa Monica Mountains in Los Angeles and Ventura counties bounded by Calleguas Creek on the west, by Highway 101 on the north and east, and by Sunset Boulevard and Pacific Ocean on the south. d) The Santa Clara River watershed in Los Angeles and Ventura counties, including but not limited to Aliso Canyon, Agua Dulce Canyon, Sand Canyon, Bouquet Canyon, Mint Canyon, South Fork of the Santa Clara River, San Francisco Canyon, Castaic Creek, Piru Creek, Sespe Creek and the main-stem of the Santa Clara River.

Regional Condition 9: Any requests to waive the 300 linear foot limitation for intermittent and ephemeral streams for NWP 29, 39, 40 and 42, 43, 44, 51 and 52 or to waive the 500 linear foot limitation along the bank for NWP 13, must include the following: a) A narrative description of the stream. This should include known information on: volume and duration of flow; the approximate length, width, and depth of the waterbody and characters observed associated with an Ordinary High Water Mark (e.g. bed and bank, wrack line, or scour marks); a description of the adjacent vegetation community and a statement regarding the wetland status of the associated vegetation community (i.e. wetland, non-wetland); surrounding land use; water quality; issues related to cumulative impacts in the watershed, and; any other relevant information. b) An analysis of the proposed impacts to the waterbody in accordance with General Condition 31 and Regional Condition 3; c) Measures taken to avoid and minimize losses, including other methods of constructing the proposed project; and d) A compensatory mitigation plan describing how the unavoidable losses are proposed to be compensated, in accordance with 33 CFR Part 332.

Regional Condition 10: The permittee shall complete the construction of any compensatory mitigation required by special condition(s) of the NWP verification before or concurrent with commencement of construction of the authorized activity, except when specifically determined to be impracticable by the Corps. When mitigation involves use of a mitigation bank or in-lieu fee program, the permittee shall submit proof of payment to the Corps prior to commencement of construction of the authorized activity.

E. 401 Water Quality Certification (401 WQC)

A 401 WQC is mandatory for any activity that requires a Clean Water Act Section 404 permit. A 401 WQC is required prior to discharging any dredged or fill material into a water of the United States. Only one of the following 401 WQCs listed below will apply to your project. The geographical location of your project will determine which 401 WQC is applicable. The 401 WQCs issued for this NWP will remain in effect through March 18, 2017.

On all "Non-Tribal Lands", lands that are not part of federally recognized Indian Reservation, the Arizona Department of Environmental Quality (ADEQ) is the agency responsible for issuing the 401 WQC.

On all "Tribal Lands", lands that are part of a federally recognized Indian Reservation, the U.S. Environmental Protection Agency (EPA) is responsible for issuing the 401 WQC except where EPA has delegated the 401 WQC authority to the White Mountain Apache Tribe (Fort Apache Indian Reservation), Hopi Tribe (Hopi Indian Reservation), Hualapai Tribe (Hualapai Indian Reservation), or Navajo Nation (Navajo Indian Reservation).

If "Individual Certification" is required you must apply for, receive, and comply with the 401 WQC issued by ADEQ, EPA, or the appropriate Tribe.

Non-tribal Lands - 401 WQCs

The 401 WQCs issued by ADEQ are summarized in Table 1. For projects that can be conditionally certified the project must comply with all of the applicable ADEQ 401 General Conditions that follow Table 1.

Tribal Lands - 401 WQCs

Fort Apache Indian Reservation (White Mountain Apache Tribe):	Individual Certification required for all projects.*
Hopi Indian Reservation (Hopi Tribe):	Individual Certification required for all projects.*
Hualapai Indian Reservation (Hualapai Tribe):	Individual Certification required for all projects.*
Navajo Indian Reservation (Navajo Nation):	Individual Certification required for all projects.*
All other Indian Reservations (EPA):	401 WQCs issued by EPA are summarized in Table 2. EPA's General and Permit-Specific Conditions follow Table 2.*

***Note:** For online availability see section "F. Document Availability" of this enclosure.

401 WQC Contact Information

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Alex Cabillo
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Fax: 928-769-2309
E-mail: acabillo@hotmail.com

Robert Scalamera
Surface Water Section, 401 Certifications
Arizona Department of Environmental Quality
110 West Washington Street (Mailstop 5415A-1)
Phoenix, Arizona 85007
Telephone: 602-771-4502
Fax: Not available
E-mail: rs3@azdeq.gov

F. Document Availability

Reissuance of Nationwide Permits, 77 FR 10184-10290
Special Public Notice for Regional Conditions
EPA 401 WQC for NWP
White Mountain Apache Tribe 401 WQC for NWP
Hopi Tribe 401 WQC for NWP
Havasupai Tribe 401 WQC for NWP
Navajo Nation 401 WQC for NWP
ADEQ 401 WQC for NWP

<http://www.gpo.gov/fdsys/pkg/FR-2012-02-21/pdf/2012-3687.pdf>
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.

Table 1 - ADEQ 401 WQCs for all Non-Tribal Lands

NWP	303(d) impaired waters ¹ & Tributaries to 303(d)-impaired waters ²	OAW ³ & Tributaries to OAW	Lakes ⁴	Other Waters ⁵	Comments
1 - Aids to Navigation	-	-	-	-	N/A
2 - Structures in Artificial Canals	-	-	-	-	N/A
3 - Maintenance	I	I	I	C	
4 - Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities	I	I	I	C	
5 - Scientific Measurement Devices	I	I	I	C	
6 - Survey Activities	I	I	I	C	
7 - Outfall Structures and Associated Intake Structures	I	I	I	C	
8 - Oil and Gas Structures on the Outer Continental Shelf	-	-	-	-	N/A
9 - Structures in Fleeting and Anchorage Areas	-	-	-	-	N/A
10 - Mooring Buoys	-	-	-	-	N/A
11 - Temporary Recreational Structures	-	-	-	-	N/A
12 - Utility Line Activities	I	I	I	C	
13 - Bank Stabilization	I	I	I	C	
14 - Linear Transportation Projects	I	I	I	C	
15 - U.S. Coast Guard Approved Bridges	I	I	I	C	
16 - Return Water From Upland Contained Disposal Areas	I	I	I	C	
17 - Hydropower Projects	I	I	I	C	
18 - Minor Discharges	I	I	I	C	
19 - Minor Dredging	I	I	I	C	
20 - Response Operations for Oil and Hazardous Substances	I	I	I	T	If work begins within 14 days of event.
21 - Surface Coal Mining Activities	I	I	I	I	
22 - Removal of Vessels	I	I	I	C	
23 - Approved Categorical Exclusion	I	I	I	C	
24 - Indian Tribe or State Administered Section 404 Programs	-	-	-	-	N/A
25 - Structural Discharges	I	I	I	C	
26 - [Reserved]	-	-	-	-	
27 - Aquatic Habitat Restoration, Establishment, and Enhancement Activities	I	I	I	I	
28 - Modifications of Existing Marinas	-	-	-	-	N/A
29 - Residential Developments	I	I	I	C	
30 - Moist Soil Management for Wildlife	I	I	I	C	
31 - Maintenance of Existing Flood Control Facilities	I	I	I	C	
32 - Completed Enforcement Actions	I	I	I	C	
33 - Temporary Construction, Access, and Dewatering	I	I	I	C	
34 - Cranberry Production Activities	I	I	I	I	
35 - Maintenance Dredging of Existing Basins	I	I	I	C	
36 - Boat Ramps	I	I	I	C	
37 - Emergency Watershed Protection and Rehabilitation	I	I	I	T	If work begins within 30 days of event.
38 - Cleanup of Hazardous and Toxic Waste	I	I	I	T	If work begins within 2 days of discovery.
39 - Commercial and Institutional Developments	I	I	I	C	
40 - Agricultural Activities	I	I	I	C	
41 - Reshaping Existing Drainage Ditches	I	I	I	C	
42 - Recreational Facilities	I	I	I	C	
43 - Stormwater Management Facilities	I	I	I	C	
44 - Mining Activities	I	I	I	I	
45 - Repair of Uplands Damaged by Discrete Events	I	I	I	T	If work begins within 14 days of event.
46 - Discharges in Ditches	I	I	I	C	
47 - [Reserved]	-	-	-	-	Reserved
48 - Commercial Shellfish Aquaculture Activities	I	I	I	C	
49 - Coal Remining Activities	I	I	I	I	
50 - Underground Coal Mining Activities	I	I	I	I	
51 - Land-Based Renewable Energy Generation Facilities	I	I	I	C	
52 - Water-Based Renewable Energy Generation Pilot Projects	I	I	I	C	

C = Conditionally certified in Other waters, all applicable CWA 401 General Conditions listed on following pages apply.

T = Conditionally certified only if work begins within designated time of event, otherwise individual 401 certification required.

I = Individual certification required. N/A = Not Available/Not Applicable.

¹ 303(d)-listed Impaired Waters list available at <http://www.azdeq.gov/index.html>. For projects on an impaired surface water, if the project is within 1600 meters (or 1 mile) upstream and/or 800 meters (½ mile) downstream of an impaired surface water.

² Tributaries to 303(d)-impaired waters. For projects on a tributary to an impaired surface water, or if the tributary mouth is to an impaired surface water and the project is within 1600 meters (or 1 mile) of its mouth.

³ Outstanding Arizona Waters (OAW) are the surface waters of exceptional quality listed at <http://www.azdeq.gov/index.html>. For projects on a designated Outstanding Arizona Water OAW, if the project is within 1600 meters (or 1 mile) upstream and/or 800 meters (½ mile) downstream of a designated OAW. Also, Tributaries to Outstanding Arizona Waters: For projects on a tributary to a designated Outstanding Arizona Water, or if the tributary mouth is to an impaired surface water and the project is within 1600 meters (or 1 mile) of its mouth.

⁴ Lakes are lakes and reservoirs listed at <http://www.azdeq.gov/index.html>

⁵ Other Waters are all WUS that are not otherwise designated as a 303(d) Impaired, OAW, or a lake.

ADEQ 401 General Conditions applicable to Other Waters of the United States (WUS) on all Non-Tribal Lands

- 1) Any discharge occurring as a result of activities certified for the subject project shall not cause an exceedence of any Water Quality Standard (WQS). Applicability of this condition is as defined in A.A.C. R18-11-102.
- 2) This certification does not authorize the discharge of wastewater, process residues or other waste to any WUS.
- 3) Work shall be conducted and monitored to ensure that pollution from the activities certified herein does not cause an exceedence of Arizona WQS in any WUS.
- 4) Activities herein certified shall be performed during periods of low flow (baseflow or less) in any WUS, or no flow in the case of ephemeral and intermittent WUS. No work shall be done, nor shall any equipment or vehicles enter any WUS while flow is present, unless all applicable conditions in this certification are met.
- 5) The effectiveness of all pollution control measures, including erosion and sedimentation, shall be reevaluated after each flow event and repaired/modified as needed.
- 6) Applicant must minimize clearing, grubbing, scraping or otherwise limit exposure of erodible surface to the minimum necessary for each construction phase or location.
- 7) If activities certified herein are likely to cause or contribute to an exceedence of WQS, or create an impediment to the passage of fish or other aquatic life - operations shall cease until the problem is resolved or until control measures have been undertaken.
- 8) Erosion control, sediment control and/or bank protection measures shall be installed before construction and pre-operation activities, and shall be maintained during construction and post-construction periods to minimize channel or bank erosion, soil loss and sedimentation. Control measures shall not be constructed of uncemented or unconfined imported soil, or other materials easily transported by flow.
- 9) For portions of the project utilizing potable water or groundwater for irrigation or dust control, direct runoff of such water shall be limited to the extent practicable and shall not cause downstream erosion or flooding.
- 10) The applicant is responsible for ensuring construction material and/or fill (other than native fill or that necessary to support revegetation) placed in any WUS, shall not include materials that can cause or contribute to pollution of the WUS. Examples of prohibited fill include pollutant-contaminated soil and materials defined as pollutants or hazardous in Arizona Revised Statutes (A.R.S.) § 49-201. Fill used to support vegetation rooting or growth shall be protected from erosion.
- 11) Any washing of fill material must occur outside of any WUS prior to placement and the rinseate from such washing shall be settled, filtered or otherwise treated to prevent migration of pollutants (including sediment) or from causing erosion to any WUS. Other than replacement of native fill or material used to support vegetation rooting or growth, fill placed in locations subject to scour must resist washout whether such resistance is derived via particle size limits, presence of a binder, vegetation, or other armoring.
- 12) Any dredged material or waste material is to be placed and retained in areas outside any WUS. Runoff from this material/area is to be settled, filtered or otherwise treated to prevent migration of pollutants (including sediment) to any WUS.
- 13) Acceptable construction materials that will or may contact water in any WUS are: untreated logs and lumber, crushed stone, crushed clean concrete (recycled concrete), native fill, precast, sprayed or cast-in-place concrete (including soil cement and unmodified grouts), steel (including galvanized), plastic and aluminum. Use of other materials may be allowed, but require application for an individual 401 certification.
- 14) Upon completion of construction the applicant shall ensure no adverse change, due to the subject project, has occurred in the stability with respect to stream hydraulics, erosion and sedimentation, of any WUS including upstream and downstream from the project. If such change has occurred, the applicant shall take steps to restore the pre-project stability of any impacted segments.
- 15) Except where the activities certified herein are intended to permanently alter any WUS, all disturbed areas shall be restored and (re)vegetated as soon as physically practicable. Vegetation shall be maintained on unarmored banks and slopes to stabilize soil and prevent erosion.
- 16) If retention/detention basins are included in the project, applicant will complete the grading necessary to direct runoff towards retention/detention basins no later than immediately following initial land clearing or rough grading. Retention/detention basins shall be sized to accept storm runoff and capture sediment prior to it entering or moving downstream in any WUS. Detention basins will provide detention by controlling outflow and shall cause no significant change to the hydraulic conditions of the upstream or downstream WUS outside of the project boundaries. The basins shall be maintained; e.g., have sediment removed, as required to maintain their function.
- 17) Unless specifically permitted to do so when flow is present in any WUS within the project area, the applicant and any contractor will not alter the flow by any means except to prevent erosion or pollution of any WUS.
- 18) Silt laden or turbid water resulting from activities certified herein shall be settled, filtered or otherwise treated to ensure no violation of Arizona WQS in any WUS.
- 19) When flow in any WUS in the work area is sufficient to erode, carry or deposit material, activities certified herein shall cease until: The flow decreases below the point where sediment movement ceases, or control measures have been undertaken; e.g., equipment and materials easily transported by flow are protected with non-erodible barriers or moved outside the flow area.
- 20) The applicant will erect any barriers, covers, shields and other protective devices as necessary to prevent any construction materials, equipment or contaminants/pollutants from falling, being thrown or otherwise entering any WUS.
- 21) The applicant must designate area(s) for equipment staging and storage located entirely outside of any WUS. In addition, the applicant must designate areas, located entirely outside of any WUS, for fuel, oil and other petroleum product storage and for solid waste containment. All precautions shall be taken to avoid the release of wastes, fuel or other pollutants to any WUS. Any equipment maintenance, washing or fueling that cannot be done offsite may be performed in the designated area with the following exception: equipment too large or unwieldy to be readily moved; e.g., large cranes, may be fueled and serviced in the WUS (but outside of standing or flowing water) as long as material specifically manufactured and sold as spill containment is in place during fueling/servicing. All equipment shall be inspected for leaks, all leaks shall be repaired and all repaired equipment will be cleaned to remove any fuel or other fluid residue prior to use within (including crossing) any WUS. The applicant shall have a spill containment plan onsite to ensure that pollutants are prevented from entering any WUS. Any pollutant generated by activities certified herein shall be properly disposed of in accordance with applicable regulations. A spill response kit will be maintained in this (these) area(s) to mitigate any spills. The kit will include material specifically manufactured and sold as spill adsorbent/absorbent and spill containment. The applicant will ensure that whenever there is activity on the site, that there are personnel on site trained in the proper response to spills and the use of spill response equipment.
- 22) Permanent and temporary pipes and culverted crossings shall be adequately sized to handle expected flow and properly set with end section, splash pads, or headwalls that dissipate water energy to control erosion.

- 23) All temporary structures, within any WUS, constructed of imported materials and all permanent structures within any WUS, including but not limited to, access roadways; culverted and uncultivated crossings; staging areas; material stockpiles; berms, dikes and pads, shall be constructed so as to accommodate overtopping and must resist washout of the feature by streamflow.
- 24) Any temporary crossing, other than fords on native material, shall be constructed in such a manner so as to provide armoring of the stream channel. Materials used to provide this armoring shall not include anything easily transportable by flow. Examples of acceptable materials include steel plates, wooden planks, pre-cast concrete planks or blocks; examples of unacceptable materials include clay, silt, sand and gravel finer than cobble (roughly fist-sized). The armoring must, via mass, anchoring systems or a combination of the two, resist washout. Any ford shall be designed, and maintained as necessary, to carry the proposed traffic without causing erosion or sedimentation of the stream channel while dry or during a flow event equal to or less than the crossing's design event; i.e., the flow event which closes the ford to traffic. No unarmored ford shall be subject to heavy-truck or equipment traffic after a flow event until the stream bed is dry enough to support the traffic without disturbing streambed material to a greater extent than in dry conditions. Light vehicles (less than 14,000 pounds gross weight) are not restricted by this condition. Applicant will take measures necessary to prevent approaches to any WUS crossing from causing erosion or contributing sediment to any WUS.
- 25) Temporary structures constructed of imported materials are to be removed no later than upon completion of the permitted activity.
- 26) Temporary structures constructed of native materials, if they provide an obstacle to flow or can contribute to or cause sedimentation or erosion, are to be removed no later than upon completion of the permitted activity.
- 27) Upon completion of the activities certified herein (except as noted in condition 28 -concrete curing), areas within any WUS shall be promptly cleared of all forms, piling, construction residues, equipment, debris or other obstructions.
- 28) If fully, partially or occasionally submerged structures are constructed of cast-in-place concrete instead of pre-cast concrete, applicant will take steps; e.g., sheet piling or temporary dams, to prevent contact between water (instream and runoff) and the concrete until it cures and until any curing agents have evaporated or otherwise cease to be available; i.e., are no longer a pollutant threat. Where practicable, construction work will be during extreme low water conditions or at a time and season with the highest probability of ensuring work is done in "the dry".
- 29) Any permanent WUS crossings other than fords, shall not be equipped with gutters, drains, scuppers or other conveyances that allow untreated runoff (due to events equal to or lesser in magnitude than the design event for the crossing structure) to directly enter a WUS if such runoff can be directed to a local stormwater drainage, containment and/or treatment system.
- 30) Applicant will clear debris as needed from culverts, ditches, dips and other drainage structures in any WUS to prevent clogging or conditions that may lead to washout.

Table 2 - EPA 401 WQC for Tribal Lands (All Indian Reservations except Fort Apache, Hopi, Hualapai and Navajo Indian Reservations)

NWP	Conditional Certification		Notification	Impact Limits	Notes
	General Conditions	Specific Conditions			
1 - Aids to Navigation	X		MPCN	None	
2 - Structures in Artificial Canals	X		MPCN	None	
3 - Maintenance	X	X	PCN or MPCN	Generally no increase in fill footprint	1,2
4 - Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities	X		MPCN	None	
5 - Scientific Measurement Devices	X		MPCN	25 cyds	
6 - Survey Activities	X		MPCN	25 cyds	
7 - Outfall Structures and Associated Intake Structures	X		PCN	None	
8 - Oil and Gas Structures on the Outer Continental Shelf	X		PCN	None	
9 - Structures in Fleeting and Anchorage Areas	X		MPCN	None	
10 - Mooring Buoys	X		MPCN	None	
11 - Temporary Recreational Structures	X		MPCN	None	
12 - Utility Line Activities	X	X	PCN or MPCN	**1/2 acre or 300'	3,4
13 - Bank Stabilization	X	X	PCN or MPCN	**1/2 acre or 300'	5
14 - Linear Transportation Projects	X	X	PCN or MPCN	**1/2 acre or 300' nontidal, 1/3 acre or 300' tidal	3
15 - U.S. Coast Guard Approved Bridges	X		MPCN	None	
16 - Return Water From Upland Contained Disposal Areas	X		MPCN	None	
17 - Hydropower Projects	X		PCN	None	
18 - Minor Discharges	X		PCN or MPCN	1/10 acre or 25 cyds	
19 - Minor Dredging	X		MPCN	25 cyds	
20 - Response Operations for Oil and Hazardous Substances	X		MPCN	None	
21 - Surface Coal Mining Activities	X	X	PCN	1/2 acre or 300'	6
22 - Removal of Vessels	X		PCN or MPCN	None	
23 - Approved Categorical Exclusion	X		PCN or MPCN	None	
24 - Indian Tribe or State Administered Section 404 Programs	X		MPCN	None	
25 - Structural Discharges	X		MPCN	None	
26 - [Reserved]					
27 - Aquatic Habitat Restoration, Establishment, and Enhancement Activities	X	X	PCN or MPCN	None	7
28 - Modifications of Existing Marinas	X		MPCN	None	
29 - Residential Developments	X	X	PCN or MPCN	**1/4 acres for single house, 1/2 acres or 300' for multi-unit	8, 9
30 - Moist Soil Management for Wildlife	X		MPCN	None	
31 - Maintenance of Existing Flood Control Facilities	X	X	PCN	None	10
32 - Completed Enforcement Actions	X		MPCN	5 acres non-tidal or 1 acre tidal	
33 - Temporary Construction, Access, and Dewatering	X		PCN	None	
34 - Cranberry Production Activities	X		PCN	10 acres	
35 - Maintenance Dredging of Existing Basins	X		MPCN	Lesser of previously authorized or controlling depths	
36 - Boat Ramps	X		PCN or MPCN	50 cyds, 20'-wide ramp	8
37 - Emergency Watershed Protection and Rehabilitation	X		PCN or MPCN	None	
38 - Cleanup of Hazardous and Toxic Waste	X		PCN	None	
39 - Commercial and Institutional Developments	X	X	PCN or MPCN	1/2 acre or 300' non-tidal	8
40 - Agricultural Activities	X	X	PCN or MPCN	1/2 acre or 300' non-tidal	8
41 - Reshaping Existing Drainage Ditches	X	X	PCN or MPCN	**1/2 acre or 300' non-tidal	8
42 - Recreational Facilities	X	X	PCN	1/2 acre or 300' non-tidal	
43 - Stormwater Management Facilities	Individual Certification Required		MPCN	Not Applicable	
44 - Mining Activities	X	X	PCN or MPCN	1/2 acre or 300' non-tidal	8
45 - Repair of Uplands Damaged by Discrete Events	X	X	PCN or MPCN	**1/2 acre or 300'	8
46 - Discharges in Ditches	X	X	PCN or MPCN	**1/2 acre or 300' non-tidal	8
47 - [Reserved]					
48 - Commercial Shellfish Aquaculture Activities	X	X	PCN or MPCN	**Impacts of submerged aquatic veg. prohibited	
49 - Coal Remining Activities	X	X	PCN or MPCN	**1/2 acre or 300' non-tidal	8
50 - Underground Coal Mining Activities	X	X	PCN or MPCN	1/2 acre or 300' non-tidal	8
51 - Land-Based Renewable Energy Generation Facilities	X	X	PCN or MPCN	1/2 acre or 300' non-tidal	8
52 - Water-Based Renewable Energy Generation Pilot Projects	X	X	PCN or MPCN	1/2 acre or 300'	

X=Conditional Certification requires compliance with General and Specific Conditions on following pages.

MPCN=Modified Pre-Construction (MPCN) must be submitted to EPA even though Corps notification is not required.

PCN=Pre-Construction Notification (PCN) submitted to Corps must also be submitted to EPA.

** Impacts limits are modified by EPA

- Notes:
1. No undersized structures
 2. Bioengineering used whenever practicable
 3. Only once per single and complete project with independent utility
 4. Waiver approval required from EPA for 300"
 5. Waiver approval required from EPA
 6. EPA approves mitigation plan first
 7. Approval required from EPA
 8. Waiver approval required from EPA
 9. No recreational impacts authorized
 10. Approval for levee vegetation removal required from EPA

EPA 401 WQC General and Specific Nationwide Permit Conditions for Tribal Lands

(All Indian Reservations except Fort Apache, Hopi, Hualapai and Navajo Indian Reservations)

General Conditions

Projects that are unable to comply with the general conditions of this programmatic certification are denied certification without prejudice and the applicant must apply to EPA for an individual certification. Applicants can apply for an individual certification by providing the same content required in a MPCN described in General Condition 01. *Notification*, of this programmatic certification, but EPA may request additional project information for individual certifications after receiving notification materials. When an individual certification is required, EPA will strive to issue, deny, or waive certification within sixty days of receipt of complete project information, but our review shall not exceed one year, the statutory limit beyond which certification is considered waived.¹

01. Notification - To improve the government's ability to demonstrate whether the NWP program has minimal adverse impacts to the aquatic environment, individually and cumulatively, all NWP-authorized projects proceeding on tribal lands within Region 9 shall submit a form of notification to EPA Region 9 as described below.² Notification is required in order to be eligible for any NWP under this certification.

Projects seeking authorization under this certification will fall under one of the following two notification categories:

Pre-Construction Notification (PCN):

The Corps already requires a PCN, subject to criteria in the Corps' General Condition 31, because the project proposes use of a NWP that requires a PCN automatically or for specific activities authorized by the NWP. Applicants must simply forward a second copy of the PCN already required by the Corps to EPA Region 9 for notification. If a PCN is already required by the Corps and a waiver of impact limits is proposed beyond what is approved under this certification, applicants must include written determinations specified in General Condition 02. *Waivers* for EPA approval.

Modified Pre-Construction Notification (MPCN):

a) The Corps does not require a PCN for any activities authorized under the NWP proposed for use, or for impacts below limits identified in the NWP for a PCN. Applicants must forward a MPCN to EPA Region 9 for notification, subject to the criteria below. If a waiver of impact limits is proposed beyond what is approved under this certification, applicants must include written determinations specified in General Condition 02. *Waivers* for EPA approval. 1) **Timing**. Applicants shall submit an MPCN to EPA Region 9 as early as possible, and in advance of any authorization letter from the Corps allowing the applicant to proceed under a given NWP. When an EPA approval is required by condition of this certification, EPA will act within sixty days of receiving a complete MPCN. 2) **Content**. MPCNs must be in writing (electronic mail submittal is acceptable) and include the following information: a) Name, address and telephone numbers of the applicant and any agents or representatives. If available, the electronic mail address and fax numbers for these persons; b) Location of the proposed project; c) A description of the proposed project and impacts including i) the project's purpose; ii) direct and indirect adverse environmental effects the project would cause, including the proposed acreages and linear feet (for streams) of waters impacted, avoided, and where applicable, created or otherwise mitigated; iii) any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to determine compliance with NWP and EPA 401 conditions and to determine whether compensatory mitigation may be necessary. Maps, drawings and/or photographs of the project area and aquatic resources are not mandatory, but usually help to clarify the project and allow for quicker review. At minimum, a narrative description of any special aquatic sites and other waters of the United States on the project site must be included; b) Consistent with General Condition 02. *Waivers*, a written demonstration that any proposed impact limit waiver that may be allowable under this certification will result in minimal impacts to aquatic resource functions; c) Consistent with General Condition 03. *Avoidance, Minimization, and Mitigation*, a written statement documenting measures taken to avoid and minimize temporary and permanent impacts to waters of the U.S.; d) Consistent with General Condition 04. *Prohibition on the Multiple Use of One NWP for a Single Project*, for proposed utility or transportation projects where the same NWP is proposed at multiple locations, a written determination will be provided describing independent utility of each impact location and how the project will not contribute to more than minimal direct, indirect and cumulative impacts to waters of the U.S., either at the impact site or to upstream, downstream, or adjacent aquatic resources. e) The name(s) of any species listed as endangered or threatened under the Endangered Species Act which may be adversely affected by the proposed work, either directly or by impacting designated critical habitat; f) Identification of any cultural or historic properties listed in, or eligible for listing in, the National Register of Historic Places that may be adversely affected by the proposed work. Written notification should be mailed to USEPA Region 9, WTR-8, 75 Hawthorne Street, San Francisco, CA 94105.

02. Waivers - For certain NWPs, Corps District Engineers may waive impact thresholds for intermittent and ephemeral drainages by making a written determination that the discharge will result in minimal adverse effects. To ensure that these waters, commonly found on tribal lands in the arid southwest, receive an adequate level of protection, and to prevent the NWP Program from having more than minimal adverse impacts to the aquatic environment, all proposed impact limit waivers are denied under this certification unless EPA approves a written determination that the waiver will not exceed minimal impacts to aquatic resource functions. For some NWPs where the Corps does not include an impact limit, EPA has added an impact limit as a permit-specific condition. Some of these NWPs also include a condition that a waiver may be provided when EPA approves a written determination that the waiver will not exceed minimal impacts to aquatic resource functions. Impacts to special aquatic sites are not permitted under this certification unless EPA approves a written determination that impacts to aquatic resource functions will be minimal. "Special aquatic sites" include sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs and riffle pool complexes. When EPA approval is required for a waiver, EPA will act within sixty days of receiving a complete PCN or MPCN.

03. Avoidance, Minimization, and Mitigation - To protect water quality and beneficial uses of U.S. waters on tribal lands, all projects using NWPs must avoid discharges to the maximum extent practicable, and utilize the best available and practicable means of minimizing the adverse impact of discharges that cannot be avoided. A written statement documenting measures taken to avoid and minimize temporary and permanent impacts to waters of the U.S. will be provided to EPA and the Corps with each PCN or MPCN. To the extent practicable, temporary impact sites will be returned to pre-construction contours and substrate. Where applicable, banks shall be reseeded or replanted with native vegetation. EPA shall make a written determination, within sixty days of receipt of a complete PCN or MPCN, whether compensatory mitigation measures are required to ensure the activity will have only minimal adverse effects, but no such determination is required for a project to begin work if otherwise in compliance with the NWP, this programmatic certification, and any applicable tribal or local authorities' requirements. Nevertheless, should compensatory mitigation be determined necessary by EPA, the mitigation becomes a condition of water quality certification and thus a condition of the Corps' permit. Failure to address an EPA mitigation requirement would therefore place a permittee out of compliance with their NWP and potentially subject to a range of

¹ Clean Water Act Section 401 Certification (a): <http://water.epa.gov/lawsregs/guidance/wetlands/sec401.cfm>

² NOTE: this requirement does not modify or eliminate existing Corps requirements regarding PCNs for projects proceeding on tribal lands (or elsewhere).

Corps and EPA enforcement actions. The need for post-project performance and/or mitigation monitoring and reporting (if applicable) will be determined by EPA on a case-by-case basis.

04. Prohibition on the Multiple Use of One NWP for a Single Project - Permittees may not use the same NWP multiple times (more than once) for one single and complete project at locations that do not have independent utility; to do so circumvents acreage limitations of the NWPs and may result in more than minimal adverse impacts to water quality and other ecosystem services. For example, under this certification, linear transportation projects on tribal lands must sum the impacts of each proposed crossing of individual waters of the U.S. and use that total to determine eligibility for NWP 14 (Linear Transportation Projects). If the acreage or linear foot impacts exceed the limits of the applicable NWP (or combination of applicable different NWPs), minimal adverse impacts to water quality may be exceeded and the project is not eligible for 401 certification under this programmatic action. Under these circumstances, projects must seek individual certification from EPA, and EPA may grant, grant with conditions, waive, or deny 401 certification of the project under the NWP. In the event of a denial, the NWP would not be available to the project proponent and therefore applicants may need to apply to the Corps for authorization under a different General Permit, Letter of Permission, or Individual Permit as appropriate and determined by the Corps. EPA would review these other proposed permit actions for case-by-case certification. Note that, on a case-by-case basis, EPA may waive this General Condition and allow the use of multiple NWPs if the applicant so appeals, and demonstrates in their PCN or MPCN that authorization under the NWP will result in minimal and/or completely mitigated impacts to the aquatic environment, individually and cumulatively.

05. Use of Appropriate Fill Material - To the extent practicable, local, native materials should be used as fill material. (e.g., soil, sand, or rock from the site or near the site; clean building materials or clean imported earthen fill). Inappropriate and unauthorized fill materials include, but are not limited to: tires, junked or abandoned vehicles, appliances, or other equipment; garbage; debris; oil drums or other chemically contaminated vessels; artificial turf; non-native vegetation; etc. If an applicant has any doubts or questions about the suitability of a proposed fill material, they should consult with the Corps and/or EPA prior to discharging into waters of the U.S. Such consultation may be via phone, or written letter, fax or electronic mail.

06. Dewatered Conditions - Discharges below the ordinary high water mark or within jurisdictional wetlands are not approved under this certification unless the discharge site is naturally dewatered (e.g., seasonally dry), or dewatering has been authorized by the Corps, thereby avoiding direct discharge of pollutants into the water column. If the site is artificially dewatered, permittees shall, to the extent practicable, avoid dewatering techniques that require additional temporary or permanent discharges of fill material within jurisdictional waters (e.g., coffer dams).

07. Fills Within Floodplains - Projects requiring NWP authorization for discharges of fill material within 100-year floodplains shall include in their PCN or MPCN a statement of compliance with Executive Order 11988 (Floodplain Management). However, discharges within the FEMA-mapped 100-year floodplain associated with residential and commercial development are not certified for use under the NWP program on tribal lands. The 100-year floodplain is based on hydrologic conditions prior to permit issuance.

08. Best Management Practices - Except as specified in the application, no debris, silt, sand, cement, concrete, oil or petroleum, organic material, or other construction related materials or wastes shall be allowed to enter into or be stored where it may be washed by rainfall or runoff into waters of the U.S. Silt fences, straw wattles, and other techniques shall be employed as appropriate to protect waters of the U.S. from sedimentation and other pollutants. Water used in dust suppression shall not contain contaminants that could violate surface water or aquifer standards. Permittees and their contractors shall take necessary steps to minimize channel and bank erosion within waters of the United States during and after construction. A copy of the permit conditions shall be provided to all contractors and subcontractors, and will be posted visibly at project construction sites.

09. Transportation Projects - Permittees shall implement State transportation agencies' guidelines for construction sites to protect water quality and aquatic habitat. In California, CALTRANS has guidance in the *CALTRANS Stormwater Quality Manuals and Handbooks*³; in Nevada NDOT has guidance in their *NDOT Water Quality Manuals*⁴; and in Arizona, ADOT has guidance in their *Erosion and Pollution Control Manual*⁵.

10. Inspections - The permittee shall allow EPA representatives to inspect the authorized activity and any mitigation areas at any time deemed necessary to determine compliance with the terms and conditions of the NWP verification.

11. Buffers - Unless specifically determined to be impracticable by the Corps and EPA, for NWPs 29, 39, 40, and 42, the permittee shall establish and maintain upland buffers in perpetuity between upland structures constructed as part of the project approved by the NWP and all preserved open waters, streams and wetlands, including created, restored, enhanced or preserved waters of the U.S. Buffers should be vegetated whenever practicable. Plantings in buffers should be dominated by native species, and not include any federal or state listed invasive or noxious weed species⁶. Except in unusual circumstances, as determined by the Corps and EPA, buffers shall be at least 50 feet in width from the lateral limits of the Corp's jurisdiction⁷.

12. Protected Lands - The permittee shall record the NWP verification with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records of title of interest in real property for areas designated to be preserved as part of compensatory mitigation for authorized impacts, including any associated covenants or restrictions.

13. Impaired Water Bodies - If a proposed activity would result in dredge or fill in water bodies listed as impaired under Section 303(d) of the CWA, the PCN or MPCN must include specific measures that will be used to avoid exacerbating the impairment(s).⁸

³ <http://www.dot.ca.gov/hq/construc/stormwater/manuals.html>

⁴ http://www.nevadadot.com/About_NDOT/NDOT_Divisions/Engineering/Hydraulics/Water_Quality_BMP_Manuals.aspx

⁵ http://www.azdot.gov/inside_adot/OES/Water_Quality/Stormwater/Manuals.asp

⁶ <http://plants.usda.gov/java/noxiousDriver>

⁷ Ordinary high water mark in non-tidal and the mean higher high water line in tidal waters

⁸ EPA Region 9 lists of impaired water bodies: <http://www.epa.gov/region9/water/tmdl/303d.html>

Specific Nationwide Permits

NWP-01 Aids to Navigation - Subject to the General Conditions (GCs) above, this NWP is hereby programmatically certified.

NWP-02 Structures in Artificial Canals - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-03 Maintenance - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified.

"Currently serviceable structures" which may be maintained under this permit do not include undersized culverts or structures that cause or exacerbate channel incision, bank destabilization, and/or prevent fish and wildlife passage due to inadequate design or construction standards. Certification of this permit is granted only if the existing structure proposed to be maintained demonstrably preserves (via design, flow modeling or other information in the PCN) the natural functions of the affected aquatic resource when the structure is fully operational. Otherwise, an alternative permit should be utilized as appropriate (e.g., NWP 13 Bank Stabilization). Where existing bank stabilization structures are to be maintained, bioengineered methods shall be utilized to the extent practicable in lieu of "rip-rap" or other hardscape engineered materials. This permit shall not authorize the enlargement of, or increase in, the footprint of a structure within waters of the U.S., unless that enlargement consists of the replacement of existing artificial channel armoring materials (e.g., rip-rap, soil cement, etc.) with low-impact bioengineered natural channel design structures (e.g., log revetments, geotextile rolls/mats, root wads, brush mattresses, willow wattling, etc.)

NWP-04 Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities

Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-05 Scientific Measurement Devices - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-06 Survey Activities - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-07 Outfall Structures and Associated Intake Structures - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-08 Oil and Gas Structures on the Outer Continental Shelf - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-09 Structures in Fleeting and Anchorage Areas - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-10 Mooring Buoys - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-11 Temporary Recreational Structures - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-12 Utility Line Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of waters of the U.S., including intermittent and ephemeral streams. Only the 300 linear foot limit may be waived by EPA upon approval, consistent with General Condition 02. *Waivers*. Under this certification, NWP 12 can only be used once for a single and complete project having independent utility. When NWP 12 is proposed for multiple locations a written determination will be provided describing independent utility of each impact location for approval by EPA, consistent with General Condition 01. *Notification*. Permittees are required to ensure that the construction of utility lines does not result in the draining of any water of the U.S., including wetlands. This may be accomplished through the use of clay blocks, bentonite, or other suitable material (as approved by EPA) to seal the trench. For utility line trenches, during construction, the permittee shall remove and stockpile, separately, the top 6 – 12 inches of topsoil. Following installation of the utility line(s), the permittee shall replace the stockpiled topsoil on top and seed the area with native vegetation.

NWP-13 Bank Stabilization - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of waters of the U.S., including intermittent and ephemeral streams. All bank stabilization activities under this permit shall involve either the sole use of native vegetation or other bioengineered design techniques (e.g. willow plantings, root wads, large woody debris, etc.) or a combination of hard-armoring (e.g. rock) and native vegetation or bioengineered design techniques, unless specifically determined to be impracticable by the EPA.

NWP-14 Linear Transportation Projects - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of non-tidal waters of the U.S., including intermittent and ephemeral streams, and 1/3 acre or 300 linear feet of tidal waters of the U.S. NWP 14 can only be used once for a single and complete project having independent utility. When NWP 14 is proposed for multiple locations a written determination will be provided describing independent utility of each impact location for approval by EPA, consistent with General Condition 01. *Notification*. All bank stabilization activities under this permit shall involve either the sole use of native vegetation or other bioengineered design techniques (e.g. willow plantings, root wads, large woody debris, etc.) or a combination of hard-armoring (e.g. rock) and native vegetation or bioengineered design techniques, unless specifically determined to be impracticable by the EPA.

NWP-15 U.S. Coast Guard Approved Bridges - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-16 Return Water from Upland Contained Disposal Areas - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-17 Hydropower Projects - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-18 Minor Discharges - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-19 Minor Dredging - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-20 Response Operations for Oil and Hazardous Substances - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-21 Surface Coal Mining Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Before an applicant may use this permit, EPA must approve a compensatory mitigation plan sufficient to ensure impacts to aquatic resource functions are minimal.

NWP-22 Removal of Vessels - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-23 Approved Categorical Exclusions - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-24 Indian Tribe or State Administered Section 404 Programs - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-25 Structural Discharges - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-26 [Reserved]

This NWP is no longer in use. No certification is necessary.

NWP-27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities - Subject to the GCs above, and the following permit-specific condition, this NWP is hereby programmatically certified. Upon review of a PCN or MPCN, consistent with General Condition 01. *Notification*, EPA will approve or deny on a case-by-case basis whether the proposed project will result in a net increase in aquatic resource functions and services, consistent with the NWP. An individual certification may be required in the event EPA denies approval of a waiver for this NWP.

NWP-28 Modifications of Existing Marinas - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-29 Residential Developments - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to 1/4 acre of impacts to non-tidal waters of the U.S. for single family houses, and the greater of 1/2 acre or 300 linear feet of impact to waters of the U.S. for multi-unit residential developments. Under this certification, this permit will not be used to approve residential developments and their attendant features within the 100-year floodplain. The 100-year floodplain is determined based on hydrologic conditions at the time of the NWP application. Recreational facilities such as playgrounds, playing fields, and golf courses are not authorized under this certification. These projects are separate and distinct from residential developments, are not required to be included in a residential development project for it to be practicable, and their construction within waters is normally avoidable.

NWP-30 Moist Soil Management for Wildlife - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-31 Maintenance of Existing Flood Control Facilities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Upon review of a PCN, consistent with General Condition 01. *Notification*, EPA will approve or deny on a case-by-case basis whether the proposed project will result in minimal impacts to waters of the U.S. for projects that include removal of levee vegetation.

NWP-32 Completed Enforcement Actions - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-33 Temporary Construction, Access, and Dewatering - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-34 Cranberry Production Activities - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-35 Maintenance Dredging of Existing Basins - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-36 Boat Ramps - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to 50 cubic yards of fill and ramps that are 20 feet wide or less.

NWP-37 Emergency Watershed Protection and Rehabilitation - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-38 Cleanup of Hazardous and Toxic Waste - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-39 Commercial and Institutional Developments - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Under this certification, this permit will not be used to approve commercial and institutional developments and their attendant features within the 100-year floodplain. The 100-year floodplain is determined based on hydrologic conditions at the time of the NWP application. Recreational facilities such as playgrounds, playing fields, and golf courses are not authorized under this certification. These projects are separate and distinct from commercial and institutional development, are not required to be included in such developments to be practicable, and their construction within waters is normally avoidable.

NWP-40 Agricultural Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Construction of farm ponds under this certification is limited to those that do not qualify for the Clean Water Act section 404(f)(1)(C) exemption because of the recapture provision at section 404(f)(2). Under this certification, no discharges are authorized which would impact hydrological connectivity between jurisdictional waters to such an extent as to convert waters of the U.S. to uplands, or otherwise isolate waters and eliminate federal regulatory jurisdiction. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of impacts to non-tidal waters of the U.S., including intermittent and ephemeral streams.

NWP-41 Reshaping Existing Drainage Ditches - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of impacts to non-tidal waters of the U.S., including intermittent and ephemeral streams. All sidecast materials from excavation must be stored and/or disposed of within non-jurisdictional uplands under this certification. A statement must be included in the notification as to how the applicant's activities will improve water quality. Under this certification, no discharges are authorized which would impact hydrological connectivity between jurisdictional waters to such an extent as to convert waters of the U.S. to uplands, or otherwise isolate waters to eliminate federal regulatory jurisdiction.

NWP-42 Recreational Facilities - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-43 Stormwater Management Facilities - Use of this NWP is not covered by this programmatic certification, and prospective users on tribal lands must seek individual project certification from EPA in all cases. NWP authorization of constructing stormwater facilities within waters of the U.S. discourages applicants from using practicable construction options that locate stormwater retention and detention facilities "off line" from streams. For example, retention facilities are often built as sediment (or debris) basins within a stream. This practice includes constructing a dam in the stream, excavating out a basin, and regular sediment removal to maintain the structure. These facilities cause considerable and unnecessary damages to stream functions as retention facilities can be located "off line" by constructing a high flow diversion channel above the ordinary high water mark. If applicants can continue to use the traditional, more damaging practices that are sanctioned by this NWP, there is no incentive for these management practices to improve. We do not believe NWP-43 for new facilities complies with the CWA Section 404(b)(1) Guidelines. CWA section 401 certification for this NWP is denied without prejudice. Applicants for projects on tribal lands must apply to EPA for individual certification if this NWP is proposed to be used. Applicants can apply for an individual certification by providing the same content required in a MPCN described in General Condition 01. *Notification*, of this certification.

NWP-44 Mining Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Applicants must ensure that mining activities (e.g., aggregate mining) approved by this NWP will not cause upstream head cutting or downstream incision. Notification to EPA shall include a narrative description and design drawing, when applicable, of any measure that will be implemented to comply with the condition. When used for in-stream aggregate mining activities, compensatory mitigation is likely to be required due to extensive indirect impacts and temporal losses typical of this type of impact.

NWP-45 Repair of Uplands Damaged by Discrete Events - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified.

Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of impacts to non-tidal waters of the U.S., including intermittent and ephemeral streams.

NWP-46 Discharges in Ditches

Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified.

Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of impacts to non-tidal waters of the U.S., including intermittent and ephemeral streams.

NWP-47 [Reserved] - This NWP is no longer in use. No certification is necessary.

NWP-48 Commercial Shellfish Aquaculture Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Under this certification, impacts to submerged aquatic vegetation are prohibited, consistent with NWP 19. *Minor Dredging*, and NWP 36. *Boat Ramps*.

NWP-49 Coal Remining Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of impacts to non-tidal waters of the U.S., including intermittent and ephemeral streams. Applicants must provide information in the PCN illustrating that activities authorized under NWP-49 will result in a net increase in aquatic resource functions.

NWP-50 Underground Coal Mining Activities - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-51 Land-Based Renewable Energy Generation Facilities - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-52 Water-Based Renewable Energy Generation Pilot Projects - Subject to the GCs above, this NWP is hereby programmatically certified.

BID PROPOSAL
CITY OF PHOENIX, ARIZONA
OFFICE OF THE CITY ENGINEER
PROJECT TITLE: Avenida Rio Salado / Broadway Road – Phase II
PROJECT NO.: ST85100371-1
BOND ISSUE OR BUDGET PROJECT

PROPOSAL to the City Engineer of the City of Phoenix.

In compliance with the Advertisement for Bids, by the City Engineer, the undersigned bidder:

(Print or Type Contractor Name)

Having examined the contract documents, site of work and being familiar with the conditions to be met, hereby submits the following proposal for furnishing the material, equipment, labor and everything necessary for the completion of the work listed and agrees to execute the contract documents and furnish the required bonds and certificates of insurance for the completion of said work, at the locations and for the prices set forth on the inside pages of this form.

Understands that construction of this project shall be in accordance with all applicable Maricopa Association of Governments' (MAG) Uniform Standard Specifications and Uniform Standard Details, latest revision, and the City of Phoenix Supplements, latest revision to the MAG Uniform Standard Specifications and Details, except as otherwise required by the project plans and specifications.

No proposal may be withdrawn for a period of 50 days after opening without consent of the Contracting Agency through the body or agent duly authorized to accept or reject the proposal except in the case of federally-assisted projects.

Understands that his proposal will be submitted with a proposal guarantee of cash, certified check, cashier's check or surety bond for an amount not less than ten (10) percent of the amount bid, as referenced in the Call for Bids.

Agrees that upon receipt of Notice of Award, from the City of Phoenix, he will execute the contract documents within 10 calendar days.

Work will be completed within 600 calendar days, beginning with the day following the starting date specified in the Notice to Proceed. The time allowed for completion of the work includes lead time for obtaining the necessary materials and/or equipment and approvals.

The bidder will acknowledge all addenda in writing. By writing the addendum number(s) below, the bidder agrees that this proposal is computed with consideration of the specification book(s) plus any addenda.

<u>ADDENDUM NO.</u>	<u>DATE</u>	<u>ADDENDUM NO.</u>	<u>DATE</u>
_____	_____	_____	_____
_____	_____	_____	_____

Project No: ST85100371

BID PROPOSAL

Item	No.	Description	Unit	Quantity	Unit Price	Total
1	E6992000	ALLOWANCE FOR STORMWATER POLLUTION PREVENTION BEST MANAGEMENT PRACTICES (BMP'S)	ALLOWANCE	1	\$ 75,000.00	\$ 75,000.00
2	M1042005	ALLOWANCE FOR EXTRA WORK	ALLOWANCE	1	\$ 900,000.00	\$ 900,000.00
3	M1095011	ALLOWANCE FOR REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL	CU. YD.	1,000		\$
4	M3010001	SUBGRADE PREPARATION	SQ. YD.	99,811		\$
5	M3100000	AGGREGATE BASE COURSE	TON	2,112		\$
6	M3210120	ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2, 2" THICK	TON	10,886		\$
7	M3210125	ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2, 2-1/2" THICK	TON	196		\$
8	M3210200	ASPHALT CONCRETE SURFACE COURSE, TYPE C 3/4	TON	847		\$
9	M3210355	ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2, 5-1/2" THICK	TON	29,915		\$
10	M3211001	ALLOWANCE FOR TEMPORARY ASPHALT CONCRETE PAVEMENT, TYPE C 3/4, 2" THICK	TON	600		\$
11	M3240090	PORTLAND CEMENT CONCRETE PAVEMENT, CLASS A, 9" THICK	SQ. YD.	805		\$
12	M3241063	CONCRETE AREA DRAIN APRON, PER DETAIL NO. 1	EACH	3		\$
13	M3290100	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	77		\$
14	M3362100	MICROSEAL COAT, TYPE II	SQ. YD.	56,984		\$
15	M3400000	CONCRETE MEDIAN NOSE	SQ. FT.	1,564		\$
16	M3400405	DECORATIVE CONCRETE SIDEWALK, STD. DETAIL P-1230 MODIFIED (6" THICK)	SQ. FT.	2,700		\$
17	M3400406	CONCRETE SIDEWALK, STD. DETAIL P-1230 MODIFIED (6" THICK), CLASS A CONCRETE	SQ. FT.	89,105		\$
18	M3400409	CONCRETE SIDEWALK, STD. DETAIL P-1230, MODIFIED, 9" THICK; CLASS A CONCRETE	SQ. FT.	9,859		\$
19	M3400415	TRUNCATED DOMES FOR SIDEWALK RAMPS	SQ. FT.	422		\$
20	M3400543	CONCRETE DRIVEWAY ENTRANCE, STD. DETAIL P-1243	SQ. FT.	19,753		\$

Item	No.	Description	Unit	Quantity	Unit Price	Total
21	M3400566	CONCRETE DRIVEWAY ENTRANCE, STANDARD DETAIL P-1255-2 (9" THICK)	SQ. FT.	7,623		\$
22	M3400657	CONCRETE BUS BAY PAVEMENT PER DETAILS	SQ. FT.	16,618		\$
23	M3400664	CONCRETE DRIVEWAY ENTRANCE, STANDARD DETAIL P1255-1 (9" THICK)	SQ. FT.	7,599		\$
24	M3401260	CONCRETE BUS SHELTER/ACCESSORY PAD, STD. DETAIL P-1260	SQ. FT.	6,399		\$
25	M3401262	CONCRETE BUS SHELTER/ACCESSORY PAD, STD. DETAIL P-1262	SQ. FT.	1,730		\$
26	M3402201	COMBINED CONCRETE CURB AND GUTTER, STD. DETAIL 220, TYPE "A", H=6"	LIN. FT.	20,706		\$
27	M3402202	COMBINED CONCRETE CURB AND GUTTER, STD. DETAIL 220, TYPE "A", H=4"	LIN. FT.	158		\$
28	M3402204	CONCRETE ROLL CURB AND GUTTER, STANDARD DETAIL 220, TYPE "D"	LIN. FT.	1,378		\$
29	M3402220	COMBINED CURB AND GUTTER, STANDARD DETAIL 220, TYPE "A", H=6", MODIFIED 9" GUTTER PAN, CLASS "A" CONCRETE	LIN. FT.	2,426		\$
30	M3402221	CONCRETE SINGLE CURB, STD. DETAIL 222, TYPE "A"	LIN. FT.	18,956		\$
31	M3420000	DECORATIVE PAVEMENT PER DETAIL	SQ. FT.	12,254		\$
32	M3450001	ADJUST EXISTING VALVE BOX & COVER	EACH	52		\$
33	M3450020	ADJUST EXISTING MANHOLE FRAME AND COVER, MAG STD DETAIL 422 AND COP DETAIL P-1430	EACH	68		\$
34	M3500005	REMOVE EXISTING MANHOLE	EACH	9		\$
35	M3500010	REMOVE PORTLAND CEMENT CONCRETE SINGLE CURB; CURB AND GUTTER; HEADER CURB OR EMBANKMENT CURB	LIN. FT.	12,142		\$
36	M3500020	REMOVE PORTLAND CEMENT CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SQ. FT.	49,460		\$
37	M3500036	REMOVE CATCH BASIN	EACH	34		\$
38	M3500040	REMOVE PIPE, BACKFILL & COMPACT	LIN. FT.	5,736		\$

Item	No.	Description	Unit	Quantity	Unit Price	Total
39	M3500060	REMOVE ASPHALT CONCRETE PAVEMENT	SQ. YD.	1,000		\$
40	M3500110	REMOVE EXISTING FENCE	LIN. FT.	3,271		\$
41	M3500150	REMOVE TREE, 12" DIAM. AND LARGER	EACH	1		\$
42	M3500300	MISCELLANEOUS REMOVAL AND OTHER WORK	JOB	1		\$
43	M3500310	REMOVE EXISTING RIP-RAP	SQ. FT.	41,257		\$
44	M3503010	REMOVE EXISTING BARRICADE AND/OR GUARD RAIL	LIN. FT.	335		\$
45	M3510658	REMOVE AND DISPOSE OF EXISTING STREET LIGHTS	EACH	31		\$
46	M3513140	4" PVC ELECTRICAL CONDUIT	LIN. FT.	10,915		\$
47	M3515042	FURNISH AND INSTALL STREET LIGHT PER C.O.P. STREET LIGHTING PROCEDURES, STANDARDS AND SPECIFICATIONS MANUAL, LATEST EDITION.	EACH	31		\$
48	M3515065	EMERGENCY PRE-EMPTION CABLE	LIN. FT.	790		\$
49	M3515070	FURNISH AND INSTALL 43 WATT LED STREET LIGHT PER COP STREET LIGHTING PROCEDURES, STANDARDS, AND SPECIFICATIONS MANUAL, LATEST EDITION	EACH	4		\$
50	M3515075	FURNISH AND INSTALL 113 WATT LED STREET LIGHT PER COP STREET LIGHTING PROCEDURES, STANDARDS, AND SPECIFICATIONS MANUAL, LATEST EDITION	EACH	11		\$
51	M3515085	FURNISH AND INSTALL 113 WATT LED STREET LIGHT PER COP STREET LIGHTING PROCEDURES, STANDARDS, AND SPECIFICATIONS MANUAL, LATEST EDITION	EACH	62		\$
52	M4012000	TRAFFIC CONTROL DEVICES	LUMP SUM	1		\$
53	M4013000	ALLOWANCE FOR UNIFORMED, OFF-DUTY LAW ENFORCEMENT OFFICER	ALLOWANCE	1	\$ 60,000.00	\$ 60,000.00
54	M4051201	SURVEY MARKER, MAG STANDARD DET. 120-1, TYPE "A"	EACH	3		\$
55	M4051202	SURVEY MARKER, MAG STANDARD DET. 120-1, TYPE "B"	EACH	11		\$
56	M4154001	SAFETY POST / BOLLARD	EACH	14		\$
57	M4200005	6-FOOT CHAIN LINK FENCE (GALV)	LIN. FT.	1,940		\$

Item	No.	Description	Unit	Quantity	Unit Price	Total
58	M4200006	TEMPORARY 6-FOOT CHAIN LINK FENCE	LIN. FT.	1,000		\$
59	M4200011	SWING GATE PER PLANS	EACH	5		\$
60	M4303000	PLANT ESTABLISHMENT GUARANTEE AND MAINTENANCE (INCLUDING WATER AND POWER)	MONTH	12		\$
61	M4304000	DECOMPOSED GRANITE, 3/4" MINUS FOR GENERAL LANDSCAPE	CU. YD.	2,211		\$
62	M4305001	1 GALLON SHRUB	EACH	2,240		\$
63	M4305005	5 GALLON SHRUB	EACH	4,196		\$
64	M4305024	24" BOX, TREES	EACH	539		\$
65	M4305048	48" BOX, TREES	EACH	55		\$
66	M4400050	1/2", CLASS 315 PVC IRRIGATION PIPE	LIN. FT.	48,080		\$
67	M4400262	2" PVC IRRIGATION PIPE, SCH. 40	LIN. FT.	9,805		\$
68	M4403200	2" REDUCED PRESSURE BACKFLOW PREVENTION UNIT AND CAGE	EACH	3		\$
69	M4404000	PULL BOX	EACH	106		\$
70	M4404199	1" ELECTRIC REMOTE CONTROL VALVE AND EMITTER CONTROL ASSEMBLY PER DETAIL	EACH	63		\$
71	M4404320	2" GATE VALVE	EACH	63		\$
72	M4404400	FLUSH VALVES	EACH	172		\$
73	M4404510	MULTI-PORT EMITTER AND RISER ASSEMBLY WITH BUG CAP	EACH	2,302		\$
74	M4405904	4" SCHEDULE 80 PVC IRRIGATION SLEEVE	LIN. FT.	3,681		\$
75	M4406020	IRRIGATION CONTROLLER, INSTALLED PER PLAN	EACH	3		\$
76	M4711002	2" PVC CONDUIT UNDER NEW PAVEMENT OR LANDSCAPING	LIN. FT.	1,565		\$
77	M4711004	2 1/2" CONDUIT UNDER NEW PAVEMENT OR LANDSCAPING	LIN. FT.	4,915		\$
78	M4712002	NO. 5 JUNCTION BOX	EACH	28		\$
79	M4712003	NO. 7 JUNCTION BOX	EACH	10		\$
80	M4721001	FOUNDATION FOR TYPE A POLE	EACH	1		\$
81	M4721003	FOUNDATION FOR TYPE LM POLE	EACH	16		\$
82	M4721004	FOUNDATION FOR TYPE SM POLE	EACH	1		\$
83	M4721005	FOUNDATION FOR TYPE SR POLE	EACH	16		\$
84	M4721006	FOUNDATION FOR TYPE SQ POLE	EACH	3		\$
85	M4722001	POWER SERVICE PEDESTAL FOUNDATION	EACH	7		\$
86	M4722002	TRAFFIC SIGNAL CONTROLLER FOUNDATION	EACH	3		\$

Item	No.	Description	Unit	Quantity	Unit Price	Total
87	M4741001	TYPE A POLE PER DET	EACH	1		\$
88	M4741004	TYPE LM POLE PER DET	EACH	16		\$
89	M4741005	TYPE SM POLE PER DET	EACH	1		\$
90	M4741006	TYPE SR POLE PER DET	EACH	16		\$
91	M4741007	TYPE SQ POLE PER DET	EACH	3		\$
92	M4741012	35' MAST ARM FOR SR/SM POLE	EACH	2		\$
93	M4741013	40' MAST ARM FOR SR POLE	EACH	6		\$
94	M4741014	45' MAST ARM FOR SR POLE	EACH	4		\$
95	M4741016	55' MAST ARM FOR SQ POLE	EACH	2		\$
96	M4741017	60' MAST ARM FOR SQ POLE	EACH	1		\$
97	M4741025	COP LUMINAIRE MAST ARM	EACH	36		\$
98	M4741027	5' POLE EXTENSION FOR LM/SM/SR POLE	EACH	33		\$
99	M4741028	20' POLE EXTENSION FOR LM/SM/SR POLE	EACH	4		\$
100	M4751001	ELECTRICAL POWER SERVICE PEDESTAL CABINET (120/240 VOLT) (MEYERS MEUGL- W/TB)	EACH	7		\$
101	M4751002	TRAFFIC SIGNAL 8 PHASE CONTROLLER CABINET	EACH	3		\$
102	M4771050	REPLACE LUMINAIRE WITH LED FIXTURE	EACH	3		\$
103	M4791001	REMOVAL OF A POLE	EACH	14		\$
104	M4791003	REMOVAL OF LM POLE	EACH	3		\$
105	M4791004	REMOVAL OF LM POLE W/ 10' EXTENSION	EACH	4		\$
106	M4791005	REMOVAL OF M POLE W/ MAST ARM	EACH	11		\$
107	M4791008	REMOVAL OF SM/SR POLE W/ MAST ARM AND EXTENSION	EACH	4		\$
108	M4792001	REMOVAL OF CONTROLLER CABINET	EACH	3		\$
109	M4792002	REMOVAL OF POWER PEDESTAL	EACH	3		\$
110	M4793001	REMOVE TRAFFIC SIGNAL POLE FOUNDATION	CU. YD.	34		\$
111	M4794001	REMOVAL OF INCIDENTAL TRAFFIC ITEMS (PER INTERSECTION)	JOB	4		\$
112	M5050021	CONCRETE BARRIER PER SPECIAL DETAIL, SHEET 44, DETAIL B	LIN. FT.	123		\$
113	M5050105	TRACC ENERGY ABSORBING END TREATMENT	EACH	1		\$
114	M5051530	CONCRETE CATCH BASIN, TYPE "M-1, L=3- FT" PHX. SUPP. DETAIL P-1569-1	EACH	5		\$
115	M5051531	CONCRETE CATCH BASIN, TYPE "M-1, L=3- FT", PHX. SUPP. DETAIL P-1569-2	EACH	10		\$

Item	No.	Description	Unit	Quantity	Unit Price	Total
116	M5051532	CONCRETE CATCH BASIN, TYPE "M-2, L=3-FT", PHX. SUPP.DETAIL P-1569-1	EACH	3		\$
117	M5051535	CONCRETE CATCH BASIN, TYPE "M-1, L=6-FT" PHX. SUPP. DETAIL P-1569-1	EACH	2		\$
118	M5051536	CONCRETE CATCH BASIN, MODIFIED, TYPE "M-1, L=6-FT", PHX. SUPP. DETAIL P-1569-2	EACH	5		\$
119	M5051540	CONCRETE CATCH BASIN, TYPE "M-1, L=10-FT", PHX. SUPP. DETAIL P-1569-1	EACH	3		\$
120	M5051541	CONCRETE CATCH BASIN, MODIFIED, TYPE "M-1, L=10-FT", PHX. SUPP. DETAIL P-1569-2	EACH	3		\$
121	M5051545	CONCRETE CATCH BASIN, TYPE "M-1, L=17-FT", PHX. SUPP. DETAIL P-1569-1	EACH	2		\$
122	M5051546	CONCRETE CATCH BASIN, TYPE "M-1, L=17-FT", PHX. SUPP. DETAIL P-1569-2	EACH	4		\$
123	M5051550	CONCRETE CATCH BASIN, TYPE "M-2, L=6-FT" PHX. SUPP. DETAIL P-1569-1	EACH	1		\$
124	M5051551	CONCRETE CATCH BASIN, MODIFIED, TYPE "M-2, L=6-FT", PHX. SUPP. DETAIL P-1569-2	EACH	2		\$
125	M5051556	CONCRETE CATCH BASIN, MODIFIED, TYPE "M-2, L=10-FT", PHX. SUPP. DETAIL P-1569-2	EACH	5		\$
126	M5051561	CONCRETE CATCH BASIN, MODIFIED, TYPE "M-2, L=17-FT", PHX. SUPP. DETAIL P-1569-2	EACH	1		\$
127	M5051563	CONCRETE CATCH BASIN, TYPE "M-2,L=3-FT", PHX. SUPP. DETAIL P-1569-2	EACH	1		\$
128	M5051566	CONCRETE CATCH BASIN, TYPE "N, SINGLE", PHX. SUPP. DETAIL P-1570, MODIFIED WITH CONCRETE APRON	EACH	3		\$
129	M5051580	CONCRETE CATCH BASIN, TYPE "P", PHX. SUPP. DETAIL P-1571	EACH	10		\$
130	M5051588	CONCRETE CATCH BASIN, TYPE "R", PHX. SUPP. DETAIL P-1573	EACH	6		\$
131	M5051590	SLOTTED VANE DRAIN INLET	LIN. FT.	33		\$
132	M5100060	CONCRETE BLOCK MASONRY WALL	SQ. FT.	522		\$
133	M5100066	CONCRETE BLOCK MASONRY RETAINING WALL, PER PLANS	LIN. FT.	293		\$
134	M6014900	TRENCHING FOR STREET LIGHT CIRCUIT	LIN. FT.	17,178		\$

Item	No.	Description	Unit	Quantity	Unit Price	Total
135	M6101801	RELOCATE EXISTING WATER METER, BOX, AND COVER	EACH	8		\$
136	M6101807	WATER SERVICE CONNECTION & NEW METER	EACH	3		\$
137	M6101810	3/4" OR 1" WATER METER SERVICE CONNECT. PIPE AND FITTINGS, MAIN TO METER, FURNISH & INSTALL	LIN. FT.	208		\$
138	M6101850	ALLOWANCE FOR EXCESS DUCTILE IRON FITTINGS, FURNISH AND INSTALL	ALLOWANCE	1	\$ 10,000.00	\$ 10,000.00
139	M6103706	WATERLINE REALIGNMENT, 6" AND 8", CONTINGENT ITEM	EACH	9		\$
140	M6103710	WATERLINE REALIGNMENT, 10" AND 12", CONTINGENT ITEM	EACH	3		\$
141	M6104006	6" DUCTILE IRON WATER PIPE & FITTINGS, RESTRAINED, FURNISH & INSTALL	L. F.	381		\$
142	M6108006	FIRE HYDRANT FURNISHED BY THE CITY OF PHOENIX, INSTALL	EACH	11		\$
143	M6108007	FIRE HYDRANT, SALVAGE & DELIVER TO THE CITY OF PHOENIX	EACH	11		\$
144	M6108015	RELOCATE WATER VALVE	EACH	1		\$
145	M6108053	RELOCATE BACKFLOW PREVENTION UNIT, PHX SUPP. DETAIL P-1352, 8"	EACH	2		\$
146	M6154008	8" SANITARY SEWER PIPE	LIN. FT.	1,763		\$
147	M6180018	18" STORM SEWER PIPE	LIN. FT.	1,980		\$
148	M6180024	24" STORM SEWER PIPE	LIN. FT.	1,586		\$
149	M6180030	30" STORM SEWER PIPE	LIN. FT.	120		\$
150	M6180036	36" STORM SEWER PIPE	LIN. FT.	263		\$
151	M6180048	48" STORM SEWER PIPE	LIN. FT.	3,657		\$
152	M6180427	PIPE PLUG, STANDARD DETAIL 427	EACH	16		\$
153	M6181018	18" CATCH BASIN CONNECTOR PIPE	LIN. FT.	363		\$
154	M6181578	STORM SEWER LATERAL PIPE CONNECTION, SPECIAL DETAIL 1578	EACH	8		\$
155	M6186010	24" X 24" X 18" PREFABRICATED TEE	EACH	6		\$
156	M6186032	36" X 36" X 18" PREFABRICATED TEE	EACH	2		\$
157	M6186141	48" X 48" X 18" PREFABRICATED TEE	EACH	14		\$
158	M6250005	STORM SEWER MANHOLE, MAG STANDARD DETAIL 522, COP SUPP. STD. DETAIL P-1520	EACH	21		\$
159	M6255021	CONSTRUCT 4-FOOT DIAMETER SANITARY MANHOLE, PER MAG DETAILS 420 AND 424	EACH	10		\$

Project No: ST85100371

BID PROPOSAL

Item	No.	Description	Unit	Quantity	Unit Price	Total
160	M6257450	REHABILITATION OF EXISTING SANITARY SEWER MANHOLE	EACH	3		\$
161	M6257900	DROP SEWER CONNECTION, MAG STANDARD DETAIL 426	EACH	2		\$
162	M6303006	6" VALVE, BOX AND COVER, FURNISH & INSTALL	EACH	8		\$
163	M6309067	DEBRIS CAP, INCLUDING LOCATOR COIL, INSTALL	EACH	61		\$
					TOTAL COST:	

PROPOSAL SUBMITTAL

PROJECT TITLE: Avenida Rio Salado
/ Broadway Road – Phase II
PROJECT NO.: ST85100371

THIS PROPOSAL IS SUBMITTED BY _____

a corporation organized under the laws of the State of _____

a partnership consisting of _____

a joint venture consisting of _____

or individual trading as _____

of the City of _____

FIRM _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

PHONE _____ FAX _____

BY _____

Officer and Title (signature)

Officer and Title (print or type)

Date

WITNESS: If Contractor is an individual
(signature)

ATTEST: If Contractor is Corporation or Partnership
(signature and title)

SURETY BOND

Project No.: ST85100371-1

That we, _____, as Principal, (hereinafter called the Principal) and the _____, a corporation duly organized under the laws of the State of _____, as Surety, (hereinafter called the Surety) are held and firmly bound unto the City of Phoenix as Obligee, in the sum of ten (10) percent of the total amount of the bid of Principal, submitted by him to the City of Phoenix for the work described below, for the payment of which sum, well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents and in conformance with A.R.S. #34-201.

WHEREAS, the said Principal is herewith submitting its proposal for **AVENIDA RIO SALADO/BROADWAY ROAD – PHASE II**

NOW, THEREFORE, if the City of Phoenix will accept the proposal of the Principal and the Principal will enter into a contract with the City of Phoenix in accordance with the terms of such proposal and give such Bonds and Certificates of Insurance as specified in the Standard Specifications with good and sufficient Surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter into such contract and give such Bonds and Certificates of Insurance, if the Principal will pay to the City of Phoenix the difference not to exceed the penalty of the bond between the amount specified in the proposal and such larger amount for which the Obligee may in good faith contract with another party to perform the work covered by the proposal, then this obligation will be null and void, otherwise to remain in full force and effect.

Signed and sealed this _____ day of _____ A.D., 2017

Principal

Title

Surety

WITNESS:

A.M. BEST RATING:



City of Phoenix
Small Business Enterprise Program

SBE – DESIGN BID BUILD (DBB) CONTRACT CLAUSE

PROJECT #: ST85100371-1

CONTRACT #: TBD

PROJECT NAME: Avenida Rio Salado Parkway, Phase II

The City of Phoenix Small Business Enterprise Program (SBE) is managed and administered by the Equal Opportunity Department, Contract Compliance Division. Phoenix is one of the fastest growing, multicultural cities in the country and has shown a historical commitment to business diversity. The City strives to advance the economic growth of businesses through its Small Business Enterprise (SBE) Program.

Through a coordinated effort among several city departments, the SBE Program provides SBE certification, procurement opportunities, construction subcontracting utilization, small business management and technical assistance and educational services and networking opportunities.

The Small Business Enterprise (SBE) participation goal for this project is as follows:

SBE Required Goal = 11%

An annual SBE subcontracting participation goal has been established under this Contract. The Prime Contractor is required to demonstrate good faith efforts to utilize certified SBE firms to achieve this goal during the life of this contract.

For purposes of determining the Contractor's actual SBE utilization during and at the end of the project, the Contractor shall meet or exceed their **Proposed SBE Goal Percentage (as indicated on the Submitter's received SBE Utilization Form with their bid submittal)** for the contract, for ALL work performed on the project, including any amount paid for contingencies and allowances, and selected alternates. **The Proposed Goal shall meet/or exceed the Required Goal.**

For purposes of calculating the Contractor's "Proposed SBE Goal Percentage" on the Contractor's Statement of Proposed SBE Utilization form, bidders must not propose SBE subcontractors from areas identified on the bid form as contingencies and allowances or proposed alternates. Any SBE participation proposed from these areas will be not counted towards meeting the SBE goal requirement necessary for contract award.

The "Total Bid" shall be defined as the total of all the unit prices, or the lump sum total, including alternates and contingencies and allowances. The "Base Bid" shall be defined as the "Total Bid" minus "all proposed alternates" as determined by the project manager. Any additional dollars paid under this contract, including any selected alternate(s), shall be subject to the **Proposed SBE Goal Percentage** listed on the Contractor's Statement of Proposed SBE Utilization form.



City of Phoenix

Small Business Enterprise Program

SBE PROGRAM DEFINITIONS

Broker, Packager, Manufacturers' Representative, or Jobber means a firm that is not a manufacturer or regular dealer as defined herein.

Commercially Useful Function (CUF) means that a SBE firm is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. A SBE must perform at least 75% of the total cost of its contract with its own work force in order to be determined to be performing a CUF on the contract.

Contract is a written agreement obligating the seller or business enterprise to furnish goods or services as submitted and the Purchaser or Buyer to pay for such goods or services.

Contractor is an individual, partnership, joint venture, corporation or firm that executes a contract with the City to perform services requested by a solicitation or procurement. The Contractor may be direct or through an authorized representative.

Joint Venture (JV) is an association between two or more persons, partnerships, corporations, or any combination thereof, formed to carry on a single business activity. The JV is limited in scope and duration to this contract. The resources, assets and labor of the participants must be combined in an effort to accrue profit.

Manufacturer means a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.

Purchaser for purposes of this contract means the City.

Regular Dealer or Supplier means a business that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. The firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.

Small Business Enterprise (SBE) means a small business that has been determined to meet the requirements for SBE certification with the City of Phoenix and whose certification is in force at the time of the award of business by the City. A directory of currently certified SBE firm is located at <https://phoenix.diversitycompliance.com>.

Subcontract a contract at any tier below the prime contract, including purchase orders.

Subcontractor is an individual, partnership, joint venture, corporation or firm that holds a contract at any tier below the prime contract, including purchase orders.

Successful Submitter is a Submitter who has been selected to perform services requested by a solicitation or procurement.



City of Phoenix
Small Business Enterprise Program

SECTION I. SBE CERTIFIED FIRMS

Only firms certified by the City of Phoenix under Chapter 18, Article VIII of the Phoenix city code are eligible to fulfill the participation goal stated above. A firm's ***certification must be in the trade areas listed on the proposed utilization form and current and in force at the date and time of the bid opening deadline.***

The most current electronic directory of all certified **SBE** firms can be accessed at:

<https://phoenix.diversitycompliance.com>

If you need to verify certification status, please contact the Equal Opportunity Department at (602) 262-6790 and identify yourself as a prime contractor bidding on this project. Prime contractors should verify that the certifications of the SBE firms are current prior to bid opening. ***If a firm's certification expires and is not renewed prior to the bid-opening deadline, that firm will be ineligible to satisfy the goal.***

SECTION II. SBE BID PROCEDURES

The bid envelope shall contain all information and documents related to the SBE requirements of this section. ***Failure to properly complete the "Contractor's Statement of Proposed SBE Utilization" and "Letter of Intent to Perform as a Subcontractor/Supplier" forms, or submit a fully documented waiver request as described below, will result in bid rejection.*** The required documentation includes:

1. **A Contractor's Statement of Proposed SBE Utilization** - The form shall document the name of each SBE firm that will be awarded a subcontract; services to be performed by each subcontractor; dollar amount to be paid for those services; and the total dollar amount that is being proposed in SBE participation.
2. **A Letter of Intent to Perform as a SBE Subcontractor/Supplier** (required for each SBE subcontractor/supplier proposed) The form shall be completed by the SBE firm that will be awarded the subcontract. The form documents services to be performed by the subcontractor/supplier and the total dollar amount of the subcontract that will be awarded to the SBE. Only the services performed in the area(s) described by the SBE's certification description can be counted towards the SBE goal requirement.

The bidder's proposed utilization of SBE firms to fulfill the participation goal must be submitted on the "Contractor's Statement of Proposed SBE Utilization" form included in the specification packet. Additionally, each of the **SBE** subcontractors/suppliers the bidder is proposing to use to meet the goal requirement on this contract must complete the "Letter of Intent to Perform as an SBE Subcontractor/Supplier" (LOI) form. Both forms must be completed and submitted as part of the bid packet by the bid-opening deadline.



City of Phoenix

Small Business Enterprise Program

Failure to submit a completed “Contractor’s Statement of Proposed SBE Utilization” and signed “Letter of Intent to Perform as an SBE Subcontractor/Supplier” form for each of the proposed SBE firms will result in a bidder being declared non-responsive to the requirements of these specifications and the bid will not be considered. The forms must contain the following:

1. The Certified SBE firm name and the certified trade or services to be performed.
2. The dollar amount of the proposed subcontract to be awarded to each SBE firm.
3. The total dollar amount of all SBE proposed subcontracts.

In instances where an exact dollar amount to be subcontracted with a SBE firm cannot be determined, the bidder shall indicate on Columns 3 and 4 of Part B Section 1 of the “Letter of Intent To Perform as a SBE Subcontractor/Supplier” form the minimum guaranteed hours/units and dollar amount that will be paid to the SBE firm. This situation applies only when a Contractor proposes to utilize a SBE firm that engages in work related to a broker, supplier or; a bid that is based on a per hour charge as in hauling/trucking or construction site security. Please note that this exception does not permit the Prime contractor to complete or modify any other part of the LOI document. Both, the SBE and the bidder must sign the LOI document prior to bid submittal. By signing the document, the bidder affirms that it has not altered or modified the document in any way other than, if applicable, entering the Unit/Hours and Total Quote Amount in Part B SECTION 1.

If a bidder proposes to utilize a firm not certified by the City of Phoenix and/or not certified in the proposed scope of work at the time of bid, the proposed utilization amount for that firm will be deducted from the total proposed SBE utilization amount used for determining if the bidder is responsive to the requirements of this section. Bidder shall not include any amount the SBE firm has indicated in the LOI document as work it will sublet or is not covered in their certification description in the Contractor’s Statement of Proposed SBE Utilization form. Only amounts associated with the work to be performed by the SBE, and indicated in the SBE’s certification description, may be counted towards the SBE participation goal requirement of this section.

If the reduced proposed SBE utilization is insufficient to meet the established participation goal required for this contract, and no waiver documentation has been submitted, the bidder shall be determined to be **non-responsive** to the requirements of this section and the bid will not be considered.

A certified SBE firm bidding as a Prime Contractor cannot count the work it will self-perform towards meeting the required SBE subcontracting goal.

A “Letter of Intent to Perform as a Subcontractor/Supplier” will be used in determining compliance with the requirements of this section. **The proposed subcontract dollar amount listed for each SBE firm on the “Contractor’s Statement of Proposed SBE Utilization” must match the SBE dollar amount indicated in the boxed areas in Parts C, D or E of the signed “Letter of Intent to Perform as a Subcontractor / Supplier.”** Failure to submit a completed LOI document with the SBE’s and bidder’s signatures shall be determined to be **non-responsive** to the requirements of this section and the bid will not be considered.



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SECTION III. IF THE BIDDER IS UNABLE TO MEET THE GOAL

A fully documented waiver request detailing why the bidder has been unable to meet the SBE utilization goal in whole, or in part, and the “good faith” effort of the bidder to obtain SBE participation. In order to be viewed as good faith efforts, a bidder’s activities must be consistent with all activities that could reasonably be expected from a bidder who was actively and aggressively seeking to meet the SBE goal. To show proof of having exercised good faith efforts in trying to obtain bids from SBE firms to meet the utilization goals. The following factors are illustrative of those matters that shall be considered when judging whether the bidder made “good faith efforts”.

1. A cover letter addressed to the Street Transportation Procurement Section clearly indicating whether a full or partial waiver is being requested, the percentage to be waived, and the reasons the waiver is being sought.
2. If a partial waiver is being requested, a Bidder’s Statement of Proposed Utilization listing firms that will satisfy the portion of the goal that will be met must be included with the bid proposal. Additionally, a Letter of Intent to Perform as a Subcontractor/Supplier from each SBE firm that is proposed to be utilized must be included with the bid proposal.
3. Proof of contact with SBE firms, including but not limited to, fax logs, telephone logs, mail receipts, etc., including documentation of the number of times that firms were contacted, the dates of contact, and the name, phone number, fax number, and address of the contact person associated with each SBE firm. Solicitation of SBE subcontractors must be consistent with the solicitation of all subcontractors and must clearly demonstrate that SBE firms had sufficient time to submit an effective response.
4. Copies of the documents submitted to all subcontractors requesting their bid. This should include the scope of work to be bid and performed on the project.
5. Copies of bid responses/quotes from all subcontractors who bid to perform work on the project in the areas that SBE firms were also bidding on, including information as to why SBE bids were not considered.
6. Documentation that shows efforts made to provide assistance to SBE firms in the areas of bonding, insurance, or other contracting requirements.
7. Documentation of attendance at the pre-bid conference held for the project.
8. Documentation of contact made with City personnel seeking assistance in identifying eligible SBE firms for contracting opportunities on the project.



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SECTION IV. SBE WAIVER PROCEDURES

Requests for a partial or full waiver of the SBE goal for the project including all Good Faith Documentation shall be submitted as part of the bid packet. The request will be reviewed to ensure compliance with the requirements of this section. If the request is determined to meet the requirements, a waiver hearing will be scheduled and the bidder notified of the date, time, and place of the hearing. All waiver hearings are open to the public. However, only the designated representative for the contractor and City staff may participate in the proceedings.

The contractor requesting the waiver may appear at the hearing to present their request and answer questions from the Waiver Review Committee regarding their submittal. The Committee will consider the information and documentation that was submitted at the time of bid. The bidder may not present additional or new information at the hearing. At the conclusion of the hearing process the Committee will make independent recommendations on the request for waiver. The presiding officer, on behalf of the Committee, will provide a written summary of the Committee's recommendations to the City Manager's designee, the City Engineer. The City Engineer will make the final decision to grant or deny the waiver request. The City Engineer's decisions shall be final. The City will notify the contractor regarding the final decision of the City Engineer.

If a partial or full waiver of the SBE goal is granted to a bidder, the bidder shall be considered to have met the project goals and their bid will be considered responsive to the requirements of this section. If a waiver is denied, the bidder is deemed non-compliant and non-responsive to the requirements of this section and their bid will not be considered.

Failure to submit the Contractor's Statement of Proposed SBE Utilization form and a LOI from each SBE firm proposed OR a fully documented waiver request at the time of bid will be cause to determine the bidder non-responsive to the requirements of this section.



City of Phoenix

SECTION V. LIMITATION OF THE USE OF SUPPLIERS AND BROKERS TO FULFILL THE SBE GOAL

Proposed expenditures to brokers and suppliers can be used to meet the utilization goal, provided that the combined applicable expenditures do not exceed 25 percent (25%) of the total SBE goal requirement. Contractors may count one hundred percent (100%) of the dollars proposed to be paid to a SBE supplier, and all costs associated with fees and commission to be paid to a SBE broker, up to the 25% limitation.

Supplier (or Wholesaler) is defined as firm that does not directly manufacture the product being supplied and has an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A supplier is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

EXAMPLE: *An SBE goal of 5% has been established on a project where the contractor has submitted a base bid of \$1,000,000. This results in a dollar goal of \$50,000 to be subcontracted to SBE's. The contractor proposes to contract with a SBE supplier for \$100,000. Only \$12,500, or 25 percent (25%), may be counted towards achievement of the SBE goal for this project. The remaining \$37,500 must be achieved through the use of firms that are not suppliers or brokers.*

Broker is defined as firm that arranges or expedites services or transactions through the use of individuals not directly employed by the company. Brokers are not regular suppliers. Only costs associated with the fees and commission paid to the certified firm for providing such services may be applied towards the SBE contract goal.

The following defines the expenditures to SBE firms that are NOT subject to the 25% limitation. The following expenditures may be counted in their entirety towards fulfilling 100% of the utilization goal:

1. Expenditures to certified SBE firms that operate and maintain an establishment or factory to produce, on the premises, the materials or supplies purchased for the contract.
2. Expenditures to a certified SBE fabricator that operates and maintains a factory to substantially alter materials or supplies before resale.
3. Expenditures, including fees and commissions, charged to provide bona fide technical and professional personnel recruitment for the contract. The total cost paid that shall be comparable to the industry standards customarily charged for the same or similar services.
4. Expenditures, including fees and commissions, charged for providing bonds and insurance specifically required for the performance of the contract. The total cost shall be comparable to the industry standards charged for the same or similar services.



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Small Business Enterprise Program

All SBE firms proposed to participate on this contract opportunity must be SBE certified by the City of Phoenix prior to the date and time of the bid.

Participation on the contract will be calculated based on that portion (dollar value) of the contract that the SBE actually performs with its own forces. This includes the cost of supplies and materials obtained by the SBE for the work on the contract, **except** in cases when; it has been determined by the City *not* to be part of the firm's certification description; the SBE is certified as a "placer", "finisher", or "installer" of those materials only, or when the supplies and/or equipment it uses to perform its work is purchased or leased from the Contractor or its affiliate.

Special emphasis and care should be taken to ensure that the following types of participation are handled properly when preparing your bid packet, as failure to correctly calculate the allowable SBE participation in the following areas shall result in your bid being declared non-responsive if the SBE goal requirement is not met:

Fees & Commissions: SBE firms that supply a bona fide service for a fee or commission may be counted only to the extent of the fees or commissions charged by the SBE. This includes, but is not limited to, providing professional, technical, consultant, or managerial services, and bonds or insurance specifically required for the performance of a contract. Fees must be reasonable, not excessive, compared to fees customary for similar services.

EXAMPLE: A SBE firm that supplies uniformed officers for security or traffic control may count only the amounts charged as a commission. The hourly amount paid to the officers may not be counted. If the "per hour" bid amount to the prime contractor is \$35, and \$25 per hour will be paid to the officers, only \$10 per hour can be counted towards achieving the SBE goal. If the firm or bidder estimates that there will be 200 hours of work bid at a rate of \$35 per hour, only \$2,000 of the total \$7,000 bid could be counted.

Trucking & Hauling: The amount of a trucking/hauling subcontract that may be counted towards the utilization requirements may be limited. An SBE must itself own and operate at least one fully licensed, insured, and operational truck that will be used on the contract. In addition, trucks the SBE leases without drivers under a long-term leasing agreement may be considered part of the trucking firm's workforce and counted in full, provided the leasing agreement(s) is/are for a period of not less than 6 months and; **the leased vehicles have been recorded with the City's Equal Opportunity Department's Certification Office prior to the submittal of the LOI document.**

EXAMPLE: A SBE trucking firm uses seven trucks on a job; two are owned by the SBE and five are leased from other firms. If two of the five trucks are leased without drivers and the remaining three are leased with drivers from another firm, then the amount paid to the SBE for the services provided by the trucks it owns and the two it leases without drivers and operates with its own employees can be counted in full towards meeting the SBE requirements. The Contractor may not count any portion of the amount the SBE receives for the two trucks it leases with drivers towards the SBE utilization goal.



City of Phoenix

Small Business Enterprise Program

SECTION VI. POST AWARD SBE COMPLIANCE INFORMATION - DBB

Submittal of a bid to the City of Phoenix shall constitute an agreement by the bidder to comply with the SBE utilization requirements of this section should the bidder be awarded a contract. This includes, but is not limited to, the following compliance activities:

1. The contractor shall contract, or attempt to contract, in good faith with all SBE firms listed on the Bidder's Statement of Proposed SBE Utilization form submitted with their bid. The subcontract shall be for an amount that is equal to, or greater than, the total proposed dollar amount listed on the form, with the exception of instances where the City changes a scope of work in the contract that would reduce the available work in the subcontractor's area of performance.
2. The contractor shall not reduce any of the proposed SBE scopes of work or amounts indicated on the Bidder's Statement of Proposed SBE Utilization form without first submitting a Request for Exemption and receiving approval in writing from the City's Equal Opportunity Department (EOD), Contract Compliance Division.
3. The contractor shall notify the City of Phoenix Equal Opportunity Department immediately if any firm listed on the Bidder's Statement of Proposed SBE Utilization form refuses to enter into a subcontract or fails to perform according to the requirements of the subcontract.
4. Any reduction of retention by the City to the contractor shall result in a corresponding reduction to subcontractors or suppliers who have performed satisfactory work. The contractor has 14 days from the date their retention reduction takes effect to reduce retention to the subcontractors.
5. The contractor shall return all retention monies to subcontractors at such time as the work originally proposed by the subcontractor, and expressed in the original subcontract agreement, is complete and the purchaser (City) has accepted the work and paid the prime for the work performed by the subcontractor. Retention shall be paid no later than 30 days after such payment is made by the City.
6. The contractor shall act in good faith to meet the contract SBE utilization goal and provide all necessary documentation to show proof of those efforts as requested by the City.

If for any reason the SBE firm is decertified prior to the execution of a subcontract agreement, the bidder shall find additional SBE participation in the amount equivalent to or greater than that which was originally proposed for the SBE firm. Bidder shall make every good faith effort possible in finding a SBE replacement in the proposed trade area first, before considering SBE participation in other trade areas.



City of Phoenix
Small Business Enterprise Program

SECTION VII. Subcontract Assurances

Each contract signed by the Agency and the Successful Bidder and each subcontract signed by the Successful Bidder with a Subcontractor, including Subcontractors with lower tier Subcontractors must include the following assurances verbatim:

Prompt Payment of Subcontractors *The Contractor and Subcontractor shall promptly pay its lower tier subcontractors, sub consultants, or suppliers upon receipt of payment from the City of Phoenix (Agency).*

Progress Payments: In accordance with the Arizona Revised Statutes (ARS), Section 34-221(G), the Contractor(s) shall promptly pay its subcontractors, sub consultants, or suppliers within seven (7) calendar days of receipt of each progress payment from the Agency. Any diversion by the Contractor(s) of payments received for work performed on the contract, or failure to reasonably account for the application or use of such payments, constitutes grounds for a declaration of breach of the contract with the Agency.

Retention Payments: If the Agency reduces the Contractor's retention, the Contractor shall correspondingly, within 14 days, reduce the retentions held against the Subcontractors and suppliers that have performed satisfactory work.

Release of Retention: The Contractor(s) shall ensure prompt and full payment of retentions to Subcontractors and suppliers when their work is complete, the Agency has accepted the work, and the Agency has paid the Contractor for the work. The Contractor shall pay each Subcontractor's and supplier's retention no later than 30 days after the Agency pays Contractor for the completed scope of work.

Changes to Subcontracts and Values *The City of Phoenix prohibits Contractor(s) from altering the Contractor's Statement of Proposed SBE Utilization form without receiving prior, written consent from the City. The Equal Opportunity Department must be informed, in writing, and in advance of the following:*

- *Reduction to the scope of work performed by subcontractors working on the contract*
- *Changes in any of the subcontract values resulting in a reduced dollar amount*
- *Replacement and/or release of any subcontractor after contract award*

Contractor(s) and Subcontractor(s) are required to complete a Request for Exemption Form and have the written approval of the Contract Compliance Office prior to taking action on any of the above listed matters related to SBE subcontractors.

In the event that any provision of this subcontract varies from the provisions of the contract or subcontract, the provisions for SBE contract compliance as contained in Administrative Regulation 1.89, Section IX, shall provide definitive guidance.

Disclaimer: *Nothing in this section prevents the Contractor or Subcontractor from enforcing its subcontract with a lower tier Subcontractor or supplier for defective work, late performance, and other claims arising under the Subcontract.*



City of Phoenix

Small Business Enterprise Program

SECTION VIII. RECORDS and REPORTING REQUIREMENTS

1. Records

During performance of the Contract, the Successful Submitter shall keep all records necessary to document DBE and Small Business participation. The Successful Submitter shall provide the records to the Agency within 72 hours of the Agency's request and at final completion of the Contract. The Agency will prescribe the form, manner, and content of reports. The required records may include but not limited to:

- a) A complete listing of all Subcontractors and suppliers on the project;
- b) Each Subcontractor's and supplier's scope performed;
- c) The dollar value of all subcontracting work, services, and procurement;
- d) Copies of all executed Subcontracts, purchase orders, and invoices:
and
- e) Copies of all payment documentation.

2. Reports

- a. The contractor shall participate in all compliance reviews determined necessary by the City. This includes, but is not limited to participating in on-site reviews, providing monthly utilization reports of SBE activity, providing signed copies of subcontracts and/or purchase orders with each SBE listed on the Bidder's Statement of Proposed SBE Utilization form, and complying with any and all requests for information the City deems appropriate for effectively monitoring this contract for compliance with the SBE Program requirements.
- b. The contractor shall provide regular, monthly report/audit information that will assist us in effectively monitoring your compliance with the SBE Program requirements. This shall include listing all subcontractors working on the contract and reporting payments into the Certification and Compliance System <https://phoenix.diversitycompliance.com>. Reporting audits shall include all payments received from the City and payments you have issued to all subcontractors and suppliers. **Copies of the first 2 pages of the Pay Request submittal are required with each report. All Monthly audit reports are to be completed online by the 15th of every month. (<https://phoenix.diversitycompliance.com>).**
 - i. The total of all payments received from the City during the previous month.
 - ii. The first two pages of each payment application submitted for those payments.
 - iii. All payments made to Subcontractors during the previous month.

Before the Agency processes the Successful Submitter's final payment and/or outstanding retention held against the Successful Submitter, the Successful Submitter shall submit to the Agency a final certification of full and final payment to each Subcontractor in the form prescribed by the Agency. The form must be completed and certified by the Successful Submitter's and each Subcontractor's duly authorized agents.



City of Phoenix
Small Business Enterprise Program

SECTION IX. PERFORMANCE OF A COMMERCIALY USEFUL FUNCTION

The prime contractor may count only expenditures to SBE subcontractors that perform a commercially useful function in the work of the contract, as defined in Chapter 18 Article VI of the City Code. A "commercially useful function" constitutes performing real and actual services related to the contract.

SBE subcontractors may enter into second-tier subcontracts consistent with normal industry practices. If an SBE subcontracts greater than twenty-five **(25)** percent of the work of their contract, the SBE subcontractor shall be presumed not to be performing a commercially useful function. In this event, the prime contractor will not be allowed to claim any expenditure to the SBE subcontractor.

SECTION X. FAILURE TO COMPLY WITH THE SBE PROGRAM REQUIREMENTS

If the Equal Opportunity Department determines that the contractor will fail, or has failed, to meet the SBE subcontracting goals, and/or has failed to act in good faith to ensure compliance with the SBE conditions of its contract; it shall deem the contractor "noncompliant" and not in good standing. A noncompliant status shall result in the rejection of all future contract bids or offers for all projects or other procurements with the City until such time that the contractor has cured its breaches and demonstrates that it has faithfully performed its approved SBE utilization plan and all other provisions of this article required to be deemed in good standing. In addition to this action, the City may also exercise its option to impose any or all of the following remedies:

1. Withholding from the contractor ten percent (10%) of all future payments on the involved eligible project until it is determined that the contractor is in compliance;
2. Withholding from the contractor all future payments on the involved project until it is determined that the contractor is in compliance

Failure to cure a non-compliance status within the time frame provided by the City may result in further action, including but not limited to imposing any or all of the following sanctions:

1. Rejection of all future bids or offers from the contractor for any eligible project with the City or any of its departments or divisions for a period of (1) year after substantial completion of the contract.
2. Cancellation of the contract.



City of Phoenix

Small Business Enterprise Program

CONTRACTOR'S STATEMENT OF PROPOSED SBE UTILIZATION (DBB)

PROJECT NUMBER/NAME: ST85100371 / Avenida Rio Salado Parkway, Phase II

Required SBE Goal: 11%

SBE FIRMS	COMPANY NAME	SERVICES TO BE PROVIDED	SUPPLIER-YES/NO May not satisfy more than 25% of the Goal	SBE \$\$\$ AMOUNT from LOI Tables - Sections C, D, or E

(\$ _____) - (\$ _____) = (\$ _____)

Total Bid - Alternates = Base Bid

(\$ _____) ÷ (\$ _____) X 100 = _____ %

Total Proposed SBE Dollars ÷ Base Bid X 100 = Total Proposed SBE Participation %

Proposed SBE Percentage must equal to or exceed the Required SBE Required Goal Percentage.

All additional contract dollars, including selected alternates, will be subject to the Proposed SBE Goal %. NO rounding allowed.

Do not alter or adjust any dollar amount or percentage on this form; it may have a negative impact on your bid.

**Total Proposed
SBE Dollars**

\$

I hereby certify by signing below the foregoing SBE firms shall be contracted to work on the trades identified above and/or supply material/equipment for this project.

The information shown above is a **true reflection of the proposed subcontracts.**

COMPANY NAME: _____ EMAIL: _____ PHONE: _____

NAME & TITLE: _____

SIGNATURE: _____ DATE: _____



City of Phoenix

Small Business Enterprise Program

Letter of Intent (LOI) To Perform as an SBE Subcontractor – L.O.I. – 1

(THIS FORM **MUST** BE COMPLETED BY THE SBE SUBCONTRACTOR – BOTH SBE SUBCONTRACTOR & PRIME SIGNATURE ARE REQUIRED)

Project Number: ST85100371
Contract #:

Project Description: Avenida Rio Salado Parkway, Phase II

TO: _____ (Insert Name of Prime Contractor)

FROM: _____ (Insert Name of SBE Firm)

A. The undersigned declares that the firm bidding to perform the work described herein, has been granted certification by the City of Phoenix (COP) as a Small Business Enterprise (SBE) in the area(s) of:

(COP) Certification Description:

B. The undersigned is bidding to perform the following scope(s) of work on the above referenced project:

**SECTION 1 - COMPLETE THIS PORTION IF THE SCOPE OF WORK IS BEING BID BY UNIT PRICE OR HOURLY RATE
SUPPLIER, BROKER, TRUCKING, HAULING, UNIFORMED OFFICERS MUST USE THIS SECTION**

Scope of Work	Unit/Hourly Rate	# of Units/Hours	Total Quote Amount
			\$

SECTION 2 - GENERAL OR SPECIALTY CONSTRUCTION TRADE AREAS MUST USE THIS SECTION

Scope of Work	Total Quote Amount
	\$

C. Of the Total Quote Amount reflected in Part B-SECTION 2, the following scope(s) of work with the given amount **will not** be performed by the SBE or **is/are not** covered under the SBE's certification description:

Scope(s) of Work _____ Amount \$ _____

Subtract Amount in Part C above from the Total Quote Amount in Part B-Section 2 = * \$ _____
*** Only this amount shall be reflected on the Bidder's Statement of Proposed Utilization.**

D. If trucking services are included in Part B - SECTION 1 above, SBE **MUST** complete the following:

Of the Total Quote Amount noted in part B-Section 1, the SBE affirms that the amount of * \$ _____ shall be performed by drivers the firm employs, and trucks the SBE owns and leases without drivers.
(The amount referenced above is transferred from Step 9 of the Worksheet (L.O.I.W.-1). *Only this amount shall be on the Statement of Proposed Utilization)

E. All subcontractors providing Broker or Traffic Control/Security Services indicated in Part B-SECTION 1 above **MUST Complete the Following:**

Rate of the SBE's fees/commissions _____%; for a Total Amount in fees/commissions of: \$ _____
The Percentage and Total Amount referenced above is transferred from Steps 2 and 3 of the Worksheet (page L.O.I. W.-1).
Only the Total Amt in fee/commissions shall be reflected on the Bidders Statement of Proposed Utilization.

Should the prime contractor receiving this form be selected for award of the contract, the undersigned affirms that he/she will enter into an agreement to perform the work bid herein.

(SBE Subcontractor Authorized Signature)

(Date)

(Print Name and Title)

(Phone Number)

By signing this LOI document, the Prime Contractor affirms that it has not altered or modified this document in any way other than, if applicable, entering the Unit/Hours and Total Quote Amount in Part B SECTION 1.

(Prime Contractor Authorized Signature)

(Date)

(Print Name and Title)

(Phone Number)



City of Phoenix

Small Business Enterprise Program

**LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR/SUPPLIER
INSTRUCTIONS AND WORKSHEET - L.O.I. W.-1**

A Letter of Intent to Perform as a SBE Subcontractor/Supplier (required for each SBE subcontractor/supplier proposed). The form documents services to be performed by the subcontractor/supplier and the total dollar amount of the subcontract that will be awarded to the SBE. Only the services performed in the area(s) described by the SBE's certification description can be counted towards the SBE goal requirement.

Part I. Trucking and Hauling: SBEs should indicate on Part B-Section 1 and Part D, of the LOI form, the information regarding trucks to be used in executing the contract. The City allows the counting of all payments for services provided by trucks which the SBE owns. Trucks which the SBE leases on a long-term basis and are operated with drivers the SBE employs may also be counted in full. The payments for short-term leased trucks, with or without SBE employed drivers cannot be counted.

Only trucks for which leasing agreements have been submitted and approved by EOD as part of the SBE firm's current certification file shall be considered eligible for counting towards the goal.

STEP ONE	STEP TWO	STEP THREE
Value of work expected to be performed by trucks owned by the SBE (2 Trucks)	Value of work expected to be performed by trucks leased (with drivers) by the SBE on a long-term basis (2 Trucks)	Combined value of work expected to be performed by other trucking firms and/or trucks leased (without drivers) by the SBE (3 Trucks)
\$20,000	\$20,000	\$33,000
STEP FOUR	STEP FIVE	STEP SIX
Estimated value for services provided by all trucks the SBE will use on the contract. (Add Steps One, Two, and Three)	Expected value of work performed by trucks not eligible for counting as SBE participation (Value in Step Three)	Total estimated value that can be counted for SBE participation (Subtract Step Five from Step Four) \$73,000 - \$33,000
\$73,000	\$33,000	=\$40,000

Part II. Fees and Commissions: Insert the information from below under Step Three-Commission/Fees Percentage and the Countable Amount for SBE Participation into Part E of the LOI form. This part is applicable for the use of uniformed officers to provide traffic control and security and other services provided at an hourly rate by non-employees of the SBE contractor.

(The following information is provided as a sample only)

(The following information is provided as a sample only.)

STEP ONE			
Total Number of Hours	Per Hour Bid Amount	Calculation Formula: Total Gross Bid Amount	
200	\$35	200 x \$35 = \$7,000	
STEP TWO			
Per Hour Bid Amount	Officers Hourly Rate	SBE Firm Commission/Fee	Calculation Formula: Fees/Commissions Percentage
\$35	\$25	\$10	(10 / 35) * 100 = 28.57%
STEP THREE			
Gross Bid Amount (from Step One)	Commission/Fee % (from Step Two)	Calculation Formula: Amount Countable for SBE Participation	
\$7,000	28.57%	\$7,000 x .2857 = \$2,000	

Part III. Construction Trade Areas: SBE must indicate in the Scope of Work of Part B-Section 2 of the LOI form, **all** scope(s) of work associated with the Total Quote Amount. The SBE must complete Part C of the LOI form by entering the Scope of Work and amount not expected to be performed by the SBE or which is not covered under the SBE's certification description. Subtracting this amount from the Total Quote Amount in Part B-Sect. 2 will result in the portion of work that can be counted as SBE participation.

CITY OF PHOENIX

LIST OF MAJOR SUBCONTRACTORS AND SUPPLIERS

PROJECT NO.: ST85100371-1

PROJECT TITLE: AVENIDA RIO SALADO/BROADWAY ROAD – PHASE II

DESCRIPTION OF WORK OR MATERIALS (CONTRACTOR TO ENTER TRADE/SUPPLIER AREAS)	SELF- PERFORMED BY PRIME CONTRACTOR	SUBCONTRACTOR/SUPPLIER COMPANY NAME (IF NOT SELF-PERFORMED)	CONTACT PERSON	PHONE NUMBER
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			

I hereby certify by signing below that the above listed companies will be utilized to perform work on this project for an amount **equal to or greater than 5% of the base bid**. These companies will not be removed or replaced without prior written approval by the City of Phoenix Project Manager. The City requires, as in Paragraph D – List of Major Subcontractors and Suppliers in the Information for Bidders that ALL vendors are listed or you will be disqualified. If you are self-performing the work, you must still list any suppliers for materials, or list any contractors that will assist you in any form.

COMPANY NAME _____ SIGNATURE _____

NAME & TITLE _____ PHONE NUMBER _____ DATE _____

EMAIL ADDRESS _____

CITY OF PHOENIX

LIST OF ALL SUBCONTRACTORS AND SUPPLIERS

PROJECT NO.: ST85100371-1

PROJECT TITLE: AVENIDA RIO SALADO/BROADWAY ROAD – PHASE II

DESCRIPTION OF WORK OR MATERIALS (CONTRACTOR TO ENTER TRADE/SUPPLIER AREAS)	SELF- PERFORMED BY PRIME CONTRACTOR	SUBCONTRACTOR/SUPPLIER COMPANY NAME (IF NOT SELF-PERFORMED)	CONTACT PERSON	PHONE NUMBER
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			
	<input type="checkbox"/> YES <input type="checkbox"/> NO			

I hereby certify by signing below that the above listed companies will be utilized to perform work on this project. These companies will not be removed or replaced on the project without prior written approval by the City of Phoenix Project Manager. The City requires, as in Paragraph D - List of All Subcontractors and Suppliers in the Information for Bidders that ALL vendors are listed or you will be disqualified. If you are self-performing the work, you must still list any suppliers for materials, or list any contractor's that will assist you in any form.

COMPANY NAME _____ SIGNATURE _____

NAME & TITLE _____ PHONE NUMBER _____ DATE _____

EMAIL ADDRESS _____

Authorized Contact for this Disclosure Statement

Name: _____

Title: _____

E-mail: _____

Phone number: _____

FAX number: _____

List any other DBA, trade name, other identity, or EIN used in the last five (5) years, the state or country where filed, and the status (active or inactive): (if applicable): _____

Business Characteristics

Business entity type – Please check appropriate box and provide additional information:

- | | | |
|--------------------------|-------------------------------|------------------------------------|
| <input type="checkbox"/> | Corporation | Date of incorporation: _____ |
| <input type="checkbox"/> | Limited Liability Company | Date organized: _____ |
| <input type="checkbox"/> | Limited Liability Partnership | Date of registration: _____ |
| <input type="checkbox"/> | Limited Partnership | Date established: _____ |
| <input type="checkbox"/> | General Partnership | Date established: _____ |
| <input type="checkbox"/> | Sole Proprietor | How many years in business?: _____ |
| <input type="checkbox"/> | Other (explain) | Date Established: _____ |

Was the business entity formed in the State of Arizona? Yes _____ No _____

If no, indicate jurisdiction where Business Entity was formed: _____

Is the Business Entity currently registered to do business in Arizona with the Arizona Corporation Commission? Yes _____ No _____ Not required _____ (if sole proprietor or general partnership)

Does the Business Entity have a City of Phoenix business privilege license? Yes _____ No _____ If “no” explain and provide detail such as “not required” or “application in progress” or other reason.

Is the Business Entity publicly traded? Yes _____ No _____

Is the responding Business Entity a Joint Venture? Note: If the Submitting Business entity is a Joint Venture, also submit a questionnaire for each Business Entity

comprising the Joint Venture. Yes_____ No_____

Is the Business Entity's Principal Place of Business/Executive office in Phoenix? If "no" does the Business Entity maintain an office in Phoenix? Yes_____ No_____

Provide the address and phone number for the Phoenix office. _____

Is the business certified by Phoenix as a Small Business Enterprise? Yes_____ No_____

Identify Business Entity Officials and principal Owners:

Name(s) _____ Title _____ Percentage ownership ____%(Enter 0% if not applicable).

Name(s) _____ Title _____ Percentage ownership ____%(Enter 0% if not applicable).

Name(s) _____ Title _____ Percentage ownership ____%(Enter 0% if not applicable).

Name(s) _____ Title _____ Percentage ownership ____%(Enter 0% if not applicable).

Affiliates and Joint Venture Relationships

Does the Business entity have any Affiliates? Yes_____ No_____ Attach additional pages if necessary.

Affiliate name: _____

Affiliate EIN (if available):_____.

Affiliate's primary Business Activity:_____

Explain relationship with Affiliate and indicate percent ownership, if applicable. _____

Are there any Business Entity Officials or Principal Owners that the Business Entity has in common with this Affiliate? _____

Individual's name:_____

Position/Title with Affiliate:_____

Has the Business Entity participated in any joint Ventures within the past three years? Yes_____ No_____ (Attach additional pages if necessary)

Joint Venture Name:_____

Joint venture EIN (if applicable):_____

Identify parties to the Joint Venture:_____

Contract History

Has the Business Entity held any contracts with the city of Phoenix in the last three (3) years? Yes_____ No_____ If “yes” attach a list.

Integrity – Contract Bidding

Within the past three (3) years, has the Business Entity or any Affiliate been suspended or debarred from any government contracting process or been disqualified on any government procurement? Yes_____ No_____

Been subject to a denial or revocation of a government prequalification? Yes_____ No_____

Been denied a contract award or had a bid rejected based upon a finding of a non-responsibility by a government entity? Yes_____ No_____

Agreed to a voluntary exclusion from bidding/contracting with a government entity? Yes_____ No_____

Initiated a request to withdraw a bid submitted to a government entity or made any claim of an error on a bid submitted to a government entity? Yes_____ No_____

Initiated a request to withdraw a bid submitted to a government entity or made any claim of an error on a bid submitted to a government entity? Yes_____ No_____

For each “Yes” answer above, provide an explanation of the issues.

Integrity – Contract Award

Within the past three (3) years has the Business Entity or any Affiliate been suspended, cancelled, or terminated for cause on any government contract? Yes_____ No_____

Been subject to an administrative proceeding or civil action seeking specific performance or restitution in connection with any government contract? Yes_____ No_____

For each “yes” answer, provide an explanation. (Attach explanation on a separate sheet of paper).

Certifications/Licenses

Within the past three (3) years, has the Business Entity or Affiliate had a revocation, suspension, or disbarment of any business or professional permit and/or license? Yes_____ No_____

If “yes” provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, relevant dates, the government entity involved, and any remedial or corrective action(s) taken and the current status of the issues.

Legal Proceedings

Within the past three (3) years, has the Business Entity of any Affiliate:

Been the subject of an investigation, whether open or closed, by any government entity for a civil or criminal violation? Yes_____ No_____

Been the subject of an indictment, grant of immunity, judgment or conviction, (including entering into a plea bargain for conduct constituting a crime)? Yes_____ No_____

Received any OSHA citation and Notification of Penalty containing a violation classified as serious or willful? Yes_____ No_____

Had a government entity find a willful prevailing wage or supplemental payment violation? Yes_____ No_____

Been involved in litigation as either a plaintiff or a defendant involving a copyright or patent infringement violation or an anti-trust violation? Yes_____ No_____

Other than previously disclosed, for the past three (3) years:

(i) Been subject to the imposition of a fine or penalty in excess of \$1000 imposed by any government as a result of the issuance of citation, summons or notice of violation, or pursuant to any administrative, regulatory, or judicial determination? Yes_____ No_____

(ii) Been charged or convicted of a criminal offense pursuant to any administrative and/or regulatory action taken by any government entity? Yes_____ No_____

If "yes" provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, relevant dates, the government entity involved, and any remedial or corrective action(s) taken and the current status of the issues.

Leadership Integrity

If the Business Entity is a joint Venture Entity, answer "N/A – Not Applicable" to questions below:

Within the past three (3) years has any individual previously identified, or any other Business Entity Leader not previously identified, or any individual having the authority to sign, execute, or approve bids, proposals, contracts or supporting documentation with the city of Phoenix been subject to:

A sanction imposed relative to any business or professional permit and/or license? Yes_____ No_____

An investigation, whether open or closed, by any government entity for a civil or criminal violation for any business related conduct? Yes_____ No_____

DLB/dlb/828671V3



City of Phoenix
AFFIDAVIT OF IDENTITY

Your completion of this form is required by Arizona state law. A.R.S. §§ 1-501 and -50 only if you are a sole proprietor.

I, _____ (print full name exactly as on document),
hereby affirm, upon penalty of perjury, that I presented the document marked below to the City of
Phoenix, that I am lawfully present in the United States, and that I am the person stated on the
document. (select one category only)

☐ Arizona driver license issued after 1996.

Print first four numbers/letters from license:

--	--	--	--

☐ Arizona non-operating identification license.

Print first four numbers/letters:

--	--	--	--

☐ Birth certificate or delayed birth certificate issued in any state, territory or possession
of the U.S.

Year of birth: _____; Place of birth: _____

☐ United States Certificate of Birth Abroad.

Year of birth: _____; Place of birth: _____

☐ United States Passport.

Print first four numbers/letters on Passport:

--	--	--	--

☐ Foreign Passport with United States Visa.

Print first four numbers/letters on Passport:

--	--	--	--

Print first four numbers/letters on Visa:

--	--	--	--

☐ I-94 Form with a photograph.

Print first four numbers on I-94:

--	--	--	--

☐ USCIS Employment Authorization Document (EAD).

Print first four numbers/letters on EAD:

--	--	--	--

or Perm. Resident Card (acceptable alternative):

--	--	--	--

☐ Refugee Travel Document.

Date of issuance: _____; Refugee country: _____

☐ U.S. Certificate of Naturalization.

Print first four digits of CIS Reg. No.:

--	--	--	--

☐ U.S. Certificate of Citizenship.

Date of issuance: _____; Place of issuance: _____

☐ Tribal Certificate of Indian Blood.

Date of issuance: _____; Name of tribe: _____

☐ Tribal or Bureau of Indian Affairs Affidavit of Birth.

Year of birth: _____; Place of birth: _____

Signed: _____ Dated: _____