

CITY OF CASA GRANDE
NOTICE OF INVITATION FOR BIDS

LANDFILL CULVERT HEADWALLS

BID DUE DATE:	March 25, 2014 1:30 P.M. LOCAL AZ TIME
SUBMITTAL LOCATION:	City of Casa Grande Clerk's Office 510 East Florence Blvd. Casa Grande, AZ 85122
PRE-BID CONFERENCE DATE: TIME: LOCATION:	March 10, 2014 10:30 A.M. LOCAL AZ TIME North Operations Center 3181 North Lear Avenue Casa Grande, Arizona 85122

Any requests for **procedural** clarification or additional information regarding the submission of this Invitation to Bid shall be directed to:

City of Casa Grande Clerk's Office
510 East Florence Blvd.
Casa Grande, AZ 85122

Requests for **technical or other** information shall be directed to:

Abdul Rashid, P.E., CFM
Civil Engineer
(520) 421-8625
arashid@casagrandeaz.gov

INTERESTED BIDDERS MAY OBTAIN A COPY OF THIS SOLICITATION BY VISITING OUR WEBSITE AT WWW.CASAGRANDEAZ.GOV OR CALLING THE CITY CLERK'S OFFICE (520) 421-8600.

Competitive sealed bids for the specified material or service shall be received by the City of Casa Grande Clerk's Office, 510 E. Florence Boulevard, Casa Grande, Arizona 85122, on or prior to the time and date cited. Bids received by the correct time and date shall be publicly recorded. The City of Casa Grande takes no responsibility for informing recipients of changes to the original solicitation documents. Failure to submit amendments with the solicitation response shall be grounds for deeming a bid non-responsive.

Bids must be in the actual possession of the Clerk's Office at the location indicated, on or prior to the exact time and date indicated above. Late proposals shall not be considered. The prevailing clock shall be the City of Casa Grande City Clerk's office clock.

Bids must be submitted in a sealed envelope. The **Bidder's name and address** should be clearly indicated **on the outside** of the envelope. All bids must be completed in blue or black ink or typewritten. Questions must be addressed to the persons listed above.

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CITY OF CASA GRANDE, ARIZONA**NOTICE OF BID**

The City of Casa Grande will receive sealed bids for the following:

LANDFILL CULVERT HEADWALLS

Each bid shall be in accordance with the specifications and instructions on file with the City Clerk at City Hall, 510 East Florence Boulevard, Casa Grande, Arizona, 85122. Copies can be obtained by visiting our website at www.casagrandeaz.gov or calling the City Clerk's Office (520) 421-8600.

All bids must be submitted by **Tuesday, March 25, 2014 at 1:30 P.M.**, City time to the City Clerk, Remilie S. Miller, 510 East Florence Boulevard, Casa Grande, Arizona, 85122. The bid opening will take place on **Tuesday, March 25, 2014 at 1:30 P.M.** in the Main Conference Room (2nd Floor), 510 East Florence Boulevard, Casa Grande, Arizona, 85122.

Bids must be addressed to:

**Remilie S. Miller, City Clerk
City of Casa Grande
510 East Florence Boulevard
Casa Grande, Arizona 85122**

**THE ENVELOPE MUST BE BOLDLY MARKED:
BID ON: LANDFILL CULVERT HEADWALLS FOR THE CITY OF CASA GRANDE
BID OPENING: MARCH 25, 2014 AT 1:30 P.M.**

The City of Casa Grande reserves the right to waive any informalities or irregularities in this Request for Bids, or to reject any or all bids; to be the sole judge of the suitability of the materials offered, and to award a contract or contracts for the furnishing of one or more items of the services it deems to be in the best interest of the City.

/s/James V. Thompson
City Manager

INFORMATION TO BIDDERS**I. SECURING BID DOCUMENTS**

- A. Specifications and other bid document forms are available at the following location:

Remilie S. Miller, City Clerk
City of Casa Grande
510 E. Florence Blvd.
Casa Grande, Arizona 85122
(520) 421-8600

- B. Exhibits and Specifications can be obtained by visiting our website at www.casagrandeaz.gov or calling the City Clerk Department (520) 421-8600.

II. ADDITIONAL INFORMATION

Abdul Rashid, PE, CFM
Civil Engineer
City of Casa Grande
510 E. Florence Blvd.
Casa Grande, AZ 85122
(520) 421-8600
Extension: 3342
arashid@casagrandeaz.gov

III. CONTENT OF BID

The Bid package shall contain the following:

- * Call for Bids Notice
- * Information to Bidders'
- * General Information/Bid Specifications
- * Bid Form
- * Check List (If applicable); and
- * Certification of Bid

IV. INTERPRETATION OF DOCUMENTS

If any person contemplating submitting a bid is in doubt as to the true meaning of any part of this Request for Bids, or finds discrepancies in or omissions from the specifications, the Bidder may submit to the City Clerk, a written request for an interpretation or correction thereof. The person submitting the request will be responsible for its prompt delivery. Any interpretation or correction of the proposed documents will be made only by Addendum duly issued by the City, and a copy of such Addendum will be mailed or delivered to each person who received a Bid Packet. All Addendums will be forwarded to the City Clerk's Office to be included in the Original Bid Packet. The City will not be responsible for any other explanation or interpretation of the Request for Bids.

V. ANY ADDENDUMS OR BULLETINS

Any addendums or bulletins issued by the City during the time of bidding or forming a part of the documents provided to the Bidder for the preparation of the bid shall be covered in the bid and shall be made part of the contract. No addendums will be issued closer than five (5) days prior to the bid opening.

VI. WITHDRAWAL OF BIDS

Any Bidder may withdraw his bid, either personally or by a written request, at any time prior to the scheduled time for the opening of bids.

VII. ECONOMY OF PREPARATION

Bids should be prepared simply and economically, providing a straightforward, concise description of the Bidder’s capabilities to satisfy the requirements of these guidelines. The Bidder shall be responsible for costs incurred in the proposal preparation and delivery.

VIII. SCHEDULE

The following schedule is planned, but subject to change at the sole discretion of the City:

Call For Bid	February 25, 2014
Pre Bid Meeting and Site Visit	March 10, 2014
Last Date to Submit Bids	March 25, 2014
Bid Opening	March 25, 2014
Bid Review	March 31, 2014
Bid Award (1 st City Council Reading)	April 21, 2014

IX. EVALUATION PROCESS

Bids that are judged by the City to be unresponsive or materially incomplete will be immediately rejected. Finalists will be selected from the remaining Bidders. The City will perform whatever research it deems necessary into the Bidder’s history, financial viability and references. The Bidder shall cooperate with the City and Engineer or his designated representative by providing appropriate information.

X. EVALUATION CRITERIA

The following elements, in addition to price, shall be given consideration in evaluating the qualifications of and degree of responsibility to be credited to the Bidder: (1) the ability, capability and skill of the Bidder to perform the contract; (2) the character, integrity, reputation, judgment, experience, and efficiency of the Bidder; and (3) whether the Bidder can perform the contract within the times specified.

Each Bidder shall demonstrate to the satisfaction of the City that the Bidder has sufficient qualifications to perform the work under this contract. The burden to demonstrate such

qualifications shall be on the Bidder. The Bidder must be licensed and registered as a CONTRACTOR in accordance with the laws of the State of Arizona (which is required in order for a Bidder to submit a bid hereunder). **Each Bidder must have successfully completed three (3) similar projects in the past 5 years and must submit the CONTRACTOR Experience/References.** The projects must have been performed satisfactorily, and have been of like nature, magnitude and of comparable difficulty.

Each Bidder shall be skilled and regularly engaged in the general class and type of work called for under this contract. It is the intention of the City to award this contract to a Bidder who furnishes satisfactory evidence of its key personnel's, and its proposed subcontractors', requisite experience and ability and of sufficient capital, facilities, and plant to enable prosecution of the work successfully and properly and within the time named in the contract.

XI. EXAMINATION OF SITE

Bidders must satisfy themselves by personal examination of the location of the proposed work as to the accuracy of the estimate of the quantities of the work to be done, and shall not at any time after the submission of a bid dispute, complain of such estimate, nor assert that there was any misunderstanding in regard to the nature or amount of work to be done.

XII. UNIT BID ITEMS

The preliminary opinion of quantities of work to be done as indicated by the unit bid items are approximate as shown in the Contract Documents, and are given as a basis for the comparison of bids. The City does not expressly, or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the quantity of any item or portion of the work or to omit portions of the work at the unit or lump sum prices stated in the bid form. The Bidders shall not at any time after the submittal of their bids have any claim for damages as a result of the lowering of anticipated profits or the loss of profits because of any difference between the quantities of work actually done and those stated in the bidding sheets.

All work as set forth in the Contract Documents is to be accomplished. Bidder shall include in the bid item or items, of work, funds to allow for compensation for all work for which specific bid items are not provided.

XIII. DELIVERY OF PRODUCT/COMPLETION OF WORK

The CONTRACTOR shall complete all submittals within fourteen (14) calendar days of the notice to proceed. **The work described herein must be complete within 60 calendar days of the notice to proceed.**

XIV. EXECUTION OF AGREEMENT

The successful Bidder will be required to enter into a formal agreement that is consistent with the bid package outlined within. The Bidder to whom the Contract is awarded by the City shall within 15 days after notice of award and receipt of Agreement forms from the City, sign and deliver to the City all required copies of said Agreement. (Sample of

Agreement attached in bid packet – specifics may change to comply with bid specifications)

XV. MISCELLANEOUS INFORMATION

- A. All prices quoted will reflect the total to the City for the item/project/service and shall include all applicable taxes, and other charges.
- B. The City will not honor any invoices or claims that are tendered sixty (60) days after the close of the City's fiscal year for work completed.
- C. The City is not responsible for any Bidder's, or their subcontractor's, errors or omissions.
- D. All bids submitted to the City are to remain firm for a minimum period of ninety (90) days from the date the bids are officially opened.
- E. The selected bid is not officially accepted until such time as the successful Bidder receives written notice of acceptance from the City Clerk.
- F. If the successful bidder conducts business inside the City Limits, then a business license number is required.
- G. Where the Bidder is a corporation or other type of legal entity, bids must be signed in the legal name of the entity followed by the name of the state of incorporation or place of formation, and the legal signature of an officer authorized to bind the entity to a contract.

XVI. REJECTION OF THE BID

The City reserves the right to reject any and all bids received.

LANDFILL CULVERT HEADWALLS

1. GENERAL INFORMATION

(1) INTRODUCTION

The City of Casa Grande (OWNER) is accepting proposals from qualified CONTRACTOR's for the installation of two (2) new culvert headwalls at the City of Casa Grande Landfill (Landfill). The Landfill, located at Interstate-8 and Chuichu Rd (Indian route 15), has an existing culvert consisting of two (2) six-foot diameter corrugated steel pipes and earthen headwalls. In anticipation of continued growth in future traffic to the West Cell where filling is taking place, the OWNER seeks to expand the traffic crossing width across the existing culvert by installing reinforced concrete culvert headwalls with guardrails as shown on the Drawings. This contract covers only the in-place construction of culvert headwalls. The constructed in-place culvert headwalls shall conform to the Drawings and Specifications herein. The CONTRACTOR is responsible for obtaining any required Federal, State, County and/or City permit(s) such as Air, Dust, 404 Jurisdictional Wash, etc. Any professional services required to obtain the required permit(s) and/or to install the improvements per the attached plans, are to be considered incidental to the installation.

The project is a performance based construction contract in which any professional services required are considered incidental. The CONTRACTOR shall provide all labor and materials necessary to complete construction of the culvert headwalls in accordance with the Drawings and Specifications. The CONTRACTOR may propose alternatives for the purpose of meeting or exceeding expectations. However, any alternatives need to be approved by the OWNER and ENGINEER prior to such an action being taken.

(2) BACKGROUND

The City of Casa Grande Landfill consists of approximately 160 acres of land under operations providing landfill services.

(3) PROJECT OBJECTIVE

The objective of this project is to meet the expanding needs and services of the Landfill by improving access to the West Cell.

2. PRE-BID CONFERENCE

Perspective Bidders are invited to attend a mandatory pre-bid conference to be held on **March 10, 2014, 10:00 A.M.** Local Arizona Time, at the North Operations Center located at 3181 North Lear Avenue, Casa Grande, AZ 85122, which will be followed by the tour of the Landfill Culvert. The purpose of this conference will be to clarify the contents of this Invitation for Bid in order to prevent any misunderstanding of the OWNER's position. Any doubt as to the requirements of this Invitation for Bid or any apparent omission or discrepancy should be presented to the OWNER at this conference. The OWNER will then determine the appropriate action necessary, if any, and issue a written amendment to the Invitation for Bid. Oral statements or instructions shall not constitute an amendment to this Invitation for Bid.

3. SUBMITTING BIDS

- (1) No bid will be considered unless it is made upon the proposal form(s) contained in and submitted with the project proposal pamphlet. No project proposal pamphlet shall be disassembled. All blank spaces for proposal prices must be filled in, in ink, typewritten or printed, in both words and figures.
- (2) A bid may be withdrawn prior to the time set for opening of bids.
- (3) Bids received after the time and date specified in the "Notice of Bids" will be returned unopened to the Bidder.

4. BID BOND REQUIREMENTS

- (1) No proposal will be read unless accompanied by a proposal guarantee in the form of a certified or cashier's check, or surety bond in the amount of 10% of the contract amount. The guarantee shall be made payable and acceptable to the City of Casa Grande.
- (2) Such bonds shall be executed solely by a surety company or companies holding a certificate of authority to transact surety business in the State of Arizona as issued by the Director of the Arizona Department of Insurance. Such bonds are not to be limited as to the time in which action may be instituted against the surety company. The bond(s) shall be made payable and acceptable City of Casa Grande and shall be written or countersigned by an authorized representative of the surety who is either a resident of the State of Arizona or whose principal office is maintained in this State, as required by law, and the bond(s) shall have attached thereto a certified copy of Power of Attorney of the signing official.
 - (a) All proposal guarantees except those of the three lowest qualified Bidders will be returned immediately following the opening and checking of proposals. The proposal guarantee of the three lowest qualified CONTRACTOR's will be returned immediately after the contract documents have been executed.

5. AWARD AND EXECUTION OF THE CONTRACT

- (1) The contract will be awarded, or all bids rejected, as soon as practical after the date of opening of bids, as stated in the "Notice of Bid". The contract will be awarded within 90 days after the bid opening date, unless agreed upon in writing by both parties to the contract.

Award of this contract will be for the lowest qualified Unit price.
- (2) Protest Procedure: All bid protests shall be submitted, and will be decided, pursuant to Casa Grande City Code Section 3.04.170. The OWNER reserves the right to reject any or all bids, to waive irregularities of information in any bid, and/or to take any steps determined prudent in order to resolve the protest.
- (3) Bonds in the following amounts will be required ten (10) working days after notice of award and receipt of contract:
 - (a) Bond for benefit of labor and material suppliers, 100 percent of the bid price; and
 - (b) Bond for performance of contract, 100 percent of the bid price.

- (4) Information relative to execution of the contract documents may be obtained from the Administrative Services Director, City of Casa Grande, 510 E. Florence Blvd., Casa Grande, Arizona 85122.

6. START AND COMPLETION OF WORK

- (1) Work shall start within ten working days after the starting date set forth in the "Notice to Proceed" and shall be completed within 90 calendar days of said starting date. The time allowed for completion of the work includes "lead time" for obtaining necessary materials and/or equipment.
- (2) Liquidated damages in the amount of five hundred dollars (\$500.00) per calendar day may be assessed for each day the Work remains incomplete after the scheduled and agreed upon completion date.

7. QUANTITIES

- (1) All quantities stated on the bid form are subject to adjustment dictated by OWNER requirements. Quantities at variance with the stated bid quantities may be purchased as required during the term of the agreement at the quoted prices, except as otherwise noted herein.

8. MEASUREMENT AND PAYMENT

- (1) Measurement of the various items in the proposal shall be of each item of completed work, with no allowance for waste.
- (2) Payment for the various items in the proposal will be made at the unit price bid in the proposal and shall be compensation in full for furnishing all materials, labor, tools, equipment, and appurtenances necessary to complete the work in a satisfactory manner as shown on the plans and as required in the specifications with all connections, testing, and related work completed. Each item, fixture, piece of equipment, etc., shall be completed with all necessary connections and appurtenances, for the satisfactory use and operation of said item unless specifically called for in the proposal.
- (3) Total quantities indicated in the proposal are approximate and for bidding purposes only.
- (4) Partial payments may be made once a month based upon satisfactory completion of work in progress. No payment will be made for amounts less than Five Hundred Dollars (\$500.00).
- (5) A retainage of 10 percent shall be deducted from all partial payment requests up through completion of fifty percent of the scheduled construction activities. A retainage of 5 percent will be subtracted from all subsequent partial payment requests to insure satisfactory completion of the work by the CONTRACTOR. The retainage shall be released to the CONTRACTOR upon final acceptance of the CONTRACTOR's final invoice.

In accordance with State statutes, the CONTRACTOR may post securities in an escrow account in lieu of the 10% retention. The worth of the securities shall be of an amount equal to or greater than 10% retention.

9. INSURANCE REQUIREMENTS

- (1) Without limiting any of the other obligations or liabilities of the CONTRACTOR, the CONTRACTOR shall provide and maintain, until the work is completed and accepted by the OWNER, minimum insurance coverage as required in Section 103.6 of Maricopa Association of Governments (MAG) Specifications General Conditions except as otherwise indicated in the OWNER Contract Documents.
- (2) Within ten (10) working days after notice of award and receipt of contract, the CONTRACTOR shall submit to the OWNER a "Certificate of Insurance" form completed by his insurance carrier or agent certifying that minimum insurance coverage's as required are in effect and will not be canceled or changed until 10 days after written notice is given to the OWNER.
- (3) These policies shall not expire until all work has been completed and the project has been accepted by the OWNER (if a policy does expire during the life of the contract, a renewal certificate of the required coverage must be sent to the OWNER not less than five (5) days prior to the expiration date).
- (4) The CONTRACTOR shall purchase and maintain, during the contract time, insurance as listed in the Contract. The CONTRACTOR will be required to provide evidence of such insurance prior to issuance of the Notice to Proceed in a form acceptable to the OWNER.

The certificate of insurance shall name as additional insured the City of Casa Grande. As required by law, the certificate of insurance shall be provided by an insurance carrier(s) authorized to do business in the State of Arizona, or countersigned by an agent of the carrier authorized to do business in the State of Arizona.

Additionally, the CONTRACTOR will be required to purchase and maintain Worker's Compensation insurance, including occupational disease provisions, for all employees at the site of the project. In case any work is sublet, the CONTRACTOR shall require such Subcontractor similarly to provide Worker's Compensation insurance, including occupational disease provisions, for all the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR.

Also:

Property Damage Insurance	\$500,000 each person \$1,000,000 each accident
Protective Liability Insurance	\$500,000 each person \$1,000,000 each accident

10. AFFIDAVIT FORMS

- (1) The Affidavit of Non-Collusion form in this proposal must be filled out completely by each CONTRACTOR prior to the time set for opening of bids.

11. PERMITS AND FEES

- (1) Payment of fees for permits issued by the OWNER for work conducted within any OWNER rights-of-way normally requiring a permit from the OWNER will be waived.

- (2) OWNER business licenses will be required of the prime CONTRACTOR and all Subcontractors's performing work within the City of Casa Grande.

12. CONTRACTORS LICENSE LAW

CONTRACTOR shall comply with, and require all Subcontractor's to comply with State and OWNER CONTRACTOR's License Law, and be duly registered and licensed there under. CONTRACTOR's shall comply with the provisions of "an Act to Regulate the Business of the Contracting", Title 32, Chapter 10, Arizona Revised Statutes and "Rules and Regulations for CONTRACTOR's", dated March 1969, or the latest revision thereof adopted under the provisions of A.R.S. Title 32, Chapter 10.

13. SUMMARY OF ITEMS TO BE SUBMITTED WITH BID

- (1) Proposal Forms - Completely executed and signed (P/1 thru P/4).
- (2) Certification of Bid.
- (3) Bid Security - Acceptable Surety Bond, Certified Check or Cashier's Check in the amount of not less than ten percent (10%) of the total bid price.
- (4) Affidavit of Non-Collusion (AN/1).

14. BID SUBMITTAL DEAD LINE

- (1) Sealed bids marked "Landfill Culvert Headwalls" will be received on or before **March 25, 2014 at 1:30 P.M.** in the Office of the City Clerk, Casa Grande City Hall, 510 E. Florence Blvd., Casa Grande, Arizona, 85122. Bids will be opened and read aloud immediately thereafter.

BID PROPOSAL

LANDFILL CULVERT HEADWALLS

Place _____

Date _____

City Engineer
City of Casa Grande
Casa Grande, Arizona

In compliance with your invitation for bids and all conditions of the Contract Documents, the undersigned _____, a corporation organized under the laws of the State of, * _____, a partnership consisting

or individual trading as

in the City of _____, having examined the Contract Documents, site of work, and being familiar with conditions to be met, hereby proposes and agrees to furnish and provide all materials, labor, construction equipment, and everything necessary for completion of the work described in the "Notice for Bids for the City of Casa Grande (OWNER)", and to construct the same and install the material therein for the OWNER in a good and workmanlike manner and to the satisfaction of the OWNER, through its ENGINEER and under the direction and supervision of its ENGINEER, or their properly authorized agents and strictly pursuant to and in conformity with the Specifications and Plans prepared by the ENGINEER for the OWNER, and with such modification of same and other documents that may be made by the OWNER through its ENGINEER or their properly authorized agents, as provided herein, at the following unit prices for the work described:

*Insert names of president, secretary and treasurer of corporation.

BID SCHEDULE**LANDFILL CULVERT HEADWALLS****BASE BID:**

Item No.	Description	Quantity	Cost	Remarks/Description
1.	Furnish and Construct In-Place Culvert Headwalls	1		Lump Sum

BASIS FOR BID

The CONTRACTOR must bid the Base Bid in its entirety.

ACCEPTANCE OF PROPOSAL

Award of this contract will be for the lowest qualified base bid or the lowest qualified total of the base bid.

I. BASE BID – LANDFILL CULVERT HEADWALLS

TOTAL \$ _____

The undersigned hereby declares that he/she has visited the site and has carefully examined the Contract Documents relating to the work covered by the above bid.

The undersigned understands that any quantities stated or implied in the specifications or elsewhere in the Contract Documents are approximate only, and are subject to increase or decrease, and hereby proposes to perform all quantities of work as either increased or decreased, in accordance with the provisions of the specifications.

The undersigned understands that his proposal shall be submitted with a proposal guarantee of Certified Check, Cashier's Check or Surety Bond for an amount not less than 10 percent of the amount bid, Certification of Bid and a completed Affidavit of Non-Collusion.

The undersigned agrees that upon receipt of the Notice of Award from the OWNER he/she will execute the contract documents and furnish the required bonds and certificates of insurance.

Respectfully submitted,

By

Officer & Title

ATTEST:

Officer and Title

(Give CONTRACTOR's full address)

Witness: if CONTRACTOR is an individual

* _____

The CONTRACTOR hereby acknowledges receipt of and agrees his proposal is based on the proceeding Addenda:

*Addresses of corporate officers or partners if different than business address.

CONTRACTOR

By _____

License No. _____

Classification _____

CERTIFICATION OF BID

FOR

LANDFILL CULVERT HEADWALLS

CONTRACTOR hereby certifies by signing and submitting this bid, which includes Notice of Bids, Information to CONTRACTOR, Bid Specifications, Bid Form, Issued Addenda and Certification of Bid that they have read and fully understand, and will comply with said invitation for bids.

Corporate Name

Address

City, State, and Zip

Type of Entity

State of Incorporation

Phone Number

Casa Grande Business
License Number (if Applicable)

Signature of Authorized Officer

Print Name of Authorized Officer

Title of Authorized Signatory

SURETY BOND

KNOW ALL MEN BY THESE PRESENTS:

That _____, we,
_____, as
Principal, (hereinafter called the Principal), and the

_____, a
corporation duly organized under the laws of the State of _____, as Surety,
(hereinafter called the Surety), are held and firmly bound unto the City of Casa Grande as
Obligee, in the sum of Ten Percent (10%) of the total amount of the bid of Principal, submitted
by him to the City of Casa Grande for the work described below, for the payment of which sum,
well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs,
executors, and administrators, successors and assigns, jointly and severally, firmly by these
presents, and in conformance with A.R.S.

WHEREAS, the said Principal is herewith submitting its proposal for the Casa Grande
LANDFILL CULVERT HEADWALLS.

NOW, THEREFORE, if the City of Casa Grande shall accept the proposal and give such Bonds
and Certificates of Insurance as specified in the Standard Specifications with good and sufficient
Surety for the faithful performance of such contract and for the prompt payment of labor and
material furnished in the prosecution thereof, or in the event of the failure of the Principal to
enter into such contract and give such Bond and Certificate of Insurance, if the Principal shall
pay to the City of Casa Grande the sum of money set forth above as liquidated damages for
failure of the Principal to enter into the contract, then this obligation shall be null and void,
otherwise to remain in full force and effect.

Signed and sealed this _____ day of _____, A.D., 2014

Principal

Title

Witness:

Surety

Title

Witness:

AFFIDAVIT OF NON-COLLUSION

STATE OF ARIZONA)
COUNTY OF _____) ss

(NAME)

BEING FIRST DULY SWORN, DEPOSES AND SAYS:

That he/she is _____
(TITLE)
of _____
(NAME OF BUSINESS)

That pursuant to Section 44-1404 of the Arizona Revised Statutes, he certifies as follows:

That neither he/she nor anyone associated with the said

(NAME OF BUSINESS)

has, directly or indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with the Project:

OWNER OF LANDFILL CULVERT HEADWALLS

(NAME)

(TITLE)

(NAME OF BUSINESS)

Subscribed and sworn to before me this _____ day of _____,
2014.

(NOTARY PUBLIC)

My Commission Expires:

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Contract No. XXXXX

TITLE

Project No. XXXXXXXXX

XXXXX Department
City of Casa Grande

CONTACT NAME
PHONE

CONTRACTOR

CONTACT NAME
PHONE

THIS CONTRACT made and entered into by and between the **City of Casa Grande**, a Municipal Corporation (the "City") and _____, (the "Contractor").

The City and the Contractor for the consideration named agree as follows:

SECTION 1. The complete Contract includes all of the Contract Documents as if set forth in full herein. The Contract and all Contract Change Orders issued after the execution of the Contract, Addendum No(s) _____ issued prior to the opening of the bids, the Special Provisions, the Project Plans (Exhibit(s) _____), the Standard Plans, the Standard Specifications, the Waterworks Standards, Reference Specifications, the Bidder's Proposal, the Notice Inviting Bids, the Performance Bond and the Payment Bond all of which are essential parts of this Contract as defined in Attachment 1. In the event of any conflict in these provisions, the terms of the Contract Documents shall control, each over the other, in the order provided.

SECTION 2. The Contractor shall furnish all materials, except as otherwise provided in the Plans or Specifications, and will perform all the work for the

PROJECT NO. _____

PROJECT NAME: _____

necessary to complete in a good, workmanlike, and substantial manner the work in accordance with the Contract Documents for this Project. The Contract documents are specifically referred to and made a part hereof this Contract.

SECTION 3. The City will pay the Contractor the amount of _____ (Dollars) (\$ _____) for a base contract, subject to change of materials and work orders. The Contractor agrees to receive and accept the prices set forth in the Bid Schedule as full compensation for the work required under the bid items awarded by the City subject to additions and/or reductions of the quantities of the various bid items at the unit prices bid for furnishing all labor and materials and for doing all the work contemplated and embraced under this Contract. The Contractor further agrees that:

- a. The City will not pay any claim submitted to the City by the Contractor unless the claim is **SUBMITTED IN WRITING** to the City and **APPROVED BY THE CITY IN WRITING BEFORE** any such work is started.
- b. The City will not pay for any cost increases for labor and materials outside the original prices as set forth in the Bid Schedule unless **SUBMITTED IN WRITING** to the City and **AGREED TO IN WRITING** by the City **IN ADVANCE**.
- c. In the event of unforeseen difficulties or obstructions arising out of the nature of the work to be performed are encountered by the Contractor, the Contractor **SHALL NOT MOVE FORWARD** with any additional work until that work is **APPROVED IN WRITING** by the City's Project Manager.
- d. The Contractor shall be responsible for all expenses incurred by or in consequence of the suspension and/or discontinuance of work **CAUSED BY** Contractor.
- e. The Contractor shall faithfully complete the work in the manner and in accordance with the Contract Documents and the requirements of the City's Project Manager under them.
- f. Any additional charges incurred without **WRITTEN CONSENT** of the City shall be considered incidental costs to the Contract with **NO COST** to the City.

SECTION 4. TIME IS OF THE ESSENCE for this Contract. The Contractor agrees to commence work pursuant to this Contract within _____ **calendar days** after the date of authorization specified in the Notice to Proceed and to diligently prosecute the same, day to day, to completion within _____ **calendar days** after the date provided except as adjusted by subsequent Contract Change Order(s). All additional work, when authorized by executed Change Order(s) shall be compensated for by a fee as mutually agreed upon by the City and Contractor.

When a contractor submits a request for a date extension for which work must be completed in a contract, a written Contract Change Order shall be initiated outlining the reason for applying for the extension and the drop-dead date the work **will** be completed. If the extension is agreed to and signed by the City and the Contractor, it binds the Contractor to complete the work by the extended date designated in the amendment unless the delay in completion of the work by the Contractor results from an unforeseeable cause beyond the control and without the fault or negligence of the Contractor. It is agreed the City's only liability for delay from any cause shall be limited to granting a time extension to the Contractor. There is no other obligation, expressed or implied, on part of the City to the Contractor for delay from any cause.

SECTION 5. If the work to be performed by Contractor for this Contract is not timely completed, the Contractor shall pay to the City \$_____ as liquidated damages for each day the work remains incomplete after the scheduled completion date. The scheduled completion date for determining liability for liquidated damages shall be _____ **consecutive days** from the effective date of City's Notice to Proceed to the Contractor.

For the purpose of determining applicability of liquidated damages, completion time shall be extended only if delay in completion of the work by the Contractor results from an unforeseeable cause beyond the control and without the fault or negligence of the Contractor per Section 6.

SECTION 6. Force Majeure: Notwithstanding any other term, condition, or provision hereof to the contrary, in the event any party hereto is precluded from satisfying or fulfilling any duty or obligation imposed upon such party by the terms hereof due to labor strikes, nationwide material shortages, war, civil disturbances, unusual weather conditions, natural disasters, acts of God, or other events beyond the control of such party, the time period provided herein for the performance by such party of such duty or obligation shall be extended for a period equal to the delay occasioned by such events and must be agreed to **IN WRITING BY BOTH PARTIES.**

SECTION 7 The Contractor agrees to indemnify, defend, and save harmless the City, its Mayor and Council, appointed boards and commissions, officials, officers, and employees, individually and collectively from all losses, claims, suits, demands, expenses, subrogations, attorney's fees, or actions of any kind and nature arising out of the Contractor's negligence or any subcontractor employed by the Contractor including bodily injury and death, damages to any property or any other losses, claims, suits, demands, and/or expenses, arising or alleged to have arisen out of the work performed, except any injury or damages arising out of the sole negligence of the City, its officers, agents or employees. The amount and type of insurance coverage requirements set forth in Section 8 will in no way be construed as limiting the scope of indemnity in this paragraph.

SECTION 8. INSURANCE.

8.1 Contractor Liability Insurance. Upon signing of the Agreement and so long as it shall remain in effect, contractor, at its cost and expense, shall purchase and maintain the insurance described in this subsection 14. The insurance shall be purchased and maintained in companies duly licensed or otherwise approved by the State of Arizona, with forms acceptable to the City of Casa Grande, and shall be primary with no right of contribution. The contractor's insurer shall have a minimum A.M. Best's rating of A-VIII. Use of alternative insurers requires prior approval for the City of Casa Grande.

The insurance coverages to be purchased and maintained are:

8.1.1 Workers' Compensation. Contractor shall provide workers' compensation insurance as required by state and federal laws having jurisdiction over Contractor's employees engaged in the performance of the Services within this Agreement.

8.1.2 General Liability. Contractor shall maintain a Commercial General Liability (Occurrence)

policy that includes coverage for premises and operations, products and completed operations, contractual liability, broad form property damage, and personal injury liability. The policy shall have limits of not less than:

- \$1,000,000 for each occurrence of bodily injury and property damage; and
- \$1,000,000 for personal injury;

8.1.3 Automobile Liability. Contractor shall maintain an Automobile Liability policy with a combined single limit for bodily injury and property damage of not less than \$1,000,000 for each accident. The policy shall cover all owned, hired, and non-owned automobiles used in connection with the Agreement for the performance of Contractor's services.

8.1.4 Property Insurance. A policy or policies of fire and extended coverage property damage insurance covering the full insurable value of all tools and equipment used by contractor from time to time on the lands of City of Casa Grande pursuant to the Agreement, including mobile equipment. Contractor shall also require its agents, contractors, licensees and others performing the obligations, or exercising the rights, of Contractor under the Agreement to carry such property damage insurance. Such policy or policies shall cover the full insurable value of such tools and equipment.

8.1.5 Adjustment of Liability Limits. If the initial term of the Agreement shall exceed ten years or if the aggregate term of the Agreement, including any extension or renewal terms agreed to by the parties or provided for in the Agreement shall exceed ten years, on each tenth anniversary of the date of the Agreement, the liability limits provided for in sections 8.1.2 and 8.1.3 shall be increased by an amount proportional to the increase in the US consumer price index occurring since the date of the Agreement or the date of the last such increase as appropriate.

8.1.6 Professional Liability. The Contractor retained by the City to provide the engineering services required by the Agreement will maintain Professional Liability insurance covering errors and omissions arising out of the Services performed by the Contractor or any person employed by him, with an unimpaired limit of not less than \$1,000,000 each claim and \$2,000,000 all claims, or 10% for the construction budget, whichever is larger. In the event the insurance policy is written on a "claims made" basis, coverage shall extend for two years past completion and acceptance of Services as evidenced by annual Certificates of Insurance.

8.2 Insurance Certificate. Contractor shall not exercise any of its rights under the Agreement until it delivers to City of Casa Grande's designated recipient certificates from contractor's insurers showing that the coverage required above has been obtained.

8.2.1 The insurance certificates must show City of Casa Grande, its subsidiaries, affiliates directors, officers, and employees as additional insured parties in respect of all liability coverage except workers' compensation. The policy shall provide and the certificate shall reflect that the insurance afforded applies separately to each insured against whom claim is made or suit is brought except with respect to the limits of the company's liability.

8.2.2 The insurance certificate shall provide on its face that the policies it represents will not be terminated, amended, or allowed to expire without 30 days prior written notice to City of Casa Grande.

8.2.3 Failure of City of Casa Grande to demand the insurance certificate or other evidence of full compliance with these insurance requirements or failure of City of Casa Grande to identify a deficiency from any certificate provided to it shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

8.3 Severability of Interests. The policies referenced in 8.1.2 and 8.1.3 shall contain a severability of interests clause, generally providing, "the insurance afforded applies separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the company's insurance."

8.4 Waiver of Subrogation. Contractor hereby waives any and all rights that it might have against City of Casa Grande, its employees, officers, and directors, to recover all or part of any loss or damage insured or insurable by the insurance policies carried or required to be carried by it pursuant to the Contract Documents. Contractor shall require each of its agents, contractors, licensees and others performing the obligations, or exercising the rights, of Contractor under the Agreement to provide a similar waiver for City of Casa Grande's benefit.

8.5 Deductibles. Contractor may purchase the required insurance policies with deductibles which are reasonable in light of the contractor's financial condition; provided that any loss not covered due to the deductible will be paid by Contractor. Contractor shall also require its agents, contractors, licensees and others performing the obligations, or exercising the rights, of contractor under the Agreement to carry such property damage insurance. Such policy or policies shall cover the full insurable value of such tools and equipment.

SECTION 9. This Contract may be terminated at any time by mutual written consent, or by the City, with or without cause, upon giving thirty (30) days written notice. If this Contract is terminated, the City shall be liable only for payment for services rendered and accepted by the City before the effective date of termination.

The City reserves the right to terminate in whole or any part of this Contract due to the failure of the Contractor to carry out any term or condition of the Contract. The City will issue a written notice of default to the Contractor for failing to perform the stipulations, conditions or services/specifications required in this Contract. The Contractor shall have 5 days from receipt of the notice to rectify the failure or establish a plan for remedy. Contractor shall provide documentation of the remedy or proposed plan for approval by the City.

The City may terminate this Contract for cause if:

- A. In the opinion of the City, the Contractor attempts to impose personnel, materials or services of an unacceptable quality;
- B. In the opinion of the City, the Contractor fails to furnish the required services and/or product within the time stipulated in the Contract;
- C. In the opinion of the City, the Contractor fails to make progress in the performance of the requirements of the Contract;
- D. The Contractor gives the City a positive indication that the Contractor will not or cannot perform to the requirements of the Contract.

In the event the Contractor has failed to perform any substantial obligation to be performed by the Contractor under this Agreement and said failure has not been cured within the times set forth in this Agreement, then the City may, upon written notice, withhold all monies due and payable to Contractor, without penalty, until such failure to perform is cured or otherwise adjudicated.

If funds that are appropriated or allocated for the payment of obligations under this Contract are not allocated by the City and available for the continued purchase of the services and/or materials provided under this Contract, this Contract may be terminated by the City at the end of the period for which funds are available. The City will notify the Contractor in the event that continued service will or may be affected by non-appropriation. No penalty shall accrue to the City in the event that this provision is exercised, and the City shall not be obligated or liable for any future payments due or for any damages as a result of termination under this paragraph.

Upon Notice of Termination the Contractor shall appraise the work the Contractor has completed and submit this appraisal to the City for evaluation.

The Contractor shall receive as compensation for services performed through the date of such termination, a fee for the percentage of work actually completed. This fee shall be a percentage of the Contractor fee described in this Contract and shall be in the amount mutually agreed to between the Contractor and the City. The City shall make this final payment within sixty (60) days after the Contractor has delivered the last of the partially completed items or service.

Notice required under this section shall be in writing and shall be served by certified mail upon the other party. When served by certified mail, services shall be conclusively deemed made five (5) days after posting thereof in the United States mail, postage prepaid.

SECTION 10. Any written commitment received from the Contractor concerning this Agreement shall be binding upon the Contractor, unless otherwise specifically provided herein with reference to this paragraph. Failure of the Contractor to materially fulfill such a commitment shall result in a breach of this Contract. A commitment includes, but is not limited to any representation made prior to execution of this Agreement, whether or not incorporated elsewhere herein by reference, as to performance of services or equipment, prices or options for future acquisition to remain in effect for a fixed period, or warranties.

SECTION 11. The Contractor agrees that any inspection by the City Representative or by other agents or employees of the City of the work performed is for the purpose of ensuring the technical competence of the work and adherence to other contractual provisions. Inspections are not for the purpose of safeguarding workers on the job, which is the sole responsibility of the Contractor.

The Contractor warrants that he/she is fully familiar with all the safety requirements of the Occupational Safety and Health Act as promulgated by the Federal Government and as implemented by the State of Arizona, and that he/she will be solely responsible for implementing and enforcing the same at all times.

SECTION 12. The Contractor agrees to accomplish the work with a minimum of traffic interruption. If it becomes necessary to close any traffic lanes on any street within the City, permission must first be obtained from the City Engineer's Office. Permission shall be requested at least 48 hours in advance for residential streets and 72 hours in advance for arterial streets. The Contractor shall furnish and place all detour signs and any other warning signs in accordance with the SPECIAL PROVISIONS.

SECTION 13. All writings, programs, data, public records, or other materials prepared by the Contractor and/or its Contractors or subcontractors, in connection with the performance of this Agreement shall be the sole and absolute property of the City.

SECTION 14. In the event that any litigation should arise concerning the construction or interpretation of any of the terms of this Agreement, the venue of such action of litigation shall be in the courts of the State of Arizona in and for the County of Pinal. This Agreement shall be governed by the laws of the State of Arizona. Should the City bring any legal or equitable action for the purpose of protecting or enforcing its rights under this Contract, the City shall recover, in addition to all other relief, its reasonable attorney's fees and court costs to be fixed by the court.

SECTION 15. It is agreed that the _____ or his/her designee is authorized to execute Contract Change Order(s) necessary to the prosecution of the work, all in accordance with the Standard Specifications.

SECTION 16. The Contractor agrees that he/she will not proceed with any extra work unless he/she has been authorized in writing to do so by the _____ or his/her designee prior to the commencement of any extra work.

SECTION 17. The Parties do for themselves, their heirs, executors, administrators, successors and assigns agree to the full performance of all the provisions herein contained. Contractor may not, either voluntarily or by action of law, assign any obligation assumed by the Contractor without prior written consent of the City.

SECTION 18. No portion of this contract may be assigned or subcontracted to any other individual, firm, or entity without the express and prior written approval of the Contracting Officer. It will be the responsibility of the Contractor to ensure that any and all subcontractors comply with the terms and conditions of this agreement and that City of Casa Grande is named as express third-party beneficiary of such subcontracts with full rights as such.

SECTION 19. The Contractor shall cause the Performance Bond and Payment Bond to remain in full force and effect through the warranty and guarantee period. By my signature hereunder, as Contractor, I agree to keep the Performance Bond and Payment Bond or cashier's check in equivalent of the full Performance Bond and Payment Bond in full force

and effect through said period. The cashier's check shall serve the same purposes and fully cover the requirements of a Performance Bond and a Payment Bond.

SECTION 20. By my signature hereunder, as Contractor, I certify that I will comply with all provisions of the City of Casa Grande Project No. _____.

SECTION 21. This contract may be subject to review by any federal or state auditor. The City or its designee shall have the right to review and monitor the financial and service components of this program by whatever means are deemed expedient by the City. Such review may occur with or without notice, and may include, but is not limited to, on site inspection by City Agents or employees, inspection of all records or other materials which the City deems pertinent to the Agreement and its performance, and any and all communications with or evaluations by service recipients under this Agreement. The Contractor shall preserve and maintain all financial records and records relating to the performance of work under this Agreement for five (5) years after contract termination in accordance with A.R.S. §35-214 and shall make them available for such review within the City of Casa Grande, State of Arizona, upon request.

SECTION 22. DISPUTES

22.1 General. Differences between the Contractor and the City, arising under and by virtue of the Contract Documents shall be brought to the attention of the City at the earliest possible time in order that such matters may be settled or other appropriate action promptly taken. Except for such objections as are made of record in the manner hereinafter specified and within the time limits stated, the records, orders, rulings, instructions and decisions of the Contracting Officer, shall be final and conclusive.

22.2 Notice of Potential Claims. The Contractor shall not be entitled to additional compensation which otherwise may be payable, or to extension of time for (1) any act or failure to act by the City, or (2) the happening of any event or occurrence, unless the Contractor has given the City a written Notice of Potential Claim within 10 days of the commencement of the act, failure, or event giving rise to the claim, and before final payment by the City. The written Notice of Potential Claim shall set forth the reasons for which the Contractor believes additional compensation or extension of time is due, the nature of the cost involved, and insofar as possible, the amount of the potential claim. Contractor shall keep full and complete daily records of the Work performed, labor and material used, and all costs and additional time claimed to be additional.

22.3 Detailed Claim. The Contractor shall not be entitled to claim any such additional compensation, or extension of time, unless within 30 days of the accomplishment of the portion of the work from which the claim arose, and before the final payment by the City, the Contractor has given the City a detailed written statement of each element of cost or other compensation requested and of all elements of additional time required, and copies of supporting documents evidencing the amount or the extension of time claimed to be due.

SECTION 23. By my signature hereunder, as Contractor, I agree that even if only one (1) Progress Payment is prosecuted by the City of Casa Grande for this Project, the City will retain ten percent (10%) of the Progress Payment amount. The ten percent (10%) retention will be discharged in accordance with the Standard Specifications.

SECTION 24. To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the City, its agents, officers, officials, and employees from and against all claims, damages, losses, and expenses (including but not limited to attorney's fees, court costs, and the costs of appellate proceedings), relating to, arising out of, or alleged to have resulted from the negligent acts, errors, mistakes or omissions in the work, services, or professional services of the Contractor, its agents, employees, or any other person (not the City) for whose negligent acts, errors, mistakes or omissions in the work, services, or professional services the Contractor may be legally liable in the performance of this Contract. Contractor's duty to defend, hold harmless and indemnify the City, its agents, officers, officials, and employees from and against all claims, damages, losses, and expenses that are attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of any person or property, including loss or use resulting therefrom, caused by any negligent acts, errors, mistakes, omissions, work, services, or professional services in the performance of this Contract by Contractor or any employee of the Contractor, or any other person (not the City) for whose negligent acts, errors, mistakes, omissions, work, or services the Contractor may be legally liable. The amount and type of insurance coverage requirement set for the herein will in no way be

construed as limiting the scope of the indemnity in this paragraph.

To the fullest extent permitted by law, the City agrees to indemnify and hold the Contractor harmless from any damage, liability or cost (including reasonable attorney's fees and costs of defense) to the extent caused by the City's negligent acts, errors or omissions and those of his or her contractors, subcontractors or consultants or anyone for whom the City is legally liable, and arising from the project that is the subject of this Agreement. The Contractor is not obligated to indemnify the City in any manner whatsoever for the City's own negligence.

SECTION 25. By my signature hereunder, as Contractor, I agree that I am not an employee of the City, and that I am performing the duties as an Independent Contractor, supplying my own employees, and maintaining my own insurance and handling all of my own internal accounting. The City in no way controls, directs, or has any direct responsibility for the actions of the Contractor. The performance of all or part of this contract by the Contractor shall not operate to vest any employment rights whatsoever and shall not be deemed to guarantee any employment of the Contractor or any employee of the Contractor or any subcontractor or any employee of any subcontractor by the City at the present time or in the future.

By my signature hereunder, as Contractor, I understand and acknowledge that the City will not withhold federal or state income. Where required by state or federal law, the Contractor authorizes the City to make withholding for any taxes other than income taxes (i.e., Medicare). All compensation received by the Contractor will be reported to the Internal Revenue Service at the end of the calendar year in accordance with the applicable IRS regulations. It is the responsibility of the Contractor to make the necessary estimated tax payments throughout the year, if any, and the Contractor is solely liable for any tax obligation arising from the Contractor's performance of this Agreement. The Contractor hereby agrees to indemnify the City against any demand to pay taxes arising from the Contractor's failure to pay taxes on compensation earned pursuant to this Agreement.

The City will pay sales and use taxes imposed on goods or services acquired hereunder as required by law. The Contractor must pay all other taxes including, but not limited to, Business or Occupation Tax, taxes based on the Contractor's gross or net income, or personal property to which the City does not hold title.

By my signature hereunder, as Contractor, I agree that I shall be responsible for the compliance with the United States Immigration Reform and Control Act of 1986, and shall indemnify and hold harmless the City for any liability arising from failure of the Contractor to comply with this Act. This indemnification includes the costs of suit.

By my signature hereunder, as Contractor, I agree that I shall be responsible for compliance with the Americans with Disabilities Act of 1990 and shall indemnify and hold harmless the City for any liability arising from failure of the Contractor to comply with this act. This indemnification includes the costs of suit.

SECTION 26. By their signatures hereunder, as Contractor and City, the Parties agree to be bound by all applicable Federal and State regulations governing Equal Opportunity and Non-Discrimination.

SECTION 27. Pursuant to the requirements of Arizona Revised Statutes, Title 34, the City will require both of the following documents to be completed and submitted before the final payment is made and retainage is released.

1. A certification from the Prime Contractor that all bona fide project claims and bills from his/her subcontractors and suppliers have been paid, and that all his/her project claims against the City have been resolved (CONTRACTOR'S AFFIDAVIT REGARDING SETTLEMENT OF CLAIMS).
2. The consent of surety affidavit signed by an authorized representative of the surety (CONSENT OF SURETY TO FINAL PAYMENT AND FULL RELEASE OF CONTRACT RETAINAGE OR SUBSTITUTE SECURITIES).

The City of Casa Grande reserves the right to obtain from the Contractor "satisfactory receipts for all labor and material billed and waivers of liens from any and all persons holding claims against the work".

SECTION 28. This Contract is subject to the provisions of A.R.S. § 38-511 which provides in pertinent part that

the state, its political subdivisions or any department of either may, within three years after its execution, cancel any contract, without penalty or further obligation, made by the state, its political subdivisions, or any of the departments or agencies of either if any person significantly involved in initiating, negotiating, securing, drafting or creating the Contract on behalf of the state, its political subdivisions or any of the departments or agencies of either is, at any time, while the Contract or any extension of the Contract is in effect, an employee or agent of any other party to the Contract in any capacity or a Contractor to any other party to the Contract with respect to the subject matter of the Contract.

SECTION 29. In accordance with A.R.S. §35-391, the Contractor hereby certifies that the Contractor does not have scrutinized business operations in Sudan. In accordance with A.R.S. §35-393, the Contractor hereby certifies that the Contractor does not have scrutinized business operations in Iran.

SECTION 30. Contractor understands and acknowledges the applicability to it of the American with Disabilities Act, the Immigration Reform and Control Act of 1986, and the Drug Free Workplace Act of 1989.

SECTION 31. To the extent applicable under A.R.S. § 41-4401, the Contractor and its subcontractors warrant compliance with all federal immigration laws and regulations that relate to their employees and compliance with the E-verify requirements under A.R.S. § 23-214(A). The Contractor's or subcontractor's breach of the above-mentioned warranty shall be deemed a material breach of the Agreement and may result in the termination of the Agreement by City. The Contractor agrees to insert language similar to this paragraph in all contracts in which they engage with subcontractors on this project to ensure that those subcontractors are meeting the requirements of the above-mentioned statutes. City retains the legal right to randomly inspect the papers and records of the Contractor and its subcontractors who work on the Agreement to ensure that the Contractor and its subcontractors are complying with the above-mentioned warranty. The Contractor and its subcontractors warrant to keep the papers and records open for random inspection during normal business hours by City. The Contractor and its subcontractors shall cooperate with City's random inspections including granting City entry rights onto its property to perform the random inspections and waiving their respective rights to keep such papers and records confidential.

A breach of the Contractor Immigration Warranty shall constitute a material breach of this Contract and shall subject the Contractor to penalties up to and including termination of this Contract at the sole discretion of the City.

The City retains the legal right to inspect the papers of any Contractor or Subcontractors employee who works on this Contract to ensure that the Contractor or Subcontractor is complying with the Contractor Immigration Warranty. Contractor agrees to assist the City in regard to any such inspections.

Neither the Contractor nor any of Subcontractor shall be deemed to have materially breached the Contractor Immigration Warranty if the Contractor or Subcontractor establishes that it has complied with the employment verification provisions prescribed by sections 274A and 274B of the Federal Immigration and Nationality Act and the E-Verify requirements prescribed by A.R.S. §23-214, Subsection A.

The provisions of this Article must be included in any contract the Contractor enters into with any and all of its subcontractors who provide services under this Contract or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

SECTION 32. The Contractor, its employees, subcontractors, and their employees shall maintain the confidentiality of all information provided by the City or acquired by the Contractor in performance of this Agreement, except upon the prior written consent of the City Attorney, or an order entered by a court after having acquired jurisdiction over the City. Contractor shall immediately give to the City notice of any judicial proceeding seeking disclosure of such information. Contractor shall indemnify and hold harmless the City, its officials, agents, or employees from all loss or expense, including, but not limited to settlements, judgments, setoffs, attorneys' fees and costs resulting from Contractor's breach of this provision.

SECTION 33. In the event of a public records request to the City for the Licensed Program or Licensed Documentation, the City shall promptly provide a copy of such request to Contractor so that it has at least 7 days from Contractor's receipt of such request in which to seek an order restraining the City from disclosing the Licensed

Program and Documentation pursuant to such public records request. If Contractor does not obtain a restraining order within such period of time, the City may disclose the Licensed Program and Licensed Documentation pursuant to such public request as the City deems appropriate to comply with Arizona's Public Records Laws.

SECTION 34. Except as set forth elsewhere in the Agreement, for all purposes under this Agreement, except service of process, notice shall be given by the Contractor to the department head of the department for whom services are rendered and to the City Attorney's Office. Notice may be given by delivery or by depositing in the U.S. Mail, first class, postage prepaid.

SECTION 35. The provisions of paragraphs 5, 8, 9, 10, 13, 14, 21, 22, 24, 25, 26, 29, 31, 32, 33, and 34 and the provisions of any non-collusion affidavit, shall survive, notwithstanding the termination or invalidity of this Agreement for any reason.

SECTION 36. This is the entire Contract between the parties. If any portion(s) of this Contract is (are) later found to be invalid or unenforceable, such portion(s) shall be null and void and without any effect on the rest of the Contract which shall continue in full force and effect.

SECTION 37. This Agreement shall be subject to all laws, rules, and regulations of the United States of America, the State of Arizona, and the City of Casa Grande.

SECTION 38. THIS CONTRACT SHALL BE VALID UPON EXECUTION BY THE PARTIES.

Dated this the _____ day of _____, 20____.

City of Casa Grande, an Arizona
municipal corporation. _____

By: _____
James V. Thompson,
City Manager

By: _____

Attest:

Remilie S. Miller, City Clerk MMC

Approved as to form:

Brett Wallace, City Attorney

SIGNING INSTRUCTION TO THE CONTRACTOR:

SIGNATURE MUST BE FROM A CORPORATE OFFICER OR OWNER. IN THE EVENT THAT ANOTHER INDIVIDUAL IS SIGNING, A LETTER OF AUTHORIZATION FROM A CORPORATE OFFICER OR OWNER INDICATING SIGNATORY AUTHORITY FOR THAT INDIVIDUAL MUST BE PROVIDED.

PERFORMANCE BOND

STATUTORY PERFORMANCE BOND PURSUANT TO TITLE 34,
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the contract amount)

KNOW ALL MEN BY THESE PREMISES:

That, _____ (hereinafter called the Principal), as Principal, and _____, a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____, (hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Casa Grande, State of Arizona (hereinafter call the Obligee) in the amount of _____ Dollars (\$_____), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal intends to enter into a certain written contract with the Obligee for the construction of the "2013 Mill and Overlay Improvement Project" which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, therefore, the condition of this 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 to the surety, and during the life of any guaranty 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 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.

IN WITNESS WHEREOF, we have hereunto set our hands, and seals on this _____ day of, _____ 20____.

CONTRACTOR:

SURETY:

Name: _____

Name: _____

Address: _____

Address: _____

Tel. No.: _____

Tel. No.: _____

By: _____

By: _____

Attorney-in-Fact

NOTE: This bond must be executed by both parties, and in the case of a corporation, with corporate seal affixed. All signatures must be acknowledged. (Attach acknowledgments.) The attorney-in-fact for the bonding company must be registered in at least one county in the State of Arizona.

LABOR AND MATERIALS BOND

STATUTORY PAYMENT BOND PURSUANT TO TITLE 34,
CHAPTER 2, ARTICLE 2 OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the contract amount)

KNOW ALL MEN BY THESE PREMISES:

That, _____ (hereinafter called the Principal), and
_____,
a corporation organized and existing under the laws of the State of _____, with its principal
office in the City of _____, (hereinafter called the Surety), as Surety, are held
and firmly bound unto the City of Casa Grande, State of Arizona (hereinafter call the Obligee) in the
amount of _____ Dollars
(\$_____), for the payment whereof, the said Principal and Surety bind themselves and their
heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal intends to enter into a certain written contract with the Obligee for the
construction of the "2013 Mill and Overlay Improvement Project" which contract is hereby referred to
and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, therefore, the condition of this 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 they were copied at length in this agreement.

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

IN WITNESS WHEREOF, we have hereunto set our hands, and seals on this _____ day of _____
_____, 20____.

CONTRACTOR:

SURETY:

Name: _____

Name: _____

Address: _____

Address: _____

Tel. No.: _____

Tel. No.: _____

By: _____

By: _____

Attorney-in-Fact

**NOTE: This bond must be executed by both parties, and in the case of a corporation, with corporate seal
affixed. All signatures must be acknowledged. (Attach acknowledgments.) The Attorney-in-fact for the
bonding company must be registered in at least one county in the State of Arizona.**

**CONSENT OF SURETY TO FINAL PAYMENT AND
FULL RELEASE OF CONTRACT RETAINAGE OR SUBSTITUTE SECURITIES**

The undersigned Surety (the "Surety"), having provided the City of Casa Grande the City with a payment bond for the payment of labor and material provided to the Contractor _____ (the "Contractor") in connection with **Project No.** _____ (the "Project") consents to final payment and full release of all retainage to Contractor held by City in connection with the Project.

Surety further releases City from all claims, past, present, future, known or unknown which it may assert or could have asserted against City as a result of City's final payment and release of the retainage held in connection with the Project.

This release is only intended to relieve City of any liability or responsibility in connection with final payment and full release of retainage to the Contractor in connection with the Project and shall in no way be construed to relieve Surety of any obligation under the payment bond issued for the Project.

IN WITNESS WHEREOF, the Surety has executed this instrument this _____ day of _____, 20____.

SURETY

Authorized Representative

Title

STATE OF _____)
) ss:
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 20____
by _____, on behalf of
_____.

Notary Public

My Commission Expires: _____

**ATTACHMENT 1
DEFINITION OF TERMS**

Addendum	Written or graphic instrument(s) issued in writing, after advertisement, but prior to the opening of the Bids, which alter, change, clarify, correct, modify or revise the Contract Documents.
Bid	The offer of the bidder, submitted on the prescribed form(s) to perform the Work and/or furnish material(s) and/or furnish labor and/or furnish equipment at the price(s) quoted.
Bidder's Proposal:	The offer of a bidder, on the prescribed form, to perform the work and to furnish the labor and materials at the prices quoted.
Bidders Bond	The security furnished with a bid to guarantee that the bidder shall enter into the contract if the bid is accepted.
Change Order	A written order, issued and signed by the City Department Director or designee to the Contractor, directing addition(s), deletion(s) or revision(s) in the Work, adjustment in Contract Price(s) or Contract Time, said Change Order(s) is/are issued after the execution of the Contract, all as incidental to the prosecution of the Work as advertised.
Contract	The written agreement between the City and the contractor setting forth the obligations of the parties thereunder including, but not limited to, the performance of the work, the furnishing of labor and materials and the basis of payment.
Liquidated Damages	The monetary damages amount that the parties to the Contract shall be paid to the City by the Contractor for each day the work remains incomplete after the scheduled completion date. The Liquidated Damages amount will be set in accordance except as otherwise required in the project specifications, shall be in accordance with all applicable Uniform Standard Details for Public Works Construction and the Uniform Standard Specifications for Public Works Construction as published by Maricopa Association of Governments (MAG), latest edition, et seq.
Notice Inviting Bids	The public announcement, as required by law, inviting Bids for work to be performed and/or materials to be furnished and/or labor to be furnished and/or equipment to be furnished.
Payment Bond	The security provided by the contractor solely for the protection of claimants supplying labor and materials to the contractor or to subcontractors of the contractor.
Performance Bond	The security provided by the contractor solely for the protection of the contracting agency and conditioned upon the faithful performance of the contract in accordance with the plans, specifications and conditions thereof.
Project Manager	The City designee in direct charge of the Project and responsible for the completion of the project according to the provisions of the Contract.
Project Plans	Specific details and dimensions peculiar to the work which are supplemented by the standard details insofar as they may apply.
Reference Specifications	Any specifications referred to in the Contract Documents other than Standard requirements peculiar to an individual project.
Special Provisions	Additions and revisions to the Standard Specifications covering conditions and Specifications, including, but not limited to: bulletins, standards, rules, methods of analysis or tests, codes, other agency specifications, engineering societies, or industrial associations

referred to in the Contract Documents. These refer to the latest edition, including amendments in effect and published at the time of advertising the Project or issuing the permit, unless otherwise specifically referred to by edition, volume or date.

- Standard Plans** The latest edition of the Uniform Standard Details for Public Works Construction and the Uniform Standard Specifications for Public Works Construction as published by Maricopa Association of Governments (MAG) including all SUPPLEMENTAL AMENDMENTS, as prepared by a joint effort of the Departments of Transportation of the Maricopa Association of Governments (MAG) where appropriate.
- Standard Specifications** The latest edition of the Uniform Standard Details for Public Works Construction and the Uniform Standard Specifications for Public Works Construction as published by Maricopa Association of Governments (MAG) including all SUPPLEMENTAL AMENDMENTS, as prepared by a joint effort of the Departments of Transportation of the Maricopa Association of Governments (MAG) where appropriate.
- Waterworks Standards** The latest edition of the Uniform Standard Details for Public Works Construction and the Uniform Standard Specifications for Public Works Construction as published by Maricopa Association of Governments (MAG) including all SUPPLEMENTAL AMENDMENTS, as prepared by a joint effort of the Departments of Transportation of the Maricopa Association of Governments (MAG) where appropriate, unless modified within the Plans and/or the Standard Notes and Detail Plan Sheet for the City of Casa Grande and Arizona Water Company Details.

PERFORMANCE BOND

STATUTORY PERFORMANCE BOND PURSUANT TO TITLE 34,
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the contract amount)

KNOW ALL MEN BY THESE PREMISES:

That, _____ (hereinafter called the Principal), as
Principal, _____ and
_____, a
corporation organized and existing under the laws of the State of _____, with its
principal office in the City of _____, (hereinafter called the Surety),
as Surety, are held and firmly bound unto the City of Casa Grande, State of Arizona (hereinafter
call the Obligee) in the amount of
_____ Dollars
(\$_____), for the payment whereof, the said Principal and Surety bind themselves,
and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by
these presents.

WHEREAS, the Principal intends to enter into a certain written contract with the Obligee for the
construction of the City of Casa Grande “**LANDFILL CULVERT HEADWALLS**” 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 THIS OBLIGATION IS SUCH, that if the
said Principal is awarded said contract and shall faithfully perform and fulfill all the
undertakings, covenants, terms, conditions and agreements of said contract during the original
term of said contract and any extension thereof, with or without notice to the Surety, and during
the life of any guaranty required under the contract, and shall also perform and fulfill all the
undertakings, covenants, terms, conditions, and agreements of any and all duly authorized
modifications of said contract that may hereafter be made, notice of which modifications to the
Surety being hereby waived; then the above obligation shall be void; otherwise to remain in full
force and effect.

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

The prevailing party in a suit on this bond shall be entitled to such reasonable attorney's fees as may be fixed by a judge of the court.

WITNESS our hands this _____ day of _____, 2014

PRINCIPAL SEAL

AGENCY OF RECORD

BY

SURETY SEAL

AGENCY ADDRESS

BY

LABOR AND MATERIALS BOND

STATUTORY PAYMENT BOND PURSUANT TO TITLE 34,
CHAPTER 2, ARTICLE 2 OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the contract amount)

KNOW ALL MEN BY THESE PREMISES:

That, _____ (hereinafter called the Principal),
and

_____,
a corporation organized and existing under the laws of the State of _____, with its
principal office in the City of _____, (hereinafter called the Surety),
as Surety, are held and firmly bound unto the City of Casa Grande, State of Arizona (hereinafter
call the Obligee) in the amount of
_____ Dollars
(\$ _____), for the payment whereof, the said Principal and Surety bind themselves
and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by
these presents.

WHEREAS, the Principal intends to enter into a certain written contract with the Obligee
for the construction of the City of Casa Grande “**Landfill Culvert Headwalls**” 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 THIS OBLIGATION IS SUCH, that if the
said Principal is awarded said contract and shall promptly pay all monies due to all persons
supplying labor or materials to him or his subCONTRACTORS in the prosecution of the work
provided for in said contract, then this obligation shall be void, otherwise to remain in full force
and effect.

PROVIDED, HOWEVER, that this bond having been required of the said Principal in
order to comply with the provisions of Title 34, Chapter 2, Article 2 of the Arizona Revised
Statutes, all rights and remedies on this bond shall inure solely to such persons and shall be
determined in accordance with the provisions, conditions and limitations of said Title, Chapter
and Article, to the same extent as if they were copies at length herein.

The prevailing party in a suit on this bond shall be entitled to such reasonable attorney's fees as may be fixed by a judge of the court.

WITNESS our hands this _____ day of _____, 2014.

PRINCIPAL SEAL

AGENCY OF RECORD

BY

SURETY SEAL

AGENCY ADDRESS

BY

TECHNICAL SPECIFICATION**LANDFILL CULVERT HEADWALLS****1.0 ABBREVIATED SCOPE OF WORK**

The project is a performance based construction contract in which any professional services required are to be considered incidental.

The work required under this project consists of but not limited to:

- Installation of culvert headwalls according to the site plan provided in their positions adjacent to the existing haul road.
- CONTRACTOR is to obtain any and all the permits required by either the City of Casa Grande (OWNER), County, or the State in order to perform the work described herein. The fees for such permits will be reimbursable by the OWNER.
- The CONTRACTOR shall provide all professional services required to finish this project.
- The CONTRACTOR shall provide all earthwork necessary for the construction of the headwalls, including excavation, backfill and compaction.
- The CONTRACTOR shall provide all labor and materials necessary to furnish and install all components of site improvements. CONTRACTOR is to provide two (2) complete and new constructed in-place culvert headwalls.
- The CONTRACTOR shall provide full-size (24" x 36") as-built drawings stamped by an Arizona Registered Professional Surveyor depicting as-built shots at locations as directed by the ENGINEER. The CONTRACTOR shall provide the OWNER with a CD containing electronic AutoCAD As-Built Drawing files.

2.0 CULVERT HEADWALLS

The CONTRACTOR shall construct in-place two (2) culvert headwalls per the Construction Drawings.

- 2.1 CONTRACTOR is to install the Culvert Headwalls in the location indicated on the attached site plan – location is to be relative to the existing double barrel CSP's and haul road. The Culvert Headwalls shall be field-fit per the direction of the ENGINEER.
- 2.2 CONTRACTOR shall install the new culvert headwalls per the plans and specifications on compacted subgrade as approved by the OWNER. Subgrade approval is required prior to beginning formwork.
- 2.3 Concrete test samples at time of the pour (two (2) test cylinders for each headwall) shall also be required and test results at seven (7) days and twenty-eight (28) days shall be documented. Subject to approval of the OWNER debris may be disposed of at the landfill at no cost to the CONTRACTOR.
- 2.4 The elevation of the Culvert Headwalls relative to the existing haul road shall be such that the elevation of the Culvert Headwalls shall be 2 feet above the existing haul road.

2.5 CONTRACTOR is to coordinate with landfill staff on project scheduling and operations issues.

3.0 MEASUREMENT AND PAYMENT

Measurement and payment for the system shall be in conformance with General Conditions of the Bid Form.

4.0 SUBMITTALS

Submit descriptive literature, including drawings of equipment that show materials of construction, weights, principal dimensions, and details.

5.0 EVALUATION AND SELECTION

The OWNER reserves the right to select any equipment which is deemed to be in its best interest.

6.0 WARRANTY

The CONTRACTOR constructing the Culvert Headwalls shall warrant his work to be of quality construction and free of defects for a One (1) year period. In the event a component fails to perform as specified, or is proven defective in service during the one (1) year guarantee period, the CONTRACTOR shall provide all replacement parts and/or repairs without any cost to the OWNER. The CONTRACTOR shall further provide, without cost, any such labor as may be required to replace, repair, or modify the structure.

7.0 SHOP DRAWINGS

The CONTRACTOR shall submit shop drawings of all equipment, appurtenance and connections proposed for or within the system or for any other equivalent system to the OWNER and ENGINEER for approval. The CONTRACTOR shall obtain OWNER approval prior to any manufacturing and/or installations. Shop drawings are to be prepared and sealed by the appropriate design professional(s) when so required. Work initiated prior to approval of shop drawings will not be approved nor paid for.

8.0 SITE IMPROVEMENTS

Any site improvements necessary to construct the headwalls are considered to be part of the work. The CONTRACTOR will not receive additional compensation for site work, excavation, compaction of subgrade, backfill of the headwalls, etc.

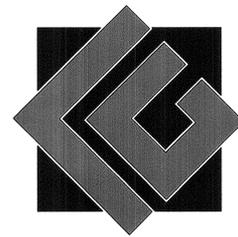
END OF SECTION

DRAWINGS

DRAWING 1	TITLE SHEET
DRAWING 2	SITE PLAN
DRAWING 3	DETAILS
DRAWING 4	DETAILS
DRAWING 5	SPECIFICATIONS

CITY OF CASA GRANDE

CASA GRANDE, ARIZONA



CITY OF
CASA GRANDE

2014 CASA GRANDE LANDFILL TWO NEW CULVERT HEADWALLS

MAYOR
BOB JACKSON

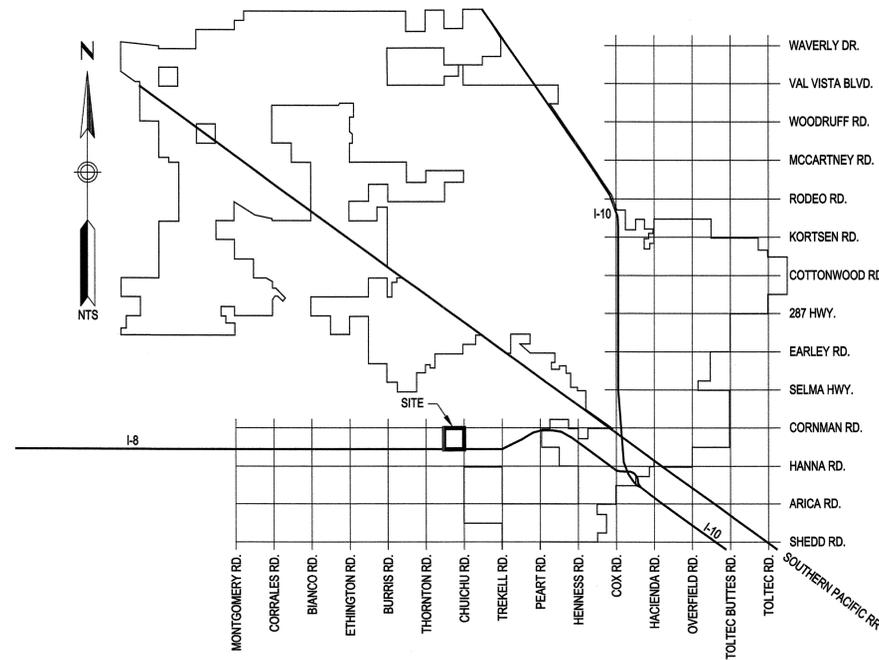
MAYOR PRO TEMPORE
LISA FITZGIBBONS

CITY COUNCIL
MATT HERMAN
MARY KORTSEN
KARL MONTOYA
DICK POWELL
RALPH VARELA

CITY MANAGER
JIM THOMPSON

CITY CLERK
REMY MILLER

CITY ATTORNEY
BRETT WALLACE



VICINITY MAP

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SITE PLAN
3	DETAILS
4	DETAILS
5	SPECIFICATIONS

CITY OF CASA GRANDE APPROVAL FOR CONSTRUCTION

APPROVAL RECOMMENDED:
DEVELOPMENT SERVICES ENGINEER _____ DATE _____

THESE PLANS APPROVED FOR CONSTRUCTION:
CITY ENGINEER _____ DATE _____

EXPIRATION DATE: _____

THE CITY APPROVES THESE PLANS IN CONCEPT ONLY.
THE CITY ACCEPTS NO RESPONSIBILITY FOR ERRORS OR OMISSIONS.

CITY OF CASA GRANDE
ENGINEERING DEPARTMENT
3181 N. LEAR AVENUE
CASA GRANDE, ARIZONA 85122 (520) 421-8625



DESIGNED: R.T.L.
DRAWN: R.T.L.
CHECKED: K.A.J.

NO.	DATE	DESCRIPTION

TWO NEW CULVERT HEADWALLS
FOR CITY OF CASA GRANDE LANDFILL
TITLE SHEET



100% DESIGN

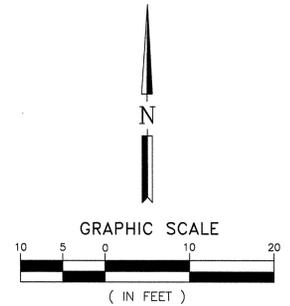
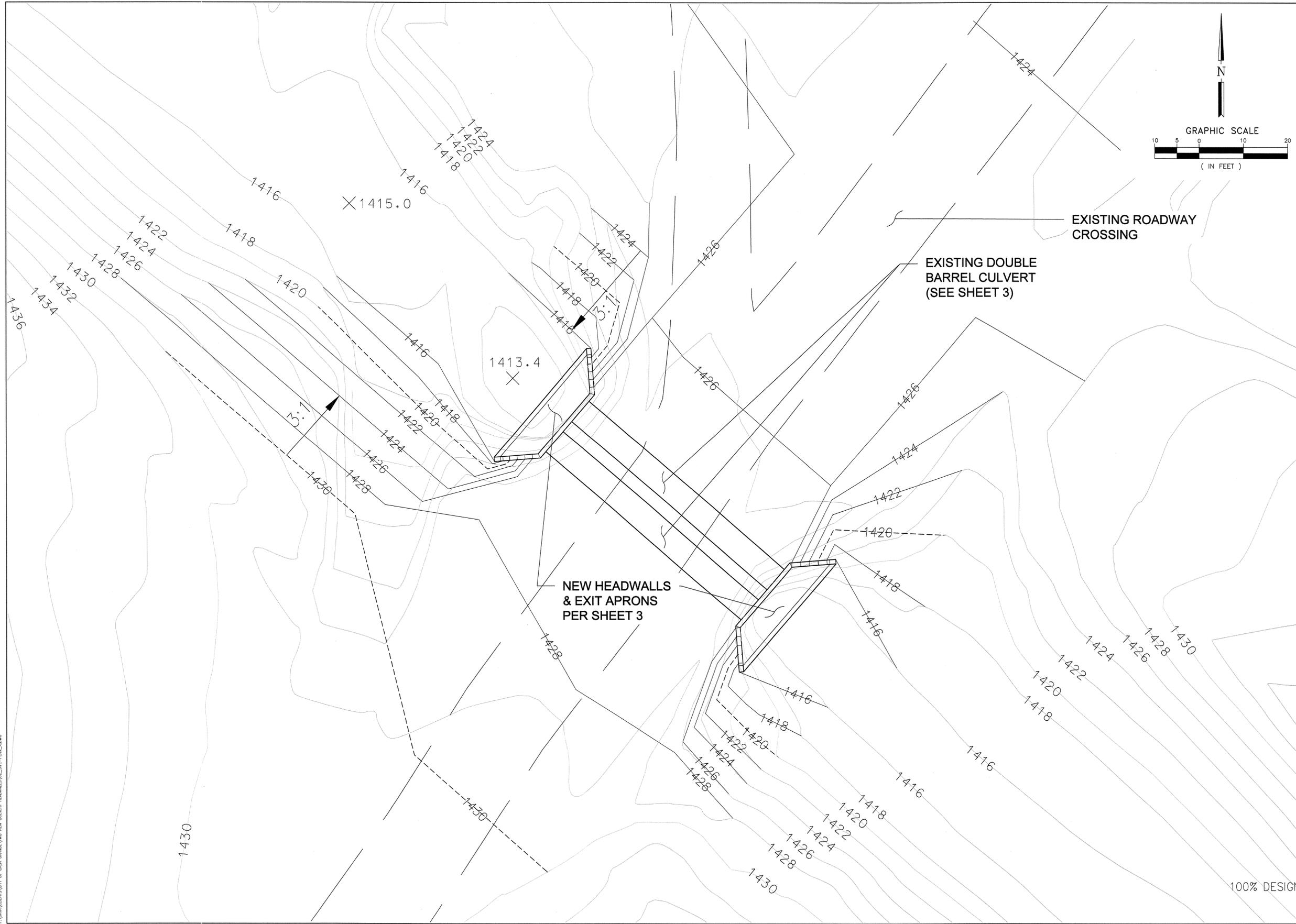


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REVISION DATE: FEBRUARY 2014
PLOTTING DATE: FEBRUARY 2014
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SHT. 1
OF 5

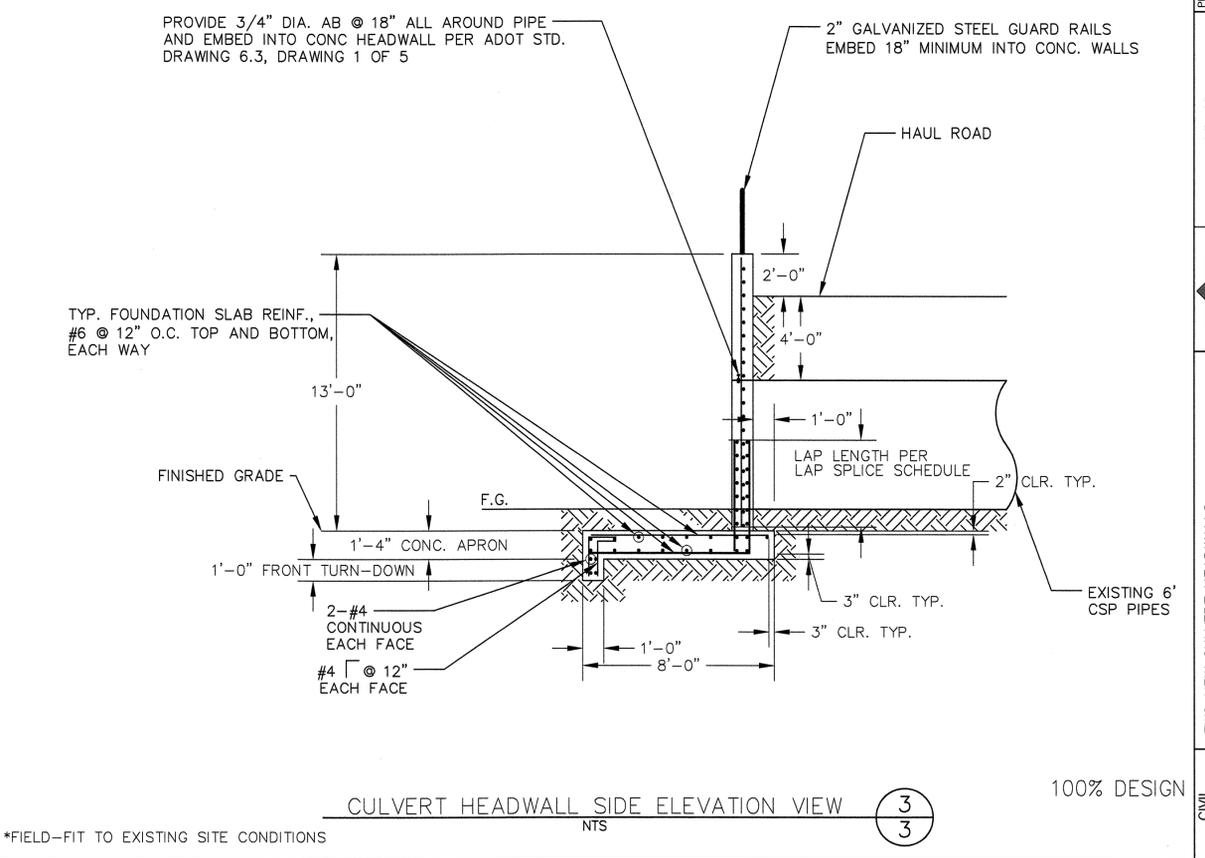
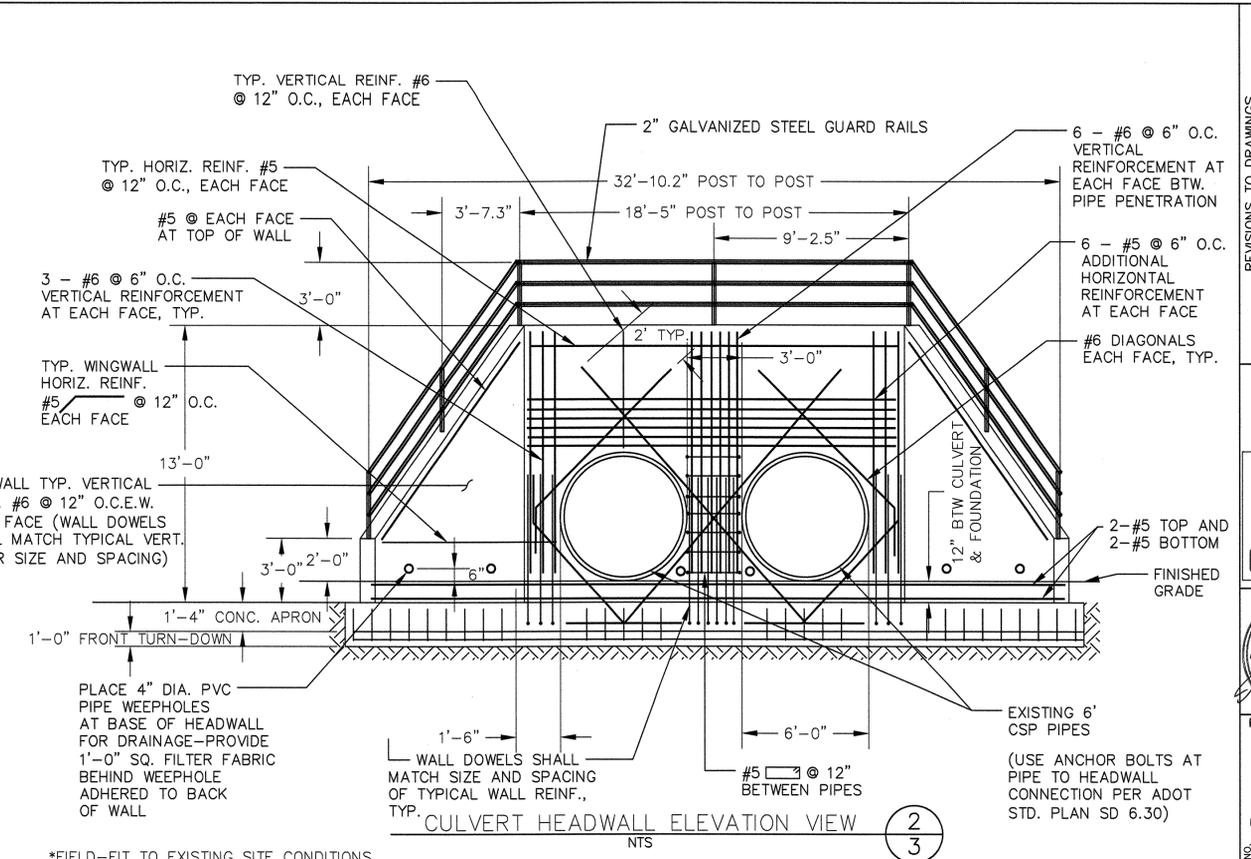
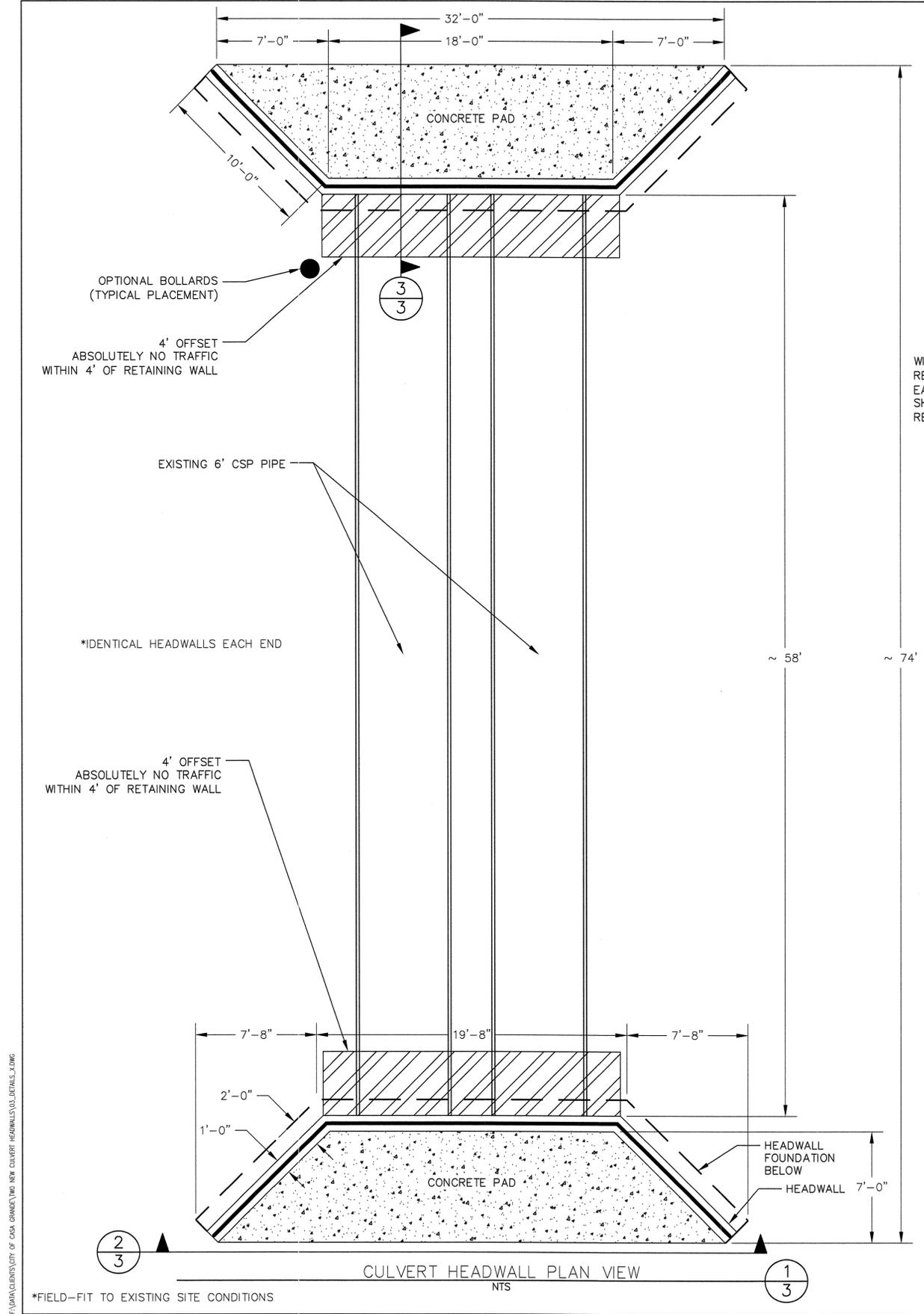
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CIVIL SHEET 2 OF 5 NO. 2 OF 5		CITY PROJECT NO. - DATE: FEBRUARY 2014	
TWO NEW CULVERT HEADWALLS FOR CITY OF CASA GRANDE LANDFILL SITE PLAN			
CITY OF CASA GRANDE			
CITY OF CASA GRANDE PUBLIC WORKS/ENGINEERING 3181 N. LEAR AVENUE CASA GRANDE, ARIZONA 85122 (520) 421-8625			
PROJECT NO. - FILE NAME: <small>as per name</small> PLOT DATE: 02-2014 DRAWN BY: R.T.L. DESIGNED BY: R.T.L. CHECKED BY: K.A.J.			
TETRA TECH BAS TETRA TECH BAS, INC. CONSULTING CIVIL ENGINEERS 3822 EAST UNIVERSITY DRIVE, SUITE 2 PHOENIX, ARIZONA 85034 (602) 281-0336			
REVISIONS TO DRAWINGS		NO. DESCRIPTION REV. BY (NO. BY) DATE	

100% DESIGN



REVISIONS TO DRAWINGS		REV. BY	DATE
NO.	DESCRIPTION		

PROJECT NO.	FILE NAME	DATE	DRAWN BY	DESIGNED BY	CHECKED BY
		02-2014	R.T.L.	R.T.L.	K.A.J.

CITY OF CASA GRANDE, ARIZONA PUBLIC WORKS/ENGINEERING	CITY OF CASA GRANDE
3181 N. LEAR AVENUE CASA GRANDE, ARIZONA 85122 (520) 421-8625	

CIVIL	TWO NEW CULVERT HEADWALLS FOR CITY OF CASA GRANDE LANDFILL	DATE	FEBRUARY 2014
SHEET 3	DETAILS		
NO. 3	OF 5		
REV. NO. 0			

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SPECIAL INSPECTIONS REQUIRED:

SPECIAL INSPECTIONS REQUIRED FOR THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH I.B.C. CHAPTER 17. SPECIAL INSPECTIONS SHALL BE PERFORMED BY AN APPROVED INSPECTION AGENCY U.N.O. EMPLOYED BY THE OWNER.

THE SPECIAL INSPECTOR SHALL BE CERTIFIED BY THE INTERNATIONAL CODE COUNCIL (I.C.C.) TO PERFORM INSPECTION FOR THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.

THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND/OR THE ENGINEER. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. THEN, IF UNCORRECTED, TO THE STRUCTURAL ENGINEER AND TO THE BUILDING OFFICIAL.

THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THIS CODE.

IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE AT LEAST 48 HOURS ADVANCE NOTICE TO THE OWNER/OWNER'S REPRESENTATIVE WHEN HIS WORK IS READY FOR ANY REQUIRED SPECIAL INSPECTIONS.

SHOP INSPECTION OF STEEL CONSTRUCTION IS NOT REQUIRED WHEN THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVAL SHALL BE BASED UPON REVIEW OF THE FABRICATOR'S WRITTEN PROCEDURAL AND QUALITY CONTROL MANUALS AND PERIODIC AUDITING OF FABRICATION PRACTICES BY AN APPROVED SPECIAL INSPECTION AGENCY. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

CONTRACTOR RESPONSIBILITY:

EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND- OR SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND- OR SEISMIC-RESISTING COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION.

SPECIAL INSPECTION SHALL BE PROVIDED FOR THE FOLLOWING TYPES OF WORK PERFORMED IN THE FIELD, OR NOT PERFORMED IN AN APPROVED FABRICATION SHOP AS DEFINED ABOVE, UNLESS NOTED AS "N/A".

Table with 3 columns: SPECIAL INSPECTIONS REQUIRED (YES/NO), CONT, PERIODIC, N/A

REQUIRED VERIFICATION AND INSPECTION OF SOILS (TO BE PERFORMED BY A LICENSED GEOTECHNICAL ENGINEER):

- 1. VERIFY SUBGRADE MATERIALS BELOW HEADWALL FOUNDATIONS ARE COMPACTED AND ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS
4. PERFORM CLASSIFICATION AND TESTING OF NATIVE SOILS TO VERIFY ANY SOIL PROPERTIES ASSUMED AS PART OF DESIGN FOR THIS PROJECT IN THE ABSENCE OF A SOILS REPORT (SEE SOIL PROPERTIES ON THIS DRAWING). THIS TESTING SHALL BE PERFORMED IN ADVANCE OF ANY CONSTRUCTION. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IF THE ASSUMED VALUES ARE NOT VALID.
5. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF FILL BEHIND THE HEADWALLS
6. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY

CONCRETE CONSTRUCTION:

- 1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH I.B.C. TABLE 1704.3, ITEM 5B
3. INSPECTION OF BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED.
4. INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE.
5. VERIFYING USE OF REQUIRED DESIGN MIX
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TEST, AND DETERMINE THE TEMPERATURE OF THE CONCRETE
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES
9. INSPECTION OF PRESTRESSED CONCRETE:
A. APPLICATION OF PRESTRESSING FORCES
B. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC-FORCE-RESISTING SYSTEM
10. ERECTION OF PRECAST CONCRETE MEMBERS
11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF CONCRETE MEMBER BEING FORMED

DEFERRED SUBMITTALS/CERTIFICATIONS:

- 1. OFF-SITE FABRICATION: FABRICATORS SHALL BE CITY, COUNTY AND/OR C.B.C. APPROVED FABRICATORS. FABRICATORS FOR ALL OFFSITE FABRICATION OF THE ITEMS LISTED BELOW:
A. TRUSSES
B. GLU-LAMINATED MEMBERS
C. PRECAST CONCRETE
D. STRUCTURAL STEEL (MILL REPORTS AND IDENTIFICATION OF STEEL, AFFIDAVIT OF COMPLIANCE)
E. OTHER:

- A. TRUSSES
B. GLU-LAMINATED MEMBERS
C. PRECAST CONCRETE
D. STRUCTURAL STEEL (MILL REPORTS AND IDENTIFICATION OF STEEL, AFFIDAVIT OF COMPLIANCE)
E. OTHER:

- 2. DEFERRED SUBMITTALS: SUBMITTAL DOCUMENTS FOR THE DEFERRED SUBMITTAL ITEMS LISTED BELOW SHALL BE DESIGNED BY A LICENSED PE OR SE AND SUBMITTED BY THE CONTRACTOR TO THE BUILDING DEPARTMENT/APPROVAL AGENCY AND STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

- A. PREFABRICATED TRUSSES
B. PRECAST VAULTS
C. CONCRETE MIX
D. OTHER: PRECAST CONC. PILES

REINFORCING STEEL:

- 1. REINFORCING STEEL SHALL BE DEFORMED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A-615, (DEFORMATIONS SHALL BE IN ACCORDANCE WITH ASTM A-305) AS FOLLOWS:

FOR REINFORCED CONCRETE, GR 60: (#4 BARS AND LARGER) GR 40: (#3 BARS)

THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS SHALL NOT EXCEED THE SPECIFIED YIELD STRENGTH BY MORE THAN 18,000 psi (RETESTS SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3000psi) AND THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRESS TO ACTUAL YIELD STRENGTH SHALL NOT BE LESS THAN 1.25

- 2. WWF SHALL CONFORM TO ASTM A-82 AND ASTM A-185. Lap 1 1/2 SPACES (9" MIN.)
3. DETAILING, FABRICATION, AND ERECTION OF REINFORCING BARS SHALL CONFORM TO A.C.I. "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES."
4. MIN. COVER FOR CAST IN PLACE CONCRETE SHALL BE AS FOLLOWS:
a. CAST AGAINST EARTH
b. CAST AGAINST EARTH FORM BELOW GRADE
c. FORMED SLABS (#11 BAR & SMALLER)
d. SLABS ON GRADE (FROM TOP OF SLAB)
e. COLUMNS AND BEAMS (MAIN BARS)
f. WALLS EXPOSED TO WEATHER (#6 - #18 BARS)
g. NOT EXPOSED TO WEATHER (#11 & SMALLER)

- 5. BARS SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIAL LIKELY TO IMPAIR BOND. BEND SHALL BE MADE COLD.
6. PRIOR TO PLACING OF CONCRETE, REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION.
7. WHEN WELDING OF REINFORCING BARS IS REQUIRED, IN ADDITION TO THE REQUIREMENTS OF ASTM A-615, A REPORT OF MATERIAL PROPERTIES SHALL BE PROVIDED BY THE REINFORCING MANUFACTURER TO VERIFY THAT MATERIAL PROPERTIES ARE THOSE NECESSARY FOR CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN AWS D1.4, "STRUCTURAL WELDING CODE - REINFORCING STEEL", IN LIEU OF SUPPLYING A SUPPLEMENTAL REPORT, BARS CONFORMING TO ASTM A-706 MAY BE USED. E90XX ELECTRODES SHALL BE USED TO WELD REINFORCING BARS.
8. WHEN REQUIRED, CONTINUOUS INSPECTION OF CONCRETE SHALL INCLUDE INSPECTION OF REINFORCING STEEL PER UBC 1701.5.4 & 1701.5.7, RESPECTIVELY. INSPECTION SHALL BE SCHEDULED SO THAT PLACEMENT OF REINFORCING STEEL, CONDUIT, SLEEVES, AND EMBEDDED ITEMS MAY BE CORRECTED PRIOR TO PLACEMENT OF OVERLYING GRIDS OF REINFORCING STEEL.

GENERAL:

- 1. GENERAL NOTES AND TYPICAL DETAILS SHALL APPLY TO ALL PARTS OF THE JOB EXCEPT WHERE THEY MAY CONFLICT WITH DETAILS AND NOTES ON OTHER SHEETS. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED SUBJECT TO REVIEW BY THE ENGINEER.
2. WORK SHALL CONFORM TO THE REQUIREMENTS, AS AMENDED TO DATE, OF THE LATEST EDITION OF THE 2006 ICC INTERNATIONAL BUILDING CODE, IFC, AND ALL OTHER LOCAL, STATE AND FEDERAL REGULATIONS. OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK INVOLVED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
4. ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS THEY SHALL BE REPORTED TO THE ENGINEER SO THAT THE PROPER REVISIONS MAY BE MADE. MODIFICATIONS OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.
5. THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, INCLUDING, BUT NOT LIMITED TO BRACING, TEMPORARY SUPPORTS, AND SHORING. OBSERVATION VISITS TO THE SITE BY FIELD REPRESENTATIVES OF TETRA TECH BAS SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTED MEASURES OF THE CONSTRUCTION PROCEDURES. ANY SUPPORT SERVICES PERFORMED BY TETRA TECH BAS DURING THE CONSTRUCTION SHALL BE DISTINGUISHED FROM CONSTRUCTION AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY TETRA TECH BAS, WHETHER OF MATERIAL OR WORK, ARE FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DOCUMENTS, BUT DO NOT GUARANTEE CONTRACTORS PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.
6. ASTM DESIGNATIONS AND ALL STANDARDS REFER TO THE LATEST AMENDMENTS.
7. SAFETY: CONFORM TO APPLICABLE OSHA CONSTRUCTION SAFETY REGULATIONS FOR ALL WORK PERFORMED DURING CONSTRUCTION. JOB SITE SAFETY IS STRICTLY THE RESPONSIBILITY OF THE CONTRACTOR AND NOT THE ARCHITECT/ENGINEER OR OWNER.
8. HAZARDOUS MATERIALS: UNLESS OTHERWISE PROVIDED, THE ENGINEER AND HIS CONSULTANTS SHALL HAVE NO RESPONSIBILITY FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL OR DISPOSAL OF OR EXPOSURE OF PERSONS TO HAZARDOUS MATERIALS IN ANY FORM AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO ASBESTOS, ASBESTOS PRODUCTS, POLYCHLORINATED BIPHENYL (PCB) OR OTHER TOXIC SUBSTANCES.

FOUNDATIONS:

- 1. FILL AND BACKFILL SHALL BE COMPACTED TO 90% OF MAX. DENSITY IN ACCORDANCE WITH ASTM TEST METHOD D-1557-94. FLOODING NOT PERMITTED.
2. FILL AND FOUNDATION EXCAVATION SHALL BE OBSERVED AND APPROVED BY THE PROJECT SOILS ENGINEER PRIOR TO PLACING CONCRETE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING, ETC. NECESSARY TO SUPPORT CUT AND/OR FILL BANKS DURING EXCAVATION, FORMING AND PLACEMENT OF CONCRETE.
4. ALL FILL AND BACKFILL MATERIAL SHALL BE APPROVED BY THE PROJECT SOILS ENGINEER PRIOR TO PLACEMENT.

DESIGN LOADS: PER 2006 ICC INTERNATIONAL BUILDING CODE

IMPORTANCE FACTORS:

SEISMIC, I = 1.0
SEISMIC, II = 1.0
WIND, Iw = 1.0

SEISMIC:

ADOT SEISMIC GROUND ACCELERATION - 90 PERCENT PROBABILITY OF NOT EXCEEDING A SEISMIC GROUND ACCELERATION OF 0.07G WITHIN 250 YEARS
ZONE: 1
TYPE: B @ 50 km
SOIL PROFILE TYPE: Se
NEAR SOURCE FACTOR, Ns = 1.0
NEAR SOURCE FACTOR, Nv = 1.0
SEISMIC COEFFICIENT, Cs = 0.36
SEISMIC COEFFICIENT, Cv = 0.26
R = 4.5 MASONRY SHEAR WALLS

RETAINING WALLS:

- 1. BACKFILL BEHIND A RETAINING WALL SHALL NOT BE PLACED UNTIL THE CONCRETE OR MASONRY OBTAINS ITS DESIGN STRENGTH AND ALL MOISTURE BARRIERS AND DRAINS ARE IN PLACE. SOILS SHALL BE PLACED AND COMPACTED IN EQUAL LIFTS ON BOTH SIDES OF THE WALL UNTIL THE LOWER ELEVATION IS REACHED. USE LIGHTWEIGHT TAMPERS BEHIND WALLS AT HIGHER ELEVATION.
2. RETAINING WALLS HAVING STRUCTURAL SUPPORT AT TOP OF WALL SHALL NOT BE BACKFILLED UNTIL THE CONCRETE OR MASONRY OBTAINS ITS DESIGN STRENGTH AND UNTIL ALL REQUIRED BRACING AND SHORING IS IN PLACE. BRACING AND SHORING SHALL NOT BE REMOVED UNTIL THE STRUCTURAL SLAB HAS CURED FOR A 7 DAY PERIOD OR PLYWOOD SHEATHING OVER WOOD JOISTS HAS BEEN STRUCTURALLY NAILED.
3. NOTIFY STRUCTURAL ENGINEER IF SUPERIMPOSED LOADING FROM EXISTING ADJACENT FOUNDATIONS (WITHIN A DISTANCE DEFINED BY A 45° IMAGINARY LINE PROJECTED UPWARD FROM TOP OF NEW FOOTINGS) IS PRESENT.
4. SEE ARCHITECTURAL AND/OR CIVIL DRAWING FOR WATERPROOFING, DAMP PROOFING AND BACKFILL DRAINAGE DETAILS. BACKFILL SHALL NOT BE PLACED UNTIL ALL SUCH WORK IS COMPLETED.

CONCRETE:

- 1. THE MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE AS FOLLOWS:
Fc = 4000 psi - 4 TEST CYLINDERS PER HEADWALL SHALL BE CAST & TESTED @ 7 DAYS & 28 DAYS

- 2. ALL CONCRETE UNLESS NOTED OTHERWISE SHALL BE REGULAR WEIGHT TYPE (150 PCF). AGGREGATES SHALL CONFORM TO ASTM C-33 WITH PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN .05% (MAXIMUM SIZE).
3. CEMENT SHALL CONFORM TO ASTM C-150 (TYPE II) UNLESS NOTED OTHERWISE ON THE DRAWINGS.
4. CONCRETE MIX DESIGN SHALL BE PREPARED BY AN APPROVED TESTING LABORATORY AND SHALL BE STAMPED AND SIGNED BY A REGISTERED ENGINEER, IN THE STATE OF ARIZONA. MIX DESIGN SHALL THEN BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW. THE USE OF A POLYMER BASED WATER REDUCING ADMIXTURE IS OPTIONAL, BUT IF USED, SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

MIX DESIGN REQUIREMENTS: DESIGN MIXES TO PROVIDE NORMAL WEIGHT CONCRETE WITH THE FOLLOWING REQUIREMENTS:

Table with 4 columns: STRENGTH Fc (28 DAYS), W/C RATIO (NON-AIR ENTRAINED), W/C RATIO (AIR ENTRAINED), SLUMP. Values: 4000 psi, 0.44, 0.35, 3" ± 1"

FLY ASH SHALL BE A MINIMUM OF 15 %, MAXIMUM OF 25%, OF THE TOTAL CEMENTITIOUS MATERIAL OF ALL MIX DESIGNS FOR CONCRETE ≥ 4000 P.S.I.. FLY ASH WITH THESE SAME LIMITS MAY ALSO BE USED IN ANY OTHER MIX DESIGN FOR CONCRETE STRENGTH < 4000 P.S.I..

FLY ASH SHALL CONFORM TO ASTM C-618, CLASS F, WITH MAXIMUM LOSS OF IGNITION (L.O.I.) TO BE 3%.

MAXIMUM ALLOWABLE WATER-TO-CEMENT (w/c) RATIO SHALL INCLUDE THE TOTAL WEIGHT OF CEMENT AND FLY ASH.

- 5. CONCRETE SHALL BE CURED AND PROTECTED IN ACCORDANCE WITH ACI 301, CHAPTER 12.
6. CONCRETE SHALL NOT FREE FALL MORE THAN TEN FEET. USE TREMIE OR PUMP.
7. LOCATION OF CONSTRUCTION JOINTS AND OTHER TYPES OF JOINTS, OTHER THAN THOSE SPECIFIED OR DETAILED, SHALL BE APPROVED BY THE ENGINEER BEFORE PLACEMENT OF CONCRETE.
8. ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED BY SANDBLASTING, THIS INCLUDED SANDBLASTING CONCRETE SURFACE AREA FOR BASEPLATES, EQUIPMENT PADS, AND ANY AREA THAT RECEIVES A GROUT PAD. CONSTRUCTION JOINTS INCLUDES ALL CONCRETE TO CONCRETE AND ALL GROUT TO CONCRETE SURFACE INTERFACES. ALL VERTICAL JOINTS SHALL BE THOROUGHLY WETTED AND BRUSHED WITH A COAT OF NEAT CEMENT IMMEDIATELY BEFORE PLACING NEW CONCRETE.
9. PRIOR TO PLACING CONCRETE, REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION.
10. SLEEVES NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL BE LOCATED BY THE TRADES INVOLVED AND SHALL BE REVIEWED BY THE ENGINEER BEFORE THE CONCRETE IS PLACED. CHECK WITH ALL TRADES TO INSURE PROPER PLACEMENT OF OPENINGS, SLEEVES, CURBS, CONDUITS, ETC., RELATED TO THE WORK. PIPES, CONDUITS OR DUCTS MAY PASS THROUGH STRUCTURAL CONCRETE IN EMBEDDED SLEEVES BUT SHALL NOT BE EMBEDDED IN STRUCTURAL SLABS, WALLS, CONTINUOUS FOOTINGS, GRADE BEAMS, SPEED FOOTINGS, ETC. UNLESS SPECIFICALLY APPROVED BY THE ENGINEER. THE SPREAD FOOTINGS MAY BE LOWERED TO ALLOW THE PASSAGE OF PIPES, CONDUITS OR DUCTS THROUGH NON STRUCTURAL SLABS. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ELEVATIONS OF ALL FOUNDATIONS, COORDINATING WORK OF ALL TRADES PRIOR TO ANY PLACEMENT OF CONCRETE AND SHALL NOTIFY THE ENGINEER OF FIELD MODIFICATIONS.
11. ALL CONCRETE SHALL BE CONTINUOUSLY INSPECTED BY A QUALIFIED INSPECTOR DURING THE TAKING OF TEST SPECIMENS AND WHILE BEING PLACED PER UBC 1701.5.1, U.N.O.
12. SUPERIMPOSED LOADS SHALL NOT BE APPLIED TO ELEVATED STRUCTURAL CONCRETE MEMBERS PRIOR TO 7 DAYS MINIMUM AFTER CONCRETE PLACEMENT AND UNTIL 28 DAY STRENGTH HAS BEEN REACHED. SHORING SHALL REMAIN IN PLACE UNTIL CONCRETE HAS REACHED DESIGN STRENGTH. RESHORING SHALL REMAIN IN PLACE 28 DAYS MINIMUM. AT NO TIME DURING THE RESHORING PROCESS SHALL CONCRETE MEMBER BE UNSUPPORTED
13. PROVIDE 1/4" CHAMFER AT EXPOSED EDGES OF CONCRETE BEAMS AND COLUMNS AND VISIBLE EXTERIOR CONSTRUCTION JOINTS, U.N.O.
14. NON-SHRINK GROUT: SHALL CONFORM TO ASTM C-476. MIN Fc = 2000 P.S.I. AT 28 DAYS. MIX: 1 PART CEMENT, 1/10 PART HYDRATED LIME OR LIME PUTTY, 3 PARTS SAND, 2 PARTS PEA GRAVEL (BY VOLUME). TO BE OF FLUID CONSISTENCY.
15. CONCRETE FLOOR AND SLAB ON GRADE CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF ACI 302, "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION". FLATNESS / LEVELNESS SHALL CONFORM TO THE REQUIREMENTS OF ASTM E1155 PER THE FOLLOWING RECOMMENDED VALUES:

Table with 3 columns: AREA USE, MINIMUM BUILDING/FLOOR FLATNESS F - NUMBER (FF), MINIMUM LEVELNESS F - NUMBER (FL). Values: AISLES IN HIGH BAY WAREHOUSES, AIR PALLET AREAS, SKATING RINKS, STUDIOS (100, 50); FORK TRUCK AISLES, OFFICE AREA, FURNITURE DISPLAY AREAS (30, 25); PEDESTRIAN AISLES, MANUFACTURING AREAS, PLAZAS (20, 17); FLOORS UNDER V.A.T., EPOXY TOPPING, PAINT OR CARPETING (20, 17); FLOORS UNDER CONCRETE TOPPING (BONDED & UNBOUND), CERAMIC TILE, SAND BED, TERRAZZO (15, 13)

Table with 2 columns: NO., DESCRIPTION, REV. BY, DATE

TETRA TECH BAS CONSULTING CIVIL & STRUCTURAL ENGINEERS 3823 EAST UNIVERSITY DRIVE, SUITE 2 PHOENIX, ARIZONA 85034 (602) 267-0336



PROJECT NO. 21-15 FILE NAME: 02-2014 PLOT DATE: 02-2014 DRAWN BY: R.T.L. DESIGNED BY: R.T.L. CHECKED BY: K.A.J.

CITY OF CASA GRANDE, ARIZONA PUBLIC WORKS/ENGINEERING 3181 N. LEAR AVENUE CASA GRANDE, ARIZONA 85122 (520) 421-8625



TWO NEW CULVERT HEADWALLS FOR CITY OF CASA GRANDE LANDFILL SPECIFICATIONS CIVIL SHEET 5 OF 5 REV. NO. 0 CITY PROJECT NO. DATE: FEBRUARY 2014

100% DESIGN