



**CITY OF BULLHEAD CITY, ARIZONA
UTILITIES DEPARTMENT**

**SPECIFICATIONS AND CONTRACT DOCUMENTS
SOUTH SUPPLY LINE PHASE 3**

PROJECT NO. 26-U-006

April 8, 2026

TABLE OF CONTENTS

Article 1 - INVITATION TO BID & BID DOCUMENTS..... 4

Article 2 – BID PROPOSAL..... 10

Article 3 – BID SCHEDULE..... 12

Article 4 – BID BOND 14

Article 5 – BIDDER’S STATEMENT OF QUALIFICATIONS 15

Article 6 – AGREEMENT..... 20

Article 7 – NOTICES & LIEN RELEASES 24

Article 8 – GENERAL CONDITIONS..... 28

Article 9 – SPECIAL PROVISIONS..... 53

Article 10 – TECHNICAL SPECIFICATIONS 65

Article 11 – CONSTRUCTION DRAWINGS..... 67

Article 12 – FEDERAL FUNDING REQUIREMENTS..... 68



City of Bullhead City, Arizona

**Construction Contract
South Supply Line Phase 3
Project No. 26-U-006**

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 involves the installation of an extension of a tank supply line for the Bullhead City public water supply system.
- 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. 26-U-006

1.0 INVITATION TO BID

Req./Contract #: 26-U-006
Project Name: South Supply Line Phase 3
Bid Due Date / Time: April 29, 2026 / 3:00 PM Arizona Time

Project Description: The Project involves the installation of approximately 4700 feet of 16-inch transmission main per drawings and specifications. This project also includes an additive alternative to install approximately 1450 feet of 10-inch distribution main per plans and specifications. The alternative is to be installed in the same trench as the transmission main.

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 Norm Bogenschield, 2355 Trane Road, Bullhead City, Arizona 86442-5966, at phone (928) 763-9400, ext. 8889, or at nbogenschield@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 3:00 p.m. on April 15, 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
- 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>

BONDS:

Bid Bond:	<u>10%</u>
Payment Bond:	<u>100%</u>
Performance Bond:	<u>100%</u>

Project Completion Date: 90 Calendar days or less after Notice to Proceed.

A Pre-Bid Conference will not be held. Any questions on the bid package should be directed to Norman Bogenschield via email to nbogenschield@bullheadcityaz.gov before 3:00 PM on April 15, 2026. 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 South Supply Line Phase 3. 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 3:00 PM. Arizona Time April 29, 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 be held for this project at the time and place stipulated in Section 1.0 Invitation to Bid, or as modified by Addenda.

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.

<u>SCHEDULE OF LIQUIDATED DAMAGES</u>		
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 Utilities 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, Utilities Department 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 NO: 26-U-006

PROJECT NAME: South Supply Line Phase 3

The undersigned, as bidder, declares that we have received and examined the Bid documents entitled “South Supply Line Phase 3” 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:

<u>Article</u>	<u>Title</u>
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 induced 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 _____, 2026.

Respectfully Submitted By: _____ Title: _____

Name of Firm: _____

Address _____

Phone: _____

Fax: _____

Seal - If bid by a Corporation:

Arizona Contractor's License No.: _____ Type _____

ARTICLE 3 – BID SCHEDULE**PROJECT NO. 26-U-006**

3.0 BID SCHEDULE

CONTRACT FOR: South Supply Line Phase 3

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.

Bid Item	Spec #	Quantity	Unit	Description	Unit Cost	Total Cost
1		1	LS	Mobilization – Demobilization (no more than 3% of total bid), Bonds, and Insurance		
2	M.A.G. 401	1	LS	Traffic Control		
3	M.A.G. 405	3	EA	Survey Monuments		
4		1	LS	Stormwater BMPs		
5	M.A.G. 355	10	EA	Utility Potholes (Keyhole Method)		
6		1	LS	Construction Staking		
7		1	LS	Striping, Pavement Markings, and Signage		
8	M.A.G. 310	750	TON	Aggregate Base Course		
9	M.A.G. 315	340	GAL	Bituminous Prime Coat		
10	M.A.G. 317	750	SY	Asphalt Milling		
11	M.A.G. 336	170	TON	Asphalt Concrete Pavement		
12	M.A.G. 329	40	GAL	Tack Coat		
13	M.A.G. 610	4700	LF	16" PVC (DR-14) Water (C900)		
14	M.A.G. 620	61	LF	30" Steel Casing		
15	M.A.G. 630	1	LS	Water Valves and Accessories		
16		1	LS	Installation		

17		1	LS	Owner Contingency	10%	
Base Bid Total						

Additive Alternative						
18	M.A.G. 610	1450	LF	10" PVC (DR-14) Water (C900)		
19	M.A.G. 630	1	LS	Water Valves and Accessories		
20		1	LS	Installation		
21		1	LS	Owner Contingency	10%	
Additive Alternative Total						
Total (Base + Additive Alternative)						

Total Bid Amount (Items 1 through 21 above): _____ (In Words). (\$_____ .00) Calendar Days Vendor requires to Complete Total Project: 90 Calendar days or less 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

ARTICLE 4 – BID BOND

PROJECT NO. 26-U-006

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. 26-U-006** known as the South Supply Line Phase 3

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 PROJECT NO. 26-U-006

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
Utilities Department
Attention Jacklyn Renfroe
Administrative Analyst
2355 Trane Road
Bullhead City, AZ 86442-5966

SUBMITTED BY: NAME: _____

- Corporation
- LLC
- Partnership
- Individual
- Joint Venture
- Other

ADDRESS: _____

PRINCIPAL OFFICE: _____

(NOTE: Attach separate sheets as required)

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

Total % of all subcontractor's work on project _____

Total % for Contractor _____

Dated at _____ this _____ day of _____, 2026

Name of Organization: _____

By: _____ Title: _____

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 construct the South Supply Line Phase 3 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 South Supply Line Phase 3 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 within 90 Calendar days or less 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

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 _____, 2026, to furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of South Supply Line Phase 3 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 _____, 2026.

PRINCIPAL SEAL

AGENCY OF RECORD

AGENCY ADDRESS

BY: _____

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 South Supply Line Phase 3 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 Statutes, 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 _____, 2026.

PRINCIPAL SEAL

AGENCY OF RECORD

AGENCY ADDRESS

BY: _____

SURETY SEAL

BY: _____

ARTICLE 7 – NOTICES & LIEN RELEASES

PROJECT NO. 26-U-006

7.0 NOTICE OF AWARD

Date: _____
To: _____

PROJECT DESCRIPTION: South Supply Line Phase 3, **Project No. 26-U-006**

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
Utilities Department
Attention Jacklyn Renfroe
Administrative Analyst
2355 Trane Road
Bullhead City, AZ 86442-5966

By: _____
Project Manager

Dated this ___ day of _____, 2026

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 South Supply Line Phase 3, Project No. **26-U-006**

You are hereby notified to commence work on the project in accordance with the Agreement dated _____, 2026, 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 within _____ calendar days or less after Notice to Proceed. The date for completion of the work is therefore _____, 2026.

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 _____, 2026

Contractor: _____

Signature: _____

Print Name: _____

Title: _____

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

City of Bullhead City
Utilities Department
Attention Jacklyn Renfro
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
South Supply Line Phase 3**

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 _____, 2026

Contractor: _____

Signature: _____

Print Name: _____

Title: _____

7.3 UNCONDITIONAL WAIVER AND LIEN RELEASE

Project Name: South Supply Line Phase 3

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 percent 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:

South Supply Line Phase 3
Project No. 26-U-006

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 be 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 involves the installation of approximately 4700 feet of 16-inch transmission main per drawings and specifications. This project also includes an additive alternative to install approximately 1450 feet of 10-inch distribution main per plans and specifications. The alternative is to be installed in the same trench as the transmission main

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 90 Calendar days or less 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 insure 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 insure 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.
- | | |
|--------|---|
| 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, 2026, MAG UNIFORM STANDARD DETAILS for PUBLIC WORKS CONSTRUCTION, 2026, the Manual of Uniform Traffic Control Devices (MUTCD) 11th Edition (December 2026), and to the extent not addressed in the preceding, the ADOT Traffic Control Manual for Hwy Construction (Supplement) 1996, and the 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 811 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 TECHNICAL SPECIFICATIONS

The Technical Specifications issued for this project titled “South Supply Pipelines – Specifications – Table of Contents”, “Supplementary Special Provisions”, and “Submittal Log”, consisting of 8 pages combined, are incorporated herein by this reference and are an integral part of the Contract Documents for this project.

11.0 CONSTRUCTION DRAWINGS

Construction drawings issued for this project titled “Bullhead City South Supply Pipelines Phase 3” consisting of 14 pages and dated March 30, 2026, are incorporated herein by this reference and are an integral part of the Contract Documents for this project. The Base Bid includes the 16” transmission main and associated appurtenances. The Additive Alternative Bid includes the 10” distribution main and associated appurtenances.

12.0 FEDERAL FUNDING REQUIREMENTS

The City entered an agreement with the Water Infrastructure Finance Authority of Arizona (“WIFA”) for the use of Federal funding that will be used to compensate Contractor under this Project. Certain terms of the City’s agreement with WIFA apply to Contractor. Following, and incorporated herein (pages 1-14), are Wage Rate and American Iron and Steel provisions with which Contractor must comply as part of the Project as well as the specific Wage Rate determination (pages 1-6) applicable to the Project. References to “Loan Agreement”, “Local Borrower”, and “General Provisions” are inapplicable to Contractor. Contractor is required to execute pages 10 and 14 of this Article as part of the bid submission. Signatures acknowledge awareness of the law and compliance with the wage rate determination applicable to the Project.

BULLHEAD CITY SOUTH SUPPLY PIPELINES

PHASE 3
MARCH 2026

SHEET INDEX		
PAGE NUMBER	SHEET NUMBER	SHEET TITLE
1	C-001	COVER SHEET
2	C-002	NOTES
3	C-003	KEY MAP
4	C-102	WATER MAIN PLAN AND PROFILE (STA 61+00.00 - 66+00.00)
5	C-103	WATER MAIN PLAN AND PROFILE (STA 66+00.00 - 74+00.00)
6	C-104	WATER MAIN PLAN AND PROFILE (STA 74+00.00 - 81+00.00)
7	C-105	WATER MAIN PLAN AND PROFILE (STA 81+00.00 - 88+00.00)
8	C-106	WATER MAIN PLAN AND PROFILE (STA 88+00.00 - 95+00.00)
9	C-107	WATER MAIN PLAN AND PROFILE (STA 95+00.00 - 103+00.00)
10	C-108	WATER MAIN PLAN AND PROFILE (STA 103+00.00 - 108+00.00)
11	C-201	CIVIL DETAILS (1 OF 2)
12	C-202	CIVIL DETAILS (2 OF 2)
13	C-301	TRAFFIC CONTROL AND DETOUR PLAN - PHASE 3A
14	C-302	TRAFFIC CONTROL AND DETOUR PLAN - PHASE 3B

CONSTRUCTION NOTES

1. INSTALL (N) 16" C900 DR 14 PVC WATER MAIN, TRENCH AND BACKFILL PER MAG STD. DWGS. 200-1 AND 211, SHEET 11
2. INSTALL (N) 10" DI TEE FLG X FLG (ADDITIVE ALTERNATIVE)
3. INSTALL (N) 16" 90° DI BEND MJ X MJ.
4. INSTALL (N) 10" 22.5° VERTICAL DI BEND MJ X MJ (ADDITIVE ALTERNATIVE)
5. INSTALL (N) 16" 45° DI BEND MJ X MJ.
6. INSTALL (N) RESTRAINED END CAP, ROMAC ALPHA EC OR APPROVED EQUAL (ADDITIVE ALTERNATIVE)
7. INSTALL (N) 16" RESTRAINED DEFLECTION COUPLING.
8. INSTALL (N) 10" GATE VALVE, (ADDITIVE ALTERNATIVE)
9. INSTALL (N) 10" DI TEE FLG X FLG (ADDITIVE ALTERNATIVE)
10. INSTALL (N) 10" RESTRAINED DEFLECTION COUPLING. (ADDITIVE ALTERNATIVE)
11. INSTALL (N) RESTRAINED END CAP, ROMAC ALPHA EC OR APPROVED EQUAL.
12. INSTALL (N) 16" BUTTERFLY VALVE WITH BLOCKING PER MAG STD. DWG 301, SHEET 11
13. INSTALL (N) 10" 45° DI BEND MJ X MJ (ADDITIVE ALTERNATIVE)
14. TANK SITE LAYOUT IS CONCEPTUAL ONLY, TO BE DEVELOPED BY OTHERS
15. INSTALL (N) 10" 90° DI BEND MJ X MJ (ADDITIVE ALTERNATIVE)
16. INSTALL (N) 16" 11.25° DI BEND MJ X MJ.
17. INSTALL (N) 10" C900 DR 14 PVC WATER MAIN, TRENCH AND BACKFILL PER MAG STD. DWGS. 200-1 AND 211, SHEET 11. (ADDITIVE ALTERNATIVE)
18. INSTALL (N) 2" AVR V PER BHC STD DWG 351-1, SHEET 12
19. INSTALL (N) BLOWOFF PER DETAIL 2, SHEET 12

SURVEY CONTROL:

BASIS OF BEARINGS/COORDINATES

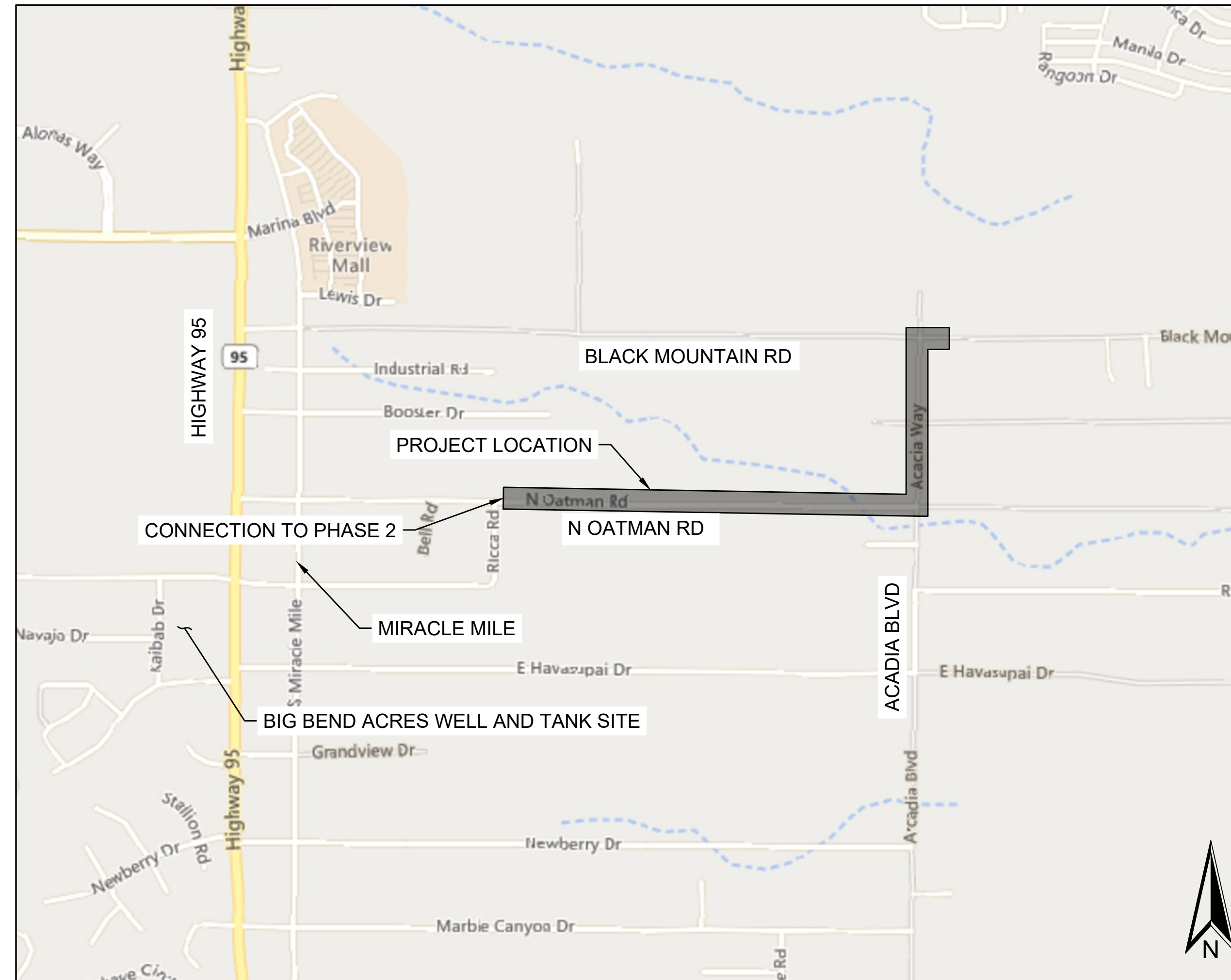
THE BASIS OF BEARINGS FOR THIS PROJECT IS THE NORTH AMERICAN DATUM OF 1983 (NAD83) (2011) (EPOCH: 2010.0000) AS DEFINED BY THE STATION MONUMENTS DESCRIBED BELOW AND STATIC GPS OBSERVATIONS FOR ARIZONA WEST (0203) ZONE, STATE PLANE COORDINATES, INTERNATIONAL FEET.

BASIS OF ELEVATIONS

THE BASIS OF ELEVATIONS FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988.

DATE OF SURVEY

THE AERIAL TOPOGRAPHIC SURVEY DATA SHOWN HEREON WAS COLLECTED BY AEROTECH MAPPING IN NOVEMBER 2022 (AERIAL SURVEY) AND JULY 2024 (SUPPLEMENTAL FIELD SURVEY).



VICINITY MAP

SCALE: 1" = 1000'

LEGEND:

EXISTING

	TREE
	WATER LINE
	SEWER PIPE
	MANHOLE
	CURB
	CONTOUR
	BUILDING
	RW
	PROPERTY LINE
	FENCE
	COMMUNICATION LINE
	GAS LINE
	OVERHEAD ELECTRIC
	LIGHT POST
	UTILITY POLE
	UTILITY BOX
	COMMUNICATIONS BOX
	GATE VALVE
	BOLLARD POST
	WATER UTILITY BOX
	ELECTRICAL BOX
	HYDRANT

PROPOSED

	16" TRANSMISSION MAIN
	12" MAIN (ADDITIVE ALTERNATIVE)
	CONTINUED ON PREVIOUS/NEXT PAGE

ABBREVIATIONS:

ABC	AGGREGATE BASE COURSE
AC	ASPHALTIC CONCRETE
ADEQ	ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AVRV	AIR VACUUM RELEASE VALVE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BP	BOTTOM OF PIPE
C/G	CURB AND GUTTER
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CONC	CONCRETE
DEMO	DEMOLITION
DET	DETAIL
DI	DUCTILE IRON
DIST	DISTRIBUTION
DR	DRIVE OR DIMENSION RATIO
DWG(S)	DRAWING(S)
E	EXISTING
EA	EACH
EG	EXISTING GRADE
EX	EXISTING
FLG	FLANGE
FM	FORCE MAIN
FS	FINISHED SURFACE
GV	GATE VALVE
HORIZ	HORIZONTAL
INV/E	INVERT ELEVATION
LF	LINEAR FEET
MAX	MAXIMUM
MAG	MARICOPA ASSOCIATION OF GOVERNMENTS
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MJR	MECHANICAL JOINT RESTRAINT
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
N	NEW
NRS	NON-RISING STEM
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PIP	PROTECT IN PLACE
PRIV	PRIVATE
PRV	PRESSURE RELEASE VALVE
PSI	POUNDS PER SQUARE INCH
PUB	PUBLIC
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RFA	RESTRAINED FLANGE ADAPTER
S	SLOPE
SDR	STANDARD DIMENSION RATIO
SECT	SECTION
SOFT	SQUARE FEET
SS	SANITARY SEWER
STA	STATION
STD	STANDARD
TP	TOP OF PIPE
TYP	TYPICAL
(UNK)	UNKNOWN
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W	WATER
W/	WITH

MATERIALS LIST		
DESCRIPTION	QTY	UNIT
16" C900 DR 14 PVC WATER MAIN	4700	LF
16" 90° DI BEND MJ X MJ	2	EA
16" 45° DI BEND MJ X MJ	8	EA
16" RESTRAINED DEFLECTION COUPLING	3	EA
16" BUTTERFLY VALVE FLG X FLG	5	EA
2" AVR V (PER BHC STD DWG 351-1, SHEET C-202)	7	EA
BLOWOFF VALVE	5	EA
STEEL CASING (SEE DETAIL 1, SHEET C-202)	61	LF
16" RESTRAINED END CAP	1	EA

MATERIALS LIST (ADDITIVE ALTERNATIVE)		
DESCRIPTION	QTY	UNIT
10" C900 DR 14 PVC WATER MAIN	1460	LF
10" 90° DI BEND MJ X MJ	1	EA
10" RESTRAINED DEFLECTION COUPLING	3	EA
10" DI TEE FLG X FLG	2	EA
10" GATE VALVE FLG X FLG	4	EA
2" AVR V	1	EA
BLOWOFF VALVE	2	EA
10" RESTRAINED END CAP	2	EA

REVISION RECORD

NO. DATE DESCRIPTION



BULLHEAD CITY SOUTH SUPPLY PIPELINES PHASE 3 WATER MAIN PLANS

COVER SHEET

DRAWN BY: CW
CHECKED BY: EM
DATE: 3/30/2026
DWG SCALE: AS NOTED
PROJECT NO: 124002
APPROVED BY: KM



DRAWING NO.

C-001

SHEET 1 OF 14

IFB PLANS 3/30/2026

GENERAL NOTES

- 1. EXISTING CONDITIONS, AS DEPICTED ON THESE PLANS, ARE GENERAL AND ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT FROM THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
2. EXISTING SITE INFORMATION / AERIAL MAPPING WAS PREPARED BY AEROTECH MAPPING, DATED NOVEMBER 2022 (AERIAL SURVEY) AND JULY 2024 (SUPPLEMENTAL FIELD SURVEY). WEST COAST CIVIL IS NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN.
3. ALL SITE AND UTILITY WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS, MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2024 REVISION TO 2020 EDITION (MAG STANDARDS) AND IN CONJUNCTION WITH ALL APPLICABLE STANDARDS AND/OR PRESIDING JURISDICTIONAL STANDARDS (LOCAL, STATE, AND/OR FEDERAL).
4. THE CONTRACTOR SHALL HAVE COPIES OF THE APPROVED PLANS ON THE JOB AT ALL TIMES.
5. ALL UTILITIES HAVE BEEN LOCATED AND SHOWN VIA FIELD INVESTIGATION AND AVAILABLE UTILITY RECORDS, AND ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UTILITY LINES AND APPURTENANCES. CALL ARIZONA BLUE STAKE AT 811 PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF THE CONDITIONS IN THE FIELD DO NOT MATCH THOSE SHOWN ON THE APPROVED PLANS.
7. NO DIMENSIONS SHALL BE SCALED FROM ANY DRAWING FOR SITE LAYOUT OR CONSTRUCTION. IF A PERTINENT DIMENSION IS NOT SHOWN, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION.
8. PROTECT IN PLACE ALL FACILITIES UNLESS STATED OTHERWISE.
9. CONTRACTOR TO FIELD VERIFY ALL MEASUREMENTS AND ELEVATIONS PRIOR TO ORDERING MATERIALS.
10. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES (INCLUDING THOSE LABELED PER RECORD DATA) PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS. INFORM ENGINEER OF ANY CONFLICTS DETRIMENTAL TO THE DESIGN INTENT.
11. 48 HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES: ARIZONA BLUE STAKE (811) AND ALL OTHER AGENCIES THAT MAY HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBERS OF ARIZONA UNDERGROUND PROTECTION, INC.
12. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
13. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE CITY AND CITY'S REPRESENTATIVE FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
14. CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REGULATIONS.
15. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL APPLICABLE PERMITS, AND PAY ALL REQUIRED FEES PRIOR TO BEGINNING WORK.
16. ANY WORK PERFORMED IN THE LOCAL OR STATE RIGHT OF WAYS SHALL BE IN ACCORDANCE WITH THE APPLICABLE LOCAL OR STATE REQUIREMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY PERMITS FOR THE WORK, SCHEDULE NECESSARY INSPECTIONS, AND PROVIDE THE NECESSARY TRAFFIC CONTROL MEASURES AND DEVICES, ETC., FOR WORK PERFORMED IN THE RIGHT OF WAYS.
17. THE CONTRACTOR IS TO PERFORM ALL INSPECTIONS AS REQUIRED BY THE EPA FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND FURNISH OWNERS REPRESENTATIVE WITH WRITTEN REPORTS. CONTRACTOR WILL OBTAIN NPDES PERMIT.
18. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL, PRACTICES REQUIRED BY MOHAVE COUNTY AND ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY.
19. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) SPECIFICATIONS SECTION 430.
20. ALL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.
21. THE CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THE PROJECT.
22. BEFORE INSTALLATION OF WATER, STORM OR SANITARY SEWER, OR OTHER UTILITY, THE CONTRACTOR SHALL VERIFY ALL CROSSINGS, BY EXCAVATION WHERE NECESSARY, AND INFORM THE CITY AND THE ENGINEER OF ANY CONFLICTS. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT HE IS NOT NOTIFIED OF DESIGN CONFLICTS PRIOR TO CONSTRUCTION.
23. PARKWAY GRADING AND DISTURBED LANDSCAPING TO BE REPLACED IN KIND. ANY LANDSCAPE IRRIGATION SYSTEMS AFFECTED DURING THE WORK SHALL ALSO BE REPLACED TO MATCH THE EXISTING CONDITION.

DEMOLITION NOTES

- 1. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD BY THE CONTRACTOR.
2. ALL DEMOLITION WASTE AND CONSTRUCTION DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED AND SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF OFFSITE IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR DAMAGE ACCORDING TO THE APPROPRIATE UTILITY COMPANY STANDARDS AND AT THE CONTRACTOR'S EXPENSE.
3. ALL UTILITY DISCONNECTION, REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY / AGENCY.
4. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR OBTAINS PRIOR WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITIES.
5. CONTRACTOR SHALL PROVIDE AND OBTAIN APPROVAL OF EROSION & SEDIMENT CONTROL MEASURES AROUND AREAS OF DEMOLITION SHALL BE PROPERLY INSTALLED AND FUNCTION PROPERLY PRIOR TO INITIALIZATION OF DEMOLITION ACTIVITIES.
6. ASBESTOS OR HAZARDOUS MATERIALS ARE NOT EXPECTED, IF FOUND ON SITE, SUCH MATERIALS SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
7. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL AND OSHA REGULATIONS DURING ALL DEMOLITION ACTIVITIES.
8. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.
9. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, STRUCTURES, AND FEATURES TO REMAIN. ANY ITEMS TO REMAIN THAT HAVE BEEN DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
10. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC.. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
11. PROVIDE NEAT, STRAIGHT, FULL DEPTH, SAW CUTS OF EXISTING PAVEMENT WHERE INDICATED ALONG LIMITS OF PAVEMENT DEMOLITION.
12. ALL UTILITY AND STRUCTURE REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED AND PROPERLY DOCUMENTED BY A CERTIFIED PROFESSIONAL, WHEN APPLICABLE, WITH THE APPROPRIATE UTILITY COMPANY, MUNICIPALITY AND/OR AGENCY. DEMOLITION OF REGULATED ITEMS MAY INCLUDE, BUT ARE NOT LIMITED TO WELLS, ASBESTOS, UNDER GROUND STORAGE TANKS, SEPTIC TANKS AND ELECTRIC TRANSFORMERS. DEMOLITION CONTRACTOR SHALL REFER TO ANY ENVIRONMENTAL STUDIES FOR DEMOLITION RECOMMENDATIONS AND GUIDANCE. AVAILABLE ENVIRONMENTAL STUDIES MAY INCLUDE, BUT ARE NOT LIMITED TO PHASE I ESA, PHASE II, WETLAND AND STREAM DELINEATION AND ASBESTOS SURVEY. ALL APPLICABLE ENVIRONMENTAL STUDIES SHALL BE MADE AVAILABLE UPON REQUEST.
13. ALL PAVEMENT, BASE COURSES, SIDEWALKS, CURBS, BUILDINGS, FOUNDATIONS, ETC., WITHIN THE AREA TO BE DEMOLISHED SHALL BE REMOVED TO FULL DEPTH. EXISTING BASE COURSE MATERIALS MAY BE WORKED INTO THE NEW PAVEMENT OR BUILDING SUBGRADE IF THE GRADATION, CONSISTENCY, COMPACTION, SUBGRADE CONDITION, ETC., ARE IN ACCORDANCE WITH THE SPECIFICATIONS AND RECOMMENDATIONS OF THE REPORT OF GEOTECHNICAL INVESTIGATION. BASE COURSE MATERIALS SHALL NOT BE WORKED INTO THE SUBGRADE AREAS TO RECEIVE LANDSCAPING.
14. THE CONTRACTOR SHALL USE SUITABLE METHODS TO CONTROL DUST AND DIRT CAUSED BY THE DEMOLITION ACTIVITIES.

LAYOUT NOTES

- 1. THE CONTRACTOR SHALL CHECK EXISTING GRADES, DIMENSIONS, AND INVERTS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE CITY'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
2. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, INCLUDING IRRIGATION LINES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. RELOCATE EXISTING UTILITIES AS INDICATED, OR AS NECESSARY FOR CONSTRUCTION.
3. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY. INSTALL ALL UTILITIES, INCLUDING IRRIGATION SLEEVES, PRIOR TO INSTALLATION OF PAVED SURFACES.
4. THE CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
5. SITE WORK CONCRETE WALKS AND PADS SHALL HAVE A BROOM FINISH TO ALL SURFACES, UNLESS OTHERWISE NOTED. SITE WORK CONCRETE SHALL BE CLASS 'B' (2,500 PSI @ 28 DAYS) UNLESS OTHERWISE NOTED.
6. ALL DAMAGE TO EXISTING PAVEMENT TO REMAIN, WHICH RESULTS FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH LIKE MATERIALS AT THE CONTRACTOR'S EXPENSE.

- 7. COORDINATES ARE FOR BUILDING COLUMNS, EXTERIOR BUILDING WALL, CENTER OF DRIVEWAYS, CENTER OF SANITARY SEWER MANHOLES, AND CENTER OF STRUCTURE PLACED SIX INCHES INSIDE FACE OF CURB FOR DRAIN INLETS, UNLESS OTHERWISE NOTED.
8. CONTRACTOR SHALL MAINTAIN ONE SET OF AS-BUILT / RECORD DRAWINGS ON-SITE DURING CONSTRUCTION FOR DISTRIBUTION TO THE OWNER AND/OR OWNER'S REPRESENTATIVE UPON COMPLETION.
9. THIS SITE LAYOUT IS SPECIFIC TO THE APPROVALS NECESSARY FOR THE CONSTRUCTION IN ACCORDANCE WITH BULLHEAD CITY. NO CHANGES TO THE SITE LAYOUT ARE ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. CHANGES MADE TO THE SITE LAYOUT WITHOUT APPROVAL IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. CHANGES INCLUDE BUT ARE NOT LIMITED TO, INCREASED IMPERVIOUS PAVEMENT, ADDITION / DELETION OF PARKING SPACES, MOVEMENT OF CURB LINES, CHANGES TO DRAINAGE STRUCTURES AND PATTERNS, LANDSCAPING, ETC.

WATER NOTES

- 1. DISTANCES SHOWN ON PIPING ARE HORIZONTAL DISTANCES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE INSTALLATION, INSPECTION, TESTING AND FINAL ACCEPTANCE OF ALL NEW WATER FACILITIES CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH ALL APPLICABLE REGULATING AGENCIES CONCERNING INSTALLATION, INSPECTION AND APPROVAL OF THE WATER SYSTEM CONSTRUCTION.
3. ALL WATER FACILITIES, INCLUDING FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.

UTILITY NOTES

- 1. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED ON FIELD DATA, AND MAP RECORDS. THE CONTRACTOR SHALL CONTACT ARIZONA BLUE STAKE (811) PRIOR TO ANY CONSTRUCTION WHICH UTILITIES DO NOT PARTICIPATE IN ARIZONA BLUE STAKE (811) AND CONTACT THEM DIRECTLY TO VERIFY THE LOCATION OF THOSE UTILITIES. ANY DAMAGE TO EXISTING UTILITIES CAUSED BY CONTRACTOR'S OPERATION SHALL BE REPORTED TO THE UTILITY OWNER IMMEDIATELY AND REPAIRED OR REPLACED AT NO COST TO THE OWNER. IN CASES WHEN THE EXISTING UTILITIES ARE NOT AS DEPICTED ON THE PLANS SOME MINOR DEVIATION TO THE PROPOSED ALIGNMENT MAY BE ALLOWED TO MAINTAIN MINIMUM SEPARATION DISTANCES BETWEEN UTILITIES. IN ALL INSTANCES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES AND STRUCTURES AND TO ABIDE BY ALL FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES. PROPOSED CHANGES TO THE ALIGNMENT MUST BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW. NO CHANGES WILL BE ALLOWED WITHOUT PRIOR APPROVAL.
2. IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODE, SECTION R18-5-502, "MINIMUM DESIGN CRITERIA", EXTRA PROTECTION SHALL BE PROVIDED FOR GRAVITY SEWER LINES, FORCE MAIN SEWER LINES, REUSE FORCE MAINS, AND WATER LINES WHERE THE REQUIRED MINIMUM VERTICAL AND HORIZONTAL SEPARATION CAN NOT BE MAINTAINED. ENCASEMENT SHALL BE PROVIDED AS REQUIRED BY ADEQ AND SHALL CONFORM TO THE STANDARD DETAILS PROVIDED. REUSE LINES SHALL BE TREATED AS WATER LINES WHEN IN PROXIMITY TO SEWER LINES AND SHALL BE CONSIDERED SEWER LINES WHEN IN PROXIMITY TO WATER LINES.
3. THE CONTRACTOR SHALL LIMIT THE WORK AREA TO PUBLIC RIGHT-OF-WAY AND PERMANENT EASEMENTS AS SHOWN FOR CONSTRUCTION OF THE PROJECT. NO TEMPORARY CONSTRUCTION EASEMENTS EXIST UNLESS INDICATED ON THE PLANS.
4. THE CONTRACTOR SHALL OBTAIN ANY ADDITIONAL TEMPORARY EASEMENTS OR USE AGREEMENTS THAT ARE DEEMED NECESSARY FOR CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER. COPIES OF ALL CONTRACTOR OBTAINED EASEMENTS AND USE AGREEMENTS SHALL BE PROVIDED TO THE CITY'S PRIOR TO THE UTILIZATION OF THE SITE.
5. THE CONTRACTOR SHALL NOT DISRUPT WATER OR SEWER SERVICE TO SCHOOLS, HOSPITALS, DAY CARE FACILITIES, ETC. IN ACCORDANCE WITH ARIZONA STATE LAW.
6. THE CONTRACTOR SHALL GRADE AND RESURFACE ALL AREAS DISTURBED BY CONSTRUCTION, IN ACCORDANCE WITH THE CITY'S SPECIFICATIONS AND TO A CONDITION EQUAL TO, OR BETTER THAN, THE PRE-CONSTRUCTION CONDITION.
7. ANY SHEATHING AND SHORING REQUIRED SHALL BE PER SUPPLEMENTARY SPECIAL PROVISIONS SECTION 206.4.7 (ENGINEERED TRENCH SHORING PLAN).
8. ANY ROCK ENCOUNTERED DURING EXCAVATION SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER. ROCK EXCAVATION COST SHALL BE INCLUDED IN THE CONTRACTOR'S BASE BID.
9. THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO PREVENT EROSION OF MATERIAL FROM THE WORK AREA AND DEPOSITION OF SEDIMENTS INTO WATER COURSES OR DRAINAGE SWALES. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL PROVIDE PROTECTION TO PREVENT UNDERMINING OR DAMAGING STRUCTURAL INTEGRITY OF ALL POWER POLES, FENCES, BLOCK WALLS, SCREEN WALLS, RETAINING WALLS, HIGHWAY AND STREET SIGNS, OTHER UTILITY POLES, OR OTHER PRIVATE OR PUBLIC IMPROVEMENTS WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE OWNING UTILITY AS NECESSARY TO PROVIDE TEMPORARY SUPPORT OR PROTECTION DURING CONSTRUCTION WORK, AND SHALL NEATLY REMOVE AND PROMPTLY REPLACE NON UTILITY IMPROVEMENTS WITHOUT UNDUE DISRUPTION. THE COST OF ALL SUCH PROTECTION, REMOVAL, AND REPLACEMENT REQUIRED TO COMPLETE THE PROJECT SHALL BE SUBSIDIARY TO OTHER BID ITEMS.
10. WATERLINES MUST BE DISINFECTED PER AWWA C651-05.

NOTES TO CONTRACTOR FROM ENGINEER:

- 1. CONTRACTOR SHALL PREPARE THE FOLLOWING SUBMITTALS FOR CITY/ENGINEER APPROVAL:
1.1. ALL MATERIALS (PIPES, FITTINGS, COUPLINGS, ETC.)
1.2. BASELINE SCHEDULE
1.3. TRAFFIC CONTROL PLAN
1.3.1. CONTRACTOR TO SUBMIT TO CITY/ENGINEER PRIOR TO INITIATING TRAFFIC CONTROL OPERATIONS.
1.4. EXISTING CONDITIONS REPORT (POTHOLE)
1.4.1. CONTRACTOR SHALL SUBMIT TO THE CITY/ENGINEER AN EXISTING CONDITIONS REPORT DETAILING THE DEPTH AND LOCATION OF THE EXISTING ON-SITE SEWER LATERAL, WATER SERVICE, AND ANY CROSSING IDENTIFIED BY AGENCY MARK OUT. THIS REPORT SHALL BE PROVIDED 10 BUSINESS DAYS PRIOR TO EXCAVATION TO PROVIDE AMPLE TIME FOR DRAWING REVISIONS (IF NECESSARY). CONTRACTOR WILL NOT BE ALLOWED TO START CONSTRUCTION UNTIL SUBMITTED.
1.5. TEST RESULTS, INCLUDING, BUT NOT LIMITED TO: CONCRETE COMPRESSIVE TESTS, HVEEM AC TESTS, COMPACTION TESTS, PRESSURE AND INFILTRATION TESTS, ETC.
1.6. CONSTRUCTION PHASING PLAN
1.7. AS-BUILT DRAWINGS

- 2. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ALL LOCAL UTILITY PROVIDERS WHOSE INFRASTRUCTURE MAY BE WITHIN THE PROJECT VICINITY. NOTE THAT UTILITIES SHOWN ON PLAN ARE BASED ON THE BEST PUBLICLY AVAILABLE DOCUMENTATION AND MAY NOT REPRESENT ACTUAL CONDITIONS.
3. CONTRACTOR IS RESPONSIBLE FOR FINAL COORDINATION AND TRAFFIC CONTROL OPERATIONS DURING CONSTRUCTION.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY NOTES

- 1. PIPE FITTINGS, VALVES, FIRE HYDRANTS, AND OTHER APPLIANCES MUST CONFORM TO AWWA, ANSI/NSF 61 STANDARD.
2. AS PER HYDROSTATIC PRESSURE TESTING AFTER CONSTRUCTION, PLEASE REFERENCE ENGINEERING BULLETIN 10 7L.2. TEST SPECIFICATIONS ARE INCLUDED MAG 611.2.2
3. SEWER AND WATER MAINS MUST MEET THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION REQUIREMENTS. PLEASE REFERENCE ENGINEERING BULLETIN 10 CH. 7F.
4. PIPES MUST HAVE AT LEAST 3' COVER. PLEASE REFERENCE MAG 610.4

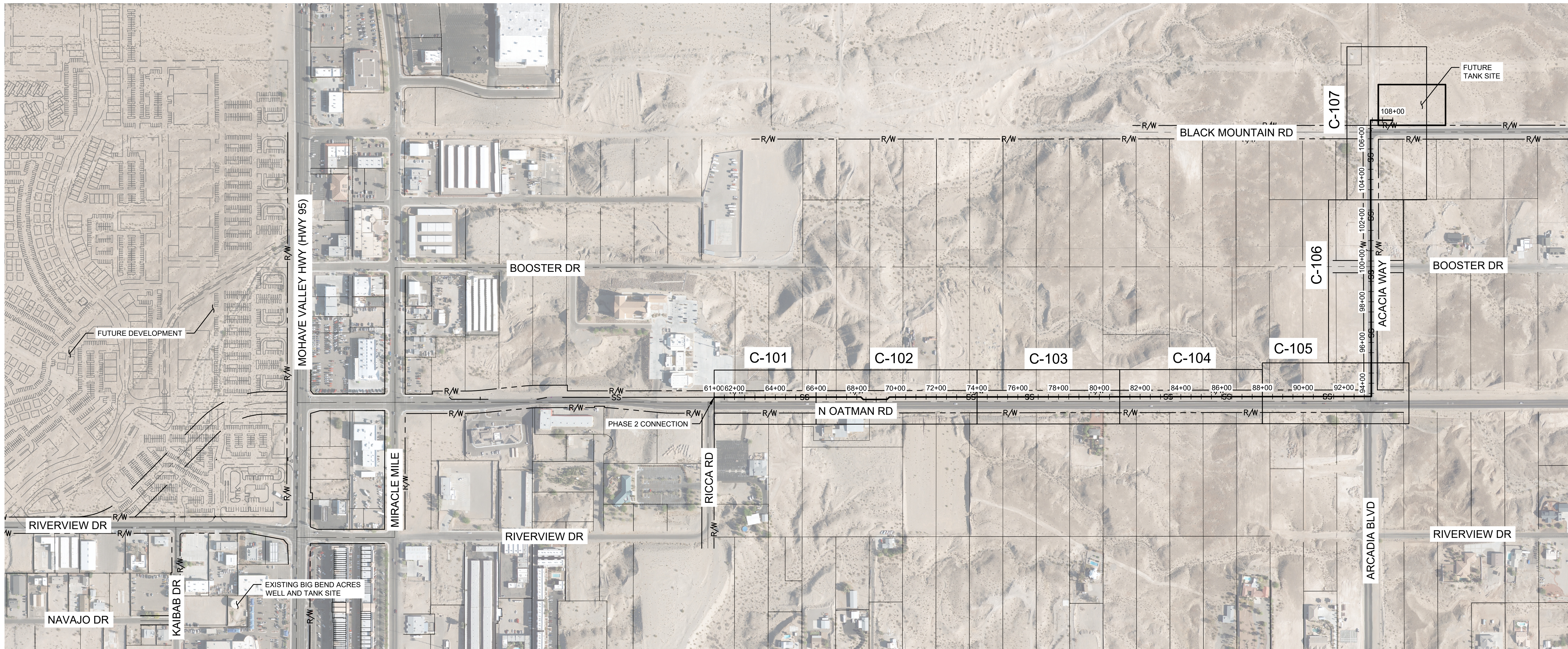
REVISION RECORD table with columns for NO., DATE, and DESCRIPTION.



BULLHEAD CITY SOUTH SUPPLY PIPELINES PHASE 3 WATER MAIN PLANS

NOTES table with columns for DATE, DRAWN BY, CHECKED BY, DIVG SCALE, PROJECT NO., and APPROVED BY.





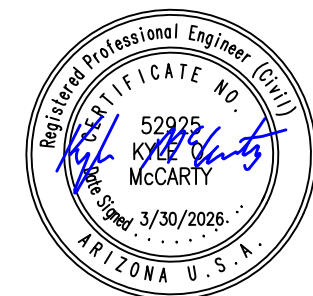
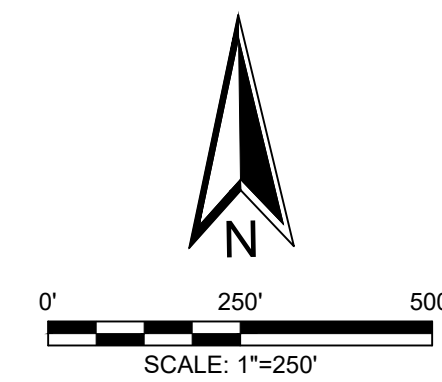
KEY MAP
SCALE: 1"=250'

CONSTRUCTION SEQUENCING

THE CONTRACTOR SHALL DEVELOP THEIR WORK PLAN BASED ON THE FOLLOWING GENERAL SEQUENCING ITEMS TO ALLOW FOR REGULAR ROADWAY OPERATIONS, WATER SERVICE TO BE MAINTAINED TO MAXIMUM EXTENTS PRACTICAL, AND TO MINIMIZE SERVICE INTERRUPTIONS.

- A. PHASE 3A (SHEET 4 - 8): CONSTRUCT 16-INCH WATER MAIN FROM STATION 61+00 TO STATION 93+00. REFER TO SHEET 13 FOR TRAFFIC CONTROL REQUIREMENTS.
- B. PHASE 3B (SHEET 8 - SHEET 10): CONSTRUCT 16-INCH WATER MAIN FROM STATION 93+00 TO 108+00, AND 10-INCH WATER MAIN FROM STATION 93+34 TO STATION 108+00. REFER TO SHEET 14 FOR TRAFFIC CONTROL REQUIREMENTS.

DEVIATIONS TO THE AFOREMENTIONED CONSTRUCTION SEQUENCING PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL WITHIN 10 BUSINESS DAYS OF NOTICE TO PROCEED FOR REVIEW AND APPROVAL.



NO.	DATE	REVISION RECORD DESCRIPTION



BULLHEAD CITY
SOUTH SUPPLY PIPELINES
PHASE 3 WATER MAIN PLANS

KEY MAP

DRAWN BY: CW
CHECKED BY: EM

DATE: 3/30/2026
DWG SCALE: AS NOTED
PROJECT NO: 124002
APPROVED BY: KM

DRAWING NO.

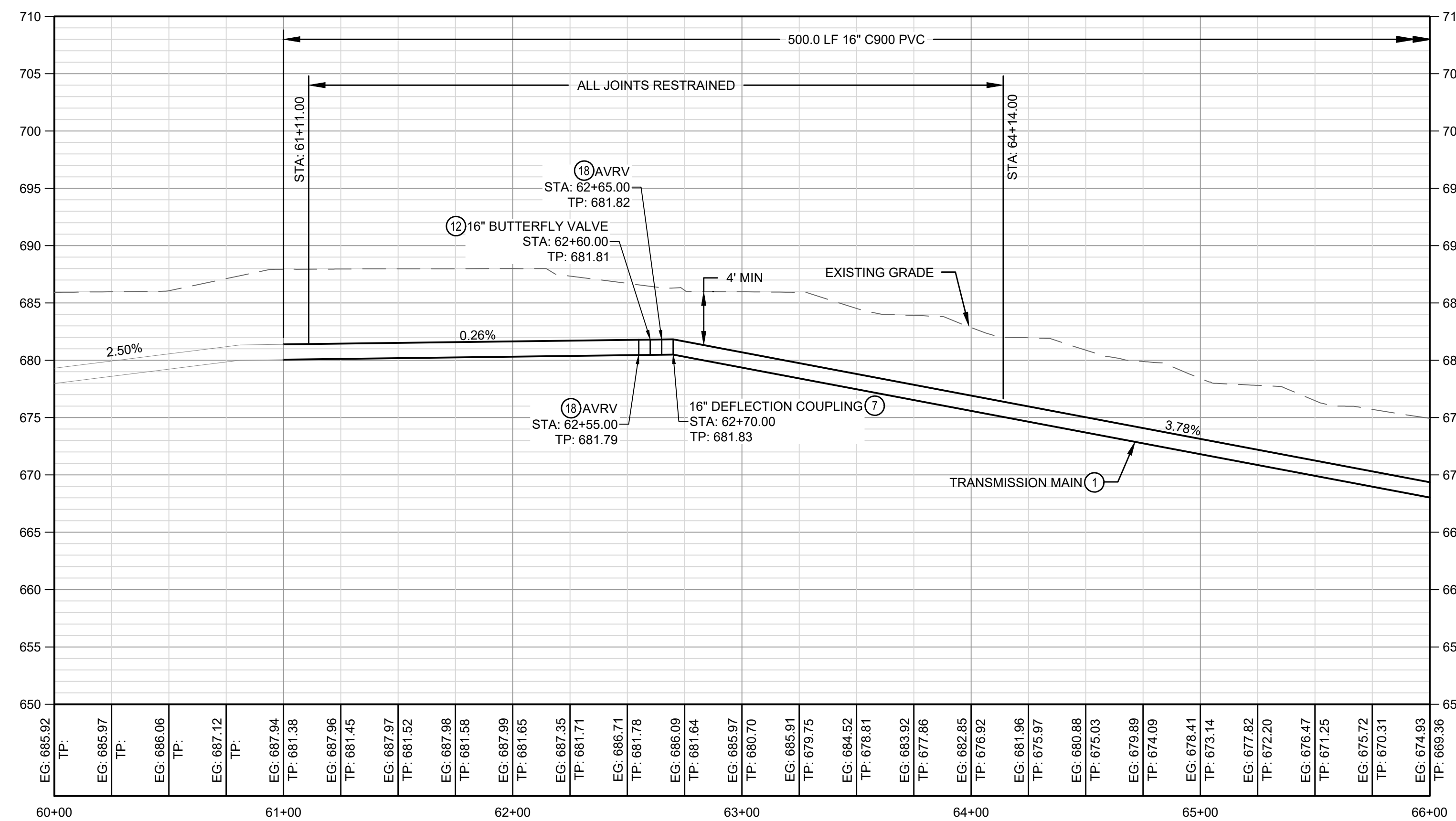
C-003

SHEET 3 OF 14

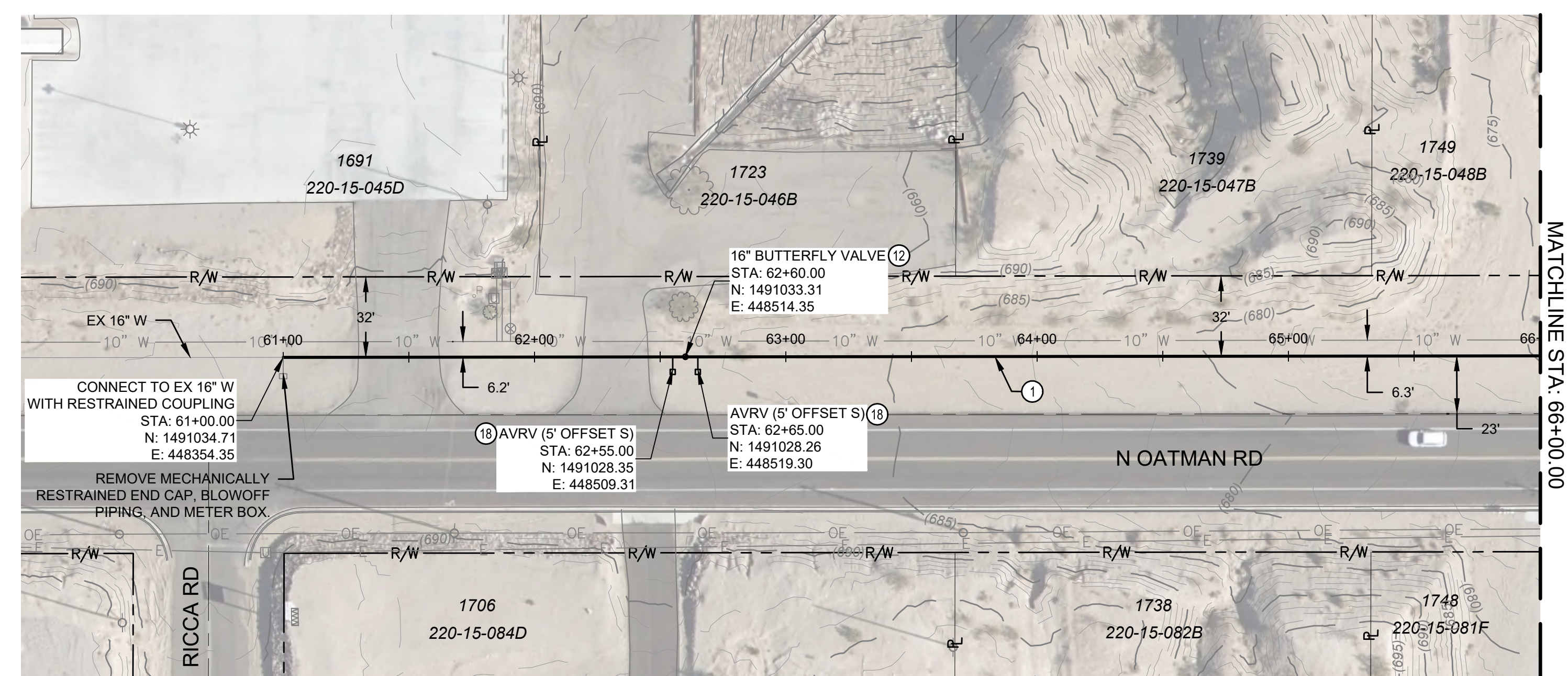
CONSTRUCTION NOTES

- ① INSTALL (N) 16" C900 DR 14 PVC WATER MAIN, TRENCH AND BACKFILL PER MAG STD. DWGS. 200-1 AND 211, SHEET 11.
- ⑦ INSTALL (N) 16" RESTRAINED DEFLECTION COUPLING.
- ⑫ INSTALL (N) 16" BUTTERFLY VALVE WITH BLOCKING PER MAG STD. DWG 301, SHEET 11
- ⑮ INSTALL (N) 2" AVR V PER BHC STD DWG 351-1, SHEET 12

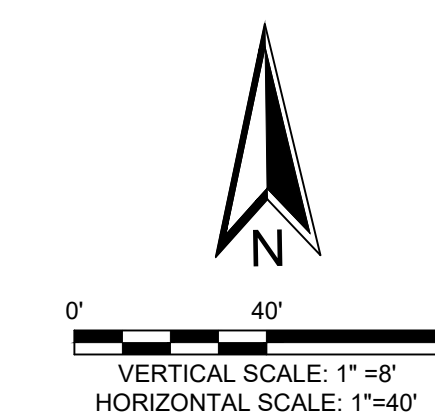
NOTE:
CONTRACTOR TO FIELD VERIFY LOCATION AND MATERIAL OF EXISTING UTILITIES PRIOR TO EXCAVATION. ALL EXISTING UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.



PROFILE



PLAN



NO.	DATE	REVISION RECORD DESCRIPTION



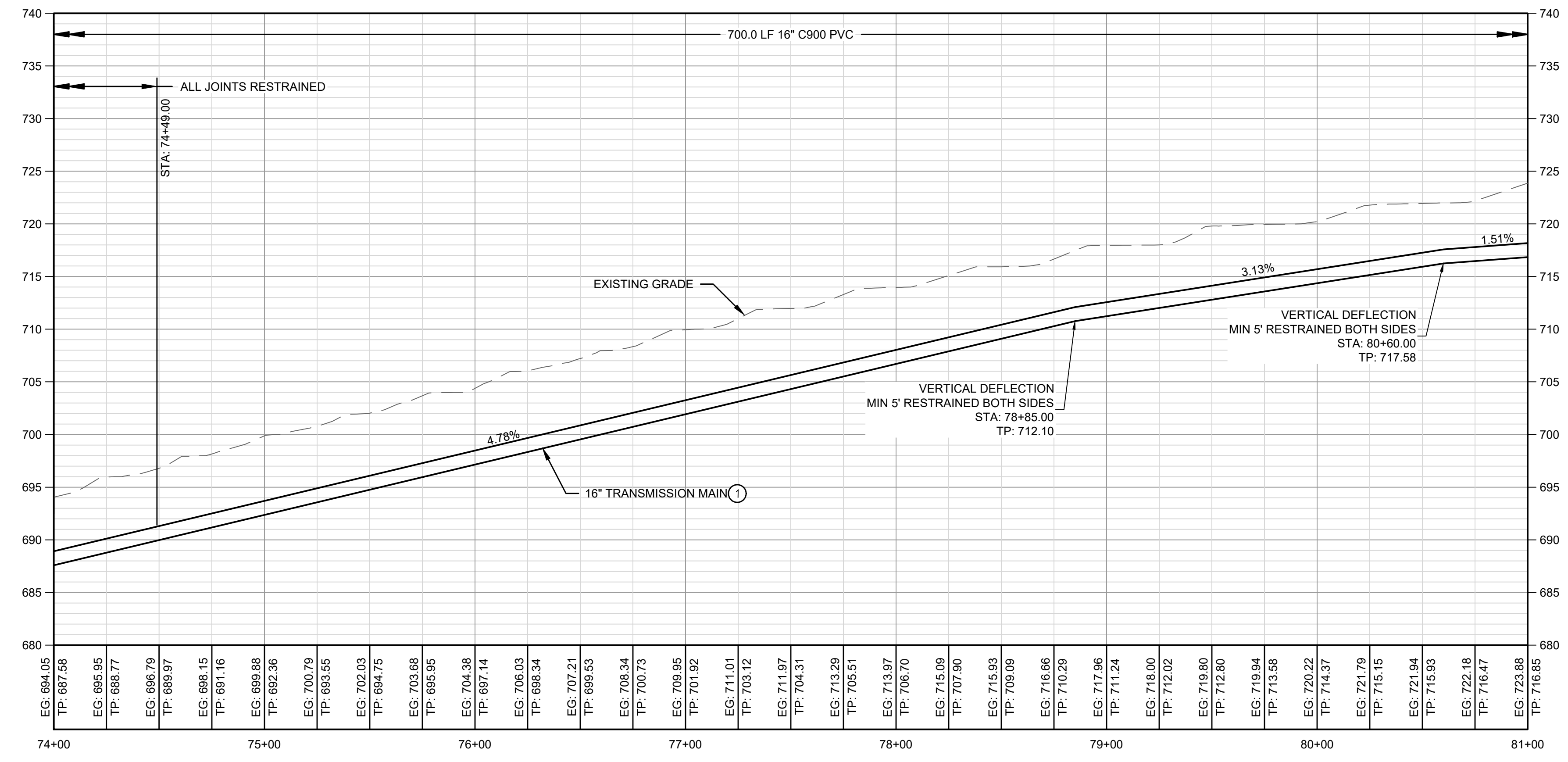
BULLHEAD CITY
SOUTH SUPPLY PIPELINES
PHASE 3 WATER MAIN PLANS

WATER MAIN PLAN AND PROFILE (STA 61+00.00 - 66+00.00)	
DATE: 3/30/2026	DRAWN BY: CW
DWG SCALE: AS NOTED	CHECKED BY: EM
PROJECT NO: 124002	APPROVED BY: KM
DRAWING NO. C-101	
SHEET 4 OF 14	

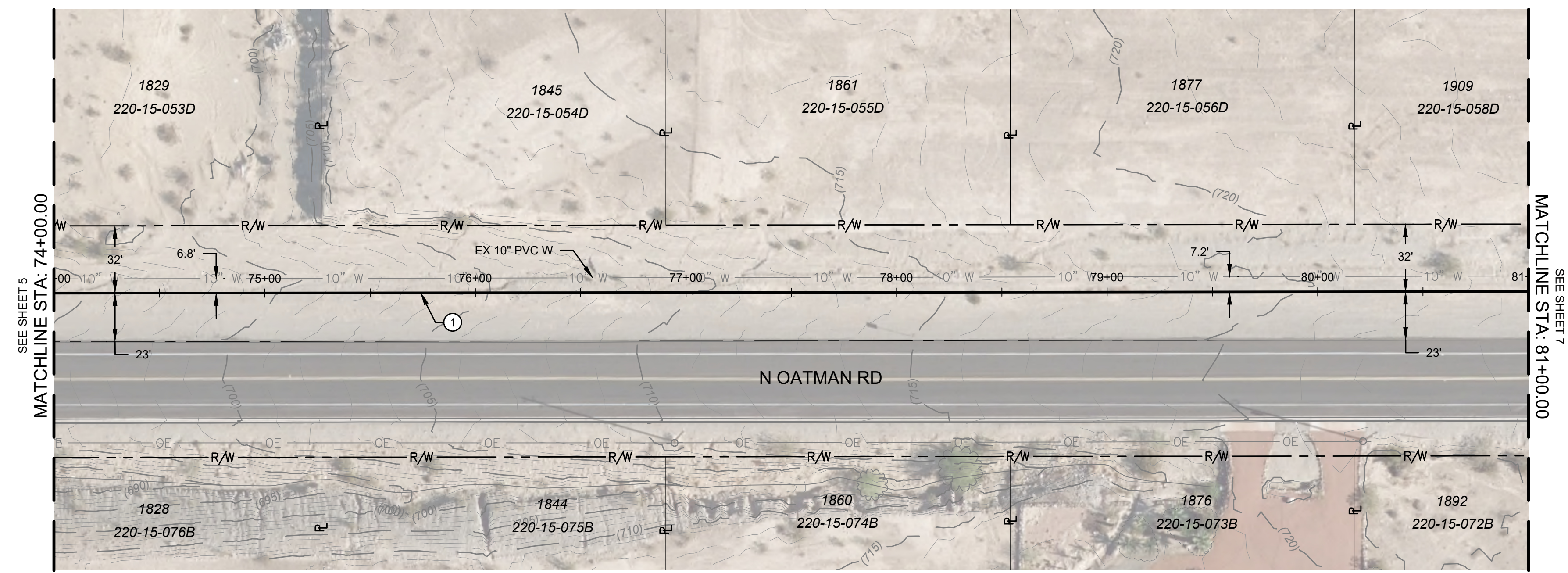
CONSTRUCTION NOTES

- ① INSTALL (N) 16" C900 DR 14 PVC WATER MAIN, TRENCH AND BACKFILL PER MAG STD. DWGS. 200-1 AND 211, SHEET 11.

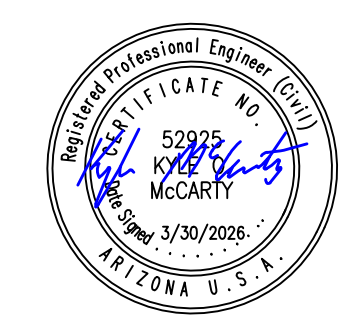
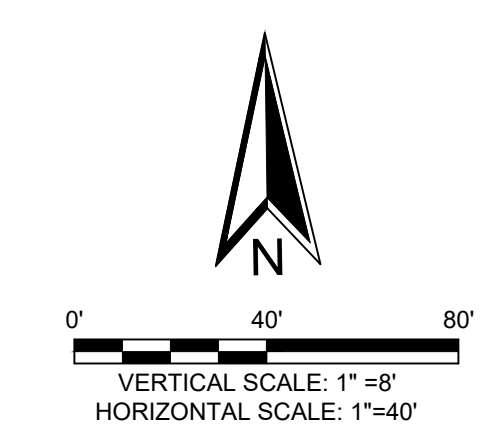
NOTE:
CONTRACTOR TO FIELD VERIFY LOCATION AND MATERIAL OF EXISTING UTILITIES PRIOR TO EXCAVATION. ALL EXISTING UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.



PROFILE



PLAN



NO.	DATE	REVISION RECORD DESCRIPTION

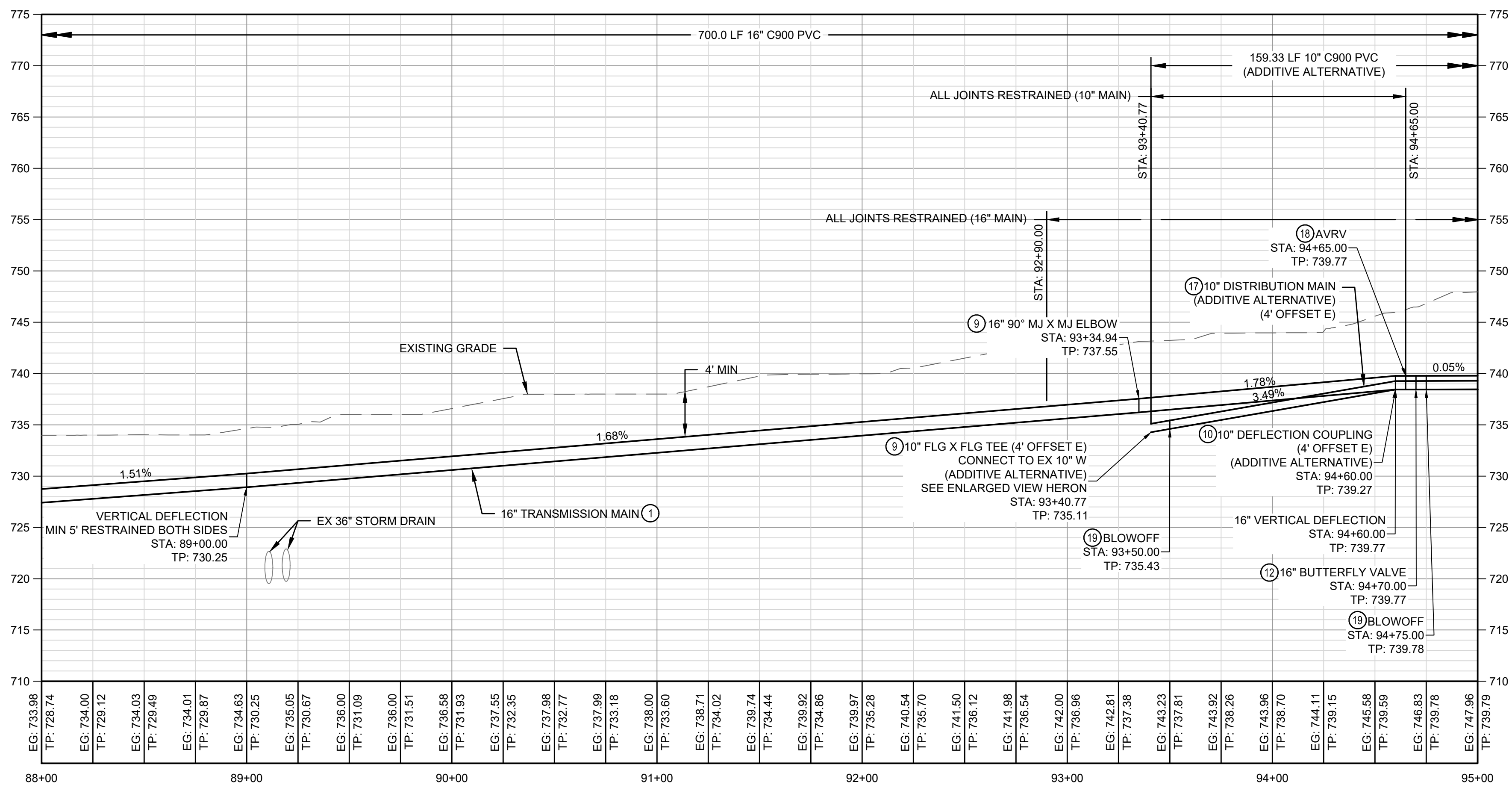


BULLHEAD CITY
SOUTH SUPPLY PIPELINES
PHASE 3 WATER MAIN PLANS

WATER MAIN PLAN AND PROFILE
(STA 74+00.00 - 81+00.00)

DRAWING NO. **C-103**
SHEET 6 OF 14

DATE: 3/30/2026	DRAWN BY: CW
DWG SCALE: AS NOTED	CHECKED BY: EM
PROJECT NO: 124002	APPROVED BY: KM



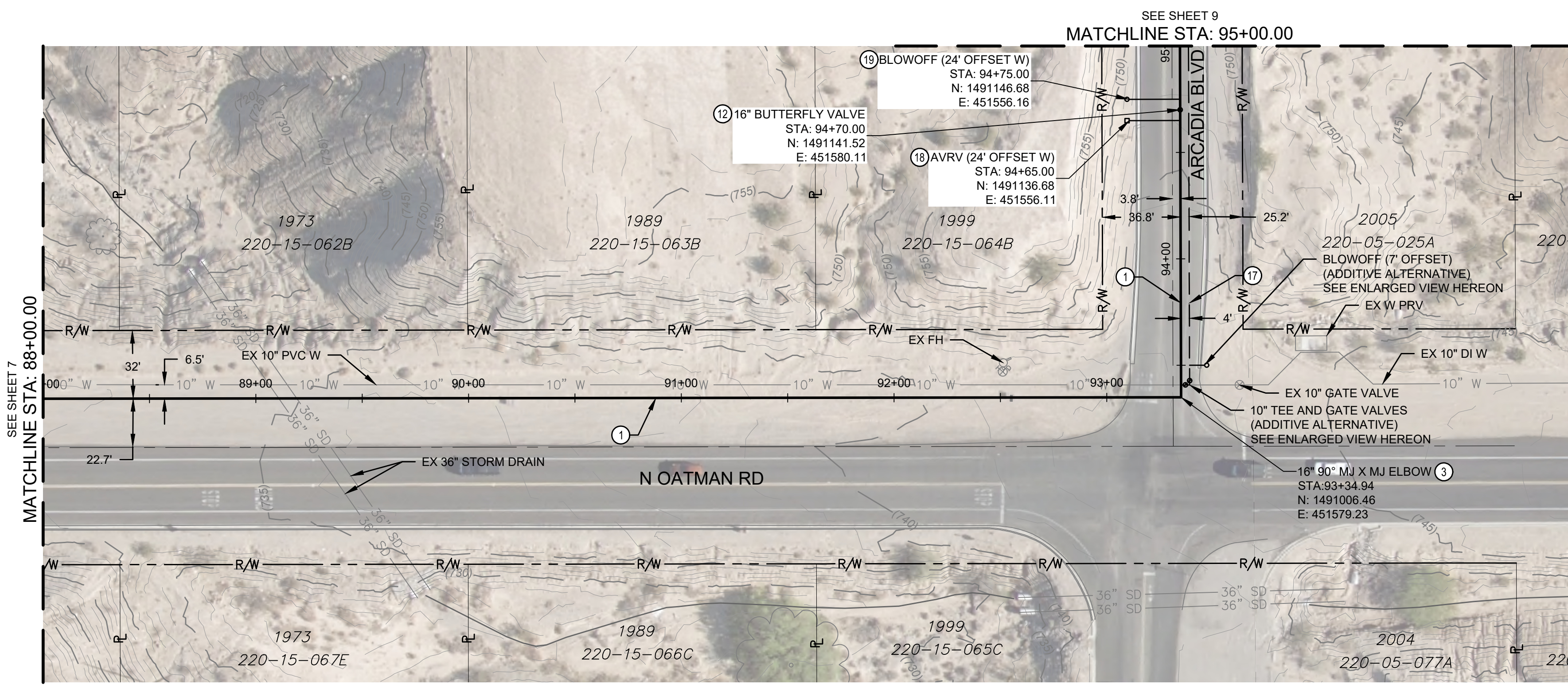
PROFILE

CONSTRUCTION NOTES

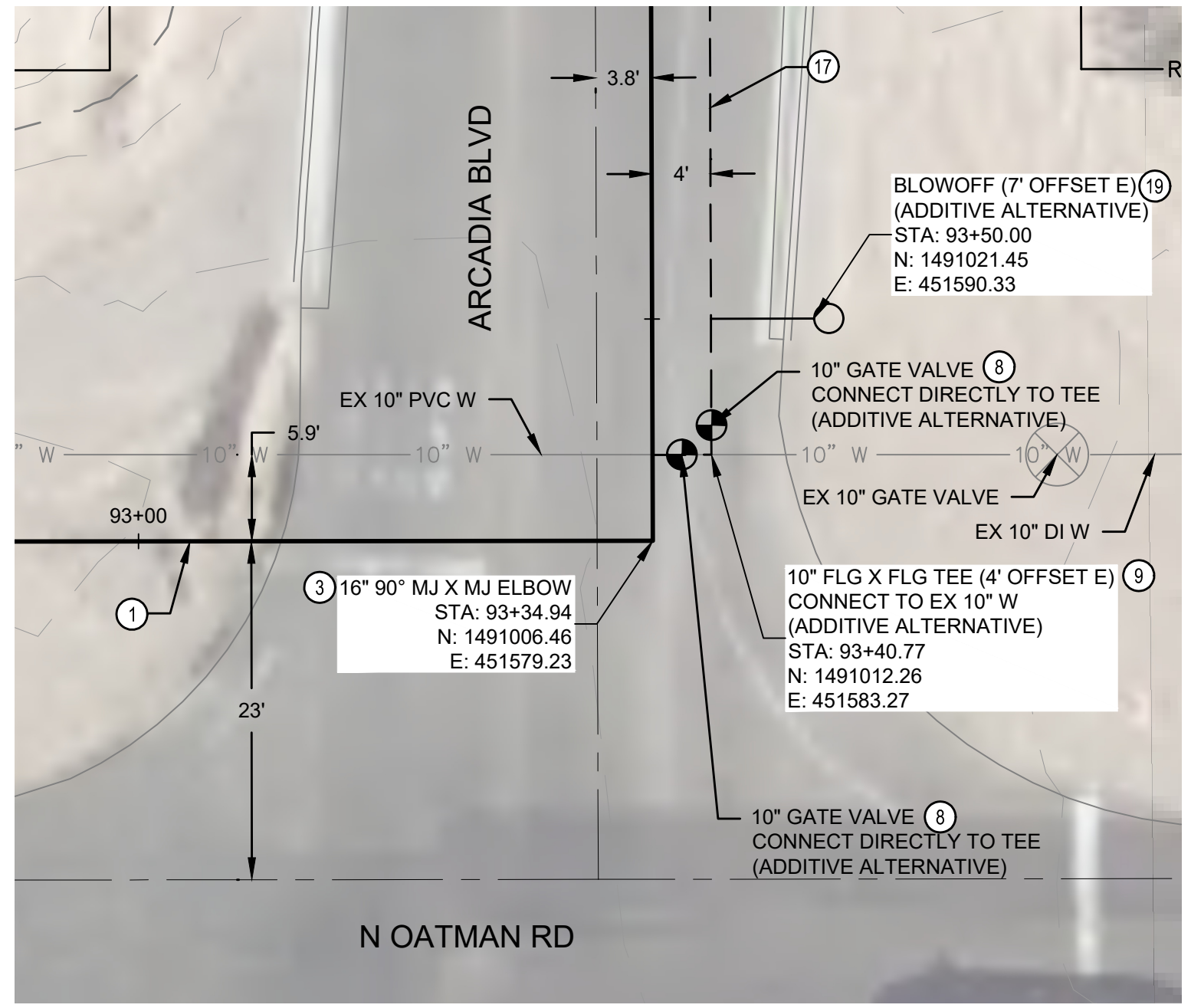
- ① INSTALL (N) 16" C900 DR 14 PVC WATER MAIN. TRENCH AND BACKFILL PER MAG STD. DWGS. 200-1 AND 211, SHEET 11.
- ③ INSTALL (N) 16" 90° DI BEND MJ X MJ.
- ⑥ INSTALL (N) 10" GATE VALVE. (ADDITIVE ALTERNATIVE)
- ⑨ INSTALL (N) 10" DI TEE FLG X FLG (ADDITIVE ALTERNATIVE)
- ⑩ INSTALL (N) 10" RESTRAINED DEFLECTION COUPLING. (ADDITIVE ALTERNATIVE)
- ⑫ INSTALL (N) 16" BUTTERFLY VALVE WITH BLOCKING PER MAG STD. DWG 301, SHEET 11
- ⑰ INSTALL (N) 10" C900 DR 14 PVC WATER MAIN. TRENCH AND BACKFILL PER MAG STD. DWGS. 200-1 AND 211, SHEET 11. (ADDITIVE ALTERNATIVE)
- ⑱ INSTALL (N) 2" AVR V PER BHC STD DWG 351-1, SHEET 12
- ⑲ INSTALL (N) BLOWOFF PER DETAIL 2, SHEET 12

NOTES:

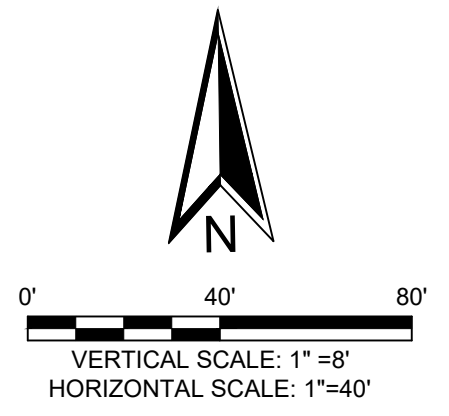
- 1. FROM STATION 94+50.00 TO STATION 106+80.95, VERTICAL PROFILE HAS BEEN SET DEEPER THAN 4" MINIMUM TO MAINTAIN PRESSURE IN THE LINE DURING NON TANK FILL OPERATIONS. ANY PROPOSED CHANGES TO THE VERTICAL ALIGNMENT IN THIS SECTION, SHALL BE APPROVED BY THE ENGINEER OF RECORD.
- 2. CONTRACTOR TO FIELD VERIFY LOCATION AND MATERIAL OF EXISTING UTILITIES PRIOR TO EXCAVATION. ALL EXISTING UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.



PLAN



ENLARGED VIEW (10" W CONNECTION)
SCALE: 1" = 10'



NO.	DATE	REVISION RECORD	DESCRIPTION



BULLHEAD CITY
SOUTH SUPPLY PIPELINES
PHASE 3 WATER MAIN PLANS

WATER MAIN PLAN AND PROFILE
(STA 88+00.00 TO 95+00.00)

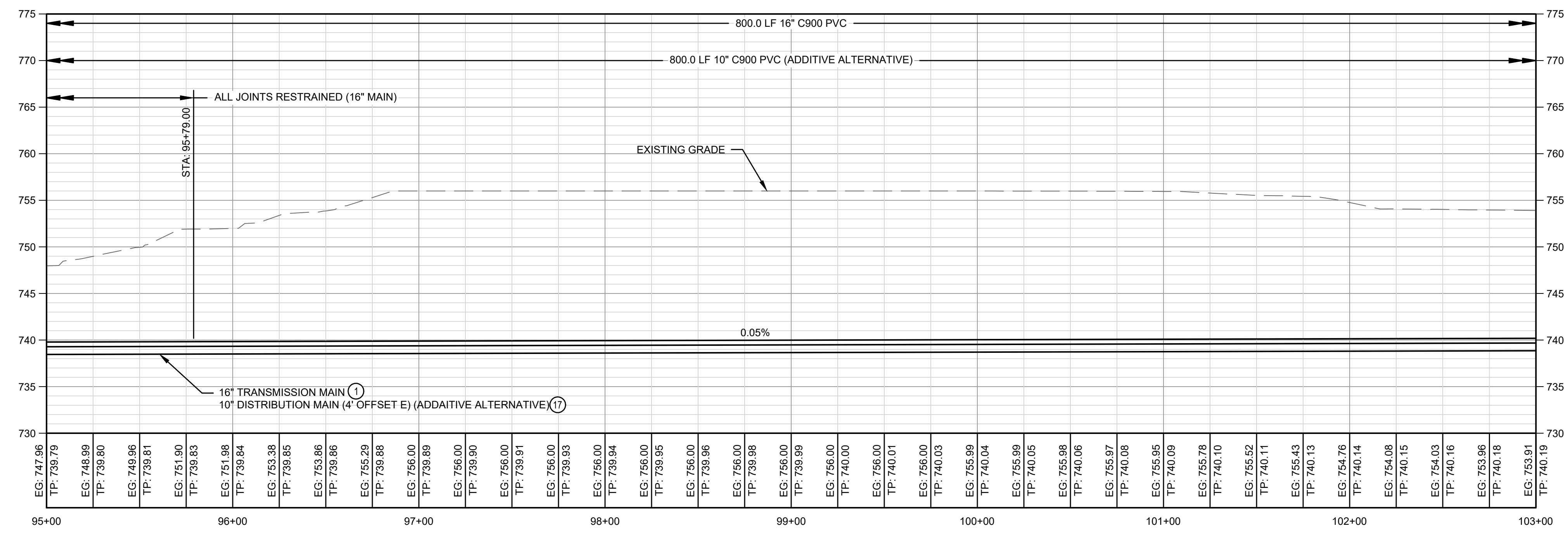
DATE: 3/30/2026
DRAWN BY: CW
DWG SCALE: AS NOTED
PROJECT NO: 124002
CHECKED BY: EM
APPROVED BY: KM



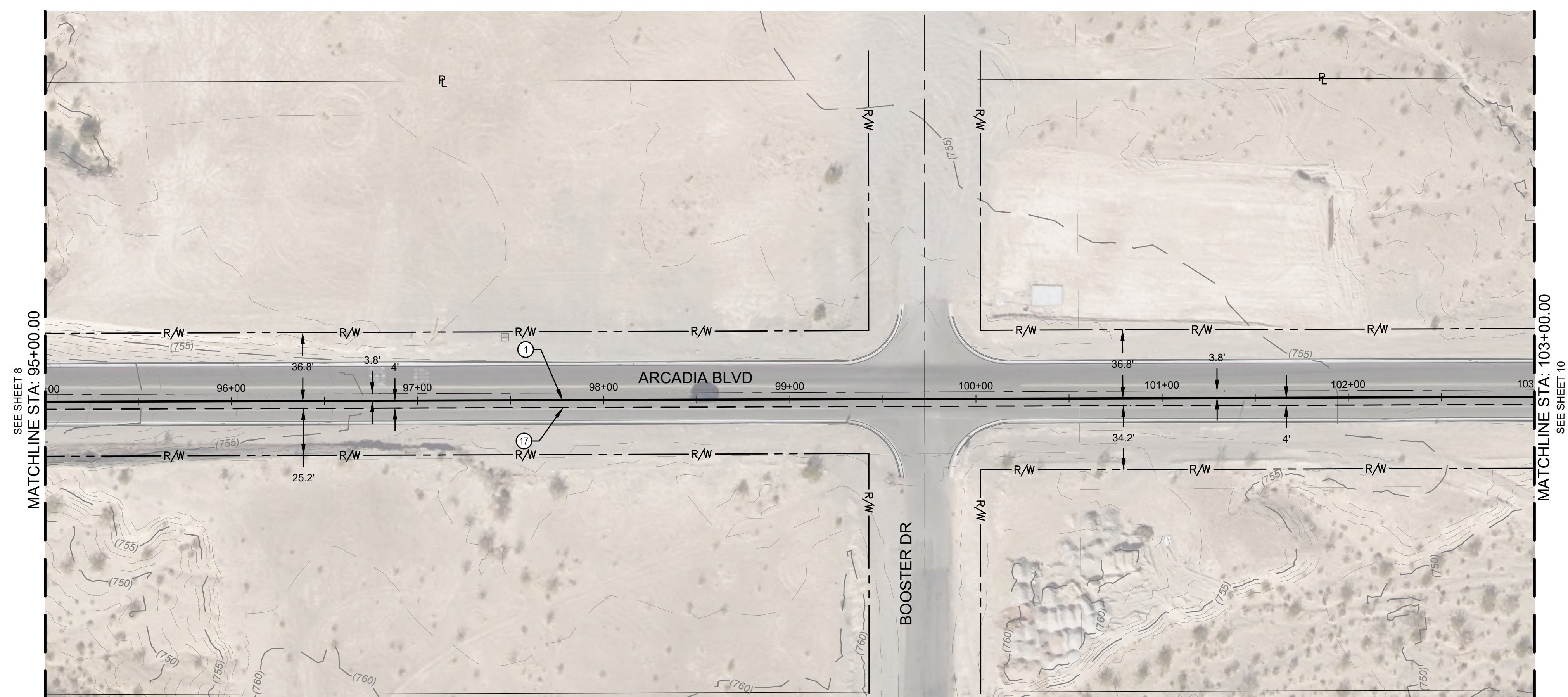
CONSTRUCTION NOTES

- ① INSTALL (N) 16" C900 DR 14 PVC WATER MAIN, TRENCH AND BACKFILL PER MAG STD. DWGS. 200-1 AND 211, SHEET 11.
- ⑱ INSTALL (N) 10" C900 DR 14 PVC WATER MAIN, TRENCH AND BACKFILL PER MAG STD. DWGS. 200-1 AND 211, SHEET 11. (ADDITIVE ALTERNATIVE)

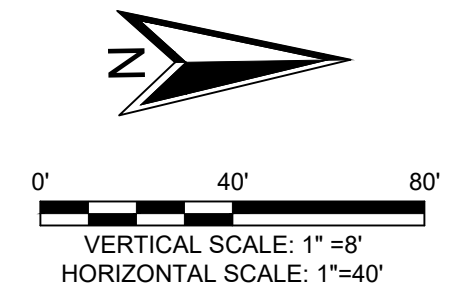
- NOTES:**
1. FROM STATION 94+50.00 TO STATION 106+80.95, VERTICAL PROFILE HAS BEEN SET DEEPER THAN 4' MINIMUM TO MAINTAIN PRESSURE IN THE LINE DURING NON TANK FILL OPERATIONS. ANY PROPOSED CHANGES TO THE VERTICAL ALIGNMENT IN THIS SECTION, SHALL BE APPROVED BY THE ENGINEER OF RECORD.
 2. CONTRACTOR TO FIELD VERIFY LOCATION AND MATERIAL OF EXISTING UTILITIES PRIOR TO EXCAVATION. ALL EXISTING UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.



PROFILE



PLAN



NO.	DATE	REVISION RECORD DESCRIPTION



BULLHEAD CITY
SOUTH SUPPLY PIPELINES
PHASE 3 WATER MAIN PLANS

WATER MAIN PLAN AND PROFILE (STA 95+00.00 - 103+00.00)	
DATE: 3/30/2026	DRAWN BY: CW
DWG SCALE: AS NOTED	CHECKED BY: EM
PROJECT NO: 124002	APPROVED BY: KM
DRAWING NO. C-106	
SHEET 9 OF 14	

T TOP TRENCH REPAIR
(USE FOR TRANSVERSE TRENCH REPAIRS, SEE DETAIL 200-2)

TYPE "A" TRENCH REPAIR
(USE FOR LONGITUDINAL TRENCH REPAIRS, SEE DETAIL 200-2)

TYPE "B" TRENCH REPAIR
(USE FOR TRANSVERSE TRENCH REPAIRS IF SPECIFIED BY AGENCY)

TYPE "D" TRENCH REPAIR
(TRENCH NOT UNDER CONCRETE OR ASPHALT PAVEMENT)

TYPE "E" TRENCH REPAIR
(TRENCH IN FUTURE ROADWAY PRISM OR ALLEY)

NOTES:

- PAVEMENT MATCHING, BASE COURSES AND SURFACE REPLACEMENT SHALL BE IN ACCORDANCE WITH SECTION 336 UNLESS OTHERWISE SPECIFIED IN CONTRACT DOCUMENTS.
- TRENCH EXCAVATION, BACKFILLING AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 601. NATIVE BACKFILL SHALL ONLY BE USED WITH AGENCY APPROVAL.
- CLSM SHALL BE 1/2-SACK OR 1-SACK PER SECTIONS 604 AND 728.
- MATERIAL FOR FINAL BACKFILL AND BASE (IF APPLICABLE) SHALL BE AS NOTED HEREIN UNLESS OTHERWISE SPECIFIED IN CONTRACT DOCUMENTS.
- FINAL BACKFILL SHALL BE CLSM FOR TRENCH DEPTHS GREATER THAN 4 FEET UNLESS A SAFE (OSHA COMPLIANT) WORKING SPACE AT LEAST 30" WIDE IS PROVIDED TO CONDUCT COMPACTION TESTING.
- PROVIDE MINIMUM 12" WIDE SHOULDER IN T-TOP TRENCH REPAIRS AT ENDS OF TYPE "A" TRENCH REPAIR EXCEPT WHERE EDGE ADJACENT EXISTING CONCRETE.
- USE T-TOP PAVEMENT REPLACEMENT WHERE A TRENCH IS NOT PARALLEL TO A STREET OR DRIVE THROUGH AN INTERSECTION.
- THE JOINT LOCATION OR JOINT CONFIGURATION MAY VARY FROM THAT SHOWN TO ELIMINATE REMNANTS, TO ELIMINATE FULL DEPTH SAWCUT JOINTS FROM BEING LOCATED WITHIN A WHEEL PATH AS REQUIRED BY SECTION 336, OR WHEN AN OFFSET JOINT IS CONSTRUCTED. SEE DETAIL 200-2 FOR REMNANT PAVEMENT REMOVAL REQUIREMENTS.
- SAWCUT OR MILL EDGE AND APPLY TACK COAT. FOR PAVEMENT PAVEMENT, APPLY 2-1/2" WIDE SECTION 337.21 COMPLIANT JOINT SEALANT AS REQUIRED BY AGENCY - SEE DETAIL ON 200-2.
- EXPOSED COPPER OR POLYETHYLENE WATER PIPE UP TO 2" IN DIAMETER IN TRENCHES TO BE BACKFILLED WITH CLSM SHALL BE WRAPPED WITH MINIMUM 3/4" THICK PREPARED PIPE-COVERING FOAM INSULATION BEFORE PLACING CLSM.

DETAIL NO. 200-1 MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD DETAIL ENGLISH TRENCH BACKFILL AND SURFACE REPLACEMENT REVISED 01-01-2023 DETAIL NO. 200-1

LONGITUDINAL TRENCH
(TRENCH IN PAVEMENT PARALLEL TO TRAFFIC)

TRANSVERSE TRENCH
(TRENCH IN PAVEMENT NOT PARALLEL TO TRAFFIC)

JOINT SEALANT DETAIL

REMNANT PAVEMENT REMOVAL

NOTES:

- SEE SECTION 601 FOR TRENCH EXCAVATION, BACKFILLING AND COMPACTION REQUIREMENTS.
- SEE DETAIL 200-1 FOR DETAILED TRENCH REPAIR REQUIREMENTS FOR TRENCH TYPES NOTED HEREIN.
- SEE DETAIL 211 FOR REQUIREMENTS REGARDING THE USE OF PLATING TRANSVERSE TRENCHES. USE OF STEEL PLATES SHALL NOT EXCEED 72 HOURS AFTER COMPLETION OF BACKFILL AND PRIOR TO FINAL PATCHING.

DETAIL NO. 200-2 MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD DETAIL ENGLISH TRENCH BACKFILL AND SURFACE REPLACEMENT REVISED 01-01-2023 DETAIL NO. 200-2

BACKFILL

IN NON-SAW CUT AREAS TO BE NATIVE MATERIAL SCREENED AT 4" OR LESS.

IN SAW CUT AREAS TO BE ONE SACK ABC SLURRY OR AS SPECIFIED BY CITY. COMPACTION TESTING REQUIRED TO 95%.

DETECTABLE LOCATING BALLS

- SEE THE CITY'S STD. DET. 200-1.
- LOCATING BALLS MANUFACTURED BY OMNI 3M OR APPROVED EQUAL MUST BE PLACED AT WATER MAIN ABOVE WATER SERVICE LINE.
- LOCATING BALLS SHOULD BE PLACED NO DEEPER THAN 4' BELOW GROUND SURFACE.

PIPE ZONE

FROM MIN. 6" BELOW BOTTOM OF PIPE TO MIN. 12" ABOVE TOP OF PIPE BACKFILL WITH THE FOLLOWING PER NOTE 4:

FROM MIN. 6" BELOW BOTTOM OF PIPE TO MIN. 12" ABOVE TOP OF PIPE BACKFILL WITH THE FOLLOWING PER NOTE 4:

A. WATER LINES
SAND PER MAG 701.3

B. RECLAIMED WATER LINES
CLSM PER MAG 701.3

C. SEWER FORCE MAIN
SAND PER MAG 701.3

D. GRAVITY SEWER LINES
ALL SERVICE AREAS - 3/4" MINUS ABC CRUSHED ROCK (NO REJECTS)

WATER AND SEWER SERVICES (ALL UTILITY SERVICE AREAS)

MINIMUM 6" SAND BEDDING AND 6" SAND SHADING. BACKFILL AS PER DETAIL.

PIPE MARKING TAPE

DETECTABLE MARKING TAPE SHALL BE LOCATED 18 INCHES BELOW GROUND SURFACE.

WORKING PER M.A.G. SEC. 616 TO BE USED FOR ALL WATER & RECLAIMED WATER LINES, AND SERVICES. THE MARKING TAPE SHALL BE PRINTED ON STANDARD COLORED DETECTABLE TAPE. LETTERING SHALL BE BLACK, 1-1/2" HEIGHT MINIMUM.

RECLAIMED WATER LINES SHALL USE PURPLE TAPE & SHALL READ "CAUTION: RECLAIMED WATER LINE".

POTABLE WATER LINES SHALL USE BLUE TAPE & SHALL READ "CAUTION: POTABLE WATER LINE".

RAW & NON-POTABLE WATER LINES SHALL USE YELLOW TAPE & SHALL READ "RAW WATER MAINS" AND/OR "NON-POTABLE WATER MAINS".

SEWER AND SERVICE LINES SHALL USE GREEN TAPE & SHALL READ "CAUTION: SEWER LINE".

NOTES:

- TRENCH WILL BE IN ACCORDANCE WITH MAG SECTION 601.
- ONE SACK ABC SLURRY (CLSM) TO BE IN ACCORDANCE WITH MAG SECTION 728.
- DEPTH OF BURY TO BE MIN. 48" IN ALL STREETS. DEPTH OF BURY FOR WATER LINES IN OTHER AREAS TO BE AS FOLLOWS:
 - a. 36" MIN. FOR MAINS 8" DIAMETER AND SMALLER
 - b. 48" MIN. FOR MAINS 10" DIAMETER AND LARGER
- WASHED, CRUSHED ROCK TO BE IN ACCORDANCE WITH MAG SECTION 718.2 AND TABLE 718-2.
 - a. SAND TO BE IN ACCORDANCE WITH MAG SECTION 701.3.
 - b. ABC TO BE IN ACCORDANCE WITH MAG SECTION 702.2 AND TABLE 702-1.
- SEE THE CITY'S STD. DET. 305-1. LOCATING BALLS MANUFACTURED BY OMNI 3M OR APPROVED EQUAL MUST BE PLACED AT WATER MAIN ABOVE WATER SERVICE LINE.
- LOCATING BALLS SHOULD BE PLACED NO DEEPER THAN 4' BELOW GROUND SURFACE.

DATE: November 2022 2355 Trane Rd. Bullhead City, AZ. 86442 (928) 763-9400 PIPE TRENCH DETAIL Detail No. 350-1

NOTES:

- USE TYPE 1 PLATE INSTALLATION WHERE POSTED SPEED LIMIT IS LESS THAN 30 MPH. USE TYPE 2 PLATE INSTALLATION WHERE POSTED SPEED LIMIT IS 30 MPH OR GREATER.
- FOR TYPE 2 PLATE INSTALLATION, THE STEEL PLATE SHALL BE RECESSED BY MILLING INTO THE EXISTING ASPHALT TO SET FLUSH WITH THE SURFACE OF THE EXISTING ASPHALT. FULL DEPTH CUTTING OF PAVEMENT SECTION OUTSIDE OF TRENCH IS NOT PERMITTED. MILLING DEPTH SHALL MATCH THICKNESS OF PLATE. THE GAP BETWEEN THE EDGE OF THE PLATE AND THE ADJACENT EXISTING ASPHALT PAVEMENT MUST BE FILLED WITH TEMPORARY ASPHALT.
- TRENCH WIDTHS ARE BASED ON AN ANALYSIS PER THE 14TH EDITION OF STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES BY AASHTO. AN ASSUMED AXLE LOADING OF 12 TONS WITH A 30% IMPACT FACTOR WAS USED. THE AXLE LENGTH IS 6 FEET; THEREFORE THE NUMBER OF WHEELS CARRIED BY A PLATE DEPENDS ON THE ROADWAY WIDTH.
- STEEL PLATE MUST BE ABLE TO WITHSTAND H-20 TRAFFIC LOADINGS WITHOUT ANY MOVEMENT.
- STEEL SHALL BE FABRICATED FROM ASTM A36 STEEL (MIN).
- PLATES SHALL BE SECURED FROM LATERAL MOVEMENT AND VERTICAL VIBRATION (ASSOCIATED NOISE) WHILE IN USE BY TEMPORARY ASPHALT (COLD MIX.)

PLATE SIZE

LONGITUDINAL		THICKNESS (W)		TRANSVERSE	
(A)	(B)	(A)	(B)	(A)	(B)
12"	18"	1"	4"	8"	19"
12"	18"	1"	4"	10"	31"
24"	18"	1"	5"	10"	25"
36"	18"	1"	6"	10"	44"
48"	18"	1"	7"	10"	52"
60"	18"	1"	8"	10"	58"
12"	18"	1-1/4"	4"	15"	88"
24"	18"	1-1/4"	5"	12"	104"
36"	18"	1-1/4"	6"	12"	66"
36"	18"	1-1/4"	6"	16"	66"
48"	18"	1-1/4"	7"	12"	76"
48"	18"	1-1/4"	7"	16"	58"
60"	18"	1-1/4"	8"	12"	86"
60"	18"	1-1/4"	8"	15"	86"
60"	18"	1-1/4"	8"	16"	63"
60"	18"	1-1/4"	8"	20"	86"
60"	18"	1-3/8"	8"	20"	102"

DETAIL NO. 211 MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD DETAIL ENGLISH STANDARD TRENCH PLATING DETAIL REVISED 01-01-1998 DETAIL NO. 211

WATER GATE VALVE

BUTTERFLY VALVE

NOTES:

- THIS DETAIL COVERS WATER GATE VALVES, 4" TO 12" INCLUSIVE, REGARDLESS OF TYPE OF PIPE OR JOINT USED. LARGER LINES TO BE DETAILED ON PLANS.
- THIS DETAIL COVERS BUTTERFLY VALVE INSTALLATION, 3" TO 12" INCLUSIVE, REGARDLESS OF TYPE OF PIPE OR JOINT USED. LARGER LINES TO BE DETAILED ON PLANS.
- VALVE BOX AND COVER REQUIRED PER DETAILS 270 AND 391.

DETAIL NO. 301 MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD DETAIL ENGLISH BLOCKING FOR WATER GATE AND BUTTERFLY VALVES REVISED 01-01-1998 DETAIL NO. 301

ANCHOR BLOCKS FOR VERTICAL BENDS

NOTES:

- EITHER THIS DETAIL OR RESTRAINT RODS CAN BE USED WHEN IT IS ALLOWED TO RELOCATE A WATER LINE UPWARD OR DOWNWARD TO CROSS A CONFLICT.
- DUCTILE IRON PIPE MAY BE USED.
- BARNS TO CONCRETE THRUST BLOCK TO BE COATED WITH 2 COATS COAL TAR, EPOXY OR BY OTHER APPROVED METHOD. BARNS TO HAVE 90° HOOK ON LOWER END, AS PER TABLE.

DETAIL NO. 381 MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD DETAIL ENGLISH ANCHOR BLOCKS FOR VERTICAL BENDS REVISED 01-01-1998 DETAIL NO. 381

IFB PLANS 3/30/2026

BULLHEAD CITY SOUTH SUPPLY PIPELINES PHASE 3 WATER MAIN PLANS

CIVIL DETAILS (1 OF 2)

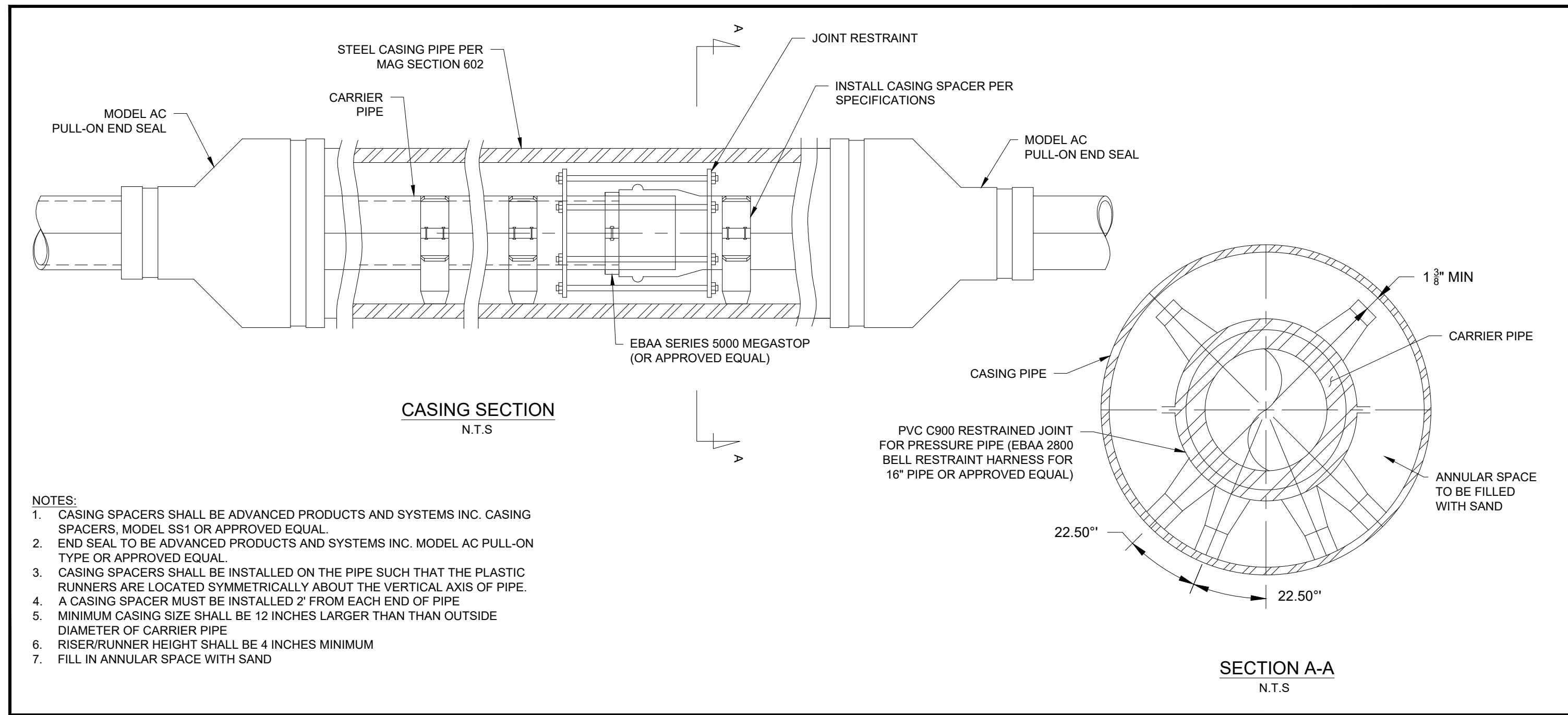
DRAWN BY: C.W. CHECKED BY: EM. DATE: 3/30/2026. DIV: SCALE: AS NOTED. PROJECT NO: 124002. APPROVED BY: KM.

REVISION RECORD

NO.	DATE	DESCRIPTION

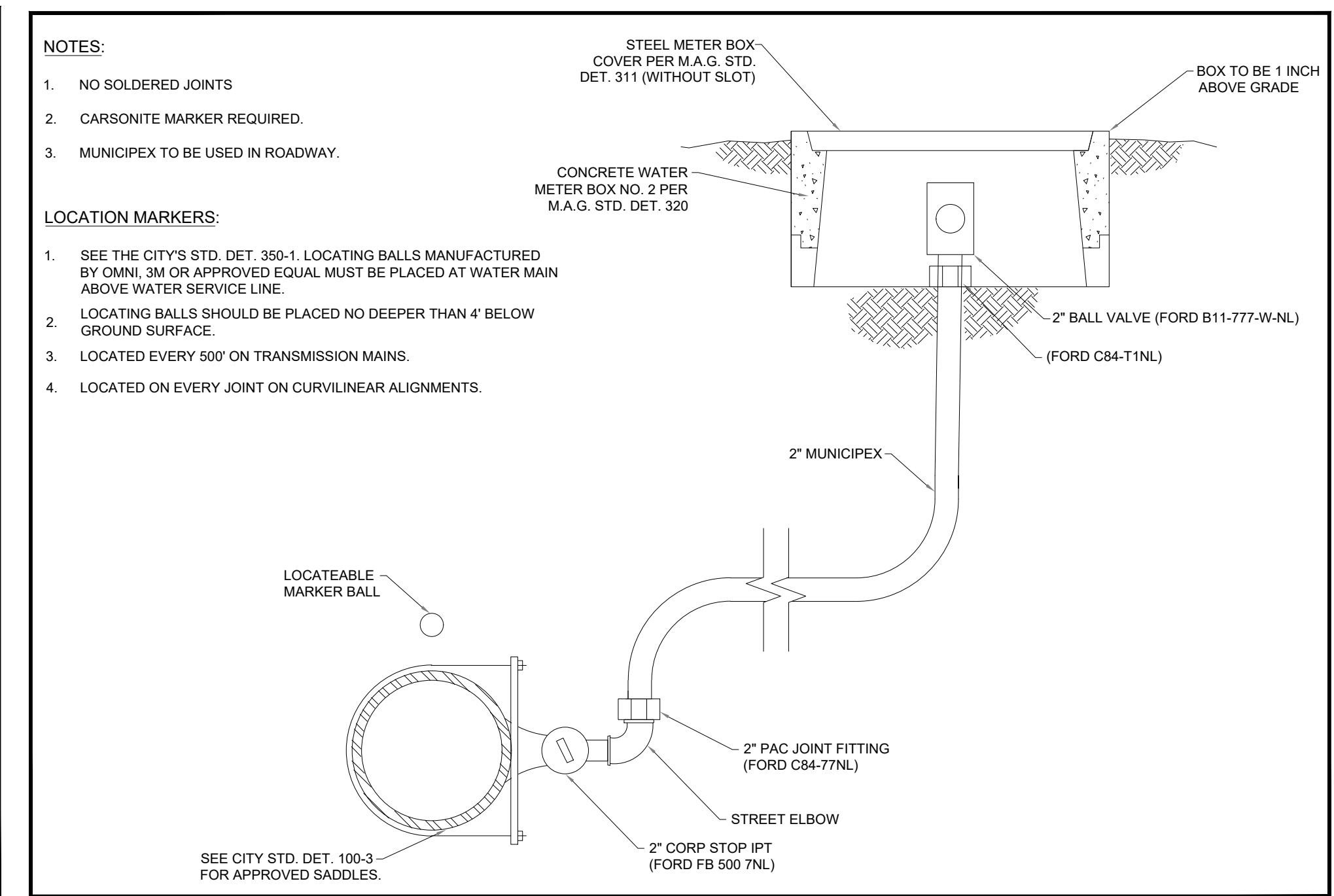
DRAWING NO. C-201 SHEET 11 OF 14





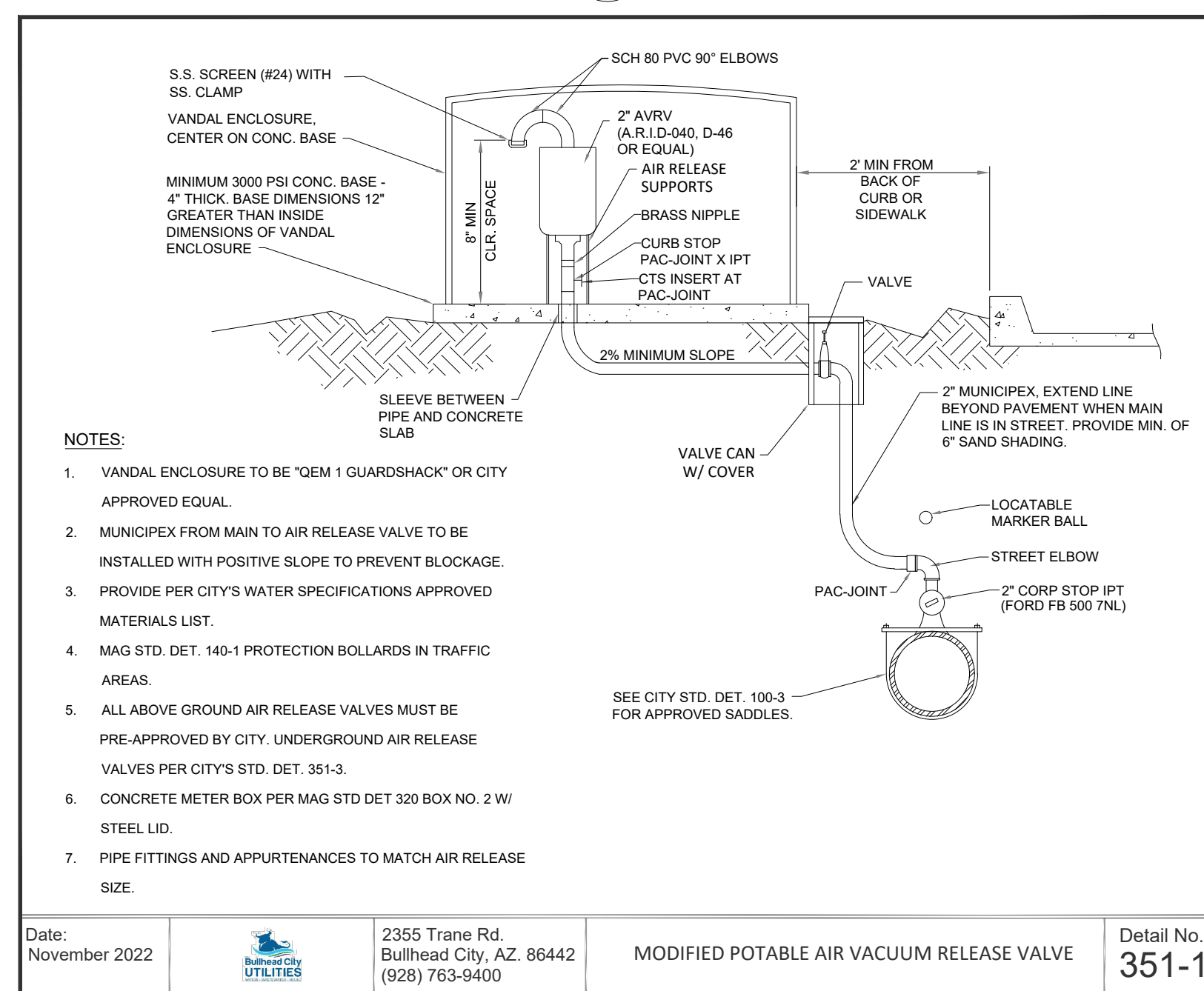
- NOTES:**
- CASING SPACERS SHALL BE ADVANCED PRODUCTS AND SYSTEMS INC. CASING SPACERS, MODEL SS1 OR APPROVED EQUAL.
 - END SEAL TO BE ADVANCED PRODUCTS AND SYSTEMS INC. MODEL AC PULL-ON TYPE OR APPROVED EQUAL.
 - CASING SPACERS SHALL BE INSTALLED ON THE PIPE SUCH THAT THE PLASTIC RUNNERS ARE LOCATED SYMMETRICALLY ABOUT THE VERTICAL AXIS OF PIPE.
 - A CASING SPACER MUST BE INSTALLED 2" FROM EACH END OF PIPE.
 - MINIMUM CASING SIZE SHALL BE 12 INCHES LARGER THAN THE OUTSIDE DIAMETER OF CARRIER PIPE.
 - RISER/RUNNER HEIGHT SHALL BE 4 INCHES MINIMUM.
 - FILL IN ANNULAR SPACE WITH SAND.

1 CARRIER PIPE WITHIN CASING
C202 NOT TO SCALE



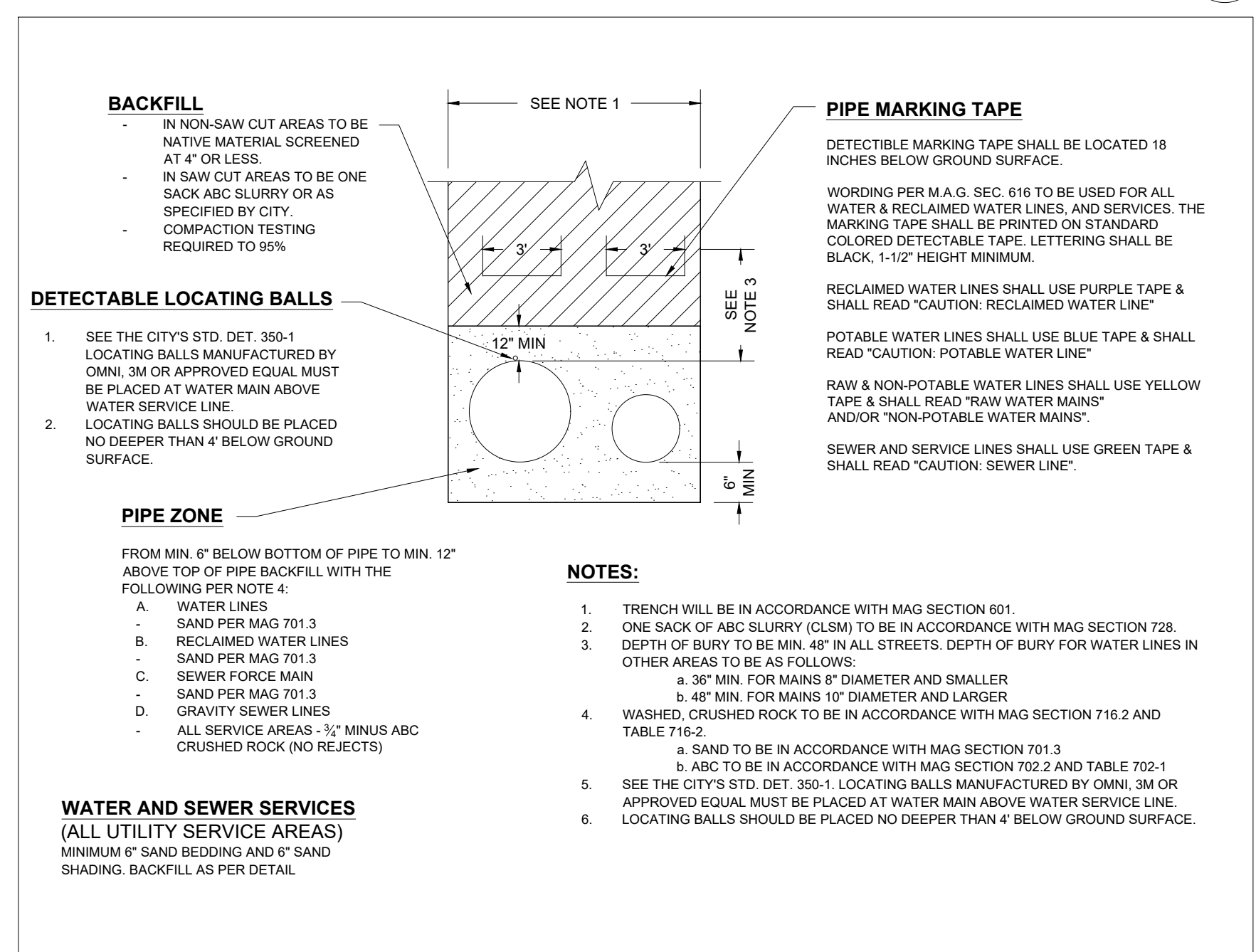
- NOTES:**
- NO SOLDERED JOINTS.
 - CARSONITE MARKER REQUIRED.
 - MUNICIPAL TO BE USED IN ROADWAY.
- LOCATION MARKERS:**
- SEE THE CITY'S STD. DET. 350-1. LOCATING BALLS MANUFACTURED BY OMNI, 3M OR APPROVED EQUAL MUST BE PLACED AT WATER MAIN ABOVE WATER SERVICE LINE.
 - LOCATING BALLS SHOULD BE PLACED NO DEEPER THAN 4' BELOW GROUND SURFACE.
 - LOCATED EVERY 500' ON TRANSMISSION MAINS.
 - LOCATED ON EVERY JOINT ON CURVILINEAR ALIGNMENTS.

2 TAPPING SADDLE AND BLOWOFF
C202 NOT TO SCALE



- NOTES:**
- VANDAL ENCLOSURE TO BE 'DEM 1 GUARDSHACK' OR CITY APPROVED EQUAL.
 - MUNICIPAL FROM MAIN TO AIR RELEASE VALVE TO BE INSTALLED WITH POSITIVE SLOPE TO PREVENT BLOCKAGE.
 - PROVIDE PER CITY'S WATER SPECIFICATIONS APPROVED MATERIALS LIST.
 - MAG STD. DET. 140-1 PROTECTION BOLLARDS IN TRAFFIC AREAS.
 - ALL ABOVE GROUND AIR RELEASE VALVES MUST BE PRE-APPROVED BY CITY. UNDERGROUND AIR RELEASE VALVES PER CITY'S STD. DET. 351-3.
 - CONCRETE METER BOX PER MAG STD DET 320 BOX NO. 2 W/ STEEL LID.
 - PIPE FITTINGS AND APPURTENANCES TO MATCH AIR RELEASE SIZE.

Date: November 2022		2355 Trane Rd Bullhead City, AZ, 86442 (928) 763-9400	MODIFIED POTABLE AIR VACUUM RELEASE VALVE	Detail No. 351-1
------------------------	--	---	---	----------------------------



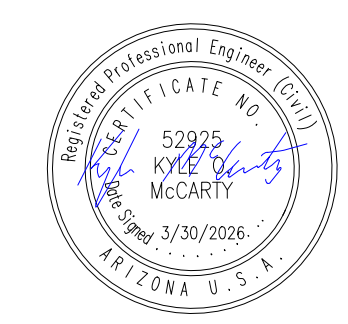
- BACKFILL**
- IN NON-SAW CUT AREAS TO BE NATIVE MATERIAL SCREENED AT 4" OR LESS.
 - IN SAW CUT AREAS TO BE ONE SACK ABC SLURRY OR AS SPECIFIED BY CITY.
 - COMPACTION TESTING REQUIRED TO 95%.
- DETECTABLE LOCATING BALLS**
- SEE THE CITY'S STD. DET. 350-1. LOCATING BALLS MANUFACTURED BY OMNI, 3M OR APPROVED EQUAL MUST BE PLACED AT WATER MAIN ABOVE WATER SERVICE LINE.
 - LOCATING BALLS SHOULD BE PLACED NO DEEPER THAN 4' BELOW GROUND SURFACE.
- PIPE ZONE**
- FROM MIN. 6" BELOW BOTTOM OF PIPE TO MIN. 12" ABOVE TOP OF PIPE BACKFILL WITH THE FOLLOWING PER NOTE 4:
- WATER LINES
 - SAND PER MAG 701.3
 - RECLAIMED WATER LINES
 - SAND PER MAG 701.3
 - SEWER FORCE MAIN
 - SAND PER MAG 701.3
 - GRAVITY SEWER LINES
 - ALL SERVICE AREAS - 3/4" MINUS ABC CRUSHED ROCK (NO REJECTS)
- PIPE MARKING TAPE**
- DETECTABLE MARKING TAPE SHALL BE LOCATED 18 INCHES BELOW GROUND SURFACE.
- WORDING PER M.A.G. SEC. 616 TO BE USED FOR ALL WATER & RECLAIMED WATER LINES, AND SERVICES. THE MARKING TAPE SHALL BE PRINTED ON STANDARD COLORED DETECTABLE TAPE. LETTERING SHALL BE BLACK, 1-1/2" HEIGHT MINIMUM.
- RECLAIMED WATER LINES SHALL USE PURPLE TAPE & SHALL READ "CAUTION: RECLAIMED WATER LINE".
- POTABLE WATER LINES SHALL USE BLUE TAPE & SHALL READ "CAUTION: POTABLE WATER LINE".
- RAW & NON-POTABLE WATER LINES SHALL USE YELLOW TAPE & SHALL READ "RAW WATER MAINS" AND/OR "NON-POTABLE WATER MAINS".
- SEWER AND SERVICE LINES SHALL USE GREEN TAPE & SHALL READ "CAUTION: SEWER LINE".
- WATER AND SEWER SERVICES (ALL UTILITY SERVICE AREAS)**
- MINIMUM 6" SAND BEDDING AND 6" SAND SHADING. BACKFILL AS PER DETAIL.
- NOTES:**
- TRENCH WILL BE IN ACCORDANCE WITH MAG SECTION 601.
 - ONE SACK OF ABC SLURRY (CLSM) TO BE IN ACCORDANCE WITH MAG SECTION 728.
 - DEPTH OF BURY TO BE MIN. 48" IN ALL STREETS. DEPTH OF BURY FOR WATER LINES IN OTHER AREAS TO BE AS FOLLOWS:
 - 36" MIN. FOR MAINS 8" DIAMETER AND SMALLER
 - 48" MIN. FOR MAINS 10" DIAMETER AND LARGER
 - WASHED, CRUSHED ROCK TO BE IN ACCORDANCE WITH MAG SECTION 716.2 AND TABLE 716-2.
 - SAND TO BE IN ACCORDANCE WITH MAG SECTION 701.3
 - ABC TO BE IN ACCORDANCE WITH MAG SECTION 702.2 AND TABLE 702-1
 - SEE THE CITY'S STD. DET. 350-1. LOCATING BALLS MANUFACTURED BY OMNI, 3M OR APPROVED EQUAL MUST BE PLACED AT WATER MAIN ABOVE WATER SERVICE LINE.
 - LOCATING BALLS SHOULD BE PLACED NO DEEPER THAN 4' BELOW GROUND SURFACE.

3 JOINT TRENCH DETAIL
C202 NOT TO SCALE

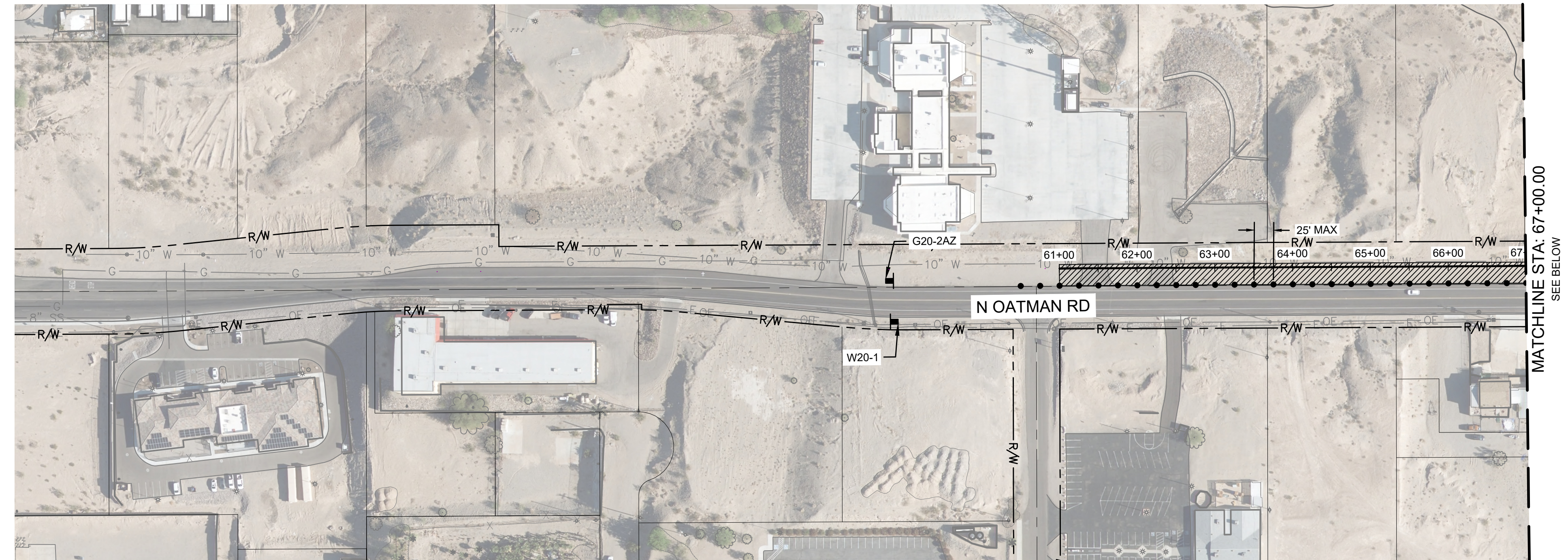
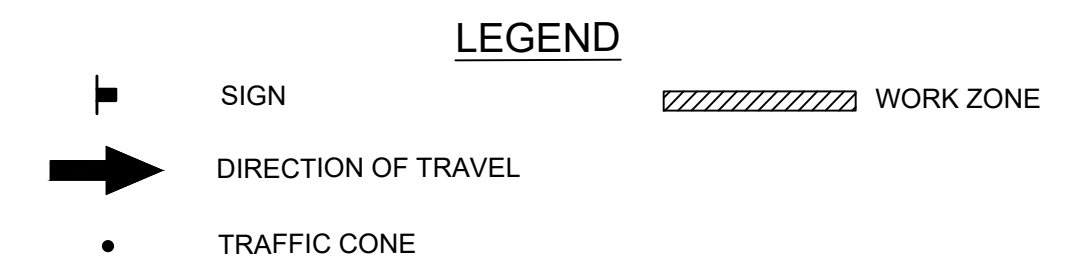
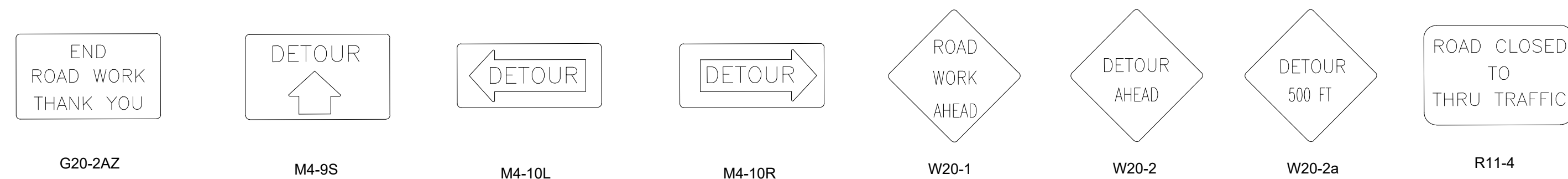
NO.	DATE	REVISION RECORD DESCRIPTION



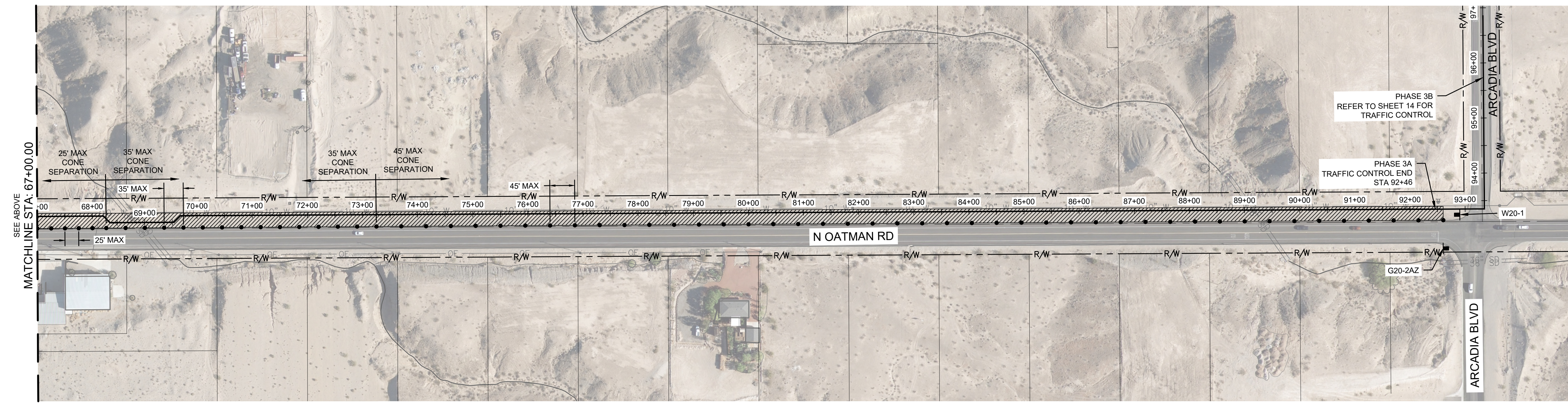
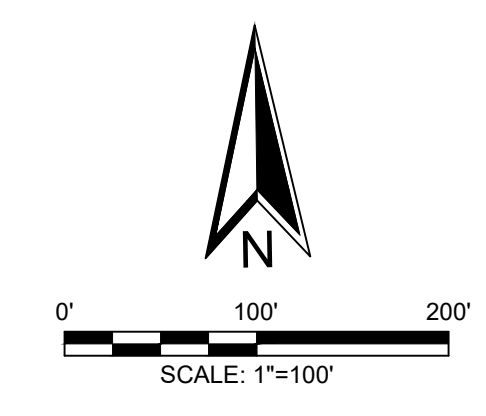
BULLHEAD CITY
SOUTH SUPPLY PIPELINES
PHASE 3 WATER MAIN PLANS



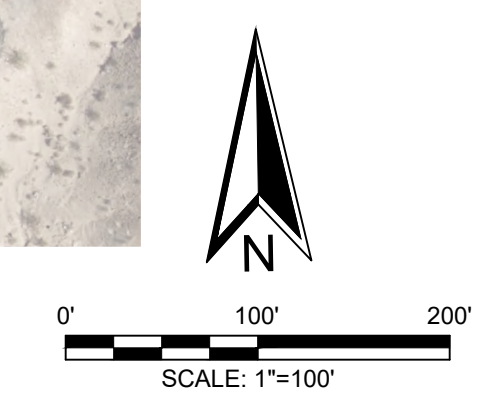
CIVIL DETAILS (2 OF 2)	DRAWING NO. C-202
DATE: 3/30/2026	SHEET 12 OF 14
DRAWN BY: CW	
DWG SCALE: AS NOTED	
PROJECT NO: 124002	
CHECKED BY: EM	
APPROVED BY: KM	



PLAN



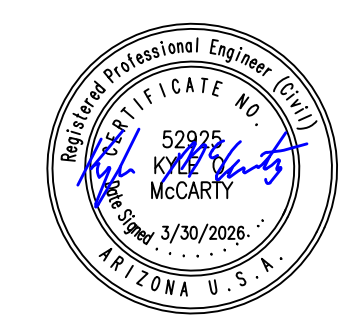
PLAN



TRAFFIC CONTROL NOTES:

1. TRAFFIC CONTROL PLANS HIGHLIGHT MINIMUM REQUIREMENTS AND ARE FOR REFERENCE ONLY. CONTRACTOR TO PREPARE TRAFFIC CONTROL PLAN FOR BULLHEAD CITY APPROVAL. THE TRAFFIC CONTROL PLAN SHALL INCLUDE TRENCH SHORING AND PLATING DURING NON WORKING HOURS, AND SHALL BE ENGINEERED SPECIFICALLY FOR JOB SITE CONDITIONS WITH TRAFFIC LOADING ON THE TRENCH WALL.
2. THE CONTRACTOR IS TO COORDINATE WITH PROPERTY OWNERS TO DETERMINE ACCESS REQUIREMENTS DURING CONSTRUCTION.
3. TEMPORARY CONSTRUCTION SIGNS SHALL BE MOUNTED ON WOOD POSTS OR ON TYPE II BARRICADES WHERE APPROVED BY ENGINEER. EXISTING SIGNS ARE TO BE COVERED AND REPLACED WITH TEMPORARY SIGNS.
4. PLACEMENT OF TEMPORARY CONSTRUCTION AREA SIGNS SHOWN ON PLAN SHALL BE IN CONFORMANCE WITH THE MUTCD.

CONE SPACING TABLE	
SPEED LIMIT (MPH)	CONE SPACING (FT)
25	25
35	35
45	45



NO.	DATE	REVISION RECORD DESCRIPTION



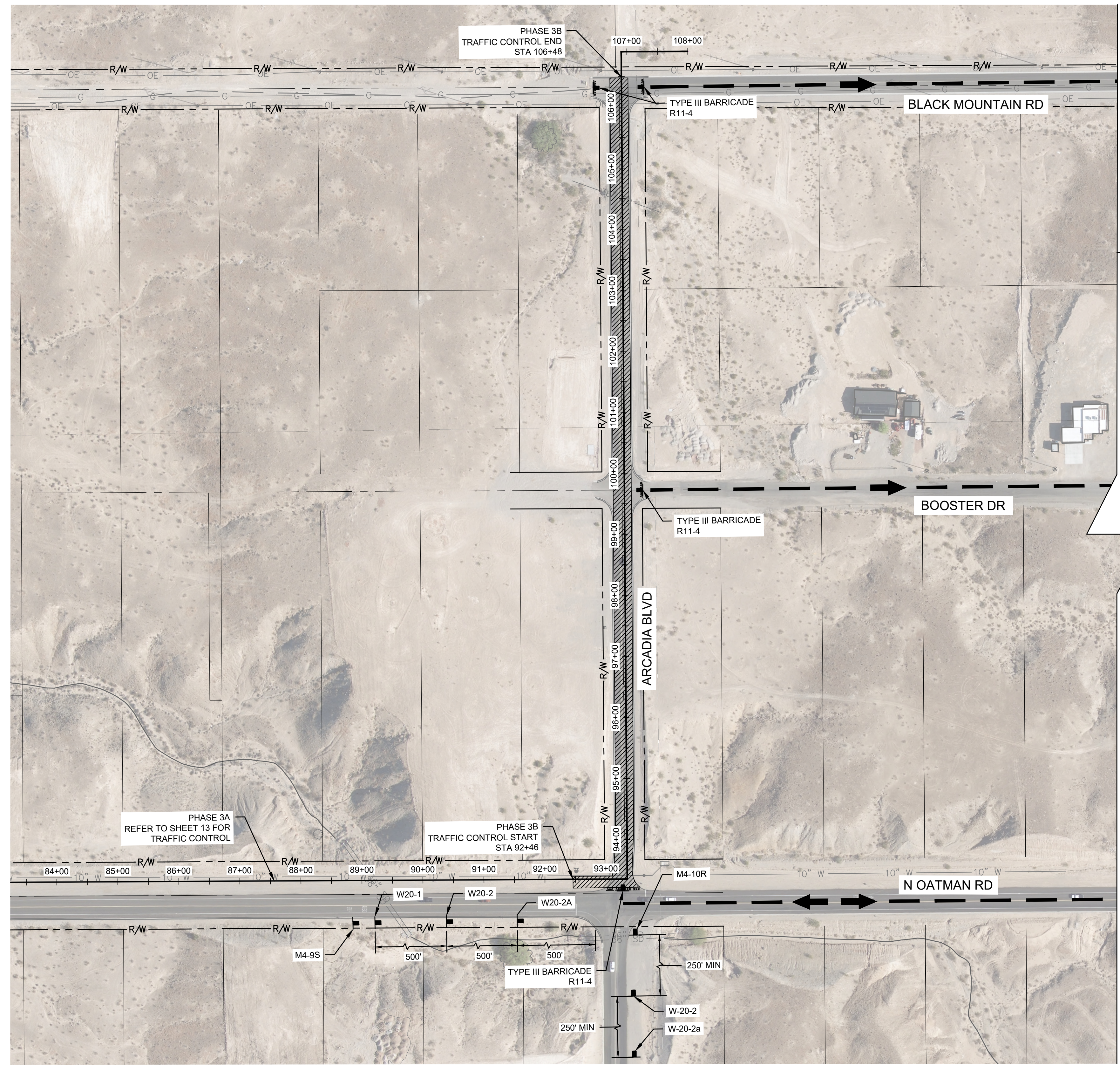
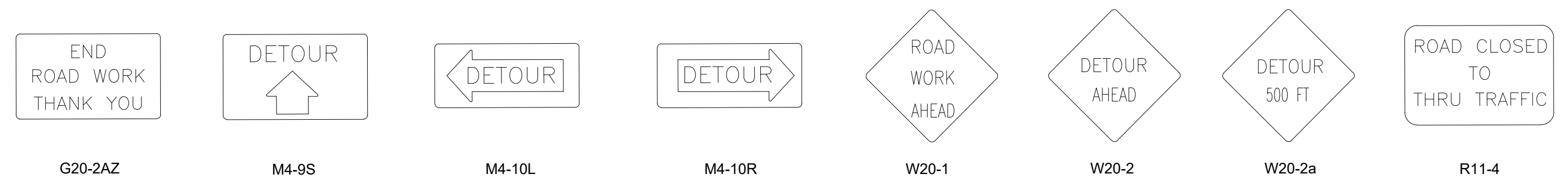
BULLHEAD CITY
SOUTH SUPPLY PIPELINES
PHASE 3 WATER MAIN PLANS

TRAFFIC CONTROL AND
DETOUR PLAN - PHASE 3A

DATE: 3/30/2026
DRAWN BY: CW
DVG SCALE: AS NOTED
PROJECT NO: 124002

CHECKED BY: EM
APPROVED BY: KM

DRAWING NO. C-301
SHEET 13 OF 14

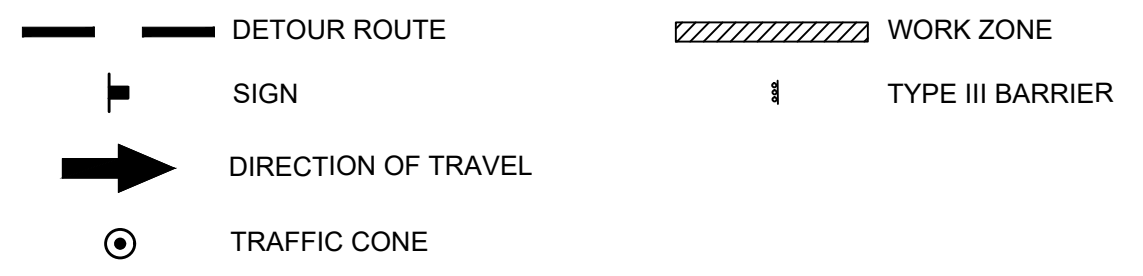


TRAFFIC CONTROL NOTES:

1. TRAFFIC CONTROL PLANS HIGHLIGHT MINIMUM REQUIREMENTS AND ARE FOR REFERENCE ONLY. CONTRACTOR TO PREPARE TRAFFIC CONTROL PLAN FOR BULLHEAD CITY APPROVAL. THE TRAFFIC CONTROL PLAN SHALL INCLUDE TRENCH SHORING AND PLATING DURING NON WORKING HOURS, AND SHALL BE ENGINEERED SPECIFICALLY FOR JOB SITE CONDITIONS WITH TRAFFIC LOADING ON THE TRENCH WALL DURING CONSTRUCTION.
2. THE CONTRACTOR IS TO COORDINATE WITH PROPERTY OWNERS TO DETERMINE ACCESS REQUIREMENTS DURING CONSTRUCTION.
3. TEMPORARY CONSTRUCTION SIGNS SHALL BE MOUNTED ON WOOD POSTS OR ON TYPE II BARRICADES WHERE APPROVED BY ENGINEER. EXISTING SIGNS ARE TO BE COVERED AND REPLACED WITH TEMPORARY SIGNS.
4. PLACEMENT OF TEMPORARY CONSTRUCTION AREA SIGNS SHOWN ON PLAN SHALL BE IN CONFORMANCE WITH THE MUTCD.

PLAN

LEGEND



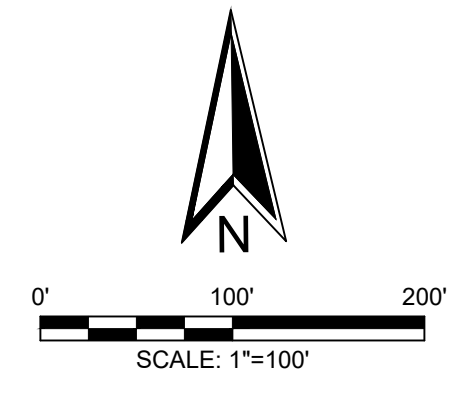
NO.	DATE	REVISION RECORD DESCRIPTION



BULLHEAD CITY
SOUTH SUPPLY PIPELINES
PHASE 3 WATER MAIN PLANS

TRAFFIC CONTROL AND
DETOUR PLAN - PHASE 3B

DRAWN BY: CW
CHECKED BY: EM
DATE: 3/30/2026
DWG SCALE: AS NOTED
PROJECT NO: 124002
APPROVED BY: KM



Bullhead City
South Supply Pipelines Phase 3



Submittal Log

Sub. No.	Submittal	Specification Title	Spec. Reference	Date Received	Date Reviewed	Reviewer	Status	Remarks
	Potholing Plan	Utility Potholes-Keyhole Method	MAG-355					
	Traffic Control Plan(s)	Traffic Control	MAG-401					
	Topsoil	Topsoils	MAG-425					
	C-900 PVC Water Pipe	Water Line Construction	MAG-610					
	Ductile Iron Pipe	Water Line Construction/Ductile Iron Water Pipe and Fittings	MAG-610/MAG-750					
	Butterfly Valve	Water Line Construction/Tapping Sleeves, Valves, and Valve Boxes on Water Lines	MAG-610/MAG-630					
	Gate Valve	Water Line Construction/Tapping Sleeves, Valves, and Valve Boxes on Water Lines	MAG-610/MAG-630					
	Corp Stop and Ball Valve (Blow Off)	Water Line Construction/Tapping Sleeves, Valves, and Valve Boxes on Water Lines	MAG-610/MAG-630					
	DI Fittings (Bends, Reducers, Tees, etc.)	Water Line Construction/Ductile Iron Water Pipe and Fittings	MAG-610/MAG-750					
	Couplings (Standard, Restrained, Deflection)	Water Line Construction/Ductile Iron Water Pipe and Fittings	MAG-610/MAG-750					
	AVRV	Water Line Construction	MAG-610/MAG-630					
	AVRV Enclosure	Water Line Construction	MAG-610/MAG-630					
	Pressure Testing Plan	Water, Sewer, and Storm Drain Testing	MAG-611					
	Valve Can and Cover	Tapping Sleeves, Valves, and Valve Boxes on Water Lines	MAG-630					
	Pipe Fittings (AVRV)	Tapping Sleeves, Valves, and Valve Boxes on Water Lines	MAG-630					
	Pipe Bedding	Trench Excavation, Backfilling, and Compaction	MAG-601					
	Bituminous Prime Coat	Bituminous Prime Coat	MAG-315					
	Tack Coat	Tack Coat	MAG-329					
	Aggregate Base Course	Aggregate	MAG-701					
	Base	Base Materials	MAG-702					
	Asphalt JMF	Asphalt Concrete	MAG-710					
	Slurry Seal	Slurry Seal Materials	MAG-715					
	Portland Cement Concrete	Portland Cement Concrete	MAG-725					
	Rebar	Steel Reinforcement	MAG-727					
	Controlled Low Strength Material	Controlled Low Strength Material	MAG-728					
	Expansion Joint Filler	Expansion Joint Filler	MAG-729					
	Grout	Masonry Mortar and Grout	MAG-776					
	Pavement Markings	Paint	MAG-790/SSP 361					
	Striping and Striping Plan	Paint	MAG-790/SSP 361					
	Import Material	Landscape Material	MAG-795					
	Trench Shoring Plan	Engineering Trench Shoring Plan	SSP 206					
	SWPPP/WPCP	Stormwater Pollution Prevention Plan and Stormwater BMP's	SSP 231					
	Carrier Pipe Annular Space	Trenchless or Open Cut Installation of Steel Casing	MAG-602					
	Bore and Receiving Pit Shop Drawings	Trenchless or Open Cut Installation of Steel Casing	MAG-602					
	Carrier Pipe installation Method	Trenchless or Open Cut Installation of Steel Casing	MAG-602					
	Welder Certification	Trenchless or Open Cut Installation of Steel Casing	MAG-602					
	Casing Pipe Letter of Certification	Trenchless or Open Cut Installation of Steel Casing	MAG-602					
	Casing Pipe End Seals Shop Drawing	Carrier Pipe Placement	SSP 602.5					
	Casing Spacers Shop Drawing	Carrier Pipe Placement	SSP 602.5					
	Bell Protection System	Detail 1, Sheet C-202	C-202					

Bullhead City – South Supply Pipelines

Specifications – Table of Contents

MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) STANDARD SPECIFICATIONS

PART 200 – EARTHWORK

205 – Roadway Excavation

206 – Structure Excavation and Backfill

PART 300 – STREETS AND RELATED WORK

301 – Subgrade Preparation

310 – Placement and Construction of Aggregate Base Course

315 – Bituminous Prime Coat

317 – Asphalt Milling

321 – Placement and Construction of Asphalt Concrete Pavement

329 – Tack Coat

332 – Placement and Construction of Asphalt Emulsion Slurry Seal Treatments

336 – Pavement Matching and Surfacing Replacement

340 – Concrete Curb, Gutter, Sidewalk, Curb Ramps, Driveway and Alley Entrance

350 – Removal of Existing Improvements

355 – Utility Potholes-Keyhole Method

PART 400 – RIGHT OF WAY TRAFFIC CONTROL

401 – Traffic Control

405 – Survey Monuments

424 – Parkway Grading

425 – Topsoils

430 – Landscaping

440 – Landscape Irrigation

PART 600 – WATER, SEWER, STORM DRAIN, AND IRRIGATION

601 – Trench Excavation, Backfilling, and Compaction

602 – Trenchless or Open Cut Installation of Steel Casing

604 – Placement of Controlled Low Strength Material

610 – Water Line Construction

611 – Water, Sewer, and Storm Drain Testing

630 – Tapping Sleeves, Valves, and Valve Boxes on Water Lines

631 – Water Taps and Meter Service Connections

PART 700 – MATERIALS

701 – Aggregate

702 – Base Materials

708 – Asphalt Pavement Core Bonding Materials

710 – Asphalt Concrete

711 – Paving Asphalt

712 – Liquid Asphalt

715 – Slurry Seal Materials

717 – Asphalt-Rubber Asphalt Concrete

718 – Preservative Seal for Asphalt

725 – Portland Cement Concrete

726 – Concrete Curing Materials

727 – Steel Reinforcement

728 – Controlled Low Strength Material

729 – Expansion Joint Filler

750 – Ductile Iron Water Pipe and Fittings

790 – Paint

795 – Landscape Material

Supplementary Special Provisions

The following are Special Provisions to the Maricopa Association Of Governments Standard Specifications for Public Works Construction, 2026 Edition (MAG Standards).

PART 100 – GENERAL CONDITIONS

104.1.1 General: To the first Paragraph ADD the following: “The completed work will provide a fully functional water transmission main extension from the intersection of Riverview Drive and Kaibab Drive to 750 ft east of the Miracle Mile Drive and N. Oatman Road intersection.

ADD

109.10.1 Payment for Mobilization/Demobilization

Mobilization/Demobilization shall be limited to 5% of total contract lump sum price (exclusive of price for Mobilization/Demobilization).

PART 200 – EARTHWORK

ADD

206.4.7 Engineered Trench Shoring Plan

Engineered Trench Shoring Plan. Before excavating any trench 5 feet or more in depth, the Contractor shall submit a detailed Working Drawing (shoring plan) showing the design of the shoring, bracing, sloping, or other provisions used for the workers protection. If the shoring plan varies from the shoring system standards, the shoring plan shall be prepared by a registered Structural or Civil Engineer. The shoring plan shall accommodate existing underground utilities. No excavation shall start until the Engineer has accepted the shoring plan and the Contractor has obtained a permit from the Arizona Division of Occupational Safety and Health (ADOSH). A copy of this permit shall be submitted to the Engineer. If the Contractor fails to submit a shoring plan or fails to comply with an accepted shoring plan, the Contractor shall suspend work at the affected location(s). Such suspension shall not be the basis of a claim for Extra Work and the Contractor shall not receive additional compensation or Contract time.

When trenching, the contractor’s name and emergency telephone number shall be posted adjacent to the work at intervals and locations approved by the Engineer. The method of marking shall be approved by the Engineer.

Respond and initiate corrective action in accordance with OSHA/ADOSH and within 24 hours of the notice of the nonconforming Work that poses an imminent threat to person or property.

The Bid item for “Engineered Trench Shoring” shall include full compensation for furnishing, installing, maintaining, and removing all sheeting, shoring, or bracing for any conditions encountered that require shoring including the preparation of engineered Shoring Plans.

ADD

231 Stormwater Pollution Prevention Plan (SWPPP) and Stormwater BMPs

231.1 SCOPE OF WORK

Stormwater Pollution Prevention Plan (SWPPP). Before excavating any trench, the Contractor shall submit a detailed Stormwater Pollution Prevention Plan showing the methodology by which potential environmental impacts associated with construction-related stormwater runoff are mitigated. The SWPPP report shall include information on potential pollutions on the site, details on any/all erosion control best management practices (BMPs) proposed as part of the SWPPP, as well as information on operation and maintenance procedures. A copy of Notice of Intent (NOI) approval shall be provided to the engineer before commencement of work.

232.2 PAYMENT

Payment for “Stormwater Pollution Prevention Plan (SWPPP) and Stormwater BMPs” shall be made on a lump sum basis with payments prorated by work completed, and the bid item shall include full compensation for report preparation and approval, as well as furnishing, installing, maintaining, and removing all best management practices and erosion control measures implemented throughout construction.

ADD

232 Construction Staking

232.1 SCOPE OF WORK

Construction Staking. Before excavating any trench, the Contractor shall coordinate the placement of stakes and markings to provide offsets and elevations to cut and fill in order to locate on the ground the designed improvements included in the Construction Drawings. Construction staking shall include staking easements and/or right of way if indicated on the plans.

Contractor is responsible for preserving and maintaining stakes. If City surveyors are required to re-stake for any reason, the Contractor will be responsible for costs to perform staking. If in the opinion of the City, a sufficient number of stakes or markings have been lost, destroyed, disturbed or omitted that the contracted Work cannot take place then the Contractor will be required to stake or re-stake the deficient areas.

232.2 MEASUREMENT

No measurement shall be made for this item.

232.3 PAYMENT

Payment for "Construction Staking" shall be made on a lump sum basis with payments prorated by work completed compared to total work included in the lump sum item.

PART 300 – STREETS AND RELATED WORK

321 PLACEMENT AND CONSTRUCTION OF ASPHALT CONCRETE PAVEMENT

321.12 PAYMENT

ADD: Payment for concrete curb, gutter, sidewalk, curb ramps, driveway and alley entrance, Portland cement concrete, placement and construction of asphalt emulsion slurry seal treatments, pavement matching and surfacing replacement, and preservative seal for asphalt shall be paid for under this pay item.

ADD

361 Signage, Striping, and Pavement Markings

361.1 SCOPE OF WORK

Signage, Striping, and Pavement Markings. Contractor shall replace any posted signage, striping, and/or pavement markings affected by construction "in kind" so that existing traffic patterns are maintained upon completion of construction. These items include (but are not limited to) posted street signage and associated posts, roadway lane markings and turn indicators, traffic signals, etc.

All traffic control devices, signage, and pavement markings shall conform to and be installed in accordance with the Arizona Manual of Uniform Traffic Control Devices (AZ MUTCD) and ADOT Standard Specifications.

361.2 MEASUREMENT

No measurement shall be made for this item.

361.3 PAYMENT

Payment for "Signage, Striping, and Pavement Markings" shall be made on a lump sum basis with payments prorated by work completed compared to total work included in the lump sum item.

PART 600 – WATER, SEWER, STORM DRAIN AND IRRIGATION

601.2.9 Shoring and Sheathing:

DELETE and REPLACE with the following: "The cost of the bracing, sheathing, or shoring, and the removal of same, shall be included in the unit price for the pipe or other item, which necessitated the work." with "The cost for shoring and sheathing shall be per supplementary provision 206.4.7 Engineered Trench Shoring Plan."

601.7 Payment:

ADD: Payment for trench excavation shall include storing of stockpiled material and off-haul of trench spoils.

602 TRENCHLESS OR OPEN CUT INSTALLATION OF STEEL CASING

602.5 CARRIER PIPE PLACEMENT

REMOVE: Pressurized carrier pipes, (i.e. water, gas, force main) shall be placed using casing spacers, wood skids or steel pipes for rails. Casing spacers shall be installed 3 per joint minimum with 8-foot maximum spacing. The annular space between the casing and carrier line shall be left empty unless otherwise directed. When the annular space is to be filled, 3/8 inch pea gravel shall be used.

ADD: Pressurized carrier pipes, (i.e. water, gas, force main) shall be placed using casing spacers. Casing spacers shall be installed 3 per joint minimum with 4-foot maximum spacing. The annular space between the casing and carrier line shall be filled with sand.

REMOVE: Bulkheads consisting of brick and mortar or concrete shall be constructed on the ends of the casing; bulkheads shall be a minimum of 8-inches thick. Alternative casing end closures may be substituted for brick and mortar or concrete bulkheads if approved by the Engineer.

ADD: End seals shall be Advanced Products and Systems Model AC pull-on type or approved equal. Secure end seals with 304 stainless steel pipe clamps.

610 WATERLINE CONSTRUCTION

610.4.3 BLOCKING AND RESTRAINTS

REMOVE: Where restrained joints are specified on mains sixteen (16) inches in diameter and smaller, ductile iron pipe shall be used with an approved joint restraint method.

ADD: Where restrained joints are specified on mains sixteen (16) inches in diameter and smaller, joint restraints shall be EBAA Iron Series 2800 or approved equal for 16-inch diameter C900 pipe and EBAA Iron Series 1900 for 12-inch diameter C900 pipe or approved equal.

610.16 (H) MEASUREMENT AND PAYMENT

ADD: Payment for parkway grading, landscaping, landscape irrigation, and landscaping materials shall be paid for under this pay item.

630.3.1 General:

REMOVE: All valves, 2-inch through 54-inch, shall have a working pressure of 250 psi and be in conformance with AWWA C515 or AWWA C509. Valves 2-inch

through 16-inch shall also meet the requirements for a UL listing and Factory Mutual Standards 11.20 and 11.30 for gate valves.

ADD: All valves, 2-inch through 54-inch, shall have a working pressure meeting or exceeding the adjacent pipe pressure class as specified on the plans and be in conformance with AWWA C515 or AWWA C509. Valves 2-inch through 16-inch shall also meet the requirements for a UL listing and Factory Mutual Standards 11.20 and 11.30 for gate valves.

WAGE RATE DETERMINATION

"General Decision Number: AZ20230014 06/09/2023

Superseded General Decision Number: AZ20220014

State: Arizona

Construction Type: Heavy

County: Mohave County in Arizona.

HEAVY CONSTRUCTION PROJECTS (DOES NOT INCLUDE DAM CONSTRUCTION)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

<p>If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:</p>	<ul style="list-style-type: none"> . Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.
<p>If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:</p>	<ul style="list-style-type: none"> . Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the

Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/06/2023
1	02/03/2023
2	05/05/2023
3	06/09/2023

BOIL0627-004 01/01/2023

	Rates	Fringes
BOILERMAKER.....	\$ 36.49	32.42

ELEC0640-006 01/01/2023

	Rates	Fringes
ELECTRICIAN.....	\$ 33.10	13.58

IRON0075-005 08/01/2022

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 28.50	18.16

* LABO1184-011 06/01/2023

	Rates	Fringes
LABORER GROUP 4 Jackhammer.....	\$ 28.75	7.59

SUAZ2012-002 05/17/2012

	Rates	Fringes
LABORER: Common or General.....	\$ 18.00	0.00
LABORER: Pipelayer.....	\$ 20.00	0.00

OPERATOR: Loader (Front End)....\$ 20.23	6.31
OPERATOR: Backhoe/Excavator/Trackhoe.....\$ 24.00	0.00
TRUCKDRIVER.....\$ 21.00	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====
Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date

for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the

interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISIO"

Wage Rate and Forgivable Principal Requirements for Compliance with P.L. 111-88

Water Infrastructure Finance Authority of Arizona

This document (this “Wage Rate and Forgivable Principal Addendum”) sets forth additional requirements applicable to state revolving fund Loans made by the Water Infrastructure Finance Authority of Arizona (“WIFA”) that are subject to the requirements of Public Law 111-88, “Making appropriations for the Department of the Interior, environment, and related agencies for the fiscal year ending September 30, 2010, and for other purposes,” enacted October 30, 2009 (“P.L. 111-88”). The provisions in this Wage Rate and Forgivable Principal Addendum are a part of the Loan Agreement. Capitalized terms not otherwise defined herein shall have the meanings given them in the Loan Agreement.

The parties acknowledge and agree that funds disbursed by WIFA to the Local Borrower will include funds made available to WIFA by the federal government under P.L. 111-88, and that the requirements of P.L. 111-88 include those set forth in this Wage Rate and Forgivable Principal Addendum. The Local Borrower agrees to comply with all of those requirements and agrees that failure to do so is a breach of the provisions of the Loan Agreement which may result in a default under the Loan Agreement, termination of WIFA’s obligation to make disbursements on the Loan and the Local Borrower being required to repay all amounts that have been disbursed by WIFA on the Loan, together with interest and fees as provided in the Loan Agreement (including interest and fees at rates adjusted from those originally in effect as described herein).

Additional Requirement for Subrecipients that are not Governmental Entities:

Obtaining Wage Determinations - Under this Wage Rate and Forgivable Principal Addendum, the non-governmental borrower must submit its proposed Davis Bacon wage determinations to WIFA for approval prior to including the wage determination in any solicitation, contract task orders, work assignments, or similar instruments to existing contractors. **THIS PARAGRAPH DOES NOT APPLY TO GOVERNMENTAL ENTITIES.**

Section 1. P.L. 111-88 Compliance - Forgivable Principal Portion.

(a) Section 1 of Exhibit A to the Loan Agreement specifies the Total Financial Assistance Amount, the amount, if any, designated as the Forgivable Principal Portion, the Intended Repayment Amount, and the required amount of reserves to be established based upon the Intended Repayment Amount. Section 2 of Exhibit A to the Loan Agreement specifies a schedule of interest and principal payments based on the Intended Repayment Amount. If the Local Borrower fails to comply with the requirements of P.L. 111-88, including those set forth in this Wage Rate and Forgivable Principal Addendum:

(i) WIFA will provide a revised Exhibit A for the Loan Agreement to amortize the entire Total Financial Assistance Amount with the Forgivable Principal Portion set to \$1,177,000.00, adjusted, as necessary, to incorporate, previous principal payments.

- (ii) The Local Borrower will repay the Total Financial Assistance Amount.

Section 2. P.L. 111-88 Compliance - Wage Rate Requirements.

This language must be included in all Davis Bacon covered construction contracts and subcontracts. (29 CFR Part 5.5)

(a) The Local Borrower shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project under the DWSRF, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in Sec. 5.1, or the FFY 2010 appropriation, the following clauses:

(1) **Minimum wages.** (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in Sec. 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. Local Borrowers may obtain wage determinations from the U. S. Department of Labor's web site, www.wdol.gov.

(ii)(A) The Local Borrower, on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The WIFA award official shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Local Borrower agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the Local Borrower to the WIFA award official. The WIFA award official will transmit the report, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA Davis Bacon Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the WIFA award official or will notify the WIFA award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Local Borrower do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the questions, including the views of all interested parties and the recommendation of the WIFA award official, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) **Withholding.** The Local Borrower shall upon its own action or upon written request of WIFA, EPA award official or an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics,

including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) **Payrolls and basic records.** (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Local Borrower. Such documentation shall be available on request of WIFA or EPA. As to each payroll copy received, the subrecipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5 (a)(1) based on the most recent payroll copies for the specified week. **The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number).** The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms/wh347.pdf> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Local Borrower for transmission to WIFA or EPA, if requested by EPA, WIFA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a

subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the Local Borrower.

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under Sec. 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(ii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of WIFA, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or WIFA may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) **Apprentices and trainees** - (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above,

shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) **Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the Local Borrower, WIFA, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) **Certification of eligibility.** (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) **Contract Work Hours and Safety Standards Act.** The Local Borrower shall insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Sec. 5.5(a) or 4.6 of part 4 of this title. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The Local Borrower, upon its own action or upon written request of the EPA Award Official or an authorized representative of the Department of Labor shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR Sec. 5.1, the Local Borrower shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Local Borrower shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of WIFA, EPA and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

Section 3. General Provisions.

(a) Binding Effect. This Wage Rate and Forgivable Principal Addendum shall inure to the benefit of and shall be binding upon WIFA and the Local Borrower and their respective successors and assigns.

(b) Severability. In the event any provision of this Wage Rate and Forgivable Principal Addendum shall be held illegal, invalid or unenforceable by any court of competent

jurisdiction, such holding shall not invalidate, render unenforceable or otherwise affect any other provision hereof.

(c) Amendments, Supplements and Modifications. This Wage Rate and Forgivable Principal Addendum may not be amended, supplemented or modified without the prior written consent of WIFA and the Local Borrower.

(d) Execution in Counterparts. This Wage Rate and Forgivable Principal Addendum may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

(e) Applicable Law. This Wage Rate and Forgivable Principal Addendum shall be governed by and construed in accordance with the laws of the State of Arizona.

(f) Captions. The captions or headings in this Wage Rate and Forgivable Principal Addendum are for convenience only and shall not in any way define, limit or describe the scope or intent of any provisions of this Wage Rate and Forgivable Principal Addendum.

(g) Further Assurances. The Local Borrower shall, at the request of WIFA , authorize, execute, acknowledge and deliver such further resolutions, conveyances, transfers, assurances, financing statements and other instruments as may be necessary or desirable for better assuring, conveying, granting, assigning and confirming the rights and agreements granted or intended to be granted by this Wage Rate and Forgivable Principal Addendum.

(h) Arbitration. The parties hereto agree to use arbitration to the extent required by Section 12-1518 of the Arizona Revised Statutes.

(i) Notice Regarding A.R.S. § 38 511. To the extent applicable by provision of law, the parties acknowledge that this Wage Rate and Forgivable Principal Addendum is subject to cancellation pursuant to A.R.S. § 38-511, the provisions of which are hereby incorporated herein.

[SIGNATURE PAGE FOLLOWS]

Contractor

By: _____ Date

Name and Title: _____

American Iron and Steel Requirements for Compliance with Federal Law

Water Infrastructure Finance Authority of Arizona

This document (this "American Iron and Steel Addendum") sets forth additional requirements made applicable to state revolving fund Loans made by the Water Infrastructure Finance Authority of Arizona ("WIFA") by federal law. The provisions in this American Iron and Steel Addendum are a part of the Loan Agreement. Capitalized terms not otherwise defined herein shall have the meanings given them in the Loan Agreement.

The parties acknowledge and agree that funds disbursed by WIFA to the Local Borrower will include funds made available to WIFA by the federal government under federal law, and that the requirements of federal law include those set forth in this American Iron and Steel Addendum. The Local Borrower agrees to comply with all of those requirements and agrees that failure to do so is a breach of the provisions of the Loan Agreement which may result in a default under the Loan Agreement, termination of WIFA's obligation to make disbursements on the Loan and the Local Borrower being required to repay all amounts that have been disbursed by WIFA on the Loan, together with interest and fees as provided in the Loan Agreement.

Federal law requires that WIFA include in all assistance agreements, including the Loan Agreement, for the construction, alteration, maintenance, or repair of treatment works under the Clean Water State Revolving Fund and for the construction, alteration, maintenance, or repair of a public water system under the Drinking Water State Revolving Fund, a provision requiring the application of American Iron and Steel requirements for the entirety of the construction activities financed by the assistance agreement through completion of construction, no matter when construction commences. Whether or not the project has multiple sources of funding, the American Iron and Steel requirements apply to the entire project and not just to the activities funded by the money made available to WIFA by the federal government.

Section 1. American Iron and Steel Requirements. In accordance with federal law:

(a)(1) None of the funds made available to WIFA as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.

(2) In this section, the term "iron and steel products" means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the "Administrator") finds that—

- (1) applying subsection (a) would be inconsistent with the public interest;
- (2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
- (3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

Section 2. General Provisions.

(a) Binding Effect. This American Iron and Steel Addendum shall inure to the benefit of and shall be binding upon WIFA and the Local Borrower and their respective successors and assigns.

(b) Severability. In the event any provision of this American Iron and Steel Addendum shall be held illegal, invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate, render unenforceable or otherwise affect any other provision hereof.

(c) Amendments, Supplements and Modifications. This American Iron and Steel Addendum may not be amended, supplemented or modified without the prior written consent of WIFA and the Local Borrower.

(d) Execution in Counterparts. This American Iron and Steel Addendum may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

(e) Applicable Law. This American Iron and Steel Addendum shall be governed by and construed in accordance with the laws of the State of Arizona and applicable federal law.

(f) Captions. The captions or headings in this American Iron and Steel Addendum are for convenience only and shall not in any way define, limit or describe the scope or intent of any provisions of this American Iron and Steel Addendum.

(g) Further Assurances. The Local Borrower shall, at the request of WIFA , authorize, execute, acknowledge and deliver such further resolutions, conveyances, transfers, assurances, financing statements and other instruments as may be necessary or desirable for better assuring, conveying, granting, assigning and confirming the rights and agreements granted or intended to be granted by this American Iron and Steel Addendum.

(h) Prohibition Against Discrimination. In the event that it applies, the parties agree to comply with the Arizona Governor's Executive Order 2009-9, entitled "Prohibition of Discrimination in State Contracts Non-Discrimination in Employment by Government Contractors and Subcontractors," which mandates that all persons, regardless of race, color, religion, sex, age, or national origin shall have equal access to employment opportunities, and all other applicable state and Federal employment laws, rules, and regulations, including the Americans with Disabilities Act. The Local Borrower shall take affirmative action to ensure that applicants for employment and employees are not discriminated against due to race, creed, color, religion, sex, national origin or disability.

(i) Arbitration. In the event of a dispute, the parties agree to use arbitration, after exhausting applicable administrative review, to the extent required by Arizona Revised Statutes Section 12-1518, and the prevailing party shall be entitled to attorney's fees and costs with respect thereto.

(j) Notice of Arizona Revised Statutes Section 38-511 - Cancellation. Notice is hereby given of the provisions of Arizona Revised Statutes Section 38-511, as amended. By this reference, the provisions of said statute are incorporated herein to the extent of their applicability to this American Iron and Steel Addendum under the law of the State of Arizona.

[SIGNATURE PAGE FOLLOWS]

Contractor

By: _____ Date

Name and Title: _____