CITY OF BULLHEAD CITY, ARIZONA
PUBLIC WORKS DEPARTMENT

# HANCOCK ROAD PAVING PROJECT
# SPECIFICATIONS AND CONTRACT DOCUMENTS

## PROJECT NO. 27-PW-009

## OCTOBER 28, 2026

Registered Professional Engineer (Civil)
CERTIFICATE NO.
11289
DON N.
ANDERSON, JR.
Date Signed 10-28-26
ARIZONA, U.S.A.
EXPIRES 03-31-29

REV. 05/02/2024

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Registered Professional Engineer (Civil)
CERTIFICATE NO. 11289
DON N. ANDERSON, JR.
Date Signed 10-28-24
ARIZONA, U.S.A.
EXPIRES 03-31-29

# Construction Contract

# Hancock Road Paving Project

# Project No. 27-PW-009

**THIS AGREEMENT**, made and entered by and between CITY OF BULLHEAD CITY an Arizona municipal corporation, hereinafter designated the "CITY" and _____, Inc., an Arizona Corporation, hereinafter designated the "CONTRACTOR."

## RECITALS

A. The City Manager of the City of Bullhead City, Arizona, is authorized and empowered by approval of the City Council to execute this contract for construction services.

B. The project consists of the construction of the **Hancock Road Paving Project** in Bullhead City, Arizona.

C. The Contractor has represented to the City the ability to construct the Project and based on this representation the City has engaged _____ to construct the Project.

## AGREEMENT

NOW THEREFORE, for and in consideration of the mutual covenants and considerations hereinafter contained, it is agreed by and between the City and the Contractor as follows:

## ARTICLE 1 - INVITATION TO BID & BID DOCUMENTS PROJECT NO. 27-PW-009

1.0 INVITATION TO BID

Req./Contract #: **27-PW-009**
Project Name: **Hancock Road Paving Project**
Bid Due Date / Time: **November 30, 2026, at 10:00 AM**, Arizona Time

Project Description: The project consists of the full depth milling of approximately 2.3 miles of existing asphalt in Hancock Road and replacing it with 4 inches of new ¾ inch asphalt in Bullhead City, Arizona.

Sealed bids for the project specified will be received by the Bullhead City Clerk's Office at the First Floor Receptionist Desk, 2355 Trane Road, Bullhead City, Arizona, 86442-5966 on the time and date specified. Bidders shall submit one original of their bid. Bids received by the correct time and date will be opened and read aloud shortly thereafter in the City of Bullhead City, City Clerk's office.

Bids must be in the actual possession of the City Clerk's office on or prior to the exact time and date indicated above. Late bids will not be considered under any circumstances.

Bids must be submitted in a sealed opaque envelope with the Project Name and the bidder's name and address clearly indicated on the envelope. All bids must be completed in ink or typewritten on the form contained within the specifications titled Invitation for Bid.

For information or to obtain plans, specifications and bid documents or to submit questions concerning the IFB, contact Casey Lemmons, Administrative Analyst, 2355 Trane Road, Bullhead City, Arizona 86442-5966, at phone (928) 763-9400, ext. 8500, or at clemmons@bullheadcityaz.gov. Brief procedural questions may be submitted and responded to informally. Technical questions regarding the substance of this IFB must be submitted in writing or by email and received no later than **5:00 PM on November 16, 2026**. Questions may then be responded to by written amendment to this document. Oral statements or instructions do not constitute an amendment to the IFB. Only those plan holders registered with the City of Bullhead City will receive any modifications to the plans, specifications and bid documents and any notices that are issued during bidding. The City of Bullhead City reserves the right to accept or reject any or all responses or parts thereto.

Plans may be reviewed at:

- City of Bullhead City, Utilities Department, 2355 Trane Road, Bullhead City, AZ 86442-5966, (928) 763-9400, ext. 8840 Fax (928) 763-0131
- Performance Graphics Digital Printing, 4140 S. Lynn Drive, Suite 107, Fort Mohave, AZ 86426, (928) 763-6860 prints@pgblueprinting.net
- Dodge Digital Plan Room, 300 American Metro Blvd, Ste 185, Hamilton, NJ 08619 Phone (877) 784-9556 brenda.cusack@construction.com
- Yuma Southwest Contractors Assoc., 2741 S. Eighth Ave., Ste B, Yuma, AZ 85364 (928) 539-9035 Fax (928) 539-9036 plans@yswca.com
- Construction Notebook, 3131 Meade Ave., Suite B, Las Vegas, NV 89102, (702) 876-8660 Fax (702) 876-5683 plandesk@constructionnotebook.com
- A&E Reprographics Plan Room, 1030 Sandretto Drive Suite F, Prescott, AZ 86305, (928) 442-9116 Fax (928) 776-1550 planroom@a-erepro.com
- Sierra Plan Room, 9348 Villa Tuscany Ave, Las Vegas, NV 89129, (702) 871-1077 Fax (702) 871-8220 sierraplanroom@yahoo.com
- iSqFt/Grand Minority Contracts Planroom Partnership, 3301 N. 24th St., Phoenix, AZ 85016, 800-364-2059 Fax (866) 570-8187 cosupport@isqft.com
- Construction Market Data, 30 Technology Parkway S., Ste. 100, Norcross, GA 30052, (800) 876-4045 Fax (800) 642-2437 CMD Group's parent company is customerservice@constructconnect.com

- IDT Plan Room (operates as Duck Press Media Solutions), 4633 E Broadway Blvd., Tucson, AZ 85711, (520) 319-0988 Fax (520) 319-1430 info@duckpress.com
- Shirley's Plan Service, 425 S. Plumer, Tucson, AZ 85719, (520) 791-7436 Fax (520) 882-9208 bids@shirleysplanservice.com
- The Blue Book Building & Construction Network, 800 E Main St., Jefferson Valley, NY 10535, (888) 720-1710 proservices@thebluebook.com
- https://www.bullheadcityaz.gov/business-development/bid-opportunities/
- https://www.publicpurchase.com

BONDS:

| | |
|---|---|
| Bid Bond: | 10% |
| Payment Bond: | 100% |
| Performance Bond: | 100% |

Project Completion Date: **May 31, 2027**

A Pre-Bid Conference will not be held for this project. City of Bullhead City reserves the right to accept or reject any or all bids or any part thereof and waive informalities deemed in the best interest of the City.

*Pursuant to the Americans with Disabilities Act (ADA), City of Bullhead City endeavors to ensure the accessibility of all of its programs, facilities and services to all persons with disabilities. If you need an accommodation for this meeting, please contact the Human Resources Director at (928) 763-9400, ext. 301, at least 24 hours prior to the meeting so that an accommodation may be arranged.*

1.1 RECEIPTS AND OPENING OF BIDS: The City of Bullhead City, Arizona, (hereinafter called the "Owner" or the "City") invites Bids on the form attached hereto for the **Hancock Repaving Project 27-PW-009.** All blanks must be appropriately filled in. The bidder shall also complete and submit a form listing proposed subcontractors as enclosed herein. Bids for this project will be received by the City Clerk's Office at the City of Bullhead City, 2355 Trane Road, Bullhead City, Arizona 86442-5966 until **10:00 AM**, Arizona Time on **November 30, 2026**, where the Bids will be publicly opened and read aloud shortly thereafter.

The Owner may, at its option, waive immaterial errors or omissions in bids not prepared and submitted in accordance with the provisions of this Invitation for Bids and/or the requirements of the City's procurement ordinance or, alternatively, may reject any and all bids not prepared and submitted in accordance with the provisions of this Invitation for Bids and/or the requirements of the City's procurement ordinance. Any Bid may be withdrawn prior to the above scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered. No bidder may withdraw a Bid within 90 calendar days after the actual date of the opening thereof.

1.2 PREPARATION OF BID: Each Bid must be submitted on the prescribed Form. All blank spaces for Bid prices must be filled in, in ink or typewritten, in both words and figures.

Each Bid must be submitted in a sealed opaque envelope bearing on the outside the name of the bidder, the bidder's address, and the name of the project for which the Bid is submitted. If forwarded by mail, the sealed envelope containing the Bid must be enclosed in another envelope addressed as specified in the Bid form.

The following fully-executed items shall be included with the bid submittal. Failure to include any of these items may result in that bid being considered incomplete, and the Bid may be rejected.

- Bid Proposal
- Bid Schedule
- Bid Bond

- Bidder's Statement of Qualifications
- Affidavit of Non-Collusion
- Acknowledgement of Each Addendum Issued

1.3 PRE-BID MEETING: The pre-bid conference will not be held for this project.

1.4 FACSIMILE BIDS OR MODIFICATIONS: No facsimile ("FAX") Bids or bid modifications will be accepted.

Any proposed modifications to the Bid shall be made by an authorized representative of the bidder in writing.

1.5 QUALIFICATIONS OF BIDDER: The Owner may make investigations as he deems necessary to determine the qualifications and the ability of the bidder to perform the Work, and the bidder shall furnish the Owner any information and data for this purpose as the Owner may request.

The Owner may request other information and data from the bidder that may include:

A list of any actions taken by the Arizona Registrar of Contractors to suspend and/or revoke the Contractor's license of the bidder for a period of two years preceding the bid.

The Owner reserves the right to reject any or all bids or withhold the award of a contract to any bidder for any reason the Owner determines in accordance with the provisions of §34-201 (A) (4), Arizona Revised Statutes.

All bidders and listed subcontractors must be valid Arizona Licensed Contractors at the time of Bidding, approved by the Arizona State Registrar of Contractors to do the type and amount of work specified in these documents.

1.6 ARITHMETIC DISCREPANCIES IN THE BID: For the purpose of evaluating bids, the following criteria will be utilized by Owner in resolving arithmetic discrepancies found on the face of the Bid Schedule as submitted by bidders:

- Obviously misplaced decimal points will be corrected;
- In case of discrepancy between unit price and extended price, the unit price will govern;
- Apparent errors in extension of unit prices will be corrected;
- Apparent errors in addition of lump sums and extended prices will be corrected; and
- In case of discrepancy between words and figures in unit prices, the amount shown in words shall govern.

For the purpose of Bid evaluation, the Owner will evaluate the bids on the basis of the unit prices, extensions, and totals arrived at by resolution of arithmetic discrepancies as provided above.

1.7 INCOMPLETE BIDS: Failure to submit a Bid on all items in the Bid Schedule may result in that bid being considered incomplete, and the Bid may be rejected. Unit and/or lump sum prices must be shown for each Bid Item within the Schedule.

1.8 BID SECURITY: Each bid must be accompanied by a bid bond in the form of a certified or cashier's check made payable to the Owner in an amount equal to ten percent (10%) of the bid submitted, or alternatively, through a surety bond issued in the form substantially similar to the one attached to these bid documents or on another form approved by the Owner in the amount of ten percent (10%) of the amount of the bid submitted that conforms with the requirements of §34-201, Arizona Revised Statutes (A.R.S.). The bond document itself must contain the actual bid amount or higher. A statement inserted into the bond form such as "10% of the Bid Amount" is not acceptable. If the bid security provided by the bidder is in the form of a surety bond, solely 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, shall execute the

surety bond. An individual surety or sureties shall not execute the surety bond, even if the requirements of §7-101 A.R.S. are satisfied. The certified check, cashier's check or surety bond submitted by each bidder as bid security shall be returned to the bidders whose proposals are not accepted, and to the successful contractor upon the execution of satisfactory payment and performance bonds for the construction contract, as provided for in these bid documents and under State law.

1.9 LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT: The successful bidder, upon failure or refusal to execute and deliver the Agreement, Bonds, and certificates required within ten calendar days from the date of the Notice of Award, shall forfeit to the Owner, as liquidated damages for the failure or refusal, its bid bond and shall owe the Owner the difference between its bid and the amount of the contract actually entered into with another party.

1.10 SECURITY FOR FAITHFUL PERFORMANCE AND PAYMENT: Simultaneously with his delivery of the executed Contract, the successful bidder shall furnish on the forms provided herein, in a sum equal to 100% of the face amount of the Contract awarded: 1) a surety bond as security for the performance of the Contract awarded; and 2) a surety bond as security for the payment of all persons performing labor or furnishing materials in connection with the project under the Contract awarded, as specified in the General Conditions included herein. In accordance with Section §34-201 of the Arizona Revised Statutes, commonly known as Arizona's Little Miller Act, payment and performance bonds shall be issued by a duly authorized surety company satisfactory to the Owner and authorized to transact business in the State of Arizona. All bonds shall be issued by a surety insurer possessing at least a "A" rating, based upon the most recent issue of Best's Insurance Guide.

1.11 POWER OF ATTORNEY: Attorneys-in-fact who sign Bid Bonds or Contract bonds must file with each bond a certified and effectively dated copy of their power-of-attorney.

1.12 LAWS AND REGULATIONS: The bidder's attention is directed to the fact that all applicable Federal Laws, State Laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.

1.13 METHOD OF AWARD/PROTEST: The Owner shall award the Contract to the lowest responsive and responsible bidder, in accordance with §34-201 and §34-221 of the Arizona Revised Statutes. Any protest of a bid selected for award shall be submitted in accordance with City Administrative Regulation 2-1, Section 1.9, within 10 days of notice of the pending award. Contact the City representative listed under Section 1.0 herein for submission details.

1.14 OBLIGATION OF THE BIDDER: At the time of the opening of Bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the Plans and Contract Documents (including all Addenda, if applicable). The failure or omission of the bidder to examine any form, instrument or document, or site changes due to natural causes, shall in no way relieve any bidder from any obligation in respect to his bid. Site changes due to natural causes prior to Bid opening shall not be cause for Bid alteration or withdrawal.

1.15 TIME OF COMPLETION AND LIQUIDATED DAMAGES: The bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" from the Owner, and to complete all of the work and achieve Final Acceptance on or before a completion date to be specified in the written "Notice to Proceed."

The bidder agrees to pay actual damages related to the cost of completion as set forth in Section 8.58 and as elsewhere assessable herein, and liquidated damages, intended to compensate the City for injury resulting from the delay. The bidder agrees to pay as liquidated damages the sum indicated in the following "Schedule of Liquidated Damages" and as provided in Section 8.62 of the General Conditions, for each calendar day that the Contract remains incomplete. Note that these damages apply for special scheduled completion dates for miscellaneous elements as defined in the special provisions. For the purposes of determining the calendar day rate of Liquidated Damages for the

Project, the Original contract amount shall be that which is included in the Agreement between the Owner and the Contractor for the Project.

| SCHEDULE OF LIQUIDATED DAMAGES | | |
|---|---|---|
| **Original Contract Amount** | | **Daily Charges** |
| **From** | **To and Including** | **Calendar Day Rate** |
| $0 | $25,000.00 | $300 |
| $25,000.01 | $50,000.00 | $325 |
| $50,000.01 | $100,000.00 | $364 |
| $100,000.01 | $500,000.00 | $559 |
| $500,000.01 | $1,000,000.00 | $741 |
| $1,000,000.01 | $2,000,000.00 | $923 |
| $2,000,000.01 | $5,000,000.00 | $1,391 |
| $5,000,000.01 | $10,000,000.00 | $1,846 |
| $10,000,000.01 | $10,000,000.01+ | $2,314 |

1.16 CONDITIONS OF WORK: Each bidder must research the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of the obligation to furnish all material and labor necessary to carry out the provisions of the Contract. Insofar as possible, the Contractor, in performing the work, must employ methods or means as will not cause any interruption of or interference with the work of any other Contractor.

1.17 ADDENDA AND INTERPRETATIONS: No interpretation of the meaning of the Plans, Specifications, or other pre-bid documents will be made to any bidder orally.

Every request for interpretation shall be in writing addressed to the Bullhead City Public Works Department at 2355 Trane Road, Bullhead City, AZ 86442-5966, and to be given consideration, must be received at least seven calendar days prior to the date fixed for the opening of Bids. Any and all interpretations and any supplemental instructions will be in the form of written Addenda to the Specifications which, if issued, will be sent to all prospective bidders (at the respective addresses furnished for such purposes), not later than five calendar days prior to the date fixed for the opening of Bids, provided that the prospective bidders are registered plan holders on the project with the City of Bullhead City. The Owner will send all addenda by FAX or e-mail, or if practical, by U.S. Mail. Failure of any bidder to incorporate any Addendum or interpretation or to be registered with the City of Bullhead City for the project shall not relieve bidder from any obligation under his/her bid as submitted. All Addenda so issued shall become part of the Contract Documents.

1.18 CONFLICT OF INTEREST: Pursuant to A.R.S. Section §38-511, this Contract is subject to cancellation by Owner if any person significantly involved initiating, negotiating, securing, drafting or creating the Contract on behalf of the City of Bullhead City is, at any time while the Contract is in effect, an employee of any other party to the Contract in any capacity or a consultant to any other party of the Contract with respect to the subject matter of the Contract.

1.19 NON-COLLUSION: The bidder will be required to complete, notarize and submit as part of this bid package the "Non Collusion Affidavit" form, as attached herein. Failure of the bidder to submit a properly executed affidavit may be grounds for rejection of the bid.

1.20 EXAMINATION OF THE PLANS AND SPECIFICATIONS: Each Bid shall be made in accordance with the Plans and Specifications, which may be examined at the following locations:

- City of Bullhead City, Public Works Administration, 2355 Trane Road, Bullhead City, AZ 86442-5966, (928) 763-0128 Fax (928) 763-0131
- Performance Graphics Digital Printing, 4140 S. Lynn Drive, Suite 107, Fort Mohave, AZ 86426, (928) 763-6860
- Dodge Digital Plan Room, 300 American Metro Blvd, Ste 185, Hamilton, NJ 08619 Phone (877) 784-9556
- Colorado River Building Industry Assoc., 2182 McCulloch Blvd, Suite #1, Lake Havasu City, AZ 86403, (928) 453-7755
- Yuma Southwest Contractors Assoc., 2741 S. Eighth Ave., Ste B, Yuma, AZ 85364 (928) 539-9035 Fax (928) 539-9036
- Construction Notebook, 3131 Meade Ave., Suite B, Las Vegas, NV 89102, (702) 876-8660 Fax (702) 876-5683
- A&E Reprographics Plan Room, 1030 Sandretto Drive Suite F, Prescott, AZ 86305, (928) 442-9116 Fax (928) 776-1550
- Sierra Plan Room, 3111 So. Valley View # B-120, Las Vegas, NV 89102, (702) 871-1077 Fax (702) 871-8220
- Just Blueprints, 112 N. 8th Street, Kingman, AZ 86401, (928) 753-0872 Fax (928) 753-0878
- iSqFt/Grand Minority Contracts Planroom Partnership, 3301 N. 24th St., Phoenix, AZ 85016, 800-364-2059 Fax (866) 570-8187
- Construction Market Data, 30 Technology Parkway S., Ste. 100, Norcross, GA 30052, (800) 876-4045 Fax (800) 642-2437
- IDT Plan Room, 4633 E Broadway Blvd., Tucson, AZ 85711, (520) 319-0988 Fax (520) 319-1430
- Shirley's Plan Service, 425 S. Plumer, Tucson, AZ 85719, (520) 791-7436 Fax (520) 882-9208
- The Blue Book Building & Construction Network, 800 E Main St., Jefferson Valley, NY 10535, (888) 720-1710
- https://www.bullheadcity.com/government/bid-information
- https://www.publicpurchase.com

The following Sections prescribe the proper form for bid proposal.

2.0 BID PROPOSAL

PROJECT NUMBER: **27-PW-009**
PROJECT NAME: **Hancock Road Paving Project**

The undersigned, as bidder, declares that we have received and examined the Bid documents entitled "**Hancock Repaving Project, Project No. 27-PW-009**" and will contract with the OWNER, on the form of Agreement provided herewith, to do everything required for the fulfillment of the contract for the project at the prices and on the terms and conditions of the Bid documents, drawing, etc.

We agree that the following shall form a part of this proposal:

| Article | Title |
|---|---|
| 2.0 | Bid Proposal |
| 3.0 | Bid Schedule |
| 4.0 | Arizona Statutory Bid Bond |
| 5.0 | Bidder's Statement of Qualifications |

We acknowledge that addenda numbers _____ have been received and have been examined as part of the Contract Documents.

We certify that our proposal is genuine, and not sham or collusive, nor made in the interest or behalf of any undisclosed person, organization, or corporation, and that we have not directly or indirectly induced or solicited any other bidder to put in a sham bid, or directly or indirectly inducted or solicited any other potential bidder to refrain from bidding, and that we have not in any manner sought by collusion to secure an advantage over any other bidder.

The bidder agrees that this Bid shall be good and may not be withdrawn for a period of 90 calendar days after the scheduled closing time for receiving Bids.

Upon receipt of written notice of the acceptance of this bid, bidder shall execute the formal Agreement attached within 10 calendar days and deliver a Performance Bond, Payment Bond, and Certificates of Insurance as required by Sections 8.69 & 8.70 of the General Conditions within the same time.

We hereby declare that we have visited the site and have carefully examined the Contract Documents relating to the work covered by the above bid or bids.

Enclosed herewith is a certified or cashier's check or bid bond, payable to the City of Bullhead City, Arizona, in the amount of ten percent (10%) of the total bid. This check or bond is submitted as a guarantee that we will enter into a Contract, and furnish the required bonds in the event a contract is awarded us. The bid security attached, without endorsement, is to become the property of the City of Bullhead City, Arizona, in the event the Contract and Bonds are not executed within the time set forth, as a portion of the liquidated damages for delay and additional work caused thereby (see Section 1.9).

We understand that the City of Bullhead City, Arizona reserves the right to reject any and/or all bids or any part thereof or to waive any informalities in any bid, deemed by them to be for the best interests of the City of Bullhead City, Arizona.

Dated this _____ day of _____, 20____.

Respectfully Submitted By: _____ Title: _____

Name of Firm: _____

Address _____

Phone: _____ Fax: _____
Seal - If bid by a Corporation:

Arizona Contractor's License No.:_____ Type_____

3.0 BID SCHEDULE

CONTRACT FOR: **Hancock Road Paving Project, Project No. 27-PW-009**

The undersigned bidder, having examined and determined the scope of the Contract Documents, hereby proposes to perform the work described therein for the following unit prices or lump sum amounts.

Note: Bids shall include sales tax and all other applicable taxes and fees. All bids shall be checked for errors. If errors are made, unit prices shall govern and corrections will be made according to the unit price and totals will be revised to reflect the corrections.

| **Hancock Road Paving Project - Bid Schedule** | | | | | | |
|---|---|---|---|---|---|---|
| **Bid Item #** | **Spec #** | **Quantity** | **Unit** | **Description** | **Unit Cost** | **Total Cost** |
| 1 | 12.1 | 1 | LS | Mobilization/Demobilization | | |
| 2 | 12.5 | 73,108 | SY | Subgrade & Base Material Preparation | | |
| 3 | 12.4 | 73,108 | SY | Mill Existing AC Pavement | | |
| 4 | 12.6 | 73,108 | SY | 4" - 3/4 " A.C. Pavement | | |
| 5 | 12.6 | 73,108 | SY | Fog Seal | | |
| 6 | 12.12 | 26 | EA | Adjust Manholes | | |
| 7 | 12.12 | 22 | EA | Adjust Valve Boxes | | |
| 8 | 12.11 | 156 | LF | 3" Sch 40 Conduit | | |
| 9 | 12.11 | 2 | EA | ADOT No. 7 HD Pull Box | | |
| 10 | 12.2 | 1 | LS | Traffic Control | | |
| 11 | 12.1 | 1 | LS | Pavement Marking | | |
| 12 | | | | **Project Subtotal** | | |
| 13 | 9.33 | 1 | LS | Owner Contigency | 10% | |
| **TOTAL PROJECT** | | | | | | |

Total Bid Amount (Items 1 through 13 above): _____(In Words). ($_____.00) Calendar Days Vendor requires to Complete Total Project: **MAY 31, 2027** or earlier after Notice to Proceed. This Proposal is submitted by _____, a corporation or limited liability company organized under the laws of the State of _____, or a partnership consisting of _____ or individual trading as _____

and is the holder of Arizona Contractor's License No.\ _____: Bullhead City License No:_____ (*City License not required at time of Bid but must be obtained prior to issuance of Notice to Proceed*.)

Respectfully submitted,

| | |
|---|---|
| _____ | _____ |
| Company Name | Signature of Authorized Person |
| _____ | _____ |
| Address | Printed Name |
| _____ | _____ |
| City State Zip | Title |
| _____ | _____ |
| Telephone | Telephone |
| _____ | _____ |
| Email | Email |
| _____ | _____ |
| Fax | Fax |

4.0 ARIZONA STATUTORY BID BOND

PURSUANT TO TITLES 28, 34 AND 41, ARIZONA REVISED STATUTES
(Penalty of this bond must not be less than 10% of the bid amount)

KNOW ALL MEN BY THESE PRESENTS:

That, _____(hereinafter "Principal"), as Principal, and _____, (hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____, with its principal offices in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto the City of Bullhead City, Arizona, (hereinafter "Obligee"), as Obligee, in the amount of Ten Percent (10%) of the amount of the bid of Principal, submitted by Principal to the Obligee for the work described below, for the payment of which sum, the Principal and Surety bind themselves, and their heirs, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid of *(insert actual amount of bid or higher)* $_____ to furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of **Project No. 27-PW-009** known as the **Hancock Road Paving Project.**

NOW, THEREFORE, if the Obligee shall accept the proposal of the Principal and the Principal shall enter into a contract with the Obligee in accordance with the terms of the proposal and give the bonds and certificates of insurance as specified in the standard specifications with good and sufficient surety for the faithful performance of the contract and for the prompt payment of labor and materials furnished in the prosecution of the contract, or in the event of the failure of the Principal to enter into the contract and give the bonds and certificates of insurance, if the Principal pays to the Obligee 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 is void. Otherwise it remains in full force and effect provided, however, that this bond is executed pursuant to the provisions of Section §34-201, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of that section to the extent as if it were copied at length herein.

Witness our hands this _____ day of _____, 20___.

| | |
|---|---|
| _____ | _____ |
| PRINCIPAL SEAL | SURETY SEAL |
| By:_____ | By:_____ |
| | Attorney-in-Fact |
| Its:_____ | _____ |
| Agency of Record | Agency Address |

## ARTICLE 5 – BIDDER'S STATEMENT OF QUALIFICATIONS PROJ. NO. 27-PW-009

5.0 BIDDER'S STATEMENT OF QUALIFICATIONS

The Undersigned certifies the truth and correctness of all statements and of all answers to questions made hereinafter.

SUBMITTED TO: City of Bullhead City
Public Works Department
Attention Casey Lemmons
Administrative Analyst
2355 Trane Road
Bullhead City, AZ 86442-5966

SUBMITTED BY: NAME: _____

ADDRESS: _____

PRINCIPAL OFFICE: _____
(NOTE: Attach separate sheets as required)

[ ] Corporation
[ ] LLC
[ ] Partnership
[ ] Individual
[ ] Joint Venture
[ ] Other

How many years has your organization been in business as a Contractor?_____
How many years has your organization been in business under its present business name? _____
If a Corporation or LLC, answer the following:

Date of Incorporation: _____
Fed. Tax I.D. #: _____
State of Incorporation/Organization: _____
President: _____
Vice President(s): _____
_____

Secretary: _____
Treasurer: _____
Members:_____
Managers:_____

If a Partnership, answer the following:

Date of organization: _____
Type of Partnership: _____
(General/Limited/Assoc.)

Name and Address of all partners.

_____
_____
_____

If other than a Corporation, LLC or Partnership, describe Organization and name Principals:

_____
_____
_____

What percent of the work do you normally perform with your own forces? _____ List trades:

_____ _____ _____
_____ _____ _____
_____ _____ _____

Have you ever failed to complete any work awarded to you? If so, indicate when, where and why:

_____

_____

Have you had any OSHA violations within the last 10 years by or against your organization or its officers?
_____ if yes, please provide details _____

_____

Has any Officer or Partner of your Organization ever been an Officer or Partner of another Organization that failed to complete a construction contract? _____ If so, state circumstances:

_____

_____

List major construction projects your Organization has under contract on this date:

| Project Name | Name, Address & Telephone Number of Owner | Engineer | Contract Amount | Contract Date | Percent Complete | Scheduled Completion |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

List similar construction projects your Organization has completed in the past five years:

| Project Name | Owner | Engineer | Contract Amount | Date Awarded | Date Completed | Percent with Own Forces |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

List the construction experience of the principal individuals in your Organization:

| Individual's Name | Construction Experience – Years | Within Your Organization | | |
|---|---|---|---|---|
| | | Present Position & Years' Experience | Dollar Volume Responsibility | Previous Position & Years' Experience |
| | | | | |
| | | | | |
| | | | | |

List states and categories in which your Organization is legally qualified to do business:

_____
_____

Bank References:

_____
_____

Trade References:

_____
_____

Name of Bonding and Insurance Companies and Name and Address of Agents: _____

_____
_____

State maximum bonding capacity: _____

Is there any pending litigation by or against your organization, its principals or officers? _____ if yes, please provide details

_____
_____

Are there any judgments that have been entered by a court of competent jurisdiction against your organization, its principals or officers during the last three years? If yes, please provide details. _____

_____

List of subcontractors. In accordance with Article 1 of the Invitation to Bid & Bid Documents, the following is a breakdown of subcontractors anticipated to be used for completing this project and their approximate percentage of work to be performed. The Contractor is not required to submit with its bid a complete list of all subcontractors contemplated to be utilized on the project, and failure to submit a complete list shall not render a bid incomplete or unresponsive. A complete list of all subcontractors proposed on the project is not considered a material part of the bid submittal. Refer to Section 8.74 of the General Conditions for additional information.

The bidder certifies that all subcontractors listed are eligible to perform Work on public works projects pursuant to A.R.S. § 34-241.

| Subcontractor | Description of Work | % Total Project |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| | | |
|---|---|---|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Dated at _____this _____ day of _____, 20___

Name of Organization: _____

By: _____ Title: _____

5.1 AFFIDAVIT

AFFIDAVIT OF CONTRACTOR
CERTIFYING THAT THERE WAS NO
COLLUSION IN BIDDING FOR
CONTRACT

STATE OF _____ )
) ss
COUNTY OF _____ )

_____
(NAME OF INDIVIDUAL)

BEING DULY SWORN, DEPOSES AND SAYS:

THAT HE/SHE IS_____
(TITLE)
OF _____
(NAME OF BUSINESS)

THAT PURSUANT TO SECTION §34-253 OF THE ARIZONA REVISED STATUTES, HE/SHE CERTIFIES AS FOLLOWS:

THAT NEITHER HE/SHE NOR ANYONE ASSOCIATED WITH SAID

_____
(NAME OF BUSINESS)

HAS DIRECTLY, OR INDIRECTLY, ENTERED INTO ANY AGREEMENT, PARTICIPATED IN ANY COLLUSION OR OTHERWISE TAKEN ANY ACTION IN RESTRAINT OF FREE COMPETITIVE BIDDING IN CONNECTION WITH THIS PROJECT.

By: _____
NAME

_____
TITLE

_____
NAME OF BUSINESS

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____, 20___

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC: _____

6.0 AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 2026, by and between the CITY OF BULLHEAD CITY, an Arizona municipal corporation ("Owner"), and _____, an _____ organized under the laws of the State of _____ (herein after designated the "Contractor").

RECITALS

WHEREAS, the Owner has developed conceptual plans for and desires to have constructed the **Hancock Road Paving Project**; and

WHEREAS, Contractor represents that it possesses the experience, competence, equipment and financing to properly perform such work, and has formally proposed to do so, and to furnish all necessary labor, materials, and equipment and services therefore in accordance with said plans, and subject to the terms and conditions hereof.

AGREEMENT

NOW, THEREFORE, in consideration of these premises and the mutual covenants herein set forth, it is hereby agreed as follows:

1. The Contractor will commence and complete in its entirety the construction of the **Hancock Road Paving Project**, all as attached and outlined in the Contract Documents.

2. The Contractor will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the project described herein.

3. The Contractor will commence the work required by the contract documents within ten calendar days after the date of the Notice To Proceed and will complete the same as follows:

   All work shall be completed by **MAY 31, 2027** or earlier after Notice to Proceed.

   The period for completion may be extended by a properly executed Change Order approved by the City.

4. Liquidated Damages: Owner and Contractor recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the project is not completed within the time specified in Section 3 above, plus any extensions thereof allowed in accordance with the General Conditions. This sum is fixed and agreed upon between the parties because the actual loss to the City and to the public caused by delay in completion will be impractical and extremely difficult to ascertain and determine. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual losses or damages (including special, indirect, consequential, incidental and any other losses or damages) suffered by Owner if a complete acceptable Project is not delivered on time.

   Accordingly, and instead of requiring proof of such losses or damages related to delay, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay to the Owner sums as defined in the Schedule of Liquidated Damages as provided in Section 1.15 per calendar day that expires after the time specified in Section 3 for delivery of acceptable bid items, and as provided in Section 8.62 of the General Conditions.

5. The Contractor agrees to perform all of the work described in the contract documents and comply with the terms therein for the sum of $_____ as shown in the bid schedule.

6. The term "Contract Documents" means the attached Final Contract, pages _____ and includes the following:

a. Advertisement for Bids
b. Bid Schedule
c. Bid Bond
d. Agreement
e. Bidder's Statement of Qualifications
f. Non-Collusion Affidavit
g. Payment Bond
h. Performance Bond
i. Notice of Award
j. Notice to Proceed
k. Certificate of Completion
l. Unconditional Waiver & Lien Release
m. General Conditions
n. Special Provisions
o. Construction Contract Drawings/Plans
p. Asphalt and Aggregate Specifications
q. Technical Specifications/General Provisions
r. Change Order(s)
s. Addenda: ____

7. The Owner will pay Contractor in the manner and at such times as set forth in the General Conditions such amounts as required by the contract documents.

8. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assignees.

**HANCOCK REPAVING PROJECT,**
**PROJECT NO. 27-PW-009**

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in three copies, each of which shall be deemed an original on the date approved by Council written below.

THE CITY OF BULLHEAD CITY

By:_____ _____
Toby Cotter, City Manager Date

COMPANY NAME

By:_____ _____
Name, Title Date

ATTEST

By:_____
Debie Ogden, City Clerk (SEAL)

APPROVED AS TO FORM

By: _____ _____
Garnet Emery, City Attorney Date

APPROVAL OF DEPARTMENT DIRECTOR

By: _____ _____
Angie Johnson Date
Public Works Director

*Mail or email all invoices to:*
City of Bullhead City
ATTN: Casey Lemmons
Public Works Department
2355 Trane Road
Bullhead City, AZ 86442-5966
clemmons@bullheadcityaz.gov

APPROVED BY COUNCIL _____, 2026

6.1 ARIZONA STATUTORY PERFORMANCE BOND

PURSUANT TO TITLES 28, 34, AND 41, ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Contract amount)

KNOW ALL MEN BY THESE PRESENTS THAT: _____
(hereinafter "Principal"), as Principal, and _____
(hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto City of Bullhead City, Arizona (hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the ____ day of , 20___, to furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the **Hancock Road Paving Project, Project No. 27-PW-009** which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THE OBLIGATION IS SUCH, that if the Principal faithfully performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of the contract during the original term of the contract and any extension of the contract, with or without notice of the Surety, and during the life of any guarantee required under the contract, and also performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of all duly authorized modifications of the contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____ , 20___.

_____
PRINCIPAL SEAL

_____ BY:_____
AGENCY OF RECORD

_____ _____
AGENCY ADDRESS SURETY SEAL

_____ BY: _____

6.2 ARIZONA STATUTORY PAYMENT BOND

PURSUANT TO TITLES 28, 34, AND 41, ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Contract amount)

KNOW ALL MEN BY THESE PRESENTS THAT: _____ (hereinafter "Principal"), as Principal, and _____ (hereinafter Surety), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto the City of Bullhead City, Arizona (hereinafter "Obligee") in the amount of (Dollars) $_____), for the payment whereof, Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the ____ day of , 20___, to furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the **Hancock Road Paving Project** which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THE OBLIGATION IS SUCH, that if the Principal promptly pays all monies due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in the contract, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statues, and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____day of _____, 20___.

_____
PRINCIPAL SEAL

_____ BY:_____
AGENCY OF RECORD

_____ _____
AGENCY ADDRESS SURETY SEAL

_____ BY:_____

7.0 NOTICE OF AWARD

Date: _____
To: _____
_____
_____

PROJECT DESCRIPTION: **Hancock Road Paving Project, Project No. 27-PW-009**

The Owner has considered the bid submitted by you, dated _____, in response to its Advertisement for bids and Invitation to Bid for the above described work.

You are hereby notified that your bid has been accepted for items in the amount of $_____.

You are required by the Invitation to Bid to execute the Agreement and furnish the required Contractor's Performance Bond, Payment Bond, and Certificates of General Liability & Property Insurance, Automobile, and Workmen's Compensation Insurance within ten calendar days from the date of this notice. You are also required to furnish proof of a current City of Bullhead City Business License.

If you fail to execute the Agreement and to furnish the bonds, insurance certificates and executed Agreement within ten calendar days from the date of this Notice, the Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your bid as abandoned and as a forfeiture of your bid bond. The Owner will be entitled to all other rights as may be granted by law.

You are required to return all documents and an acknowledged copy of this NOTICE OF AWARD to the owner at:

City of Bullhead City
Public Works Department
Attention Casey Lemmons
Administrative Analyst
2355 Trane Road
Bullhead City, AZ 86442-5966

By: _____ Dated this ___ day of _____, 2026
Project Manager

**Acceptance of Notice**: (The Contractor shall return a signed copy of this notice to the owner.)

Receipt of this NOTICE OF AWARD is hereby acknowledged by:

_____ Dated this _____ day of _____, 2026
CONTRACTOR

Print Name: _____

Title: _____

7.1 NOTICE TO PROCEED

Date: _____

TO: _____
_____
_____

RE: CITY OF BULLHEAD CITY BID for the **Hancock Road Paving Project, Project No. 27-PW-009**

You are hereby notified to commence work on the project in accordance with the Agreement dated _____, 20___, within ten calendar days of the date of this Notice to Proceed, which is the effective date of the notice for the project, and you are to complete the work by **MAY 31, 2027** or earlier after Notice to Proceed. The date for completion of the work is therefore _____, 20___.

OWNER: City of Bullhead City

By: _____
Project Manager

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged

This, the ____ day of _____, 20___

Contractor: _____

Signature: _____

Print Name: _____

Title: _____

**Note:** The Contractor shall return a signed copy of this Notice to the Owner at:

City of Bullhead City
Public Works Department
Attention Casey Lemmons
Administrative Analyst
2355 Trane Road
Bullhead City, AZ 86442-5966

7.2 CERTIFICATE OF COMPLETION

I hereby state that all goods and/or services required by:

**CITY OF BULLHEAD CITY**

**for the Hancock Road Paving Project, Project No. 27-PW-009**

project has been delivered in substantial conformance with the Contract, all activities required by the Contractor under the Contract have been completed and that all required unconditional lien releases have been submitted as of _____.
Date

**CITY OF BULLHEAD CITY**

By: _____
Project Manager Signature

Printed Name: _____

Title: _____

**ACCEPTANCE OF NOTICE**

(NOTE: The Contractor shall return a signed copy of this Notice to the Owner)

Receipt of the above **CERTIFICATE OF COMPLETION** is hereby acknowledged

This, the_____ day of _____, 20___

Contractor: _____

Signature: _____

Print Name: _____

Title: _____

7.3 UNCONDITIONAL WAIVER AND LIEN RELEASE

Project Name: **Hancock Road Paving Project, Project No. 27-PW-009**

Location: _____

Contractor: _____

Owner: City of Bullhead City, an Arizona municipal corporation

The undersigned has been paid in full for all labor, services and equipment or material furnished pursuant to the project above and does hereby unconditionally waive and release any right to mechanic's lien, any state, federal, municipal or private bond rights, and any claim for payment rights for persons in the undersigned's position, except for disputed claims for extra work in the amount of $_____.

The undersigned warrants that the provider for whom the undersigned has the authority to bind, has already paid or will use the monies received from final payment to promptly pay in full all laborers, subcontractors, materialmen and suppliers for all work, materials, equipment or services provided for or to the above-referenced project.

_____ _____
(Company name) Date

_____ _____
(Print name) Title

_____
(Signature)

NOTICE

This document waives rights unconditionally and states that you have been paid for giving up those rights. This document is enforceable against you if you sign it, even if you have not been paid. If you have not been paid, use a conditional release form.

8.0 General Conditions This section of the Contract Documents is pre-printed. Any modifications to the following articles, as may be required for this project, are made in the Special Provisions.

8.1 Definitions Wherever in the Contract Documents the following terms are used, the intent and meaning shall be interpreted as follows:

8.2 Addenda Written or graphic instruments issued prior to the opening of bids, which modify or interpret the Contract Documents, drawings and specifications, by additions, deletions, clarifications or corrections.

8.3 As Approved The words “as approved”, unless otherwise qualified, shall be understood to be followed by the words “by the Owner”.

8.4 As Shown, and as Indicated The words "as shown" and "as indicated" shall be understood to be followed by the words "on the drawings" or “in the specifications”.

8.5 Award The acceptance, by the Owner, of the successful bidder’s proposal.

8.6 Bid The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the work to be performed.

8.7 Bidder Any individual, firm partnership or corporation, or combination thereof submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.

8.8 Bonds Bid, Performance, and Payment Bonds and other instruments of security, furnished by the Contractor and his surety in accordance with the Contract Documents.

8.9 Calendar Day Every day shown on the calendar, measured from midnight to the next midnight.

8.10 Change Order A written order to the Contractor, signed by the Owner, covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for the work affected by such changes.

8.11 Contract The "Contract" is the written agreement covering the performance of the work and the furnishing of labor, materials, incidental services, tools, and equipment in the construction of the work. It includes supplemental agreements amending or extending the work contemplated in the manner hereinafter described and which may be required to complete the work in a substantial and acceptable manner to the Owner. The Contract may include change orders.

8.12 Contract Documents The "Contract Documents" consist of the bidding requirements, forms, conditions of the Contract including General and/or Supplemental General Conditions, Special Provisions, the technical specifications, and the drawings, including all Addenda and modifications thereafter incorporated into the documents before their execution and including all other requirements incorporated by specific reference thereto.

8.13 Contract Price The total monies payable by Owner to the Contractor under the terms and conditions of the Contract Documents.

8.14 Contract Time The number of calendar days stated in the Contract Documents for the completion of the work or the stated completion date.

8.15 Contractor The “Contractor” is the individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted for and the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the work.

8.16 Days Unless otherwise specifically stated, the term "days" will be understood to mean calendar days.

8.17 Drawings The term “drawings”, also described as “plans”, refers to the official drawings, profiles, cross sections, elevations, details, and other working drawings, and supplementary drawings, or reproductions thereof, which show the locations, character, dimensions, and details of the work to be performed. Drawings may either be bound in the same book as the balance of the Contract Documents or bound in separate sets, and are a part of the Contract Documents, regardless of the method of binding.

8.18 Engineer The Engineer, individual partnership, firm, or corporation duly authorized by the Owner to be responsible for the engineering of the work and acting directly or through an authorized representative.

8.19 Field Order and Change Orders A field order is a written order issued by the Engineer to the Contractor during construction, which interprets either the technical specifications and/or drawings for the work to be performed by Contractor, including all addenda and modifications, which may be incorporated into the technical specifications and/or the drawings before the Bid Opening Date. A change order is a written order effecting a change in the work which involves: 1) any adjustment in the contract price; 2) any change in the plans, specifications and/or drawings for performance of the work by the Contractor; or 3) any extension of the contract time. Field orders, which only involve an interpretation of the plans, drawings and/or technical specifications contained within the Contract Documents, may be issued by the Engineer to the Contractor during construction. All change orders must be approved, in advance, by the Owner. Contractor agrees and acknowledges that Contractor shall not be entitled to any payment for work performed in reliance upon or as a result of a change order unless the Owner has approved the change order in advance of the work performed by the Contractor.

8.20 Final Acceptance Upon due notice from the Contractor of presumptive completion of the entire project, the Owner will make an inspection. If all construction provided for and contemplated by the Contract is found completed to his satisfaction, that inspection shall constitute the final inspection and the Owner will make the final acceptance. The Contractor will be notified in writing of this acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the Owner will give the Contractor the necessary instructions for correction of same, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed. In such event, the Owner will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of the final inspection.

8.21 Inspector An authorized representative of the Owner or Engineer assigned to make all necessary inspections and/or tests of the work performed or being performed, or of the materials furnished or being furnished by the contractor.

8.22 Immigration Reform And Control Act The Contractor shall comply with the Immigration Reform and Control Act of 1986 (IRCA). Contractor understands and acknowledges the applicability of the IRCA to Contractor. Contractor agrees to comply with the IRCA in performance of any resultant contract and to permit City inspection of its personnel records to verify such compliance. Contractor represents by signing this Contract that they are in compliance with IRCA and that they will remain in compliance throughout the performance of this Contract.

**Compliance with Legal Worker and Immigration Laws.** The Contractor warrants that it and any subcontractors it may use in performance of this contract are in compliance with state law (see A.R.S. § 23-214.A) and all Federal Immigration laws and regulations (see Immigration and Control Act of 1986 as amended) that relate to its employees and employees of its subcontractors. The Contractor acknowledges that pursuant to A.R.S. § 41-4401 a breach of this warranty is a material breach of this Contract subject to penalties up to and including termination of this contract, and that the City retains

the legal right to inspect the papers of any contractor or subcontractor employee who works on this Contract to ensure compliance with this warranty. The Contractor understands that it may be selected for random verification by the City as required under A.R.S. 41-4101(B) to ensure compliance with A.R.S. 41-4401(A) and will promptly respond to any requests for information from the City with regard to its verification process.

8.23 Israeli Boycott Contractor certifies under A.R.S. § 35-393.01 et seq., that it does not participate in, and agrees not to participate in during the term of this Agreement, a boycott of Israel.

8.24 Uyghurs Prohibition. During the term of the agreement offeror certifies, that pursuant to A.R.S. § 35-394, that it, nor any of its contractors, will not use the goods or services produced by the forced labor ethnic Uyghurs in the people's Republic of China.

8.25 Methodology and Quality of Workmanship The manner and sequence of construction, which is considered to be the acceptable standard for the trade and/or profession performing the work. The Contractor's performance and completeness of the work shall be in accordance with the Contract Documents.

8.26 Notice The term "notice" or the requirement to notify, as used in the Contract Documents or applicable State or Federal statutes, shall signify a written communication delivered in person or by certified or registered mail to the individual, or to a member of the firm, or to an officer of the corporation for whom it is intended. Certified or registered mail shall be addressed to the last business address known to him who gives the notice.

8.27 Notice of Award The written notice of the acceptance of the bid from the Owner to the successful bidder.

8.28 Notice to Proceed Written communication issued by the Owner to the Contractor authorizing him to proceed with the work and establishing the date of commencement of the work. Contractor acknowledges, understands and agrees that Owner shall not be liable to compensate Contractor for any work initiated by the Contractor prior to the issuance of a Notice to Proceed by the Owner.

8.29 Or Equal The term "or equal" shall be understood to indicate that the "equal" product is the same or better than the product names in function, performance, reliability, quality, and general configuration. Determination of equality in reference to the project design requirements will be made by the Owner.

8.30 Owner The "Owner" is the City of Bullhead City.

8.31 Payment Bond The approved form of security furnished by the Contractor and his surety as a guaranty that he will pay in full all bills and accounts for materials and labor used in the construction of work.

8.32 Performance Bond The approved form of security furnished by the Contractor and his surety as a guarantee that the Contractor will complete the work in accordance with the terms of the contract and guarantee the work for a period of one year after acceptance of the work by Owner.

8.33 Plans The word "plans" shall have the same meaning as "drawings" (see Section 8.17).

8.34 Project The undertaking to be performed as provided in the Contract Documents (see Section 8.12).

8.35 Proposal The offer of the bidder for the work when made out and submitted on the prescribed proposal form, properly signed and guaranteed.

8.36 Proposal Guarantee The cash, or cashier's check or certified check, or bidder's bond accompanying the proposal submitted by the bidder, as a guarantee that the bidder will enter into a contract with the Owner for the construction or performance of the work, if it is awarded to him, and will provide the contract bonds and insurance required of him.

8.37 Shop Drawings All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a subcontractor, manufacturer, supplier or distributor, which illustrate how specific portions of the work shall be fabricated or installed.

8.38 Specifications The directions, provisions and requirements herein contained pertaining to the method and manner of performing the work or to the quantities and qualities of the materials to be furnished under the Contract, together with all other directions, provisions and requirements herein contained, plus such amendments, deletions from or additions thereto which may be provided for by supplemental agreement or change orders.

8.39 Subcontractor A subcontractor is a person or entity that has a direct or indirect contract with a Contractor to perform any of the work at the site. For convenience, the term subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender but includes the plural and feminine gender and includes a subcontractor or an authorized representative thereof. The term subcontractor does not include any separate contractor or his subcontractors.

8.40 Substantial Completion "Substantial Completion" shall be that degree of completion of the project or a defined portion of the project, sufficient to provide the Owner, at his discretion, the full-time use of the project or defined portion of the project for the purposes for which it was intended. "Substantial Completion" shall not be considered as final acceptance.

8.41 Supplemental General Conditions Modifications to General Conditions required by a Federal Agency for participation in the project and approved by the agency for participation in the project and approved by the agency in writing prior to inclusion in the Contract Documents and such requirements that may be imposed by applicable state laws. The term also includes modifications or additions to the General Conditions required by the Owner or Engineer.

8.42 Supplier Any person or organization that supplies materials or equipment for the work, including that fabricated to a special design, but who does not perform labor at the site.

8.43 Surety The corporation, partnership, or individual, other than the Contractor, executing payment, or performance bonds, which are furnished to the Owner by the Contractor.

8.44 Work The word "work" within these Contract Documents shall include all material, labor, tools, utilities, and all appliances, machinery, transportation, and appurtenances necessary to perform and complete the Contract, and such additional items not specifically indicated or described which can be reasonably inferred as belonging to the item described or indicated and as required by good practice to provide a complete and satisfactory system or structure. As used herein, "provide" shall be understood to mean, "provide complete in-place", that is, "furnish and install".

8.45 Working Day A working day shall be any day, other than a legal holiday, Saturday or Sunday, on which the normal working forces of the Contractor may proceed with regular work.

8.46 Written Notice Any notice to any party to the agreement relative to any part of this agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his given address, or delivered in person to said party or his authorized representative for the work.

8.47 Notice to Proceed After the Owner has issued the Notice of Award; the Contractor shall provide the performance bond, the payment bond, the certificate of insurance, the work schedule, the monthly cash flow, and a signed agreement within ten calendar days. The Owner's attorney will review each document and, if they are found to be acceptable, the Owner will sign and execute the agreement. Within a period of 120 Calendar Days after executing the agreement, the Owner will issue the Notice to Proceed. Within ten calendar days of the effective date of the Notice To Proceed, the work shall commence. The Contractor shall not commence any work until such time that the Notice To Proceed

has been issued. Contractor shall not be entitled to any compensation for any work from Owner until such time as Owner has issued a Notice To Proceed to Contractor.

8.48 Additional Instructions and Detail Drawings The Engineer may furnish additional instructions to the Contractor by means of drawings or otherwise, during the progress of the work as necessary to make clear or to define in greater detail the intent of the specifications and contract drawings.

The additional drawings and instruction thus supplied will become a part of the Contract Documents. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions.

8.49 Schedules, Reports and Records The Contractor shall submit to the Owner payrolls, reports, estimates, records and other data where applicable as are required by the Contract Documents for the work to be performed.

The Contractor, after the contract award and prior to the Pre-Construction Conference, shall prepare for submittal to the Engineer for review, a detailed progress schedule. The progress schedule shall be brought up to date and submitted to the Engineer prior to each progress payment request and at such other time intervals as the Engineer may request.

8.50 Progress Schedule The schedule shall be a time-scaled critical path progress schedule showing in detail the proposed sequence of activity. The critical path analysis shall consist of a graphic network diagram and shall clearly show start and completion dates and percentage of work completed.

The Contractor shall also forward to the Engineer, prior to each progress payment request, an itemized report of the delivery status of major and critical items of purchased equipment and material, including shop drawings and the status of shop and field fabricated work. These progress reports shall indicate the date of the purchase order, the current percentage of completion, estimated delivery, and cause of delay, if any.

If the completion of any part of the work or the delivery of materials is behind the approved schedule, the Contractor shall submit in writing a plan acceptable to the Engineer for bringing the work up to schedule.

The Owner shall have the right to withhold progress payments for the work if the Contractor fails to update and submit the progress schedule and reports as specified, and the withholding shall not constitute grounds for additional claims by the Contractor against the Owner.

The Contractor shall submit an estimated monthly cash flow, based upon the progress schedule with the bonds, schedules, and certificate of insurance.

8.51 Drawings and Specifications The intent of the drawings and specifications is that the Contractor shall furnish all labor, materials, tools, equipment, utilities, and transportation necessary for the proper execution of the work in accordance with the Contract Documents and all incidental work necessary to complete the project in an acceptable quality and manner, ready for use, occupancy or operation by the Owner.

In case of conflict between the drawings and specifications, the specifications shall govern. Figure dimensions on drawings shall govern over scale dimensions, and detailed drawings shall govern over general drawings.
Any discrepancies found between the drawings and specifications and site conditions or any inconsistencies or ambiguities in the drawings or specifications shall be immediately reported verbally and within 24 hours of a discovery, in writing to the Engineer, who shall promptly facilitate the correction of the inconsistencies or ambiguities. Work done by the Contractor after discovering discrepancies, inconsistencies or ambiguities shall be done at the Contractor's risk, and the Contractor shall assume full responsibility therefore and shall bear all costs attributable thereto, if not acceptable to the Owner.

8.52 Shop Drawings The Contractor shall provide seven copies of the shop drawings as specified or as may be necessary for the prosecution of the work as required by the Contract Documents. All drawings and schedules shall be submitted sufficiently in advance to allow the Engineer not less than 20 regular working calendar days for checking the submittal. The Engineer's approval of any shop drawings shall not release the Contractor from responsibility for deviations from the Contract Documents.

When submitted for the Engineer's review, shop drawings shall bear the Contractor's certification by means of a signed stamp, that he has reviewed, checked and approved the shop drawings and that they are in conformance with the requirements of the Contract Documents. Shop drawings, which, in the opinion of the Engineer, are incomplete or unchecked by the Contractor, will be returned to the Contractor for resubmission in the proper form.

If shop drawings or submittals are rejected by the Engineer, all costs incurred by the Engineer and/or the Owner for reviewing the re-submittals shall be charged to the Contractor, and the Owner has the right to deduct those costs from any monies owed the Contractor by the Owner.

When shop drawings have been reviewed by the Engineer, two sets of submittals will be returned to the Contractor, appropriately stamped. If major changes or corrections are necessary, the shop drawing may be rejected and one set will be returned to the Contractor with the changes or corrections indicated, and the Contractor shall correct and resubmit the shop drawings. No changes shall be made by the Contractor to resubmitted shop drawings other than those changes indicated by the Engineer, unless the changes are clearly described in a letter accompanying the resubmitted shop drawings.

The review of such shop drawings and catalog cuts by the Engineer shall not relieve the Contractor from responsibility for corrections of dimensions, fabrication details, and space requirements, or for deviations from the contract drawings or specifications, unless the Contractor has called attention to the deviations in writing by a letter accompanying the shop drawings and the Engineer approves the change or deviation in writing at the time of submission; nor shall review by the Engineer relieve the Contractor from the responsibility for errors in the shop drawings. When the Contractor does call deviations to the attention of the Engineer, the Contractor shall state in his letter whether or not the deviations involve any deduction or extra cost adjustment.

Portions of the work requiring a shop drawing or sample submission shall not begin until the shop drawing or submission has been approved by the Engineer. A copy of each approved shop drawing and each approved sample shall be kept in good order by the Contractor at the site and shall be available to the Engineer.

8.53 Record Drawings During construction, the Contractor shall keep an accurate record of the following:

A. Deviations between the work as shown on the plans and the work as actually installed.

B. The specific locations of piping, valves, electric conduits, ductwork, equipment, and other such work which was not located on the plans. The record drawings shall show distances to these locations from known points on the plans.

C. Equipment schedules indicating manufacturer's names and model numbers.

When all revisions showing work as installed are made, the corrected set of plans shall be delivered to the Engineer before the final pay request is processed. These plans shall be clearly marked "Record Drawings" and shall be signed and dated by the Contractor. By submittal of these Record Drawings to the Engineer, the Contractor is certifying that the work performed was done in accordance with the drawings and is an accurate representation of the improvements completed. The Contractor shall employ the services of an Arizona

Registered Land Surveyor (RLS) to certify on the Record Drawings any approved changes to the locations of facilities that were installed.

Nothing contained in this section shall be construed as authorizing any deviation in the work as shown on the contract drawings, plans and /or specifications without a written change order approved by Owner.

8.54 Materials, Services and Facilities It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the work within the specified time.

The Contractor shall furnish the Owner a list of materials and the source of supply of each of the materials on the list. The source of supply of each of the materials shall be approved by the Owner before the delivery of materials is started. Only materials conforming to these specifications and approved by the Owner shall be used in the work. All materials proposed for use may be inspected or tested at any time during their preparation and use. After trial, if it is found that sources of supply, which have been approved, do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from other approved sources. No material, which, after approval, has in any way become unfit for use shall be used in the work.

The Contractor warrants to the Owner and Engineer that the materials and equipment furnished under the contract will be new and of a quality equal to that specified or approved and, that all work will be of good quality, free from faults and defects and in conformance with the Contract Documents. Mechanical and electrical equipment shall be the products of manufacturers of established good reputations and regularly engaged in the fabrication of that equipment. Unless otherwise noted, any equipment offered shall be current models, which have been in successful regular operation under comparable conditions for a period of at least two years. This time requirement, however, does not apply to minor details or to thoroughly demonstrated improvements in design or in material of construction. Work shall be done and completed in a thorough and workmanlike manner and if required by Engineer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment used.

All materials which the Engineer or his authorized inspector has determined do not conform to the requirements of the plans and specifications will be rejected. They shall be removed immediately from the vicinity of the work by the Contractor at his own expense, unless otherwise permitted by the Engineer. No rejected material, the defects of which have been subsequently corrected, shall be used in the work, unless approval in writing has been given by the Engineer. Upon failure of the Contractor to comply promptly with any order of the Engineer made under the provisions in this section, the Engineer shall have authority to cause the removal and replacement of rejected material and to deduct the cost thereof from any monies due or to become due the Contractor.

If any part or portions of the work done or material furnished under this contract shall prove defective or nonconforming with the drawings and specifications, and if the imperfection in the same shall not be of sufficient magnitude or importance as to make the work dangerous or unsuitable, or if the removal of the work will create conditions which are dangerous or undesirable, the Engineer shall have the right and authority to retain such work but shall make deductions in the final payment therefore as may be just and reasonable. Adjustment shall be effected whether or not final payment has been made.

Materials and equipment shall be so stored (at the Contractor's expense) as to insure the preservation of their quality and fitness for the work. Stored materials and equipment to be incorporated in the work shall be located so as to facilitate prompt inspection.

Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.

Materials, supplies or equipment, to be incorporated into the work shall not be purchased by the Contractor or the subcontractor subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

8.55 Inspections and Testing All material and equipment, used in the construction of the project, shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the Contract Documents.

Additional inspections are required for all building-related activities, and must be scheduled and coordinated through the Owner's Building Division utilizing an automated inspection request system. To schedule an inspection on an active permit please call the Owner's inspection request line at (928) 763-0172 a minimum of 24 business hours in advance. The Contractor is responsible for scheduling and coordinating all inspections with the Owner's project manager, staff and other agencies.

The Owner shall provide all inspection and testing services not required by the Contract Documents.

The Contractor shall provide at his expense the testing and inspection services required by the Contract Documents.

If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to specifically be inspected, tested, or approved by someone other than the Contractor, the Contractor will give the Engineer timely notice of readiness, the minimum of which shall be 48 hours. The Contractor will then furnish the Engineer the required certificates of inspection, testing or approval.

Inspections, tests or approvals by the Engineer or others shall not relieve the Contractor from his obligations to perform the work in accordance with the requirements of the Contract Documents.

The Engineer and his representative will at all times have access to the work. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The Contractor will provide proper facilities for access and observation of the work and also for any inspection, or testing thereof.

If any work is covered contrary to the written instructions of the Engineer or prior to inspection, it must, if requested by the Engineer, be uncovered for his observation and replaced at the Contractor's expense.

If the Engineer considers it necessary or advisable that work that has already been approved be inspected or tested by the Engineer or others, the Contractor, at the Engineer's request, will uncover, expose or otherwise make available for observation, inspection or testing as the Engineer may require, that portion of the work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that the work is defective, the Contractor will bear all the expenses of the uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, the work is not found to be defective, the Contractor will be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate change order shall be issued.

8.56 Substitutions Whenever a material, article or piece of equipment is identified on the drawings or specifications by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The Contractor may recommend the substitution of a material, article, or piece of equipment of equal substance and

function for those referred to in the Contract Documents by reference to brand name or catalogue number, and if, in the opinion of the Engineer, the material, article, or piece of equipment is of equal substance and function to that specified, the Engineer may approve its substitution and use by the Contractor. Any cost differential shall be deductible from the contract price and the Contract Documents shall be appropriately modified by change order. The Contractor warrants that if substitutes are approved, no major changes in the function or general design of the project will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the Contractor without a change in the contract price or contract time. Any substitutions not properly approved and authorized by the Engineer may be considered defective and the Engineer may require the Contractor to remove the substituted material, article or piece of equipment. In such an event, the Contractor shall bear any and all costs associated with the removal of the substituted item(s), including, but not limited to, all engineering, inspection, testing or surveying costs incurred by the Owner.

The term "or equal" shall be understood to indicate that the "equal" product is the same or better than the product named in function, performance, reliability, quality, and general configuration. Determination of equality in reference to the project design requirements will be made by the Owner. "Equal" products shall not be purchased or installed by the Contractor without the Owner's written approval. Contractor shall have seven calendar days after award of the contract for submission of data substantiating a request for substitution of an "or equal" item.

Regarding the supplying of equipment, products or materials not specifically identified by reference to brand name or catalogue number in the Contract Documents, this section supersedes any pre-approval language that may exist in any other portion of the Contract Documents. There is no pre-approval process available prior to bid opening for this project, and the Contractor is advised to submit its bid based on the specified equipment, products and materials. As stipulated in this Section 8.55, the Contractor shall have seven calendar days after award of the contract for submission of data substantiating a request for substitution of an "or equal" item.

8.57 Patents The Contractor shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and indemnify and hold the Owner harmless from loss on account thereof, except that the Owner shall be responsible for any loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified, however if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for the loss unless he promptly gives that information to the Engineer.

8.58 Surveys, Permits, Regulations The Owner shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the work together with a suitable number of benchmarks adjacent to the work as shown in the Contract Documents. The Contractor shall satisfy himself as to the accuracy of all measurements before constructing any permanent structure and shall not take advantage of any errors, which may have been made in laying out the work. From the information provided by the Owner, unless otherwise specified in the Contract Documents, the Contractor shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pipe locations and other working points, lines, elevations and cut sheets.

Stakes and markings as the Engineer may set for either his own or the Contractors guidance, shall be scrupulously preserved by the Contractor. In the event the Contractor, or his employees, destroy or otherwise remove or obliterate stakes or markings, an amount equal to the cost of replacing the same may be deducted from subsequent estimates due the Contractor at the discretion of the Owner.

Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor unless otherwise stated in the supplemental general conditions easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the Owner, unless otherwise specified. The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor perceives that the Contract Documents are at variance therewith, he shall

promptly notify the Engineer in writing, and any necessary changes shall be adjusted as provided in Section 8.61, “CHANGES IN THE WORK”. If the Contractor performs and works knowing it to be contrary to any laws, ordinances, rules and regulations, without notice to the Engineer, he shall assume full responsibility therefore and shall bear all costs attributable thereto.

The Contractor shall sign for and obtain Building and/or Right of Way permits issued by the Owner prior to commencing work. These permits will be no cost to the Contractor, and the Owner will assist the Contractor with completing the applications and obtaining the permit(s). The Contractor shall comply with all requirements of these permits, including the use of the Owner’s automated inspection request system for building-related inspections. To schedule an inspection on an active permit please call the Owner’s inspection request line at (928) 763-0172 a minimum of 24 business hours in advance. The Contractor is responsible for scheduling and coordinating all inspections with the Owner’s project manager, staff and other agencies.

8.59 Protection of Work, Property and Persons and Damages The Contractor shall have sole responsibility for initiating, maintaining and supervising all safety precautions and programs in connection with the work. He shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to, all employees on the work and other persons who may be affected thereby, all the work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and other items not designated for removal, relocation or replacement in the course of construction.

The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He shall erect and maintain, as required by the conditions and progress of the work, all necessary safeguards for safety and protection. He shall notify owners of adjacent utilities when prosecution of the work may affect them. The Contractor shall remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the Contract Documents or to the acts or omissions of the Owner or the Engineer or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the Contractor.

In emergencies affecting the safety of persons or the work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Engineer or Owner, shall act to prevent threatened damage, injury or loss. He shall give the Engineer prompt written notice of any significant changes in the work or deviations from the Contract Documents caused thereby, and a change order shall thereupon be negotiated and issued covering the changes and deviations involved, as provided in Section 8.61, Changes in the Work.

The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents and the safety of all those at the site. The person shall be the Contractor’s superintendent unless otherwise designated by the Contractor in writing to the Owner and the Engineer. The Engineer will not be responsible for safety precautions and programs in connection with the work or for the Contractor’s failure to properly perform his responsibilities with respect to initiating, maintaining and supervising all safety precautions and programs. The Contractor is required to provide a copy of its written safety programs to the Owner for review by the Risk Management Division prior to commencing work.

All costs and charges incurred by Owner, together with the cost of completing the work under the contract, will be deducted from any monies due or which may become due to the Contractor if the expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of the excess.

8.60 Public Safety Contractor shall furnish, at his own expense, and without any additional cost to the Owner, such flagmen and guards as are reasonable necessary to give adequate warning to the public

of any dangerous conditions which may be encountered by motorists and/or pedestrians, and the Contractor shall furnish, erect and maintain such fences, barricades, lights, signs and other traffic control devices as are necessary to prevent accidents and avoid damage or injury to the public which may be required by the most recent edition of the *Maricopa Association of Governments (MAG) Standards for Public Works Construction,* the text of which is incorporated herein by reference and made a part of the Contract Documents.

If the Contractor appears to be neglectful or negligent in furnishing warning and protective measures as above provided, the Engineer may direct attention to the existence of a hazard and the necessary warning and protective measures shall be furnished and installed by the Contractor at his own expense without cost to the Owner. If the Engineer points out the inadequacy of warning and protective measures, that action on the part of the Engineer shall not relieve the Contractor from responsibility for public safety or abrogate his obligation to furnish and pay for these devices.

If the Contractor is neglectful in furnishing and/or maintaining warning and protective facilities as required herein, the Owner may furnish and/or maintain those facilities and charge Contractor therefore by deducting the cost thereof from periodic progress payments due the Contractor as costs are incurred by Owner.

No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic, and at the end of each day's work and at other times when construction operations are suspended for any reason, the Contractor shall remove all equipment and other obstructions from that portion of the right-of-way open for use by public traffic.

8.61 Supervision By Contractor The Contractor shall supervise and direct the work, using his best skill and attention. He shall be solely responsible for the means, methods, techniques, sequences and procedures of construction. The Contractor shall employ and maintain on the work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site, and who shall have been approved by the Engineer, which approval shall not be unreasonably withheld. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to and by the supervisor shall be as binding as if given to and by the Contractor. The Contractor shall be responsible to the Owner for the acts and omissions of the employees, subcontractors, and the agents and employees, and other persons performing any other work under the contract with the Contractor.

8.62 Changes in the Work The Owner may at any time, as the need arises, order changes within the scope of the work without invalidating the agreement. If changes increase or decrease the amounts due to Contractor under the Contract Documents, or results in changes in the time required for performance of the work, the adjustment shall be authorized by a written change order approved by the Owner.

The Owner may, at any time, by issuing a change order, make changes in the plans, specifications or other details of the work. Contractor shall proceed with the performance of any changes in the work so ordered by the Owner, unless the Contractor believes that the change order entitles him to a change in the contract price or time, or both, in which event he shall give the Engineer written notice thereof within seven calendar days after the receipt of the ordered change. The Contractor shall justify the basis for the change in contract price or time through written documentation submitted to Engineer within 14 calendar days after Contractor's receipt of the change order. Contractor shall not execute any changes in the work until and unless Contractor has received an executed change order approved by the Owner.

If the Contractor wishes to make a claim for an increase in the contract price, he shall give the Engineer written notice thereof within 14 calendar days after the occurrence of the event-giving rise to the claim. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property, in which case Contractor shall proceed in accordance with the provisions of the contract. No claim shall be valid, unless made by Contractor in

accordance with the provisions of the contract. Any change in the contract price resulting from a claim shall be authorized in a written change order approved by Owner.

The value of any work covered by a change order shall be determined by one or more of the following methods in the order of precedence listed below:

A. Unit prices previously approved.
B. An agreed lump sum.
C. Cost plus percentage.

8.63 Time for Completion and Liquidated Damages The date of beginning and the time for completion of the work are essential conditions of the Contract Documents and the work embraced shall be commenced on a date specified in the Notice To Proceed.

The Contractor shall proceed with the work at a rate of progress to insure full completion within the contract time. It is expressly understood and agreed, by and between the Contractor and the Owner, that the contract time for the completion of the work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.

The Contractor shall only work an eight hour day during normal regular hours, which will consist of Monday through Friday, 6:00 a.m. to 6:00 p.m., and do not include local municipal holidays. If the Contractor desires to carry on work more than eight hours each day, or work at night or outside the normal regular hours, the Contractor shall give timely notice (72 hours) to the Engineer and receive the Owner's written approval to allow satisfactory arrangements to be made for inspecting the work in progress.

If prosecution of the work is discontinued for any reason, the Contractor shall notify the Engineer at least 24 hours in advance of resuming operations. The Contractor shall be responsible for any extra compensation due or costs incurred as a result of Contractor's desire to carry out work beyond an eight hour day, or at night or outside normal regular hours, including but not limited to, any additional costs or compensation due the Engineer and Owner or its employees or agents as a result of having to be present at the site. The costs or extra compensation necessitated by the Contractor's work beyond an eight hour day, or at night or outside normal regular business hours may be deducted or withheld from progress payment or any other payments due to Contractor.

If for any reason a suspension of the work occurs, the Contractor, at its own expense, shall do all the work necessary to provide a safe, smooth and unobstructed passageway through construction for use by public traffic or to provide for the proper and efficient operation of sewer, drainage and other facilities within the site of the work, during the period of such suspension. In the event that the Contractor fails to perform the work specified in this section, the Owner will perform the work and the cost thereof will be deducted from periodic progress payments due the Contractor.

During inclement weather and other conditions, the Contractor shall pursue only those portions of the work as shall not be damaged thereby. No portions of the work whose satisfactory quality or efficiency will be affected by an unfavorable condition shall be constructed while these conditions remain, unless by special means or precautions, approved by the Engineer, the Contractor is able to overcome them.

Delays in delivery of equipment or material purchased by the Contractor or its subcontractor, including engineer-selected equipment, shall not be considered as a just cause for delay as this is not beyond the control of the Contractor. The Contractor shall be fully responsible for the timely ordering, scheduling, expediting, delivery, and installation of all equipment and materials.

In case of failure on the part of the Contractor to complete his contract within the time provided in the contract, or such written extension thereof as may be agreed upon by Owner, the contract may be terminated by written notice given by the Engineer as specified in Section 8.65.

In the event the contract is terminated, the Owner shall have the right to take over the work and to proceed until it is completed, either by performing the work itself directly or by contracting it out to some other person or persons, and in that event the Owner may take possession of and utilize, in completing the work, all materials, appliances and plant as may be on the site of the work and necessary for its completion. Nothing herein contained shall be deemed to limit the right of the Owner in the event of any breach of Contract by the Contractor; but all rights herein given to the Owner are and shall be deemed to be additional to any other rights or remedies which the Owner shall have under any provision of law, including both liquidated damages pursuant to Section 1.15 for the delay in final completion and actual damages for breach and ultimate completion separate and distinct from damages attributable to delay.

In the event the Contractor is not terminated, but fails to complete the work, or any part thereof, in the time agreed upon in the contract or within any extra time as may have been allowed for delays by extensions granted as provided in the contract, the Contractor shall reimburse the Owner for the additional expense and damage for each calendar day that the contract remains uncompleted after the contract completion date in the amounts stipulated in Section 1.15. The stipulated amounts are hereby agreed upon as liquidated damages for the loss to the Owner. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty, but as liquidated damages, which have accrued against the Contractor. The Owner shall have the right to deduct damages from any amount due, or that may become due the Contractor, or the amount of damages shall be due and collectible from the Contractor or its Surety.

The Contractor shall not be charged with liquidated damages or any excess costs when the delay in completion of the work is due to one or more of the following: acts of God; acts of the Owner; acts of another Contractor in the performance of a separate contract with the Owner; fire, flood, epidemics, or quarantine restrictions; strikes or freight embargoes; and, extraordinary weather conditions. Written Notice of a delay must be submitted to the Engineer for approval within three calendar days of the occurrence. In the event notice is not given as provided, liquidated damages may be assessed.

8.64 Correction of Work The Contractor shall promptly correct all work rejected by the Engineer as defective or as failing to conform to the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. Contractor shall bear all costs of correcting such rejected work, including compensation for the Engineer's additional services made necessary thereby. Contractor shall also bear the costs of making good all work of the Owner or separate Contractor destroyed or damaged by such correction or removal.

All removal and replacement work shall be done at the Contractor's expense. If the Contractor does not take action to remove rejected work within ten calendar days after receipt of Written Notice, the Owner may remove the work and store the materials at the expense of the Contractor, including compensation for the Engineer's additional services made necessary thereby.

8.65 Subsurface Conditions The Contractor shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the Owner by Written Notice of:

A. Subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents; or

B. Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

Unless indicated elsewhere in the Contract Documents a geotechnical exploration was not conducted for this project, and the Contractor shall be responsible for its own investigations and research to confirm the conditions of the project. If no geotechnical exploration was conducted, however, there may be risk of perched pockets of groundwater during trench excavations. If encountered, the Contractor shall immediately formalize a dewatering plan for Owner review and approval.

The Owner shall promptly investigate any physical conditions identified by the Contractor, and if he finds that conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the work, an equitable adjustment shall be made and the Contract Documents shall be modified by a change order. Any claim of the Contractor for adjustment hereunder shall not be allowed unless he has given the required Written Notice; provided that the Owner may, if he determines the facts so justify, consider and adjust any claims asserted before the date of final payment.

8.66 Suspension of Work, Termination and Delay The Owner may suspend the work or any portion thereof for a period of not more than 120 Calendar Days or for further time as agreed upon by the Contractor. Any suspension shall be initiated by the Owner. Written Notice documenting the suspension shall be delivered to the Contractor. The Contractor shall resume work upon receiving another Written Notice, from the Owner, to do so. The second notice shall have the Engineer's seal affixed. The Contractor may negotiate an increase in the total contract price or an extension of the contract time, or both, directly attributable to any suspension.

In addition to any other reasons for termination provided in the contract, the Contractor shall be considered in default of his contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons if the Contractor:

A. Fails to begin the work under the contract within the time specified in the "Notice To Proceed," or

B. Fails to perform the work or fails to provide sufficient workers, equipment or materials to assure completion of work in accordance with the terms of the contract, or

C. Performs the work unsuitably or neglects or refuses to remove materials or to perform new work as may be rejected as unacceptable and unsuitable, or

D. Discontinues the prosecution of the work, or

E. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or

F. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or

G. Allows any final judgment to stand against him unsatisfied for a period of ten calendar days, or

H. Makes an assignment for the benefit of creditors, or acceptable manner, or

I. Is otherwise in breach of the contract and has failed to remedy the breach within ten calendar days of written notice of the existence of breach, or

J. Fails to provide safe conditions for his workers and/or the general public, or

K. Fails to pay his subcontractors in accordance with Section 8.67 Payments to Contractor.

If the Owner considers the Contractor in default of the contract for any reason hereinbefore, he shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or Surety, within a period of ten calendar days after notice, does not proceed in accordance therewith, then the Owner shall have, upon written notification of the facts of the delay or neglect, the power and authority without violating the contract, to take the prosecution of the work

out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of the contract according to the terms and provisions thereof, or use any other methods as in the opinion of the Owner will be required for the completion of the contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may come due the Contractor. If expense exceeds the sum which would have been payable under the contract, then the Contractor and the Surety shall pay to the Owner the amount of the excess

Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of monies due Contractor by Owner will not release Contractor from liability.

Upon seven calendar days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, elect to terminate the Agreement. In that case, Contractor shall be paid (without duplication of any items):

A. for completed and acceptable work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on the work;

B. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead on those expenses;

C. for reasonable costs incurred in settlement of terminated contracts with subcontractors, Suppliers and others; and

D. for reasonable expenses directly attributable to termination. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

If the work is stopped under an order of any court or other public authority for a period of more than 120 Calendar Days , through no act or fault of the Contractor or of anyone employed by him, or if the Owner fails to pay the Contractor within 45 calendar days after the time specified in the Payments To Contractor under Section 8.67, then the Contractor may, upon 15 calendar days Written Notice to the Owner, stop work until payment of the amount owing has been received.

The Owner may terminate the Contract or a portion thereof if conditions encountered during the progress of the work make it impossible or impracticable to proceed with the work or a local or national emergency exists.

When contracts, or any portion thereof, are terminated before completion of all work in the Contract, adjustments in the amount bid for the pay items will be made on the actual quantity of work performed and accepted, or as mutually agreed for pay items of work partially completed or not started. No claim for loss of anticipated profits will be considered.

Termination of the Contract or any portion thereof shall not relieve the Contractor of his responsibilities for the completed work nor the surety of its obligation for and concerning any just claims arising out of the work performed.

8.67 Issuance of Notice of Completion and Final Acceptance By Owner Upon completion of the project, a final inspection shall be requested by the Contractor, in writing, and the Owner will make an inspection within seven calendar days. If all construction provided for and contemplated by the

contract is found completed to his satisfaction, that inspection shall constitute the final inspection and the Owner will make the final acceptance and issue a Notice Of Completion to the Contractor.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the Owner will give the Contractor the necessary instructions for correction and the Contractor shall immediately comply with and execute all instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In that event, the Owner will make the final acceptance and issue a Notice Of Completion to the Contractor.

8.68 Payments to Contractor In addition to any documents required by the Engineer, at the time a partial pay estimate is submitted, the Contractor shall, at least ten calendar days before each progress payment falls due (but not more often than once a month), submit to the Engineer a partial payment estimate filled out and signed by the Contractor covering the work performed during the period covered by the partial payment estimate and supported by data as the Engineer may reasonably require. All partial and final pay estimates submitted by the Contractor must be on a form that substantially conforms to the Owner's Standard Application & Certificate for Payment template, a copy of which is available from the Owner. If payment is requested on the basis of materials and equipment not incorporated in the work, title to materials and equipment shall vest in the Owner, and Contractor shall supply, at the time of submission of payment estimate, supporting documents satisfactory to the Owner, to establish and protect Owner's interest in the materials and equipment, and Contractor shall maintain appropriate insurance on the materials and equipment until actual possession by the Owner of the materials and equipment occurs. The Engineer will, within seven calendar days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present the partial payment estimate to the Owner, or return the partial payment estimate to the Contractor indicating in writing his reasons for refusing to approve payment. In the latter case, the Contractor may make the necessary corrections and resubmit the partial payment estimate. The Owner will, within 14 calendar days of presentation to him of an approved partial payment estimate, pay the Contractor a progress payment on the basis of the approved partial payment estimate. All payments by the Owner must be mailed to the Contractor via standard United States Parcel Post service and postmarked within 14 calendar days of presentation to the Owner of an approved partial payment estimate. If the Contractor desires an alternative payment method it will be the sole responsibility, and expense, of the Contractor to contact the Owner's Finance Department directly and request an alternative method, provided, however, that the Finance Department is under no obligation to agree to an alternative method unless it determines, at its sole discretion, that the request is reasonable and acceptable to the Finance Department. The Owner shall retain ten percent of the amount of each payment until final completion and acceptance of all work covered by the Contract Documents. When the contract is 50 percent completed, one-half of the amount retained shall be paid to the Contractor provided the Contractor makes a written request for the payment and the Contractor is making satisfactory progress on the Contract and there is no specific cause or claim requiring a greater amount to be retained. After the Contract is 50 percent completed, no more than five per cent of the amount of any subsequent progress payments made under the contract may be retained providing the Contractor is making satisfactory progress on the project, except that if at any time the Owner determines satisfactory progress is not being made, ten percent retention shall be reinstated for all progress payments made under the Contract subsequent to the determination.

In lieu of ten percent retention provided for in this Section 8.67 of Article 8, the Owner shall, at the Contractor's option, accept as a substitute an assignment of any of the following:

A. Time certificates of deposit of banks licensed by the State of Arizona; or

B. Securities of or guaranteed by the United States of America; or

C. Securities of the State of Arizona, or any county, municipality or school district thereof; or

D. Shares of savings and loan institutions authorized to transact business in the State of Arizona.

Assigned instruments shall have a face value in an amount equal to ten percent of the progress payment for which instruments are tendered and shall be retained by the Owner as a guarantee for complete performance of the Contract.

If the Owner accepts substitute security as provided herein for the ten percent retention, the Contractor shall be entitled to all interest or income earned by the security, and all security in lieu of retention shall be returned to the Contractor within 120 Calendar Days after final completion and acceptance of all material, equipment and work covered by the Contract if the Contractor has furnished the Owner satisfactory receipts for all labor and material billed and unconditional, final waivers of liens from any and all persons holding claims against the work.

In no event shall the Owner accept a time certificate of deposit of a bank or shares of a savings and loan institution in lieu of the retention specified in this Section 8.67 of Article 8 unless accompanied by a signed and acknowledged waiver of the bank or savings and loan institution of any right or power to set off against either the Owner or the Contractor in relationship to the certificates or shares assigned.

The Contractor shall promptly pay each subcontractor, upon receipt of payment from the Owner out of the amount paid to the Contractor on account of the subcontractor's work, the amount to which the subcontractor is entitled, reflecting the percentage actually retained, if any, from payments to the Contractor on account of subcontractors' work. The Contractor shall, by an appropriate agreement with each subcontractor, require each subcontractor to make payments to his sub-subcontractors in similar manner.

Prior to Substantial Completion, the Owner, with the approval of the Engineer and with the concurrence of the Contractor, may use any completed or substantially completed portions of the work. Use shall not constitute an acceptance of the completed or substantially completed portions of the work.

The Owner shall have the right to enter the premises for the purpose of doing work not covered by the Contract Documents. This provision shall not be construed as relieving the Contractor of the sole responsibility for the care and protection of the work, or the restoration of any damaged work except as may be caused by agents or employees of the Owner.

The Contractor shall indemnify and save the Owner or the Owner's agents harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the work. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the Contractor fails to do so the Owner may, after having notified the Contractor, either pay unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of the Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor, his Surety, or any third party. In paying any unpaid bills of the Contractor, any payment made by the Owner shall be considered as a payment made under the Contract Documents by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any payments made in good faith.

If any payment to Contractor is delayed after the date due, interest shall be paid at the rate of one percent per month or fraction of a month on any unpaid balance as may be due. If the Owner fails to make payment 120 Calendar Days after final completion and acceptance, including any retained amounts (subject to the presentation of the waivers and releases as required by Section 8.68 below), in addition to other remedies available to the Contractor, interest shall be paid at the rate of one per cent per month or fraction of the month on the unpaid balance as may be due, except for that amount

necessary to pay the expenses the Owner reasonably expects to incur in order to pay or discharge the expense determined by the Engineer or Owner in the finding justifying the retention or delay.

The Owner may require the Contractor to furnish partial releases or liens executed by all persons, firms and corporations who have furnished labor services or materials incorporated into the Work during the period of time for which the progress payment is due, releasing lien rights as these persons, firms or corporations may have for that period. If any of the laborers, subcontractors, or material men shall serve upon the Owner a "Notice to Owner", or shall otherwise put the Owner on notice that they are owed any unpaid money by the Contractor, the Owner shall have the right to pay these persons directly, and the Owner shall receive a credit therefore upon the Contract Sum.

8.69 Acceptance of Final Payment and Release Upon completion of the project, a Final Inspection shall be requested by the Contractor, in writing. Following the Owner's acceptance of the work, the Owner will issue a Notice of Completion to the Contractor and Engineer shall issue a certificate attached to the final payment request certifying that the work has been accepted under the conditions of the Contract Documents. Release of retained amounts may not be delayed without a specific written finding by the Engineer or Owner of the reasons justifying the delay in payment. No later than 120 Calendar Days after the issuing of the Notice of Completion, and subject to the Contractor's presentation of the necessary number of the Unconditional Waiver and Lien Release (see Section 7.3) from all subcontractors, the Owner will pay to the Contractor the entire sum so found to be due after deducting there from all previous payments and all amounts retained under the provisions of the Contract. All previous prior partial estimates and payments shall be subject to correction in the final estimate and payment.

The acceptance by the Contractor of final payment shall be and shall operate as an unconditional release by the Contractor of the Owner for any claims and all liabilities which may be asserted by the Contractor against the Owner for every alleged act and neglect of the Owner, as well as the Owner's agents and employees, relating to or arising out of the work. Any payment by Owner, however, final or otherwise, shall not release the Contractor or the Contractor's agents or employees, or the Contractor's sureties, from any obligations it may have under the Contract Documents or the performance and payment bonds.

8.70 Insurance The Contractor shall purchase and maintain insurance as will protect him from claims set forth below which may arise out of or result from the Contractor's execution of the work, whether execution be by himself or by any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

A. Claims under workmen's compensation, disability benefit and other similar employee benefit acts;

B. Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;

C. Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;

D. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person; and

E. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting there from.

Certificates of Insurance acceptable to the Owner, along with endorsements (excepting Workers Compensation) naming the Engineer, the Owner and The City of Bullhead City as additional insured parties, shall be filed with the Owner prior to commencement of the work. These documents shall contain a provision that coverages afforded under the policies will not be canceled, reduced,

discontinued, or otherwise materially altered during the period of performance without 30 calendar days prior Written Notice has been given to the Owner.

The Contractor shall procure and maintain, at his own expense, during the contract time, liability insurance with an Insurance Carrier with an A.M. Best rating of no less than “A” and as hereinafter specified:

A. Contractor’s General Commercial Liability and Property Damage Insurance including vehicle coverage issued to the Contractor and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the Contract Documents, whether the operations be by himself or by any subcontractor under him, or anyone directly or indirectly employed by the Contractor or by a Subcontractor under him. Insurance shall be written with a limit of liability to include primary and excess coverage in an amount not less than $2,000,000 for all damages arising out of bodily injury, including death, at any time resulting there from, sustained by any one person in any one accident; and a limit of liability of not less than $1,000,000 aggregate for any damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than $500,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than $500,000 aggregate for any such damage sustained by two or more persons in any one accident.

B. The Contractor shall acquire and maintain, if applicable, Fire and Extended Coverage insurance upon the project to the full insurable value thereof for the benefit of the Owner, the Contractor, and Subcontractors as their interest may appear. This provision shall in no way release the Contractor or Contractor’s Surety from obligations under the Contract Documents to fully complete the project.

C. The Contractor shall procure and maintain, at his own expense, during the Contract time, in accordance with the provisions of the laws of the state in which the work is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of his employees at the site of the project and in case any work is sublet, the Contractor shall require subcontractor to similarly provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless the employees are covered by the protection afforded by the Contractor. In case any class of employees engaged in hazardous work under this Contract at the site of the project is not protected under Workmen's Compensation statute, the Contractor shall provide, and shall cause each subcontractor to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

D. The Contractor shall secure All Risk type Builder's Risk Insurance for work to be performed. Unless specifically authorized by the Owner, the amount of such insurance shall not be less than the contract price totaled in the bid. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the contract time, and until the work is accepted by the Owner.

8.71 Contract Security The Contractor shall within ten calendar days after the receipt of the Notice Of Award furnish the Owner with a Performance Bond and a Payment Bond in sums equal to the amount of the Contract price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions and agreements of the Contract Documents, and upon the prompt payment by the Contractor to all persons supplying labor and materials in the prosecution of the work provided by the Contract Documents. Bonds shall be executed by the Contractor and a corporate bonding company licensed to transact business in the State of Arizona and the company issuing bonds shall possess, at a minimum, a “A” rating based upon the most recent issue of the *Bests Insurance Guide*. The expense of these bonds shall be borne by the Contractor. If at any time a surety on any bond is declared a bankrupt or loses its right to do business in the state in which the work is to be performed or is removed from the list of Surety Companies accepted on Federal Bonds,

Contractor shall within ten calendar days after notice from the Owner to do so, substitute an acceptable bond (or bonds) in the form and sum and signed by other surety or sureties as may be satisfactory to the Owner. The premiums on bonds shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable bond to the Owner.

8.72 Assignments Neither the Contractor nor the Owner shall sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations there under, without written consent of the other party. Nor shall the Contractor assign any monies due or to become due to him hereunder without the previous written consent of the Owner.

The Owner and Contractor each bind himself, his partners, successors and assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of the other party in respect to all covenants, agreements and obligations contained in the Contract Documents.

8.73 Indemnification To the fullest extent permitted by law, The Contractor shall indemnify and hold harmless the Owner and the Engineer and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to: attorney's fees arising out of or resulting from the performance of the work, provided that any claims, damage, loss or expense: (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting there from; and (2) to the extent it is caused by any negligent act or omission of the Contractor, his subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable. This obligation shall not be construed to negate, abridge or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any party or person described herein.

In any and all claims against the Owner or the Engineer, or any of their agents or employees, by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation of benefits payable by or for the Contractor or any subcontractor under workmen's compensation acts, disability benefit acts or other employee benefits acts.

The obligation of the Contractor under this section shall not extend to the liability of the Engineer, his agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications.

8.74 Separate Contracts The Owner reserves the right to let other contracts in connection with this project. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate his work with their requirements. If the proper execution or results of any part of the Contractor's work depends upon the work of any other contractor, the Contractor shall inspect and promptly report to the Engineer any defects in such work that render it unsuitable for such proper execution and results.

The Owner may perform additional work related to the project by himself, or he may let other contracts containing provisions similar to these. The Contractor shall afford the other Contractors who are parties to such contracts (or the Owner, if he is performing the additional work himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of work, and shall properly connect and coordinate his work with theirs.

If the performance of additional work by other contractors or the Owner is not noted in the Contract Documents prior to the execution of the contract, written notice thereof shall be given to the Contractor prior to starting any additional work. If the Contractor believes that the performance of additional work by the Owner or others involves him in additional expense or entitles him to an extension of the contract time, he may make a claim therefore as provided in Sections 8.61 and 8.62.

8.75 Subcontracting The Contractor may utilize the services of specialty subcontractors on those parts of the work which come under normal contracting practices or are typically performed by specialty subcontractors, provided the Contractor, as soon as practical after the award of the contract, shall furnish to the Owner and the Engineer in writing the names of the persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the work, together with their Arizona Contractors License Numbers and other pertinent information. This information is to be submitted to Owner on a form provided by Owner. The list of subcontractors and suppliers shall be submitted prior to the effective date of the Notice to Proceed. The Engineer will promptly reply to the Contractor in writing stating whether or not the Owner or the Engineer, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Engineer to promptly reply shall constitute notice of no reasonable objection. The Contractor shall not contract with any such proposed person or entity to whom the Owner or Engineer has made reasonable objection and the Contractor shall not be required to contract with anyone to whom he has a reasonable objection. If the Owner or Engineer has a reasonable objection to any proposed person or entity, the Contractor shall submit a substitute to whom the Owner or the Engineer has no reasonable objection. The Contractor shall make no substitution for any subcontractor, person or entity previously selected if the Owner or Engineer makes reasonable objection to the substitution

The Contractor shall not award work to subcontractors, in excess of 49 percent of the Contract Price, without prior written approval of the Owner.

The Contractor shall be fully responsible to the Owner for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

The Contractor shall not employ any subcontractors that are not properly licensed with Owner and the State of Arizona. Changes of subcontractors listed with the proposal shall be made only with the approval of the Owner.

Nothing contained in these Contract Documents shall be construed as creating any contractual relationship between any subcontractor and the Owner; the Contractor shall be as fully responsible to the Owner for the acts and omissions of subcontractors, and of persons employed by them, as he is for the acts and omissions of persons directly employed by him.

The Contractor shall, without additional expense to the Owner, utilize the services of specialty Subcontractors on those parts of the work which are specified or required by State or local laws to be performed by specialty subcontractors.

The Contractor shall be responsible for the coordination of all trades, subcontractors, material and people engaged upon this work. The Owner will not undertake to settle any differences between the Contractor and his subcontractors or between subcontractors.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the Contract Documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the Contract Documents.

Nothing contained in this Contract shall create any contractual relation between any subcontractor and the Owner.

8.76 Engineer's Authority The Engineer shall act as the Owner's representative during the construction period. He shall decide questions, which may arise as to quality and acceptability of materials furnished and work performed. He shall interpret the intent of the Contract Documents in a fair and unbiased manner. The Engineer will make periodic visits to the site and determine if the work is proceeding in accordance with the Contract Documents.

The Contractor will be held strictly to the intent of the Contract Documents in regard to the quality of materials, workmanship and execution of the work. Inspections may be made at the factory or fabrication plant of the source of material supply.

The Engineer shall not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety precautions and programs in connection with the work and he will not be responsible for the Contractor's failure to carry out the work in accordance with the Contract Documents. The Engineer shall not be responsible or have control or charge over the acts or omissions of the subcontractors, or any of their agents or employees, or any other person performing any of the work.

The Engineer shall promptly make decisions relative to interpretation of the Contract Documents.

The Engineer will have the authority to reject work, which does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the work in accordance with the other terms of this Contract and whether or not the work be then fabricated, installed or completed.

8.77 Land and Rights-of-Way Prior to issuance of Notice To Proceed, the Owner shall obtain all land and rights-of-way necessary for carrying out and for the completion of the work to be performed pursuant to the Contract Documents, unless otherwise mutually agreed.

The Owner shall provide to the Contractor information, which delineates and describes the lands owned and rights-of-way acquired.

The Contractor shall provide at his own expense and without liability to the Owner any additional land and access thereto that the Contractor may desire for temporary construction facilities, or for storage of materials.

8.78 Guarantee Except as otherwise specified, all work shall be guaranteed by the Contractor, including the work performed by his subcontractors, against defects resulting from the use of inferior materials, equipment, or workmanship for a period of one year from the date the Notice of Completion is issued by the Owner, or within a longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents.

If, within any guarantee period, repairs or changes are required in connection with guaranteed work, which, in the opinion of the Owner, is rendered necessary as the result of the use of materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the Contract, the Contractor shall, promptly upon receipt of notice from the Owner, and without expense: (1) place in satisfactory condition in every particular all guaranteed work, correcting all defects therein; (2) make good all damage to the building, site or work, or equipment or contents thereof, which in the opinion of the Owner, is the result of the use of materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the contract; and (3) make good any work or material, or the equipment and contents of the building, site or work disturbed in fulfilling any guarantee. If the Contractor, after notice, fails to proceed promptly to comply with the terms of the guarantee, the Owner may have the defects corrected and the Contractor and his surety shall be liable for all expense incurred. The performance bond shall remain in full force and effect through the guarantee period.

A. GUARANTEE

The Contractor agrees to execute a written guarantee to the Owner, in substantially the following form:

GUARANTEE FOR _____

We hereby guarantee that the improvement which we have installed, including the work of our subcontractors, for the Owner of project, specifically described as:

**Hancock Repaving Project**
**Project No. 27-PW-009**

has been done in accordance with the contract drawings and specifications.

We agree to repair and replace any or all work included in said improvement, together with any other adjacent work which may be displaced or damaged by so doing, that may prove to be defective in its workmanship or material within a period of one year from date of acceptance of the above-mentioned improvement by the Engineer on behalf of the Owner, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of our failure to comply with the above-mentioned conditions within a reasonable period of time (as determined by the Owner) after being notified in writing by the Owner, we do hereby authorize the Owner to proceed to have the defects repaired and made good at our expense, and we will honor and pay the costs and charges therefore upon demand.

Signed _____
(Contractor)

Local Representative to be contacted for service:

Name: _____

Address: _____

_____

Phone No. _____ Fax _____

The guarantee form(s) shall be completed and returned with the acknowledgment of the Certificate of Completion.

The failure of the Contractor to execute, the guarantee shall not affect the right of the Owner to rely on and enforce the guarantee and the obligations respectively assumed by the Contractor under Section 8.77 hereof.

8.79 Arbitration If both parties mutually agree, all claims, disputes and other matters in question arising out of, or relating to, the Contract Documents or the breach thereof, except for claims which have been waived by the making and acceptance of final payment as provided by Section 8.66, may be decided by arbitration in accordance with the American Arbitration Association or any other similar body. The foregoing agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law (§12-1501 et. seq.) of the State of Arizona. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in any court having jurisdiction thereof.

Notice of the demand for arbitration shall be filed in writing with the other party to the Contract Documents and with the American Arbitration Association and a copy shall be filed with the Engineer. The party filing for arbitration may select which arbitration service to use. Demand for arbitration shall in no event by made on any claim, dispute or other matter in question which would be barred by the applicable statute of limitations.

The Contractor shall carry on the work and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed in writing.

The provisions of the Contract pertaining to arbitration are not binding upon Engineer, and Engineer cannot be compelled to participate against his will in an arbitration arising out of a dispute over the Contract or Contract Documents unless Engineer so consents in writing to be a party to the arbitration.

In the event either Contractor or Owner refuse to consent to arbitration of a claim, dispute, or any other matter in question arising out of, or relating to the Contract Documents or the breach thereof, then either party of the Contract may initiate a lawsuit against the other to resolve any claims, disputes and/or other matters in question arising out of or in any way related to the Contract Documents or the alleged breach thereof. The parties agree that any lawsuit filed by either party to the contract against the other shall be filed in the Mohave County Superior Court, State of Arizona.

8.80 Taxes and Charges The Contractor shall pay all State and local sales and use taxes on items, and in a manner as required by the laws and statutes of the State of Arizona and its political subdivisions. The Contractor shall withhold and pay any and all withholding taxes, whether State or Federal, and pay all Social Security charges, State Unemployment Compensation charges, industrial insurance, workers compensation charges, and pay or cause to be withheld, as the case may be, any and all taxes, charges, or fees, or sums whatsoever, which are now or may hereafter, be required to be paid or withheld under any laws.

8.81 Miscellaneous Conditions In the event that either party to the Contract is required to institute arbitration or litigation to enforce its rights under the terms of the Contract, then the prevailing party in the arbitration or litigation shall be entitled to recover all costs and attorney's fees incurred.

In the event that any provision contained in the contract is found to be contrary to the applicable law, then it shall be severed and the remaining provisions of the contract shall remain in full force and effect.

The Contract shall be governed by the law of the State of Arizona.

8.82 Conflicts within the Plans or Specifications In the event that a conflict is discovered between sections of the Specifications or between the Plans and the Specifications, the following list of priority shall be used to resolve the conflict:

A. Executed Change Orders
B. Addenda
C. Contract
D. Special Provisions
E. General Conditions
F. Invitation to Bid & Bid Documents
G. Supplemental Specifications
H. Technical Specifications
I. Plans
J. Referenced Standard Specifications or other Documents

8.83 Nondiscrimination The Contractor, with regard to the work performed pursuant to this Contract, shall not discriminate on the grounds of race, color, sex, religion, creed, age, physical or mental disability, or national origin or ancestry in any contracts with the public and in the selection and retention of employees or subcontractors, nor in the procurement of materials and leases of equipment.

8.84 Integration This Contract represents the entire agreement between the parties hereto and supersedes any and all prior negotiations or representations, either written or oral.

Amendments or modifications to the contract shall be in writing, signed by both parties, or by Change Orders.

The Contract Documents shall not be construed to create any contractual relationship of any kind between the Engineer and the Contractor, but the Engineer shall be entitled to performance of obligations intended for his benefit, and to the enforcement thereof.

Nothing contained in the Contract Documents shall create any contractual relationship between the Owner or the Engineer and any subcontractor or sub-subcontractor.

8.85 Hazard Communication Program All contractors working on Owner projects shall submit a copy of their hazard communication plan to the Fire Prevention Office and the Owner's Risk Management Division prior to commencement of work on any project. This will ensure that other individuals on the job site are not unknowingly exposed to a hazardous substance or chemical.

The Fire Prevention Office shall be provided a list of the hazardous substances and the material safety data sheets that are applicable to the work areas of those contract employees.

All contract labor within Owner facilities will be treated the same as regular employees with regard to this hazard communication standard.

9.0 Special Provisions

9.1 Scope These Special Provisions supplement and modify the General Conditions, Special Provisions, Technical Specifications, Supplemental Specifications and Construction Drawings (Plans). All requirements and provisions of the General Conditions, Special Provisions, Technical Specifications, Supplemental Specifications and Plans apply except where modified by these Special Provisions.

9.2 Project Description: The project consists of the removal of the existing median improvements in SR 95 from Central Avenue to Ricardo Avenue in Bullhead City, Arizona.

9.3 Definitions Of Terms Wherever in these documents the word "Owner" appears, it shall be understood to mean the City of Bullhead City, Arizona. Wherever in these documents the word "Contractor" appears, it shall be understood to mean the party or parties contracting with the Owner to perform the work. Wherever in these documents the word "Engineer" appears, it shall be understood to mean the Engineer as defined in Section 8.18, General Conditions.

9.4 Preconstruction Conference Within ten calendar days after the Contract has have been awarded, but before the start of construction, the Engineer will schedule a conference to be held at the site of the project for the purpose of discussing matters as project supervision, onsite inspections, progress schedules and reports, payrolls, payments to Contractors, equal employment opportunity, contract change orders, insurance, safety, and any other items pertinent to the project. The Contractor shall arrange to have all supervisory personnel connected with the project on hand to meet with the representatives of the Owner and the Engineer.

9.5 Compliance With Laws And Labor Material Requirements The Contractor shall conduct the work in compliance with all existing state and national laws and county and municipal ordinance and regulations limiting or controlling the work in any manner. Particular attention is called to the following State of Arizona laws:

A. Employment of aliens on Public Works prohibited, Arizona Revised Statute § 34-301 and Residence requirements for employees, Arizona Revised Statute § 34-302.

B. Workman's Compensation Insurance. All personnel working on the project shall be covered by Workmen's Compensation Insurance as provided or approved by the Arizona Industrial Commission in accordance with Arizona Revised Statute § 23-901 et. seq.

9.6 Copies Of Documents The Owner will furnish to the Contractor up to two copies of the Contract Documents in hard copy (paper) format as are reasonably necessary for the execution of the work. Additional copies will be furnished, upon request, for the cost of reproduction.

9.7 Drawings of Record Two additional sets of Contract Documents will be provided to the Contractor at no charge for the purpose of showing the work as actually installed. These Contract Documents are to be kept at the job site, maintained in good condition, and marked daily by the Contractor as the work proceeds. The Contract Documents shall be kept available for inspection by the Owner at all times, and shall be kept up to date.

9.8 Contract Time The contract time for this project is completion by **MAY 31, 2027** or earlier after Notice to Proceed.

9.9 Surveys The Contractor shall layout the work, in accordance with the drawings, shall establish all necessary lines, etc., required to complete the work in accordance with the Contract Documents. The Contractor shall employ an experienced and competent Arizona Registered Land Surveyor (R.L.S.) satisfactory to the Owner to layout the work and to verify lines and elevations as the work progresses. Surveying shall be considered incidental to the various Contract bid items and no additional compensation will be made for this work.

9.10 Weather Conditions In the event of temporary suspension of work, or during inclement weather, or whenever the Owner shall direct, the Contractor will and also cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Owner, any work or materials is damaged or injured by reason of failure on the part of the Contractor or any of his subcontractors to protect his work, the materials shall be removed and replaced at the expense of the Contractor.

9.11 Submittals Prior to construction and as soon as possible, the Contractor shall supply all submittals required by the Technical Specifications or as requested by the Owner.

9.12 Inspection Of The Work The Owner intends to assign an inspector for the project. The inspector will be available for a 40-hour period during the week from Monday through Friday during the period of the Contract. If the Contractor elects to work outside the 40-hour week that occurs between Monday through Friday, such as Saturday, Sunday or legal holidays, in accordance with Section 8.62 of the General Conditions, the Contractor will be responsible for all inspection, engineering, and testing costs incurred during that period. For any inspection work performed on Saturday, Sunday, or local municipal holidays, the minimum chargeable time shall be four hours. The Owner reserves the right to deduct these additional inspection, engineering, and testing costs directly from the Contractor's payments.

Additional inspections are required for all building-related activities, and must be scheduled and coordinated through Owner's Building Division utilizing an automated inspection request system. To schedule an inspection on an active permit please call the Owner's inspection request line at (928) 763-0172 a minimum of 24 business hours in advance. The Contractor is responsible for scheduling and coordinating all inspections with the Owner's project manager, staff and other agencies.

9.13 Water, Power, And Sanitation

A. WATER Water is available from the water utility companies located in the City of Bullhead City at a cost to be determined by the appropriate company and payable by the Contractor. The Contractor shall make all arrangements to obtain a hydrant meter, from the appropriate utility company, for the purpose of metering the use of water on the project. The Contractor shall adhere to all conditions stated in the Meter Application, including payment of a deposit for the meter, return of the meter to the water utility company each month during the project for reading, and notification to the water utility company prior to any change in the location of the hydrant meter. The maximum water to be drawn off a hydrant at any time will be determined by the water utility company. Water shall only be drawn off hydrants approved by the appropriate water utility company or their authorized representative.

B. POWER All power for lighting, operation of Contractor's plant or equipment or for any other use as may be required for proper completion of the work to be performed under the provisions of these Contract Documents, shall be provided by the Contractor at his sole cost and expense.

C. SANITATION Contractor is responsible for acquiring and maintaining all restroom facilities in accordance with all applicable Federal, State, and Local laws.

9.14 Burning Of Vegetation No burning of vegetation will be allowed.

9.15 Materials Testing

A. CONSTRUCTION TESTING The materials and workmanship provided during construction will be tested on a regular basis by the Engineer, provided, however that the Contractor shall provide all sampling and testing required to confirm that the products and materials to be provided meet the contract requirements, prior to start of construction. The Engineer shall not provide any sampling or testing prior to start of construction to determine the acceptability

of the products and materials to be provided by the Contractor. It shall be the responsibility of the Contractor, at no additional cost, to provide material samples for testing at the Owner's request. The Contractor shall include with its submittals copies of all test results confirming the acceptability of the products and materials to be utilized on the project.

The Contractor shall be responsible for charges resulting from failed tests; costs for retesting shall be based upon hourly and/or individual test rates. In the event any portion of the project is rejected because of substandard work, all materials testing, engineering, and inspection costs associated with corrective measures shall be chargeable to the Contractor at the current respective rates.

The Contractor shall provide all sampling and testing necessary for its performance of the work before and during construction to ensure its compliance with the Contract Documents, and any testing shall be considered incidental to the various Contract bid items and no additional compensation will be made, and no testing provided by the Owner shall relieve the Contractor from its quality control/quality assurance obligations. The Owner shall not be responsible for providing any sampling and testing before or during construction to assure the quality of the Contractor's work and materials; the Owner's only responsibility is to provide the acceptance testing the Engineer deems necessary to ensure that the finished work products meet the contract requirements.

B. PRELIMINARY MATERIALS TESTING All preliminary materials testing and mix design testing required by the specifications to ensure materials and mix designs are suitable for project use will be the responsibility of the Contractor at no additional cost to the Owner.

9.16 Cleanup And Pollution Control

A. GENERAL The Contractor shall be responsible for the removal of all debris, litter and waste from the job site(s) and/or equipment maintenance area and the restoration of any and all areas affected, directly or indirectly by the construction, transportation of equipment or materials and/or by the acts of neglect or omission by his employees. All trucks carrying debris, dirt or aggregate base course shall be covered to prevent airborne pollutant (dust).

All debris, litter, etc., shall be disposed of in accordance with prevailing ordinance or law. Open burning of trash, debris, etc., will not be permitted.

Clean-up operations shall be on a daily basis. All pavement, concrete, brush, rocks, excess materials, etc. accumulated or removed during the course of construction must be disposed of in those areas designated by the Engineer or his authorized representative, including but not limited to the Mohave County Landfill. All costs for disposal, including gate or tipping fees, etc. are the responsibility of the Contractor. This material must be disposed of within ten calendar days of time of removal. If the areas in question are not cleaned up to the satisfaction of the Engineer, progress payments will be withheld until clean-up is completed and approved by the Engineer.

B. TEMPORARY FACILITIES The Contractor shall provide temporary mailboxes and traffic control signs where necessary until completion of backfilling and clean-up.

C. SOLID WASTES All solid wastes shall be removed and disposed of in accordance with prevailing ordinance or law. Clean-up shall be completed on a daily basis. All costs for disposal shall be the responsibility of the Contractor, and shall be considered incidental to the costs of the various bid items.

All spilled paving and concrete material shall be removed and disposed of prior to final acceptance and payment.

D. MAINTENANCE AREAS Maintenance areas shall be kept clean during construction and shall be free of litter at all times. All empty containers, debris, waste, etc., shall be removed and disposed of prior to final acceptance. Upon inspection by the Engineer, the Contractor may be required to dress the surface of the ground, dependent upon the extent of spillage of petroleum products on the surface. If so directed, the dressing shall consist of scarifying the surface to a depth of six (6) inches and moving and compacting the soil in such a way as to blend the spill areas into clean soil and restore the surface by partial compaction.

E. POLLUTION The Contractor shall be held responsible for acts leading to pollution of water, air or land by any means.

Open burning of trash, debris, etc., will not be permitted anywhere in the City limits.

The discharge of any pollutants upon the surface of the ground, or into any stream, ravine, wash or body of water which may result in pollution of the public water supply, or of groundwater contributory thereto, will not be permitted.

Violation of these conditions will be cause for the termination of work, and possible legal action.

F. REMOVAL AND REPLACEMENT OF SIGNS, MAILBOXES, ETC It is the responsibility of the Contractor to remove all poles, etc. which are located within the construction area and replace them at the time of backfilling and clean-up in the locations determined by the Engineer. In the case of landscaping or other private items located in the construction area, the Contractor shall hand-deliver a written notice to all business, residences and public facilities in that area stating his intentions to perform work and shall do so at least five calendar days prior to work commencing. If, at the time of construction these items are still in the construction area, the Contractor is to remove and dispose of them properly. All signs and mailboxes shall be permanently installed within 48 hours of construction of sidewalk.

G. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT

**The Contractor shall assume all responsibility for complying with the requirements of the NPDES Phase II Construction Program and must submit an AZPDES permit to ADEQ that meets all the requirements of a General Permit for Discharge from Construction Activities to Waters of the United States and all ADEQ requirements.**

At the time of the preconstruction conference, the Contractor shall submit, for the Engineer's approval, a program which includes all the measures, which the Contractor proposes to take for the construction of permanent erosion control work specified in the contract and all the temporary control measures to prevent erosion and pollution of streams, lakes and reservoirs.

Permanent erosion control work and pollution prevention measures shall be performed at the earliest practicable time consistent with good construction practices. Temporary work and measures are not meant to be performed in lieu of permanent work specified in the Contract.

Construction of drainage facilities as well as the performance of other contract work, which will contribute to the control of erosion and sedimentation, shall be carried out in conjunction with earthwork operations or as soon thereafter as possible.

Except for that approved in writing by the Engineer, the Contractor shall perform no clearing and grubbing or earthwork until the Contractor’s program has been approved.

If in the opinion of the Engineer, clearing and grubbing, excavation, or other construction operations are likely to create an erosion problem because of the exposure of erodible earth

material, the Engineer may limit the surface area to be disturbed until satisfactory control measures have been accomplished. Unless otherwise permitted by the Engineer, the Contractor shall not expose an area of erodible earth material greater than 217,800 square feet at any one location.

The Engineer may order the Contractor to provide immediate measures to control erosion and prevent pollution. Measures may involve the construction of temporary berms, dikes, dams, sediment basins and slope drains; the use of temporary mulches, mats and seeds and the use of other devices, methods, items, etc., as necessary.

At any time, the Contractor proposes to change its schedule of operations, the Contractor shall review and update its erosion and pollution control program and submit it to the Engineer for approval.

The Contractor shall not be entitled to additional compensation or an extension of contract time for any delays to the work because of the Contractor's failure to submit an acceptable erosion and pollution control program.

Permanent erosion control and pollution prevention work specified in the Contract, which is to be accomplished under any of the various Contract items will be paid for by the bid item and considered incidental to that work. Any additional work required by the Owner will be paid for by the Force Account set up for this work.

The cost of any erosion control and pollution prevention work which may be proposed by the Contractor in his/her program, in addition to that specified in the contract, will be considered as included in the prices bid for contract items. There is no separate payment for this item.

Temporary erosion control and pollution prevention work necessary for the Contractor to complete the various contract bid items shall be considered incidental to the bid items and the Contractor shall not be entitled to any additional compensation or an extension of contract time for any delays to the work to perform the temporary work.

9.17 Dust Control It shall be the Contractor's responsibility to provide adequate water for dust control. It is imperative that the air quality standards are maintained. In addition, dust could be quite hazardous in the everyday operations. It shall be the Contractor's responsibility to ensure that all regulations for air quality and safety are met.

9.18 Supervisory Personnel It is the intent of these specifications to provide a completed project that will in every way reflect the work of competent journeyman mechanics in the various trades represented. The Contractor shall ensure that each portion of the work is supervised by a qualified person, well versed in the operation of the various tools required for the trade, the method in which the work is to be done, and knowledge of the general requirements of the construction work. All work is to be done in accordance with the latest methods devised for such work and consistent with acceptable national industry standards to ensure the highest quality product.

9.19 Safety Requirements The Contractor shall comply with all pertinent provisions of the Department of Labor "Safety and Health Regulations for Construction" (29 CFR Part 1518, 36 CFR 7340), with additions or modifications thereto, in effect during construction of this project.

**THE FOLLOWING MEASURES OR PROVISIONS ARE TO BE ADHERED TO AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT:**

A. All heavy construction machinery to include trenching machines, bulldozers, backhoes, etc., must be equipped with a roll bar meeting the requirements of the above regulation.

B. Safety helmets will be worn by all personnel working at the site. In addition, all spectators will be required to wear safety helmets in construction zone.

C. Steel toe safety shoes or boots will be worn by all personnel working at the site.

D. Shoring of trenches and/or excavations per the Department of Labor/OSHA requirements.

9.20 Preservation Of Bench Marks And Monuments The Contractor shall exercise caution to ensure that permanent bench marks, survey monuments, established property corners, survey lines, and points are not damaged or disturbed by this work. If any survey monuments, property corners, survey lines or points are damaged or disturbed, the Contractor's representative shall immediately notify the inspector. All survey monumentation damaged or disturbed by this work shall be replaced by an Arizona Registered Land Surveyor (R.L.S.) after completion of the pavement removal and replacement operations and installation of underground facilities. A record of all monuments that have been disturbed and replaced must be recorded with the Mohave County Recorder's office and copy submitted to the Owner's Engineering Division. All costs incurred to re-establish and record points shall be the responsibility of the Contractor.

9.21 Disposal Of Excess Material Excess soil and unsuitable materials shall be removed from the site by the Contractor at his own expense and disposed of in accordance with the Contract Documents.

9.22 Reference Standard Specifications Where standard specifications or testing methods have been referred to, such as ASTM or AASHTO, the intent is to refer to the latest applicable issue or revision of such specifications or testing methods. The following abbreviations are used in these specifications.

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|---|---|
| AWWA | American Waterworks Association |
| AASHTO | American Association of State Highway and Transportation Officials |
| ACI | American Concrete Institute |
| AI | Asphalt Institute |
| AISI | American Iron and Steel Institute |
| ANSI | American National Standards Institute (formerly the USA Standards Institute) |
| ASTM | American Society for Testing and Materials |
| NSF | National Sanitation Foundation |
| SPWC. | Standard Specifications for Public Works Construction. (Wherever written herein shall mean "Maricopa Association of Governments, Arizona Specification for Public Works Construction".) |
| APWA | American Public Works Association |

The governing specifications for this project shall be the Maricopa Association of Governments (MAG) UNIFORM STANDARD SPECIFICATIONS for PUBLIC WORKS CONSTRUCTION, 1998 Arizona including revisions through 2007, MAG UNIFORM STANDARD DETAILS for PUBLIC WORKS CONSTRUCTION, 1998 Arizona including revisions through 2008, the Manual of Uniform Traffic Control Devices (MUTCD) 2003, ADOT Traffic Control Manual for Hwy Construction (Supplement) 1996, UNLESS OTHERWISE NOTED HEREIN. Reference: ARIZONA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS for ROAD AND BRIDGE CONSTRUCTION 2008.

9.23 Codes, Ordinances And Local Specifications All work under this project shall be performed in strict accordance with these specifications and the Standard Specifications for Public Works Construction (SPWC). Where any conflict occurs between these plans and specifications and the local codes and ordinances in effect at the time, applicable codes and ordinances shall take precedence over these plans and specifications only if these plans and specifications are inferior as to materials and workmanship called for by the codes and ordinances.

9.24 Interfering Structures and Utilities The Contractor shall notify Arizona Blue Stake (1-800-782-5348) at least three working calendar days prior to any excavations.

The Contractor shall exercise all possible caution to prevent damage to existing structures and utilities, whether above ground or underground. The Contractor shall notify all utility offices concerned at least 72 hours in advance of construction operations in which a utility's facilities may be involved.

Any structure or utility damage caused by the work shall be repaired or replaced in a condition equal to or better than the condition prior to the damage. Repair or replacement shall be accomplished at the Contractor's expense without additional compensation from the Owner.

If interfering structures or installations such as, but not limited to, vaults, manholes, valves, utility poles, guy wires, or anchors are encountered, the Contractor shall notify the Engineer and contact the appropriate utility or structure owner at least seven calendar days in advance of construction to arrange for protection or relocation of the structure.

The Contractor shall remove, protect and/or replace all existing structures, utilities or other improvements and similar items within the proposed improvements at his own expense without additional compensation from the Owner unless specifically provided for as a pay item of work by the specifications or as otherwise provided for in the Plans. Replacement shall be in a manner and in a condition at least equivalent to, or better than, the original condition.

If the Contractor encounters existing facilities which will prevent the construction of any facility and which are not properly shown on the Plans, he shall notify the Owner before continuing with the construction in order that the Owner may make any field revisions as necessary to avoid conflict with the existing structure. The cost of waiting or "down" time during field revision shall be borne by the Contractor without additional cost to the Owner. If the Contractor fails to notify the Owner when an existing structure is encountered, but proceeds with the construction despite this interference, he does so at his own risk. In particular, when the location of the new construction will prohibit the restoration of existing structures to their original condition; the Contractor shall notify the Engineer and contact the utility or structure owner so a field relocation may be made, if possible, to avoid the conflict.

In the event of interruption to any utility service as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority. He shall cooperate with the said authority in restoration of service as promptly as possible and shall bear all costs of repair. In no case shall interruption of any utility service be allowed to exist outside working hours unless prior approval of the Owner is received.

Neither the Owner nor its officers or agents shall be responsible for damages to the Contractor as a result of the locations of the water and sewer lines or utilities being other than those shown on the Plans or for the existence of water, sewer lines or utilities not shown on the Plans.

9.25 Air Quality – Operating Permits The Contractor may be required to obtain registration certificates and/or operating permits for sources of air pollution.

The Owner will not require an Air Quality Permit for this project. The Contractor will be responsible for obtaining any State or Federal permits associated with its construction activities on the project.

Information concerning these certificates and permits may be obtained from:

The Office of Air Quality
Arizona Department of Environmental Quality
P.O. Box 600
Phoenix, AZ 85001-0600
(602) 207-2300

9.26 Adjust Utilities To Finished Grade All manhole rims, valve boxes, meter boxes, utility vaults, etc., are to be set to finished grade. The Contractor shall adjust sewer and water facilities to finished grade in

accordance with the specifications. Unless otherwise indicated on the drawings, the adjustment of all utilities shall be considered incidental to other items and the Contractor shall not be entitled to any additional compensation or an extension of contract time for any delays to the work to perform the work. It shall be the responsibility of the Contractor to coordinate with the various private utility companies so that they can adjust their facilities to finished grade at an appropriate time.

9.27 Safety, Health And Sanitation Provisions The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of his employees as may be necessary to comply with the requirements and regulations of the Arizona State Department of Health.

The Contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions, on his own responsibility or as the Owner may determine, reasonably necessary to protect the life and health of employees on the job, the safety of the public and to protect property in connection with the performance of the work covered by the contract.

Precaution shall be exercised by the Contractor at all times for the protection of persons (including employees) and property. The Contractor shall comply with the provisions of all applicable laws, pertaining to such protection including all Federal and State occupational safety and health acts, and standards and regulations promulgated there under.

9.28 Public Safety And Traffic Control Every attempt shall be made to provide public safety during the construction of the project. Traffic control shall be performed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (M.U.T.C.D.), published by the Federal Highway Administration (FHWA).

During all construction operations, the Contractor shall construct and maintain facilities as may be required to provide access for all property owners to their property. No person shall be cut off from access to his residence or place of business for a period exceeding two hours, unless the Contractor has made a special arrangement with the affected persons. It shall be the Contractor's responsibility to notify all adjacent property owners of the construction activity and the schedule of those activities prior to any work being performed.

The Contractor shall submit for approval a traffic control and barricade plan within ten calendar days of receipt of Notification of Award of Contract. There shall be no deviations from the approved barricade plan unless a revised barricade plan is submitted and approved. The Contractor shall issue a news release once a week for duration of the project. The release will be published in Sunday's newspaper and shall indicate the area in that the Contractor will be performing work for that week.

Businesses must be notified 48 hours prior to any restrictions on normal parking areas used by their employees or patrons.

The Contractor shall contact, cooperate with, and give notice to each resident, homeowner, business or school that will be affected by any part of the construction process, particularly concerning temporary interruptions to vehicular access.

Written notice of the approximate schedule and explanation of work shall be given to each resident, homeowner, business or school at least five calendar days prior to commencement of work in the area. Verbal door-to-door communication shall be made at least 24 hours prior to construction to remind all affected parties of the construction to take place.

The Owner shall receive a copy of all notifications to residents. In the event of complaints by residents, the Owner may require the Contractor to provide documentation (i.e. check list) showing the date & time of the verbal door-to-door communication.

In addition, the Contractor is responsible to answer and resolve any conflicts that may arise between a homeowner or business owner and himself during the construction process.

The Contractor shall provide and station competent flaggers whose sole purpose shall be to direct the movement of public traffic through or around the work. Proper advanced warning signs shall be in place when flaggers are working and removed when work requiring flaggers is completed. Flaggers must be used to assist trucks for safe ingress and egress whenever truck movements may interfere with safe passage through the work zone.

All traffic control devices that are not in use or will not be used for a period greater than 72 hours or that are determined by the Engineer to be unnecessary, confusing, or causing an unsafe condition, shall be removed by the Contractor from the public right-of-way immediately upon notification by the Engineer.

Every attempt shall be made to provide public safety during the construction of the project. Traffic control shall be performed in accordance with Section 401 of the most current version of the Maricopa Association of Governments (MAG) Uniform Standard Specifications for Public Works Construction and these Contract Documents. No person shall be cut off from access to his residence or place of business for a period exceeding six hours, unless the Contractor has made a special arrangement with the affected persons. In addition, no work will be scheduled which will interrupt regular trash pickup to either residential or commercial properties. It will be the Contractor's responsibility to coordinate his activities with the local trash haulers.

No streets, avenues, boulevards or cul-de-sacs will be closed to traffic unless prior arrangements have been made and approval has been obtained from the Engineer.

9.29 Temporary Facilities On Site

A. General Not all of the temporary facilities on site referred to in this subsection are anticipated for this project. Contractor is responsible for identifying to the Owner the temporary facilities required on site. Except as otherwise provided, the Owner shall bear no costs of temporary facilities and their removal.

B. Temporary Utility Services The Contractor shall provide temporary electric power as necessary for the execution of the Work, including that required by all subcontractors. He shall make the necessary arrangements with Owner, shall bear all costs for these temporary services and shall furnish and install all necessary transformers, metering facilities and distribution centers from branch circuits as he may require.

The Contractor shall provide lighting and outlets in temporary structures throughout the project as may be required for safety, proper performance and inspection of the work. If operations are performed during hours of darkness, or if natural lighting is deemed insufficient by Owner, the Contractor shall provide adequate floodlights, clusters and spot illumination. The use of permanently installed lighting fixtures, lamps and tubes for work will not be permitted except by special permission of Owner. The Contractor shall make arrangements with subcontractors for electrical services and lighting as may be necessary in the performance of their work.

Temporary water service lines, if required, shall be installed and removed by the Contractor, who shall pay all charges for use of the water, making the connections, running the temporary lines, removing the temporary lines at the completion of the work and disconnecting the services. All relocations required to clear the work of others shall be performed by the Contractor when requested by the Owner.

C. Temporary Structures Prior to starting Work, the Contractor shall, as directed by Owner, provide and maintain suitable temporary office facilities for the duration of the project as required for the Contractor's project administration; and all necessary sheds and facilities for the proper storage of tools, materials and equipment employed in the performance of the work.

D. Toilet Facilities The Contractor shall provide and maintain temporary toilet facilities for the duration of operations, which shall be maintained in a clean and sanitary condition acceptable to Owner and in full compliance with applicable regulations of any public authority.

E. Telephones The Contractor shall provide, maintain and pay for telephone services for the duration of the work as required for the Contractor's operation.

F. Fence and Barricades The Contractor shall provide protective fences and barricades as he may deem necessary for public safety and to protect his storage areas and the work in place. The location and appearance of all fences shall be subject to the approval of the Owner.

G. Contractor Parking The Contractor shall not park his equipment, nor allow his personnel to park, in any area except those specifically designated by the Owner.

H. Temporary Living Quarters Temporary living quarters shall not be allowed on the job site or on publicly owned properties. There will be strict adherence to Owner's Zoning Code for the area in question.

I. Removal of Temporary Construction The Contractor shall remove temporary office facilities, toilets, storage sheds and other temporary construction from the site as soon as, in Owner's opinion, the progress of Work permits. He shall recondition and restore those portions of the site occupied by the same to a condition equal to or better than it was prior to construction.

9.30 Access to Washes

A. The Contractor shall have access to the washes via public streets and/or private easements only. For the purposes of this subsection, "private easement" means an agreement by and between the Contractor and a property owner, in writing authorizing the Contractor to travel across the property owner's real property in order to have ingress or egress to a wash or portion thereof. Access agreements, if any, shall be filed with the Owner's Public Works Director before the Contractor may exercise the rights there under granted. Access to any wash or portion thereof by any means not in compliance with the terms of this subsection shall be deemed a trespass and a breach of the terms of the Contract.

B. Violations of the provisions of subsection (A) hereof, shall entitle the Owner to deduct the sum of One Thousand Dollars ($1,000.00) from the monies due to Contractor as and for liquidated damages for each violation. For the purposes of this subsection, each entry by a vehicle upon land for which Contractor has not received permission to enter shall be deemed a separate violation of subsection (A) hereof.

9.31 Coordination and Cooperation with Utility Companies and Other Trades

A. Coordination/Interruption The Contractor is responsible to coordinate work with all utility companies and other trades, on or affecting the job, for an efficient and effective execution of the complete project. The Contractor shall carefully examine all work that may conflict, and plan removal and/or installation details in advance of the construction to avoid any conflict. Failure on the Contractor's part to coordinate with any and all utilities, public or private, shall preclude the Owner's consideration for additional time or cost.

B. Permission Required Utility mains and utility service to buildings shall not be cut off or otherwise interrupted without the Contractor obtaining permission from the Owner in each and every instance.

C. Scheduling of Interruptions Where utilities serve facilities or buildings in use, interruptions in service shall be scheduled during the hours when the facility is not in operation. Any overtime costs occasioned thereby shall be regarded as incidental to, and included within, the contract sum.

D. General Requirements Prior to interrupting any utility service, the Contractor shall ascertain that he has the proper materials, together with adequate workmen and equipment, to complete the work with a minimum of delay.

9.32 Review of Project Site The Contractor shall be responsible for reviewing the entire extent of the proposed project, and assuring a full understanding of the existing conditions of the sites. No allowances will be made after bidding for conditions at the site, and the Contractor shall be responsible for furnishing all labor and materials necessary to carry out the provisions of the Contract.

9.33 Owner Contingency

PART 1 - GENERAL

1.1 - Description of Work

The work to be performed in accordance with this article includes additional work that is outside the general scope of the proposed project. The work to be performed shall be specifically requested in writing by the Owner or the Engineer and the work shall not be performed until authorized by the Owner in writing, in accordance with subsection 3.2 of this Section 9.33. As the project is completed, it is anticipated that the Owner may request additional work to be performed that currently is not a part of this contract and it is the intent that the requested work shall be performed in accordance with this article.

PART 2 - MATERIALS

2.1 - General

Any materials utilized under this article shall conform specifically with the appropriate Materials section of these specifications unless the Owner specifically requests in writing a deviation from the specifications. If the materials are not covered by an appropriate specification of this document, then the Owner will provide a written specification for the materials requested

PART 3 - EXECUTION

3.1 - Workmanship

Furnish all materials, equipment and labor required to complete the work. All workmanship shall meet or exceed the appropriate specifications included in this document or any supplemental specifications that may be provided. Perform work in accordance with the contract plans or in accordance with any supplemental plans that may be provided by the Owner.

3.2 – Written authorization required before commencing work

No work to be paid for under this Owner Contingency article shall be performed until the Contractor has formally provided in writing to the Owner the appropriate documentation to confirm the cost, quality, quantity and any such changes in contract time as may be warranted by the additional work, and the owner has issued approval in writing to perform the work and the cost that will be paid for the work. The Owner shall have no responsibility to pay for any work performed by the Contractor under this article that has not received prior written authorization from the Owner.

## PART 4 - MEASUREMENT AND PAYMENT

### 4.1 - Measurement

The method of measurement shall be in accordance with the appropriate specification or as included in specific written instructions from the Owner or the Engineer.

### 4.2 - Payment

Payment for work performed under this article shall be made for those items specifically requested in writing by the Owner. The value of any work performed in this article shall be determined by one or more of the following methods in the order of precedence listed below.

A. Unit prices previously approved.

B. An agreed lump sum.

C. The actual cost for labor, materials, supplies, equipment and other services necessary to complete the work. In addition, there shall be added an amount to be agreed upon but not to exceed 15 percent of the actual cost of the work to cover the cost of general overhead and profit.

The amount specified for Owner Contingency in the Bid Documents is an estimate that is provided so each potential bidder has an equal opportunity in the bidding. The amount does not in any way represent what work may be requested or the quantity or value of the work. The Contractor shall only be compensated for the actual work requested and performed. A final Change Order will be issued to reflect the amount of work actually completed to adjust the final contract amount.

Payment for any additional work authorized by the Owner under this article shall be made under the bid item “Owner Contingency”, and shall be assigned an alphabetical sub-item number, in ascending order, and indicated as such on the authorizing paperwork noted in sub-section 3.2 of this Section 9.33. All subsequent Progress Payment Applications shall include each authorized Owner Contingency sub-item, and the remaining funds in the Owner Contingency main bid item (i.e. the difference between the original Owner Contingency in the project less all Owner Contingency sub-items authorized by the Owner) shall be indicated in the Progress Payment Application under the original bid item number for Owner Contingency. At no time shall the sum of the Owner Contingency remaining funds and all authorized sub-items exceed the total cost of the original Owner Contingency main bid item indicated in the Bid Schedule (Article 3).

10.0 CONSTRUCTION DRAWINGS

The attached Construction drawings for this project titled "**Hancock Road Paving Project**" with an issue date of **October 08, 2026**, and consisting **Sheets 1 through 10**, and any authorized amendments, are an integral part of the Contract Documents for this project and are incorporated herein by this reference.

11.0 Asphaltic Concrete and Aggregates:

11.0.1 General:

All asphaltic concrete pavements and aggregate bases shall comply with the requirements of this specification.

11.1 Asphalt:

Asphalt concrete shall be a mixture of asphalt cement and mineral aggregates. Mineral admixture shall be included in the mixture when required by the mix design or by the Engineer. Asphalt concrete shall be produced in accordance with Uniform Standard Specifications for Public Works Construction, Maricopa Association of Governments (MAG), Section 321.

The designation for asphalt concrete mixes shall be based on the nominal maximum aggregate size of the mix. The applicable mix designations are 3/8 inch, ½ inch, ¾ inch and Base (1") mix. Each mix shall be designed using Marshall Compaction methods. Marshall Mixes may be used for low or high traffic conditions, as determined by the City. Low traffic conditions are conditions where the asphalt mix will be subject to low volume and low weight vehicle usage. Examples of this condition are residential streets, most parking lots and residential minor collector streets. High traffic conditions are conditions where the asphalt mix will be subject to high volume and/or heavy weight vehicle usage as found on major collector, arterial and commercial streets. Street classifications (i.e. minor collector and major collector) shall be determined by the City of Bullhead City Public Works Department.

A) Asphalt Binder: The asphalt binder specified in this section has been developed for use in desert climate conditions. The asphalt binder shall be Performance Grade Asphalt conforming to the requirements of MAG Section 711 for PG 70-10, unless otherwise approved by the Engineer or specified differently in the plans or special provisions.

B) Aggregate: Course and Fine aggregates shall conform to the applicable requirements of this section. Coarse mineral aggregate shall consist of crushed gravel, crushed rock, or other approved inert material with similar characteristics, or a combination thereof, conforming to the requirements of these specifications.
Coarse aggregate for hot mix asphalt is material retained on or above the No. 4 sieve and Fine aggregate is material passing the No. 4 sieve. Aggregates shall be relatively free of deleterious materials, clay balls, and adhering films or other material that prevent coating with the asphalt binder. Coarse and Fine aggregates shall conform to the following requirements when tested in accordance with the applicable test methods.

Tests on aggregates used in asphalt concrete outlined above, shall be performed on materials furnished for mix design purposes and composited to the mix design gradation.

Blend sand (naturally occurring or crushed fines) shall be clean, hard and sound material that will readily accept asphalt binder coating. The blend sand grading shall be such that, when it is mixed with the other mineral aggregates, the combined product shall meet the requirements of Table 11.1-1.

The natural sand shall not exceed 20 percent for Marshall Mixes by weight of the total aggregate for a mix.

C) Mineral Admixture: Mineral admixture when used as an anti-stripping agent in asphalt concrete shall conform to the requirements of AASHTO M-17. Mineral admixture used in asphalt concrete shall be dry hydrated lime, conforming to the requirements of ASTM C-1097 or Portland cement conforming to ASTM C 150Type II or ASTM C 595 Type IP. The amount of hydrated lime or Portland cement used shall be determined by the mix design. The

minimum Mineral admixture content within a mix will be 1.00 percent, by weight of total aggregate.

| Table 11.1-1<br><br>COURSE/FINE AGGREGATE REQUIREMENTS | | | |
|---|---|---|---|
| **Characteristics** | **Test Method** | **Low Traffic** | **High Traffic** |
| Fractured Faces, %,<br><br>(Course Aggregate Only) | Arizona 212 | 75, 1 or more | 85, 1 or more<br><br>80, 2 or more |
| Uncompacted Voids, % Min. | AASHTO T-304, Method A | 42 | 45 |
| Flat & Elongated Pieces, % 5:1 Ratio | ASTM D-4791 | 10.0 Max | 10.0 Max |
| Sand Equivalent, % | AASHTO T-176 | 50 Min. | 50 Min. |
| Plasticity Index | AASHTO T-90 | Non-Plastic | Non-Plastic |
| L.A. Abrasion, %Loss | AASHTO T-96 | 9 Max. @ 100 Rev.<br><br>40 Max. @ 500 Rev | 9 Max. @ 100 Rev.<br><br>40 Max. @ 500 Rev |
| Combined Bulk Specific Gravity | AI MS-2/SP-2 | 2.35-2.85 | 2.35-2.85 |
| Combined Water Absorption | AI MS-2/SP-2 | 0-2.5% | 0-2.5% |

11.1.1 Previously Utilized Mix Design:

The Contractor may propose to use an established mix design from a previously utilized source or combination of sources. The Contractor should then submit information pertaining to the previously used design including evidence that the materials to be incorporated have not been changed. All documentation of previously utilized mixes must be no more than 1 year old. The Engineer will have the authority to disapprove the use of a previously utilized mix design if the Engineer questions the evidence provided or determines the prior use of the mix design did not obtain desirable results. The authority to approve or disapprove a previously used mix design lies solely with the Engineer and his decision shall be final. It should be noted that all other material requirements specified in these

documents must be presented for review as well. Any materials previously used and/or accepted do not constitute current approval or acceptance by the City.

11.1.2 Changes in the Approved Mix Design During Production:

At any time after production of asphaltic concrete has been started on the basis of the approved mix design, changes may be proposed by the Contractor or directed by the Engineer. If changes are proposed in the source of either bituminous material of mineral aggregate or changes are proposed in the proportions of mineral aggregate sources equal to or greater than five percentage points, additional testing, to the extent deemed necessary by the Engineer, will be performed by the contractor until the Engineer may be satisfied that the mix design criteria will be met. The proposed changes shall not be made until the Engineer has approved them. All costs for additional testing shall be borne by the contractor.

11.2 Mix Design Requirements:

11.2.1 General:

The mix design for asphalt concrete shall be prepared by a laboratory that is accredited through the AASHTO Accreditation Program (AAP) in Hot Mix Asphalt Aggregates and Hot Mix Asphalt. The laboratory shall be under the direct supervision of a Civil Engineer, registered by the State of Arizona, and who is listed by ADOT as a "Qualified Asphaltic Concrete.

A. Mix Design Engineer" within ADOT's latest list of approved laboratories. The latest list of approved laboratories is available on ADOT's web page (www.azdot.gov). The date of the design shall not be older than 1 year from the date of submittal, unless supportive documentation is provided and approved by the Engineer. The mix design report shall include the following elements as a minimum. The name and address of the testing organization and the person responsible for the mix design report.

B. The mix plant identification and/or location, as well as the supplier or producer name.

C. A description of all products that are incorporated in the asphalt concrete along with the sources of all products, including admixtures and asphalt binder, and their method of introduction.

D. The supplier and grade of asphalt binder, the source and type of mineral aggregate, and the percentage of asphalt binder and mineral admixture used.

E. The mix design report shall state the traffic condition (low or high traffic) and size designation. In all cases Gyratory based mix designs shall be designated as high traffic mixes. Marshall based mix design shall be designated either low or high traffic mixes.

F. The results of all testing, determinations, etc., such as: specific gravity and gradation of each component, water absorption, sand equivalent, loss on abrasion, fractured coarse aggregate particles, Tensile Strength Ratio (AASHTO T 283), Marshall stability and flow, asphalt absorption, percent air voids, voids in mineral aggregate, and bulk density. Historical abrasion values may be supplied on existing sources. The submittal should include a plot of the gradation on the Federal Highway Administration's 0.45 Power Gradation Chart, plots of the compaction curves and the results of moisture sensitivity testing.

G. The laboratory mixing and compaction temperature ranges for the supplier and grade of asphalt binder used within the mix design.

H. A specific recommendation for design asphalt binder content and any limiting conditions that may be associated with the use of the design, such as minimum percentages of crushed or washed fine aggregate.

I. The supplier's product code, the laboratory Engineer's seal (signed and dated), and the date the design was performed.

The mix design shall be submitted to the City of Bullhead by the Contractor for which it was developed as part of his project submittals. Once the Engineer has approved the mix design, the Contractor and/or his supplier shall not change plants nor utilize additional mixing plants without prior approval of the Engineer. Any proposed changes in the plant operation, the producer's pit, the asphalt binder, including modifiers in the asphalt binder, or any other item that will cause an adjustment in the mix, shall be justification for a new mix design to be submitted and approved by the Engineer prior to its use. If the contractor places any materials without approval by the Engineer, the City may withhold payment for those materials until approval is granted, or if through quality control testing it is determined that the materials meet the specifications, at the sole discretion of the City, payment may be made on those materials.

11.2.2 Mixed Design Criteria:

The mix design shall be performed by Marshall Mix Design. A minimum of 4 points will be used to establish the mix design results. The oven aging period for Marshall Mix design samples shall be 2 hours.

**TABLE 11.2-2**
**MARSHALL MIX DESIGN CRITERIA**

| Criteria | Requirements | | | | Designated Test Method |
|---|---|---|---|---|---|
| | 3/8" Mix | ½" Mix | ¾" Mix | Base Mix | |
| 1. Voids in Mineral Aggregate: %, Min | 15.0 | 14.0 | 13.0 | 12.0 | AS MS-2 |
| 2. Effective Voids: %, Range | 4.0 ± 0.2 | 4.0 ± 0.2 | 4.0 ± 0.2 | 4.0 ± 0.2 | AI MS-2 |
| 3. Absorbed Asphalt: % Range* | 0-1.0 | 0-1.0 | 0-1.0 | 0-1.0 | AI MS-2 |
| 4. Dust to Eff. Asphalt Ratio, Range** | 0.6-1.4 | 0.6-1.4 | 0.6-1.4 | 0.6-1.4 | AI MS-2 |
| 5. Tensile Strength Ratio: %, Min. | 65 | 65 | 65 | 65 | AASHTO T-283 |
| 6. Dry Tensile Strength: PSI Min. | 100 | 100 | 100 | 100 | AASHTO T-283 |
| 7. Stability: Pounds, Min. | 2,000 | 2,500 | 2,500 | 3,000 | AASHTO T-245 |
| 8. Flow: 0.01-Inch, Range | 8-16 | 8-16 | 8-16 | 8-16 | AASHTO T-245 |
| 9. Mineral Aggregate Grading Limits | | | | | AASHTO T-27 |

| PERCENT PASSING WITH ADMIX | | | | | |
|---|---|---|---|---|---|
| Sieve Size | 3/8" Mix | ½" Mix | ¾" Mix | Base Mix | |
| 1-1/4 Inch | | | | | 100 |
| 1 Inch | | | 100 | | 90-100 |

| | | | | | |
|---|---|---|---|---|---|
| ¾ Inch | | 100 | 90-100 | | 85-95 |
| ½ Inch | 100 | 85-100 | | | |
| 3/8 Inch | 90-100 | 62-85 | 62-77 | | 57-72 |
| No. 8 | 45-60 | 40-50 | 35-47 | | 33-43 |
| No. 40 | 10-22 | 10-20 | 10-20 | | 9-18 |
| No. 200 | 2.0-10.0 | 2.0-10.0 | 2.0-8.0 | | 1.0-7.0 |

* Unless otherwise approved by the Engineer.

**The ratio of the mix design composite gradation target for the No. 200 sieve, including admixture, to the effective asphalt content shall be within the indicated range.

11.2.3 Marshall Mix Design:

The Marshall Mix Design shall be performed in accordance with the requirements of the latest edition of the Asphalt Institute's Manual, MS-2 "Mix Design Methods for Asphalt Concrete." The mix shall utilize the compactive effort of 75 blows per side of specimen. The mix shall comply with the criteria in Table 11.2-2.

11.3 Asphalt Paving:

11.3.1 The asphalt shall be produced from crude asphalt petroleum or a mixture of refined liquid asphalt and refined solid asphalt. It shall be free from ad-mixture with any residues obtained by the artificial distillation of coal, coal tar, or paraffin oil and shall be homogeneous and free from water. Asphalt shall not be heated during the process of its manufacture, storage, or during construction so as to cause injury as evidence by the formation of carbonized particles.

11.3.2 Paving asphalt shall be classified by the Performance Grading System and shall conform to the requirements set forth in MAG Table 711-1.

11.4 Test Report And Certification:

At the time of delivery of each shipment of asphalt, the supplier supplying the material shall deliver to the purchaser 3 certified copies of the test report which shall indicate the name of the refinery and supplier, type and grade of asphalt delivered, date and point of delivery, quantity delivered, delivery ticket number, purchase order number, and results of the above specified tests. The test report shall be signed by an authorized representative of the supplier certifying that the product delivered conforms to the specifications for the type and grade indicated. Until the certified test reports and samples of the material have been checked by the Engineer, that material will be only tentatively accepted by the City. Final acceptance will be dependent upon the determination of the Engineer that the material involved fulfills the requirements prescribed. The certified test reports and the testing required in connection with the reports shall be at no additional cost to the City.

11.5 Placing And Finishing:

This section is to provide specifications for furnishing all materials, mixing at a plant, hauling and placing a mixture of aggregate materials, mineral admixture and asphalt binder to form a pavement course for placement upon a previously prepared base or sub base.

11.5.1 The materials shall conform to these specifications for the type specified. The specific required mix type shall be called out in the contract documents or as directed by the Engineer.

11.5.2 Asphalt concrete shall be placed only when the surface is dry, and when the atmospheric temperature in the shade is 40° F. (50° F for Asphalt Concrete lift less than 2 inches thick) or above. No asphalt concrete shall be placed when the weather is foggy or rainy, or when the base or sub base on which

the material is to be placed is unstable. Asphalt concrete shall be placed only when the Engineer determines that weather conditions are suitable.

11.5.3 A tack coat shall be applied to all existing and to each new course of asphalt concrete prior to the placing of a succeeding lift of asphalt concrete. The tack coat may be deleted when a succeeding layer of asphalt concrete is being applied over a freshly laid course that has been subjected to very little traffic when approved by the Engineer. The application of the tack coat shall comply with MAG Section 329. The grade of emulsified asphalt shall be SS-1 h or CSS-1 h as specified in MAG Section 713. The same material that is specified above for the tack coat shall be applied to the vertical surfaces of existing pavements, curbs, and gutters, against which asphalt concrete is to be placed. The surface to be covered may require repair or patching as directed by the Engineer. This shall be addressed in the project specifications prior to the bidding of the project.

11.5.4 All materials shall be proportioned by weight in a hot mix asphalt plant in the proportions required by the mix design to provide a homogeneous and workable mass. Each hot mix asphalt plant shall be inspected in accordance with the provisions contained in the 'Hot Mix Asphalt Production Facilities' by the Arizona Rock Products Association and shall have a current inspection certificate. All measuring devices shall be calibrated at least annually by a technician licensed by the Arizona Bureau of Weights & Measures. Mixing plants shall conform to the requirements of AASHTO M 156, except as modified herein.

In drum mix plants the mineral admixture shall be added and thoroughly mixed with the mineral aggregate by means of a mechanical mixing device prior to the mineral aggregate and mineral admixture entering the dryer. The moisture content of the combined mineral aggregate shall be a minimum of three percent by weight of the aggregate during the mixing process.

For drum-mix plants, the mineral admixture shall be weighed across a weigh belt, or other approved alternative weighing system, with a weight totalizer prior to entry into the mechanical mixing device. The mechanical mixing device shall be a pugmill type mixer that is in good working condition. The rate of the aggregate feed shall not exceed the mixing device's capacity in ton per hour. The mixer shall be constructed to minimize the loss of mineral admixture and shall be located in the aggregate delivery system at a location where the mixed material can be readily inspected. The mixing device shall be capable of effective mixing in the full range of the asphalt concrete production rates.

The hot plant and equipment shall be constructed and operated to prevent loss of mineral admixture through the dust collection system of the plant.

A positive signal system shall be provided and utilized during production whereby the mixing shall automatically be stopped if the mineral admixture is not introduced into the mineral aggregate. The plant will not be permitted to operate unless the signal system is in good working condition.

The introduction of bituminous material shall be controlled by an automated system fully integrated with the controls or the mineral aggregate and mineral admixture. The production of the plant shall be controlled by the rate required to obtain a uniform mixture of all components. Drying and heating shall be accomplished in such a manner as to preclude the mineral admixture from becoming coated with un-spent fuel. The completed asphalt concrete may be held in storage for up to 12 hours in insulated or heated silos, providing the minimum temperature noted herein for placement and compaction is met behind the placement device. If the Engineer determines that there is an excessive amount of heat, heat loss, drain down, segregation and/or oxidation of the mixture due to temporary storage, use of surge bins or storage bins will be discontinued.

The temperature of the asphalt concrete, with unmodified binders, upon discharge from the mixer shall not exceed 335° F. The discharge temperature may be increased on the recommendation of the binder supplier, when approved by the Engineer. If the asphalt concrete is discharged from the mixer into a hopper, the hopper shall be constructed so that segregation of the asphalt concrete will be minimized.

11.5.5 Petroleum distillates or other substances that will have a detrimental effect on the asphalt concrete shall not be used as a release agent.

The beds of all transportation units shall be clean and smooth to allow the free flow of material into the paving machine's hopper.

Tarpaulins shall be furnished on all trucks and used when weather conditions warrant, or if directed by the Engineer.

11.5.6 Placing:

All courses of asphalt concrete shall be placed and finished by means of a self-propelled paving machine equipped with an automatically actuated control system, except under certain conditions or at locations where the Engineer deems the use of a self-propelled paving machine impracticable.

The control system shall control the elevation of the screed at each end by controlling the elevation of one end directly and the other end indirectly either through controlling the transverse slope or alternatively when directed, by controlling the elevation of each end independently.

The control system shall be capable of working with one of the following devices:

A. Ski or non-contact device of not less than 30 feet in length, supported throughout its entire length; or
B. Taut string line or wire set to grade; or
C. Short ski or sonar sensing units from curb control; or
D. Joint matching shoe; or
E. The paving machine must be capable of paving a minimum 12-foot pass.

Failure of the control system to function properly shall be cause for the suspension of asphalt concrete production. In order to achieve a continuous operation, the speed of the paving machine shall be coordinated with the hot mix plant and transport units.

If the asphalt concrete is dumped from the hauling vehicles directly into the paving machine, care shall be taken to avoid jarring the machine or moving it out of alignment. No vertical load shall be exerted on the paving machine by the truck.

If asphalt concrete is dumped upon the surface being paved and subsequently loaded in the paving machine, the loading equipment shall be self-supporting and shall not exert any vertical load on the paving machine.

Substantially all of the asphalt concrete shall be picked up and loaded into the paving machine. Self-propelled paving machines shall spread the mixture without segregation or tearing, true to line, grade and crown indicated on the Project plans. Pavers shall be equipped with hoppers and augers that will distribute the mixture uniformly in front of an adjustable floating screed. The raising of the hopper wings must be minimized and the paving machine will not be operated when in an empty condition.

Screeds shall include any strike-off device operated by tamping or vibrating action which is effective, without tearing, shoving or gouging the mixture and which produces a course with a uniform texture and density for the full width being paved. Screeds shall be adjustable as to height and crown and shall be equipped with a controlled heating device for use when required. In the case of the screed, auger extensions and vibrators shall be installed wherever the screed is extended more than one (1) foot beyond the end of the base auger or auger extension. However, when placing material against an extremely uneven curb or edge over a short distance, the Engineer may waive the auger extensions and vibrators.

At any place not accessible to the roller, the mixture shall be thoroughly compacted with tampers to provide a uniform and smooth layer over the entire area compacted in this manner.

11.5.7 Joints:

Transverse joints, before a surface course is placed in contact with a cold transverse construction joint, the cold existing asphalt concrete shall be trimmed to a vertical face for its full depth and exposing a fresh face by means of a saw cutting device capable of exposing the existing asphalt the entirety of its depth in a single pass. After placement and finishing the new asphalt concrete, both sides of the joint shall be dense and the joint shall be smooth and tight. The surface in the area of the joint shall not deviate more than ¼ inch from a 12-foot straightedge, when tested with the straightedge placed across the joint, parallel to the centerline.

Longitudinal Joints of each course shall be staggered a minimum of 6 inches with relation to the longitudinal joint of the immediate underlying course cold transverse construction joint, the cold existing asphalt concrete shall be trimmed to a vertical face for its full depth and exposing a fresh face. The fresh face shall be tacked prior to placement of the adjacent course. After placement and finishing the new asphalt concrete, both sides of the joint shall be dense and the joint shall be smooth and tight.

The surface in the area of the joint shall not deviate more than ¼ inch from a 12-foot straightedge, when tested with the straightedge placed across the joint, parallel to the centerline. The joint will be tack coated if required by the Engineer.

11.5.8 Leveling Course:

A leveling course shall be used when specified, or as directed in writing by the Engineer, to bring existing pavement to a uniform grade prior to placing an overlay or other course. If a leveling course is being applied on an Asphalt surface, a tack coat shall be applied. The compaction requirements contained in MAG Section 321.10 do not apply to leveling courses.

11.5.9 Compaction Base and Surface:

It is the contractor's responsibility to perform any desired Quality Control monitoring and/or testing during compaction operations to achieve the required compaction. Asphalt concrete immediately behind the laydown machine shall be a minimum of 250° F as measured from a probe type thermocouple thermometer that has been calibrated to an AASHTO standard. The probe type thermocouple thermometer shall have a current calibration sticker attached. When measuring the temperature of the mat, the probe shall be inserted at mid-depth and as horizontal as possible to the mat.

Asphalt compaction equipment shall be of sufficient size and weight to accomplish the required compaction. All compaction equipment shall be operated and maintained in accordance with the manufacturer's recommendations and the project requirements.

During the rolling operation, the speed of the roller shall not exceed 3 miles per hour, unless otherwise approved by the Engineer.

Pneumatic tired compactors shall be equipped with skirt-type devices mounted around the tires so that the temperature of the tires will be maintained during the compaction process. The Engineer will determine the acceptability of the pavement compaction in accordance with MAG Section 321.10.

11.5.10 Smoothness:

The completed surfacing shall be thoroughly compacted, smooth and true to grade and cross-section and free from ruts, humps, depressions or irregularities. An acceptable surface shall not vary more than one-fourth (¼) inch from the lower edge of a 12-foot straightedge when the straightedge is placed parallel to the centerline of the roadway.

11.6 Quality Control:

It is the contractor's responsibility to perform Quality Control monitoring and/or testing during asphalt concrete production and placement to achieve the required compaction and to perform Quality Control monitoring and/ or testing during asphalt concrete production to achieve the required mix properties. The Engineer may obtain samples of any portion of any material at any point of the operations for his own use. Also, the Engineer may order the use of any drying, proportioning and mixing equipment or the handling of any material discontinued which, in his/her opinion, fails to produce a satisfactory mixture. All testing should be in accordance with Table 11.1-1.

The asphalt concrete produced shall conform to the properties of the mix design. When the asphalt concrete does not conform to the approved mix design properties, it shall be reported to the Engineer, and corrective quality control measures shall be implemented, or production shall cease immediately at no additional cost to the contracting Agency or Engineer.

11.7 Acceptance:

**Acceptance Criteria: Requirements for acceptance testing will be specified in the project specifications. In all cases the Contractor will be responsible for all required traffic control for the completion of this testing, regardless of Owner or Contractor required testing.** Unless otherwise specified, asphalt concrete will be divided into lots for the purpose of acceptance. A lot shall be considered to be one day's production. When the quantity of asphalt concrete placed in a day exceeds 500 tons but is less than 2000 tons, the lot shall be divided into 500-ton sublots or fraction thereof. Where the quantity of asphalt concrete placed in a day exceeds 2000 tons, the day's production will be divided into four (4) approximately equal sublots. A minimum of one sample will be obtained from each lot. Tests used to determine acceptance will be performed by the Engineer or a laboratory employed by the Engineer and or contractor. In either case the laboratory shall be accredited by the AASHTO Accreditation Program (AAP), for the tests being performed. The acceptance laboratory will take representative samples of the asphalt concrete from each sublot to allow for gradation, binder content, air voids, pavement thickness and compaction of base and surface course. Each sublot will be accepted based upon the test data from the sample(s) from that sublot. All acceptance samples shall be taken using random locations or times designated by the Engineer in accordance with ASTM D 3665.

11.7.1 The acceptance laboratory will take a sample of the asphalt concrete in accordance with the requirements of Section 2 or 4 of Arizona Test Methods 104 or AASHTO T168 from each sublot. The minimum weight of the sample shall be 45 pounds. Asphalt binder content and gradation shall be determined in accordance with AASHTO T308 using the ignition furnace for each sublot. The acceptance laboratory is responsible for obtaining the necessary materials and performing an ignition furnace calibration as outlined in AASHTO T308 for each asphalt concrete mixture utilized on the project. The correction factor used for each test shall be clearly indicated on the report. The bulk density for Marshall Mix designs shall be tested in accordance with AASHTO T245. The maximum theoretical density shall be tested in accordance with the requirements of AASHTO T209. Effective voids determined on the laboratory compacted specimens will be determined at a minimum of once per lot in accordance with the requirements of AASHTO T269. Should the testing for effective air voids not meet the "Full Payment" or "No Corrective Action" requirements of MAG Table 321-5, additional testing for laboratory air voids on the remaining sublots will be performed as necessary to determine the extent of the deficiency. Acceptance testing results will be furnished to the contractor within Seven (7) calendar days of receipt of samples by the acceptance laboratory.

The allowable deviations for acceptable production of each measured characteristic from the values established in the Job Mix Formula (JMF) for each sublot per MAG Table 321-3.

| **TABLE 321-3** | |
|---|---|
| **ACCEPTANCE LIMITS FOR ASPHALT CONCRETE** | |
| Maximum Aggregate Size | 100% Passing |

| | |
|---|---|
| Nominal Maximum Aggregate Size | ± 7% |
| No. 8 Sieve to the Normal Maximum Aggregate Size | ± 6% |
| No. 100 and No. 30 Sieves | ± 4% |
| No. 200 Sieve | ± 2% |

If the results from a single acceptance sample fall outside of the acceptance limits in Table 321-3 a second sample shall be taken and if the second acceptance sample is also outside of the acceptance limits in Table 321-3 the Contractor shall cease production of asphalt concrete. Production shall not begin again until calibration test results verify that adjustments made to materials or proportions yield a gradation that falls within acceptance limits in table 321-3.

The asphalt binder content shall be considered acceptable if it is within ± 0.40% of the job mix formula (JMF) design target value. Corrective action for deviations will be assessed per Table 321-4 and Table 321-5.

| **TABEL 321-4** | | |
|---|---|---|
| **ASPHALT BINDER CONTENT CORRECTIVE ACTION FOR DEVIATION** | | |
| Deviation from that Permitted | When the Contracting Agency is the Owner:<br><br>Payment Reduction<br>($ Per yard of Asphalt Concrete) | When the Contracting Agency is not the Owner (i.e. permits)<br><br>Corrective Action |
| 0.0 to 0.1% Points | $1.50 | EA (See 321.10.6) |
| Over 0.1 to 0.2% Points | $2.00 | EA (See 321.10.6) |
| Over 0.2% Points | Removal* | Removal* |

Note: Removal* refers to Section 321-10.6

| **TABLE 321-5** | | |
|---|---|---|
| **LABORATORY VOIDS ACCEPTANCE AND PENALTIES** | | |
| Laboratory Air Voids (Measured at $N_{des}$ or blows as applicable) | When the Contracting Agency is the Owner:<br><br>Payment Reduction<br>($ Per Yard of Asphalt Concrete) | When the Contracting Agency is not the Owner (i.e. permits)<br><br>Corrective Action |
| Less than 1.5% | Removal* | Removal* |
| 1.5-2.0% | $2.50 | EA (See 321.10.6) |
| 2.1-2.7% | $1.00 | EA (See 321.10.6) |
| 2.8-6.2% | Full Payment | No Corrective Action |

| | | |
|---|---|---|
| 6.3-6.9% | $1.00 | EA (See 321.10.6) |
| 7.0-8.0% | $2.50 | EA (See 321.10.6) |
| Greater than 8.0% | Removal* | Removal* |

Note: Removal* refers to Section 321-10.6

11.8 Surface Testing:

If directed by the Engineer surface drainage test shall be performed. The completed surfacing shall be thoroughly compacted, smooth and true to grade and cross-section and free from ruts, humps, depressions or irregularities. An acceptable surface shall not vary more than 1/4 inch from the lower edge of a 12-foot straightedge when the straightedge is placed parallel to the centerline of the roadway. The straightedge shall be furnished by the contractor and shall be acceptable to the Engineer.

All streets shall be water tested for drainage in the presence of the Engineer or designated representative before final acceptance. Any areas not draining properly shall be corrected to the Engineer's satisfaction at the Contractor's expense. Water for this testing shall be provided and paid for by the Contractor.

When deviations in excess of the above tolerance are found, humps or depressions shall be corrected to meet the specified tolerance, or shall be cut out along neat straight lines and replaced with fresh hot mixture and thoroughly compacted to conform with and bond to the surrounding area. Materials and work necessary to correct such deviations shall be at no additional cost to the City.

11.9 Asphalt Pavement Thickness:

Asphalt Pavement thickness will be determined from cores secured from each sublot for this purpose. Such cores will be taken and measured by the Asphalt Concrete Coring Method. This method can be found in MAG Section 321.14. Each core location will be patched by the party responsible for the testing. All cores will be patched using plant mix that is similar to the project design and utilizing acceptable means to compact the material within the cored locations. The City will inspect and approve all core patches performed prior to placement of any sealants or final acceptance of all work performed.

11.9.1 If Contracting Agency is Not Owner (Permit Work):

If the contracting agency is not the Owner (i.e. private development work or work being performed under a permit for which the City will eventually have responsibility for ownership and maintenance after the work has been accepted by the City.) and the pavement thickness is deficient from the target thickness by 0.25" or less, the City has the right to accept with no remedial action required or reject the pavement. The decision to accept as is or reject the pavement lies solely with the City Engineer and his decision will be final.

If the pavement thickness deficiency is greater than 0.25 inches and the contracting agency is not the Owner the following steps will apply:

A. If the thickness deficiency of the pavement exceeds 0.25 inch, the limits of the deficient area will be isolated by coring at maximum intervals of 100 feet from the deficient core. The thicknesses of the original deficient core will be averaged with the thicknesses of the cores taken from 100 feet on each side of it to determine compliance with the acceptance requirements. All coring, patching and associated activities shall be the responsibility of the Contractor at the Contractor's sole expense.

B. If the pavement thickness from step one above deviates from the target thickness by more than 0.25 inch but not more than 0.50-inch, corrective action will be required. This corrective action will consist of application of a Type II slurry seal coat in accordance with MAG Section 715. The Contractor may present an engineering analysis outlining other proposed remedial measures for the consideration of the City Engineer. The City Engineer will review the engineering analysis and decide within fourteen (14) calendar days whether to accept the proposed remedial measures. It will be the City Engineer's sole decision on whether to accept the Contractors proposed remedial measure or require the slurry seal coat, and his decision will be final. The remedial measure that is approved by the City Engineer will be constructed by the Contractor at no additional cost to the Owner.

C. If the pavement thickness from step one above deviates from the target thickness by more than 0.50-inch, corrective action will be required. The deficient area will be overlaid with no less than 1-inch-thick lift, for the full width of the pavement to meet or exceed the designed thickness, with the appropriate end and edge milling to provide the specified cross-slopes, grades and minimum lift thickness of 1-inch, with a mixture approved by the City Engineer. The Contractor may present an engineering analysis outlining other proposed remedial measures for the City Engineer's consideration. The City Engineer will review the engineering analysis and decide within fourteen (14) calendar days whether to accept the proposed remedial measures. It will be the City Engineer's sole decision on whether to accept the Contractors proposed remedial measure or require the overlay, and his decision will be final. If the City Engineer chooses to reject the engineering analysis, the indicated overlay will be constructed by the Contractor at no cost to the City. If the City Engineer chooses to accept the engineering analysis, the approved corrective action will be constructed by the Contractor at no cost to the City.

11.9.2 <u>If Contracting Agency is the Owner (City Project):</u>

If the pavement thickness deficiency is greater than 0.25 inches but not more than 0.50 inch and the contracting agency is the owner (i.e. City project work), Table 321-6 will apply. The Engineer will at his discretion have the option of Reduction in Payment or have the Contractor perform some Corrective Action based on the Engineers analysis of which option most benefits the City.

| **TABLE 321-6** | |
|---|---|
| **ASPHALT PAVEMENT THICKNESS PAYMENT REDUCTION**<br>For Thickness Deficiency of More Than 0.25 Inches but not More Than 0.50 Inches | |
| **Specified Mat Thickness** | **Reduction in Payment or Corrective Action** |
| Less than 1.5 Inches | 50% |
| 1.50 Inches to 1.99 Inches | 33% |
| 2.00 Inches to 2.49 Inches | 25% |
| 2.50 Inches to 2.99 Inches | 20% |
| 3.00 Inches and Over | 17% |

If the pavement thickness deficiency is greater than 0.50-inch, corrective action will be required as identified in Section 11.9.1(C) above.

11.10 <u>Density:</u>

Achieving the required compaction is the responsibility of the contractor. The number and types of rollers is the contractor's responsibility and shall be sufficient to meet these requirements.

In-place air voids shall be determined in accordance with AASHTO T269 utilizing cores taken from the finished pavement. The maximum theoretical density used in the determination of in-place air voids will be the average value from the acceptance samples determined for the Lot as outlined in MAG 321.10.1.

The Engineer will designate two random test locations for each sublot and the acceptance laboratory will obtain two cores from each location. The two cores will be averaged for acceptance. The outside one-foot of each pass of the pavement course or any unconfined edge will be excluded from testing. The Engineer may exclude areas from the compaction lot that are not accessible by normal compaction equipment.

The Contractor will provide the traffic control to facilitate any coring operations necessary for compaction acceptance, whether the Contractors Agency or the City obtains the cores.

Cores will be taken per the Asphalt Concrete Coring Method. This method can be found in MAG Section 321.14. The acceptance laboratory will furnish test results within 5 calendar days of receipt of the cores.

If the pavement density has in-place voids of 8.0% or less, the asphalt concrete will be paid for at the contract unit price. If the pavement density has in-place voids greater than 8.0%, the limits of the deficient area will be isolated within the sublot by coring at maximum intervals of 100 feet from the deficient core. The in-place voids of the original deficient core will be averaged with the in-place voids of the cores taken from 100 feet on each side of it to determine compliance with the acceptance requirements. If the average of the in-place voids is greater than 8.0% then Table 321-7 shall apply to the sublot.

| **TABLE 321-7** | | |
|---|---|---|
| **PAVEMENT DENSITY PENALTIES** | | |
| Limits of In-Place Air Voids<br><br>Less than 1.5 Inches | When the Contracting Agency is the Owner:<br><br>Payment Reduction<br>($ Per Yard of Asphalt Concrete) | When the Contracting Agency is not the Owner (i.e. permits)<br><br>Corrective Action |
| 8.1% to 9.0% | $1.00 | EA |
| 9.1% to 10% | $2.00 | EA and Type II Surry Seal |
| 10.1% to 11.0% | Removal* | Removal* |
| Greater than 11.0% | Removal | Removal |

Note: Removal* refers to Section 321-10.6 the Contractor shall remove and replace the entire sublot that is deficient. Removal for In-place Air Voids greater than 11.0% is not eligible for Section 321.10.6.

11.11 Engineering Analysis (EA):

Within fourteen (14) calendar days after receiving notice that a sublot of asphalt concrete is deficient for “Removal” by the Engineer, the contractor may submit a written proposal (Engineering Analysis) to accept the material in place at the applicable penalties listed in the “Removal” category. Engineering Analysis can also be proposed for non-removal categories of “Corrective actions” when the contracting agency is not the owner (i.e. permits).

The Engineering Analysis shall contain an analysis of the anticipated performance of the asphalt concrete if left in place. The Engineering Analysis shall also detail the effect of any proposed

corrective action on the performance. A professional engineer experienced in asphalt concrete testing and mix designs that is licensed in the state of Arizona shall perform the Engineering Analysis. If the sublot is submitted for referee testing by the contractor, the fourteen (14) calendar days allowed to prepare an engineering analysis will begin upon notification of referee test results.

When an Engineering Analysis recommends that a specific lot or sublot not be removed, the Engineering Analysis will recommend that the following penalties (Table 321-8) be paid when the contracting agency is the owner, for the specific criteria being reviewed by the EA.

| TABLE 321-8 | | |
|---|---|---|
| **ENGINEERING ANALYSIS PENALTIES FOR REMOVAL* LOTS/SUBLOTS LEFT IN-PLACE** | | |
| **Acceptance Criteria** | **Acceptance Limits** | **Penalty When Contracting Agency is Owner ($/Yard)** |
| Asphalt Binder Content | Over 0.2% Points from the Permitted | $2.00 |
| Laboratory Air Voids (Measured at $N_{des}$ or 75 Blows as Applicable) | Less than 1.5% or Greater Than 8.0% | $2.50 |
| Limits of In-Place Air Voids | 10.1% to 11.0% | $3.00 |

Within fifteen (15) calendar days, the Engineer will determine whether or not to accept the Contractor's proposed Engineering Analysis.

In the event the contractor elects to question the acceptance test results for a sublot, the Contractor may make a written request for additional testing of that sublot. The Contractor will engage an independent laboratory (at the Contractors own expense) which is accredited by AAP in all of the acceptance tests. The independent laboratory shall be acceptable to the Engineer and shall perform a complete new set of acceptance tests (as required by MAG Section 321.10 representing the area or set of tests in question).

These tests shall include asphalt binder content, aggregate gradation, Marshall or Gyratory unit weight, and maximum theoretical unit weight. Samples for referee testing shall come from representative samples obtained from the completed pavement, as directed by the Engineer.
The number of samples taken will be the same as specified in MAG Section 321.10. The independent laboratory shall compile the test results and transmit them to both the Engineer and the Contractor. The independent laboratory shall include a letter signed by an Engineer registered in the State of Arizona, who is experienced in asphalt concrete testing and mix designs. The signed letter shall give an opinion that the material evaluated either does or does not comply with project specifications, and shall clearly describe any deficiencies, and the results will be binding between all parties.

11.12 Asphalt Core Method:

Core Drilling of Hot Mix Asphalt (HMA) for Specimens of 4" or 6" diameter.

11.12.1 Scope:

This method is to establish a consistent method of the use of a diamond bit core to recover specimens of 4 or 6 inches in diameter for laboratory analysis and testing. The method will require the use of: water, ice (bagged or other suitable type), dry ice, and a water-soap solution to be utilized when coring asphalt rubber concrete. Individuals doing the specimen recovery should be observing all safety regulations from the equipment manufacturer as well as the required job site safety requirements for actions, and required personal protective equipment.

11.12.2 Core Drilling Device:

The core-drilling device will be powered by an electrical motor, or by an acceptable gasoline engine. Either device used shall be capable of applying enough effective rotational velocity to secure a drilled specimen. The specimen shall be cored perpendicularly to the surface of pavement, and that the sides of the core are cut in a manner to minimize sample distortion or damage. The machinery utilized for the procedure shall be on a mounted base, have a geared column and carriage that will permit the application of variable pressure to the core head and carriage throughout the entire drilling operation. The carriage and column apparatus shall be securely attached to the base of the apparatus; and the base will be secured with a mechanical fastener or held in place by the body weight of the operator. The core drilling apparatus shall be equipped with a water spindle to allow water to be introduced inside of the drill stem while operating. The cutting edge of the core drill bit shall be of hardened steel or other suitable material with embedded diamond chips in the cutting surface. The core barrel shall be of sufficient diameter to secure a specimen that is a minimum of four or six inches or whichever is prescribed for necessary testing. The core barrel shall not be missing more than one of the teeth used for cutting; if so, it shall be discarded and another barrel shall be used. The core barrel shall also be a minimum of two inches longer than the anticipated depth of pavement in accordance with project paving plans.

11.12.3 Accessory Equipment:

A sufficient supply of ice and dry ice shall be provided to sufficiently cool the pavement prior to securing the samples from the designated areas in the pavement. The ice should also be used to adjust the temperature of the water used to cool the core bit. A water supply (usually a plastic 35 – 55 gal drum) with sufficient hose to introduce the water into and through the spindle of the coring device by gravity feed. The drum should be white or light in color to minimize excessive thermal heating of the water (*for coring of asphalt rubber cores see Note 1*). At no time shall the water utilized in the coring operation exceed 65° F during the coring operation. Ice shall be utilized to ensure the temperature control of the water being introduced during the cutting operation. An ice chest or other suitably insulated container that can maintain a temperature of less than 70° F shall be used to secure the specimens during transport. The container will be equipped with flat shelving that will support the drilled cores throughout the entire specimen dimension during transport back to the testing facility. Miscellaneous hand tools to remove the drilled specimen from the drill hole or the core barrel taking great care in not disturbing the specimen more than necessary (refer to fig. 1 in ASTM D 5361-05).

11.12.4 Process:

The pavement surface at the time of coring shall not exceed a temperature of 90° F. The pavement shall be conditioned with ice or dry ice to ensure that this requirement is met. Immediately after it has been ensured that the pavement has dropped to the required temperature, core drilling shall begin. The operator will then apply an even and continuous pressure (Note 2) to penetrate through the full depth of the pavement. The operator will concurrently ensure that enough water is moving over the core surface as to adequately remove any and all cuttings that could damage the drilled core. After the pavement thickness has been penetrated the core shall be carefully removed from either the drill hole or the core barrel and be immediately transferred to an ice chest or other suitable container. Each individual core shall be placed on a shelf in the cooler with the exposed side of the specimen facing down, or the “top side” down. If the specimen is a two-lift core, the only acceptable means of separating lifts is with a power or other acceptable wet saw type of equipment (conforming to ASTM D 5361-05); however, at no time shall cores be split using a mallet and screwdriver or metal straight edge when being tested for bulk density. Perpendicularity of the specimen shall be checked in the field after the specimen has been extracted from the surface. The core operator shall hold the core up to eye level and place the core topside down in a “speed square” or small carpenter’s square. The specimen placed in the square shall not depart from perpendicular to the axis more than 0.5° (approximately equivalent to 1/16 of an inch in 6 inches). If the specimen is outside of this distance from square it shall be discarded in the field and another sample cored that falls within tolerance. The cores upon arriving at the laboratory for testing shall be carefully cleaned and measured for thickness in accordance with ASTM D 3549. A speed square shall be utilized to measure squareness as

compared to a 90°-degree angle and shall not depart from perpendicular to the axis more than 0.5° (approximately equivalent to 1/16 of an inch in 6 inches). All remaining testing shall be done within the parameters of the current project and / or agency-required specification.

- NOTE 1: It should be noted that when the material to be cored is a rubberized asphalt mixture a wetting agent such as liquid dish soap shall be added to the water barrel to hinder the material from sticking or allowing the binder to spread during coring.
- NOTE 2: This refers to pressure exerted on the core barrel and machine during the coring process. Too much pressure can cause damage to the core barrel and the motor; and too little pressure can cause a glazing of the diamonds, reducing cutting efficiency and premature wear of the barrel.

The work described in these Technical Specifications and shown on the plans for this project shall be performed in accordance with the current Arizona Department of Transportation (ADOT) Standard Specifications and Details for Road and Bridge Construction, ADOT Temporary Traffic Control Design Guidelines, Maricopa Association of Governments (MAG) Uniform Standard Specifications for Public Works Construction, the Manual of Uniform Traffic Control Devices, and these special provisions.

In the event a conflict exists on the plans or between the plans and referenced specifications or these technical specifications, the order of precedence shall be as follows:

1. The Technical Specifications
2. The Project Plans
3. Maricopa Association of Governments (MAG) Uniform Standard Specifications for Public Works Construction, latest edition.
4. Maricopa Association of Governments (MAG) Uniform Standard Details for Public Works Construction, latest edition.
5. Maricopa County Department of Transportation Supplement to the MAG Uniform Standard Specifications and Details.
6. Manual on Uniform Traffic Control Devices for Streets and Highways, as amended and approved by ADOT.
7. Arizona Department of Transportation Temporary Traffic Control Design Guidelines, latest edition.
8. Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, latest revisions
9. Arizona Department of Transportation Signing and Marking Standard Drawings

## 12.1 MOBILIZATION / DEMOBILIZATION

### PART 1 – GENERAL

1.1 - Description of Work

The work to be performed in accordance with this section consists of preparatory work and operations, including but not limited to, the movement of personnel, equipment, supplies and incidentals to the project site and the establishment of all offices, buildings, and other facilities necessary for work on the project.

### PART 2 – EXECUTION

2.1 - Per ADOT Standard Specification, Section 901

For the purposes of this Section, the construction specifications shall be ADOT "Standard Specifications for Road and Bridge Construction", latest edition. Section 901 "Mobilization" is included in its entirety, unless modified herein.

### PART 3 – MEASUREMENT AND PAYMENT

3.1 - Method of Measurement

Measurement of Mobilization / Demobilization for payment will be one lump sum and shall include mobilization associated with all construction activities. No separate measurement will be made for demobilization; it is included in “mobilization”.

3.2 - Basis of Payment

Payment for mobilization, measured as provided above, will be made at the contract lump sum price, which shall be full compensation for supplying and furnishing all materials, facilities and services and performing all the work involved as specified herein.

12.2 TRAFFIC CONTROL

PART 1 – GENERAL

1.1 - Description of Work

Traffic control shall consist of supplying and placing all traffic control devices. All traffic control devices, the application of traffic control measures, and traffic regulation in these specifications are not intended to delete any requirements by ADOT, Bullhead City, the “Manual on Uniform Traffic Control Devices”, as amended and approved by ADOT, or any supplements to the MAG “Uniform Standard Specifications”. These specifications incorporate, supplement and modify the requirements of Article 9.28 of this document. Access to private property shall be maintained at all times and may be restricted to local traffic only. Traffic control plans shall be approved by the City of Bullhead City prior to implementation.

The Contractor shall submit a detailed, phased traffic control plan prior to issuance of the Notice to Proceed for the entire duration of the work. Prior to commencing construction on each phase of the work, the Contractor shall submit an updated traffic control plan of that phase. The Contractor will be required to do the work during the night time hours to facilitate any traffic control issues. The Contractor would need to provide a work schedule at the time of product submittals.

Two-way traffic shall be maintained at all times, provided, however, that one way traffic with flaggers may be allowed during working hours, in accordance with these specifications.

All work on this project is to be done during night time hours. A detailed traffic control plan will need to be submitted detailing the work hours and type of work for approval by the Owner prior to implementation.

PART 2 – EXECUTION

2.1 - Per MAG Standard Specification, Section 401 modified as follows:

For the purposes of this Section, the construction specifications shall be Maricopa Association of Governments (MAG) "Uniform Standard Specifications and Details for Public Works Construction", latest edition. Section 401 "Traffic Control" is included in its entirety.

PART 3 – MEASUREMENT AND PAYMENT

3.1 - Method of Measurement

Measurement of Traffic Control Devices for payment will be one lump sum. No separate measurement will be made for this item.

3.2 - Basis of Payment

Payment for Traffic Control will be paid at the lump sum price bid in the bidding schedule.

12.3 SAWCUT, REMOVE & DISPOSE ASPHALT

PART 1 – GENERAL

1.1 - Description of Work

The work shall consist of saw cutting where indicated on plan and the removal and disposal of the existing asphalt pavement located along project limits, including all other items necessary for the accomplishment of the improvements as shown on plans or as directed by the Engineer.

PART 2 – EXECUTION

2.1 - Per MAG Standard Specification, Section 350 "Removal of Existing Improvements" is included in its entirety with the following modifications:

PART 3 – MEASUREMENT AND PAYMENT

3.1 - Method of Measurement

There will be no separate measurement for payment for Sawcut, Remove & Dispose Asphalt.

3.2 - Basis of Payment

The cost of Sawcut, Remove & Dispose Asphalt will be considered incidental to the price bid for the construction operation to which such Sawcut, Remove & Dispose Asphalt is incidental.

12.4 ASPHALT MILLING OF EXISTING ASPHALT CONCRETE PAVEMENT

PART 1 – GENERAL

1.1 - Description of Work

This work shall include all labor, materials, equipment, and incidentals associated with the Asphalt Milling / Pulverizing operation. The work shall consist of the milling and pulverizing of existing asphalt concrete pavement in-place the entire width of the removal area through the entire project limits where shown on the Plans or requested by the Engineer. The milling shall be for the full depth of the existing asphalt. The existing asphalt thickness varies from 3 inches to 6 inches. Section 12.12 Existing Asphalt Boring Information shows the approximate boring locations and the depth of the existing asphalt at the boring location.

PART 2 – EXECUTION

2.1 - Construction Requirements

Contractor is responsible for locating all milling hazards on and below the surface within the area to be milled including areas requiring special milling. Special milling is not a separate pay item and shall be paid for as Asphalt Milling.

The milling cut depth shall be the depth indicated on the Plans plus or minus 1/8 inch. The milling machine shall have electronic grade controls. Milled and pulverized material shall be left in-place and used for aggregate base course.

Asphalt pavement adjacent to manholes, valve boxes, small radius curbs and other fixed objects that produce confined areas shall be removed with milling equipment specifically designed to operate in restricted areas. The equipment shall be capable of removing asphalt concrete of the specified thickness without damage to, or displacement of, the adjacent object(s).

The Contractor shall be responsible for continually checking the milling operation to determine that the proper depth of milling has been achieved, that the proper profile and cross slope are achieved, and that the surface texture is (a) free from longitudinal ridges, and (b) has a uniform pattern.

The Contractor shall immediately notify the Engineer when:

- The existing pavement thickness is found to be less than anticipated and breaking of the underlying material occurs; or

- Delamination of underlying material occurs.

The work shall result in a completely milled subgrade section to the specified depth for the area indicated by the construction documents including the areas immediately around and next to any individual hazard within the area to be milled. The edge of milled areas shall form a straight clean-cut line. All existing asphalt pavement shall be milled/pulverized and the depth of the milling into the subgrade shall be sufficient in all areas to provide the minimum pavement section, including new compacted base course and new asphalt to the finished pavement grades shown on the plans.

All milled material 2" or larger shall not be incorporated into the project. The Contractor shall transport and stockpile all excess millings and said rejected material to the Bullhead City Community Park. This material becomes the property of Bullhead City for future use. All costs for this work shall be considered incidental to the project and shall be included in other bid items.

After milling and prior to the placement of new asphalt pavement, all areas of existing pavement shall be saw-cut to a clean, vertical edge and tacked with SS-1h prior to the placement of new pavement. All subgrade below the new pavement shall be prepared and compacted in accordance with these technical specifications. All costs for saw cutting of existing pavement to be paved against shall be considered incidental to the cost of other bid items and no additional payment shall be made for it.

PART 3 – MEASUREMENT AND PAYMENT

3.1 – Method of Measurement

Measurement for Asphalt Milling will be by the square yard and shall only include areas milled to the required depth and cross section.

3.2 - Basis of Payment

Payment for Asphalt Milling will be made at the contract bid price per square yard and shall be full compensation for the work, complete-in-place, including all asphalt milling, milling around structures, removal and the transporting of all excess milled materials to the Bullhead City Community Park. This material becomes the property of Bullhead City for future use.

12.5 SUBGRADE PREPARATION

PART 1 – GENERAL

1.1 - Description of Work

This work shall consist of Subgrade Preparation for constructing the roadway subgrade as shown on the project plans or as directed by the Engineer. Subgrade preparation shall include scarifying the existing subgrade to a depth of 6 inches and preparing the subgrade and the aggregate base course and millings to the required line and grade for paved areas. Aggregate base course and millings shall be used to fill any low areas or areas of unsuitable material required to be removed.

PART 2 – EXECUTION

2.1 - Per MAG Standard Specification, Section 301 "Subgrade Preparation" is included in its entirety.

PART 3 – MEASUREMENT AND PAYMENT

3.1 - Method of Measurement

Measurement for Subgrade Preparation will be per square yard of subgrade preparation.

3.2 - Basis of Payment

Payment for Subgrade Preparation will be made at the contract unit bid price per square yard of subgrade preparation.

12.6 ASPHALT CONCRETE PAVEMENT

PART 1 – GENERAL

1.1 - Description of Work

This work shall consist of furnishing and mixing aggregate and asphalt binder at a central mixing plant and spreading and compacting the mixture in accordance with these specifications. The 4 inches of asphalt shall be installed in 2 - 2-inch lifts.
The work shall also include the application of a Fog Seal prior to the final striping of the roadway

PART 2 – AGGREGATE MATERIAL AND ASPHALT CEMENT

2.1 - Aggregate Material

Aggregate material shall conform to the specifications per City of Bullhead City Standard Specifications, Article 11 “City of Bullhead City Asphalt & Aggregate Specifications”.

The gradation shall conform to 3/4-inch maximum aggregate as indicated in Table 11.2-2.

2.2 - Asphalt Cement

The asphalt cement shall be performance grade asphalt conforming to the requirements of the City of Bullhead City Standard Specifications, Article 11 “City of Bullhead City Asphalt & Aggregate Specifications”

PART 3 – SAMPLING AND TESTING

3.1 - Samples for acceptance tests will be taken by the Engineer or his representative as per the requirements of Article 11.

PART 4 – MAINTENANCE

4.1 - The finished base course shall be maintained by the Contractor in a condition satisfactory to the Engineer until the asphaltic concrete surfacing is placed.

PART 5 – FOG SEAL

5.1 - The fog seal shall conform to MAG Standard Specification Section 333 “Fog Seal Coats.

PART 6 – MEASUREMENT AND PAYMENT

6.1 - Method of Measurement

Measurement of Asphalt Concrete Pavement will be per square yard installed. Measurement of Fog Seal will be per square yard of Fog Seal installed.

6.2 - Basis of Payment

Quantities of Asphalt Concrete Pavement will be paid for at the contract unit price per square yard of asphalt thickness indicated and shall meet the requirements of Article 11. Such price shall include loading, depositing,

conditioning, spreading, compacting the material and application of tack coats complete in place and all other costs incidental to this work.
Quantities for the fog seal coat will be paid for at the contract unit bid price per square yard.

## 12.7 AGGREGATE BASE COURSE

### PART 1 – GENERAL

1.1 - Description of Work

This work shall consist of furnishing, placing and compacting aggregate bases in accordance with the details shown on the project plans and the requirements of these specifications. The asphalt millings are to be used as Aggregate Base Course and may be used to fill any low areas or areas of unsuitable material required to be removed.

### PART 2 – EXECUTION

2.1 - Shall be per City of Bullhead City Standard Specification, Article 11 “City of Bullhead City Asphalt & Aggregate Specifications” included in its entirety with the following modifications:

### PART 3 – SAMPLE AND TESTING

3.1 - Samples of non-compacted base material shall be taken at the locations and in the manner directed by the Engineer. A test shall be taken of each material to determine gradation, percent passing the No. 200 sieve and the Plasticity Index.

### PART 4 – MAINTENANCE

4.1 - The finished base course shall be maintained by the Contractor in a condition satisfactory to the Engineer until the asphaltic concrete surfacing is placed.

### PART 5 – MEASUREMENT AND PAYMENT

5.1 - Method of Measurement

There will be no measurement of Aggregate Base Course.

5.2 - Basis of Payment

The cost of Aggregate Base Course will be considered incidental to the price bid for Subgrade Preparation.

## 12.8 WATERING

### PART 1 – GENERAL

1.1 - Description of Work

Water for compacting base and for controlling dust caused from grading operations or public travel, shall be applied in the amounts and places required to provide a complete, satisfactory product or as directed by the Engineer.

### PART 2 – EXECUTION

2.1 - Per MAG Standard Specification, Section 104.1.3 “Water Supply” is included in its entirety.

Also refer to Article 9.13.A of this document.

PART 3 – MEASUREMENT AND PAYMENT

3.1 - Method of Measurement

There will be no separate measurement for payment of Watering.

3.2 - Basis of Payment

The cost of watering will be considered incidental to the price bid for the construction operation to which such watering is incidental.

12.9 OBLITERATE PAVEMENT MARKINGS

PART 1 – GENERAL

1.1 - Description of Work

The work shall consist of removing existing pavement markings in conflict with the proposed striping layout as shown on the plans.

PART 2 – EXECUTION

2.1 - Contractor shall determine the type of pavement markings currently in existence and the appropriate removal methods specified in this Section.

Existing traffic pavement markings shall not be painted over with slurry seal, black paint or stain of any kind.

Any damage caused to the surface of the road by pavement marking removal shall be repaired by the Contractor at Contractor's expense. The method of repair shall be approved by the Engineer before the work begins.

Removal of existing pavement markings shall be completed prior to layout and marking of new pavement markings.

PART 3 – MEASUREMENT AND PAYMENT

3.1 - Method of Measurement

There will be no separate measurement of Obliterate Pavement Markings for payment.

3.2 - Basis of Payment

There will be no separate payment for Obliterate Pavement Markings as it is considered incidental to Section 12.10 Pavement Markings.

12.10 PAVEMENT MARKINGS

PART 1 – GENERAL

1.1 - Description of Work

The work shall consist of the application of striping material at the locations as indicated on the plans or as directed by the Engineer.

PART 2 – EXECUTION

2.1 - All Paint shall conform to ADOT Standard Specifications, Sections 708 Waterborne Pavement Markings Type II (High Build).

Preformed Pavement markings will not be allowed unless specifically approved by the City Public Works Director.

PART 3 – MEASUREMENT AND PAYMENT

3.1 - Method of Measurement

Measurement of Pavement Markings for payment will be on a lump sum basis.

3.2 - Basis of Payment

Payment for Pavement Markings will be paid at the lump sum price bid in the bidding schedule, including pavement surface preparation and glass beads.

12.11 TRAFFIC SIGNAL CONDUIT AND PULL BOXES

PART 1 – GENERAL

1.1 - Description of Work

The work shall consist of furnishing and installing electrical conduit and pull boxes for traffic signals including jacking, drilling, excavating, and compacting backfill material at locations shown on the plans.

All conduit crossing existing intersection legs with active traffic shall be installed either by jacking or directional drill. All other conduit can be installed by trenching.

PART 2 – EXECUTION

2.1 - Per ADOT Standard Specification, Section 732

For the purposes of this Section, the construction specifications shall be ADOT "Standard Specifications for Road and Bridge Construction", latest edition. Section 732 "Electrical Underground Material" is included in its entirety, unless modified herein.

PART 3 – MEASUREMENT AND PAYMENT

3.1 - Method of Measurement

Conduit will be measured in a straight line from center of pull box to center of pull box, center of pull box to center of foundation, center of foundation to center of pull box, etc., for each foot of conduit furnished and installed for each bid item regardless of the number of conduits furnished and installed in the trench or bore. No direct measurement or payment will be made for individual components of each conduit run including bends, conduit fittings, expansion joints, 36-inch sweeps and other conduit accessories.

No measurement or direct payment will be made for furnishing or installing pull tape, tracer wire, vertical conduits and conduit sweeps, conduit in pull boxes, conduit reducers, concrete encasement of conduits, and conduit in foundations, the cost being considered as included in the cost of the contract items.

Pull boxes will be measured as a unit for each pull box size.

3.2 - Basis of Payment

The accepted quantities of conduit, measured as provided above, will be paid for at the contract unit price per linear foot, which shall be full compensation for the item, complete in place, including excavation, backfill, warning tape, horizontal directional boring, compaction of trenches and directional drilling/bore pits, restoration of surface conditions, and any incidentals necessary to complete the work.

The accepted quantities for pull boxes, measured as provided above, will be paid for at the contract unit price, each, which shall be full compensation for the item, contract unit price, including ground rods, any excavating, backfilling and landscaping necessary to complete the work.

12.12 ADJUSTING FRAMES, COVERS AND VALVE BOXES

Part 1 - General

1.1 - Description of Work

The Contractor shall furnish all labor, materials, and equipment necessary to adjust all frames, covers and valve boxes as required by the plans or as directed by the Engineer.

Part 2 – Execution

2.1 – Work is to be done per MAG Standard Specification Section 345 and MAG Standard Details 391-1 and 422.

Part 3 – Measurement And Payment

3.1 - Method of Measurement

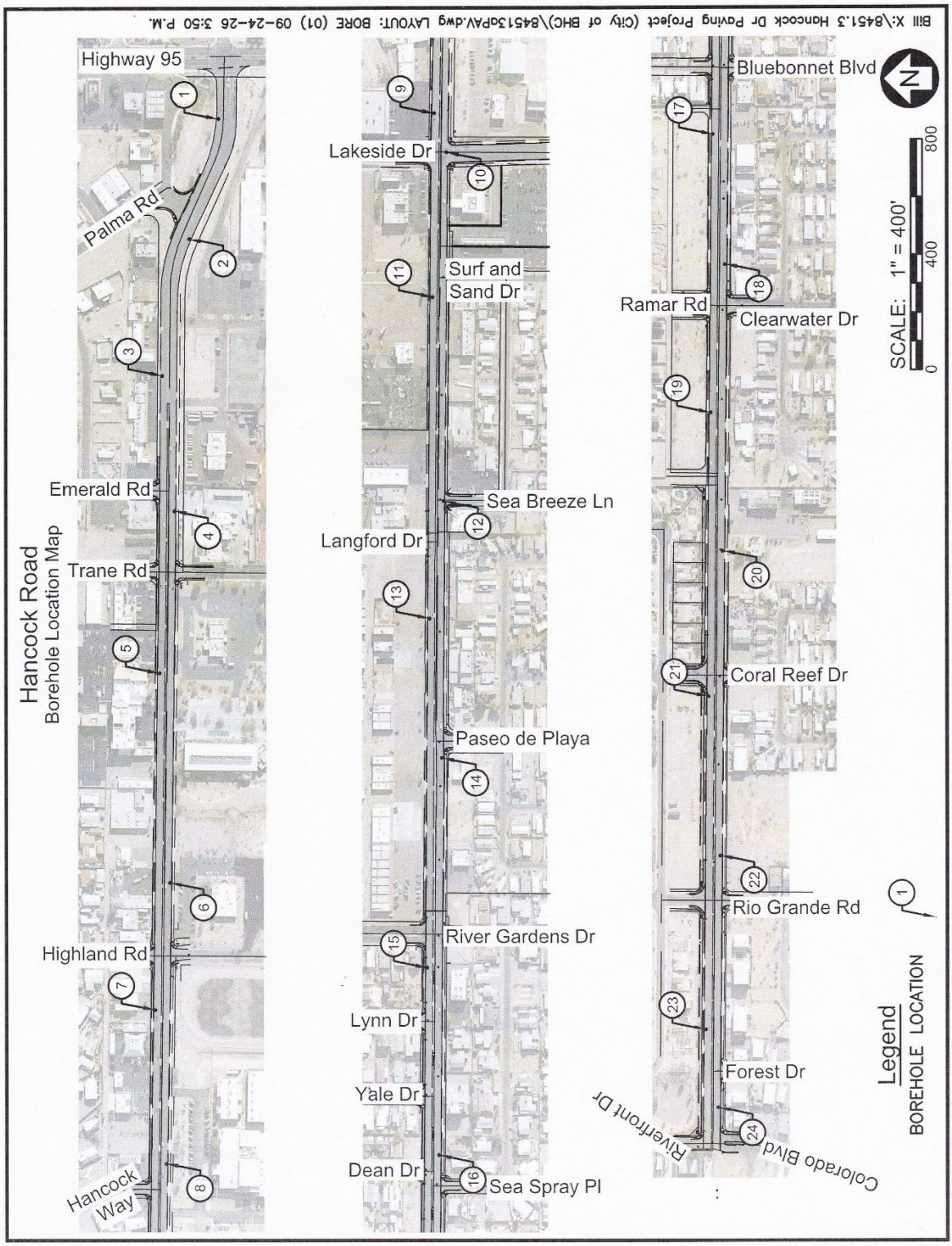
There will be no separate measurement for adjusting frames, covers and valve boxes.

3.2 - Basis of Payment

The cost of adjusting frames, covers and valve boxes will be considered incidental to the price bid for the construction operation to which such adjustments are incidental.

**12.13 EXISTING ASPHALT BORING INFORMATION**

Part 1 - DEPTHS

| Existing AC Depth (Inches) | | | Existing AC Depth (Inches) | | |
|---|---|---|---|---|---|
| Bore Hole Noumber | West Bound Lane | East Bound Lane | Bore Hole Noumber | West Bound Lane | East Bound Lane |
| | | | | | |
| 1 | 5.50 | | 13 | 4.50 | |
| 2 | | 4.75 | 14 | | 3.75 |
| 3 | 6.00 | | 15 | 4.50 | |
| 4 | | 4.25 | 16 | | 3.25 |
| 5 | 5.50 | | 17 | 4.50 | |
| 6 | | 5.75 | 18 | | 3.50 |
| 7 | 5.75 | | 19 | 4.75 | |
| 8 | | 5.75 | 20 | | 4.00 |
| 9 | 5.75 | | 21 | 5.25 | |
| 10 | | 4.50 | 22 | | 3.00 |
| 11 | 5.00 | | 23 | 5.00 | |
| 12 | | 3.75 | 24 | | 5.25 |

Part 2 - BORE HOLE LOCATIONS