



PROJECT:

CDBG PY15-003
West Yavapai Guidance Clinic
Drainage and Parking Lot Improvements

PREPARED BY:

CITY OF PRESCOTT, ARIZONA
Community Development, CDBG Program Administration
928-777-1143

BID DUE DATE:

June 30, 2016, 2:00 p.m.

NOTICE INVITING BIDS

PROJECT: CDBG PY15-003 WEST YAVAPAI GUIDANCE CLINIC DRAINAGE AND PARKING LOT IMPROVEMENTS

DESCRIPTION: The City of Prescott, Arizona, requests bids from qualified general contractors to construct Drainage and Parking Lot Improvements at the WYGC Cortez Facility. This project is a HUD, CDBG federally-funded construction project and is subject to compliance with all applicable Federal Labor Standards including the Davis Bacon Act.

A MANDATORY PRE-BID CONFERENCE AND WALK-THROUGH WILL BE HELD AT THE WEST YAVAPAI GUIDANCE CLINIC ON CORTEZ, 505 SOUTH CORTEZ STREET, PRESCOTT, AZ 86303 AT 10:00 AM ON JUNE 20, 2016.

SEALED BIDS SHALL BE RECEIVED BEFORE 2:00 P.M. MST (ARIZONA TIME) ON THURSDAY, JUNE 30, 2016, AT THE OFFICE OF THE CITY CLERK, 201 SOUTH CORTEZ STREET, PRESCOTT, AZ 86303. Any sealed bids received at or after 2:00 p.m. on the above-stated date will be returned unopened. The sealed bid envelope shall indicate the name and address of the bidder, and shall be marked: "Bid: CDBG PY15-003 West Yavapai Guidance Clinic Drainage & Parking Lot Improvements". All bids will be opened and read aloud in the office of the City Clerk. The City of Prescott reserves the right to accept or reject any or all bids, and/or some or all of the alternates bid, and waive any informality deemed in the best interest of the City and to reject the bids of any persons who have been delinquent or unfaithful to any contract with the City of Prescott.

Questions regarding the general terms and conditions of this Notice Inviting Bids (NIB) should be in writing and addressed to: City of Prescott, CDBG Program Administrator, and 201 S. Cortez St, Prescott, Arizona 86303, or to isabel.rollins@prescott-az.gov. Copies of the bid documents are available online for public inspection at <http://www.prescott-az.gov/business/bids> or by request to CDBG Grant Administrator at isabel.rollins@prescott-az.gov or (928) 778-2692.

Isabel Rollins, CDBG Grant Administrator
Published: 2xCourier June 10 & June 15, 2016

CITY OF PRESCOTT
CDBG GRANTS ADMINISTRATION
201 S. CORTEZ STREET
PRESCOTT, AZ 86303

CDBG PY15-003 West Yavapai Guidance Clinic Drainage & Parking Lot Improvements
505 West Cortez Street, Prescott, AZ 86303

The City of Prescott is soliciting bids for construction of Drainage and Parking Lot Improvements at the WYGC Cortez Facility. The Facility is located at 505 South Cortez Street, Prescott, AZ 86303. This project is a federally-funded construction project and is subject to compliance with all applicable Federal Labor Standards including the Davis Bacon Act. Contractor Guide to the Davis Bacon Act is available for review and a copy can be downloaded at: <http://portal.hud.gov/hudportal/documents/huddoc?id=4812-LRguide.pdf>.

A performance bond in the amount of 100% of the bid amount shall be required upon execution of the contract and prior to beginning work. **Sealed bids [one (1) original signed and two (2) copies] shall be opened on Thursday, June 30, 2016 at 2:00 PM in the office of the City Clerk, City Hall, 201 S. Cortez Street, Prescott, AZ 86303.**

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1.0 SOLICITATION SPECIFICATIONS

PROJECT:	CDBG PY15-003 West Yavapai Guidance Clinic Drainage & Parking Lot Improvements
LOCATION:	505 South Cortez Street, Prescott, AZ 86303
APN - ID#	109-13-001C
OWNER:	West Yavapai Guidance Clinic
Contact:	Paul Fromholtz - (928) 710-0920
Engineer:	Granite Basin Engineering, Inc. - (928) 717-0171
ZONING:	(MF-H, qualified exempt) USE: Guidance Clinic

DESCRIPTION OF THE WORK

THE CITY OF PRESCOTT, ARIZONA IS SOLICITING PROPOSALS FROM GENERAL CONTRACTORS TO SUBMIT BIDS FOR THE FOLLOWING COMMUNITY CDBG HUD FUNDED PROJECT:

- A. The project includes a Community Development Block Grant (CDBG) for site drainage and paving improvements to the WYGC Cortez Facility. The limits of work occur on the property and surrounding Right-of-Way along Cortez Street and Leroux Street. The scope of work is generally focused on erosion control and permanent stabilization of onsite drainage infrastructure for conveyance of offsite runoff impacting the subject property. Additional paving improvements will be done as a bid alternate with remaining grant funds. Site drainage improvements include a reinforced concrete headwall on the existing CMP culverts, slope stabilization along the road embankment, armored channel improvements, a short screen wall to prevent overflows onto the parking lot, and minor site grading to enhance positive drainage. Remaining grant funds will be used to apply a protective slurry seal coating to the existing pavement.
- B. The general categories include: Site preparation; earthwork; install site wall (concrete masonry units), headwall (reinforced concrete), handrail and riprap; apply erosion control and best management practices; apply pavement slurry seal (budget permitting); final cleanup.
- C. Contractors must be licensed appropriately and have the ability to coordinate and complete all of the projects listed below. Building permits and associated project specific plans are required to submit for approval to complete the work. **Project bids will be reviewed and approved by council and shall be awarded at a Public Meeting with the commitment from the contractor(s) to have the work completed no later than August 30, 2016.**
- D. The project is a federal funded, HUD CDBG housing renovation project supported by the City of Prescott CDBG Program Year 2015 funds. This is a Davis Bacon Wage Project and requires full compliance by the contractor and subcontractors associated with the Federal Labor Standard Provisions, Davis Bacon Act, and the labor wage determination of the act. **Appendix I and II.**

SCOPE OF WORK
(Also see construction documents)

BASE BID: DRAINAGE IMPROVEMENTS

Contractor to furnish all materials and labor necessary to complete the work detailed on the West Yavapai Guidance Clinic Cortez Facility Drainage Improvement Plans, sealed on 4/29/16. The work generally includes a reinforced concrete headwall, slope stabilization, armored channel improvements, a short screen wall and minor site grading. Remaining funds will be applied to the bid alternate described below.

BID ALTERNATE: SLURRY SEAL

Contractor to furnish all materials and labor necessary to complete the work detailed on the West Yavapai Guidance Clinic Cortez Facility Drainage Improvement Plans, sealed on 4/29/16. The work generally includes application of a slurry seal coat on the existing pavement structure. The extent of slurry seal coat is identified on Sheet 5 of the plans; the extent is divided into five (5) separate areas for a total of 14,140 square feet.

CITY SERVICE - CONTACT INFORMATION:

Planning and Zoning	George Worley	928-777-1287
CDBG Funding Administrator	Isabel Rollins	928-778-2692
Building Division	Randy Pluimer	928-777-1228
Engineering Services - Utilities	Gwen Rowitsch	928-777-1140
Fire Department	Dave Mecca	928-777-1760
Inspection – Interactive Voice Response – (IVR)	To schedule an Inspection	928-777-1176

GENERAL PROJECT NOTES

A. Additional Instructions and Detail Drawings

The Contractor shall furnish additional instructions and detail drawings to subcontractors as necessary to carry out the work included in the contract. The additional drawings and instructions thus supplied will coordinate with the Contract Documents and will be so prepared that they can be reasonably interpreted as part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions.

B. Shop or Setting Drawings

The Contractor shall submit promptly to the building official copies of each shop or setting drawing prepared. After examination and approval of such drawings by the building code official, the Contractor shall make such corrections to the drawings as have been indicated and shall furnish the building official corrected copies. The Contractor will be solely responsible for the accuracy of such drawings and for their conformity to the Plans and Specifications, unless he notifies the building official in writing of any deviations at the time he furnishes such drawings.

C. Materials, Services, and Facilities

1. It is understood that except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.
2. It is understood that normal residential utilities including water, light, and power are available and provided at the site at no cost to the contractor.
3. Any work necessary to be performed after regular working hours, on Sundays or Legal Holidays, shall be performed without additional expense to the Owner.

D. Inspection and Testing of Materials

1. All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. The owner will pay for all laboratory inspection service direct and not as a part of the contract.
2. Materials or construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended.

E. "Or Equal" Clause

Whenever a material, article or piece of equipment is identified on the plans or in the specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard; and, any material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed, is, in the opinion of the project administrator, of equal substance and function. It shall not be purchased or installed by the Contractor without the project administrator's written approval.

2.0 SOLICITATION PROCESS REQUIREMENTS

2.1 Communications with the City: Unless authorized by the Contracting Officer, no other City official or employee is empowered to speak for the City with respect to this solicitation. Bidders are advised that the City shall not be bound by information, clarifications, or interpretations from other City officials or employees. Failure to observe this requirement may be grounds for rejection of Bidder's bid. **For this solicitation, bidders may contact:**

City of Prescott
Isabel Rollins, CDBG Grant Administrator
Phone 928-778-2692
Email: isabel.rollins@nacog.org

2.2 Schedule

2.2.1. SOLICITATION ADVERTISEMENT

June 10, 2016 and June 15, 2016, *the Courier*, Prescott, AZ

2.2.2. MANDATORY PRE-BID MEETING

Monday, June 20, 2016, 10:00-11:00 a.m.
303 South Cortez Street, Prescott, AZ 86303

2.2.4 SEALED BIDS DUE (ONE (1) ORIGINAL AND TWO (2) COPIES)

Thursday, June 30, 2016, delivered before 2:00 p.m.
City of Prescott

Attention: City Clerk BID TITLE: CDBG PY15-003 WYGC Drainage & Parking Lot Improvements
201 S. Cortez Street
Prescott, AZ 86303

2.2.5 SEALED BID OPENING

Thursday, June 30, 2016, 2:00 p.m.
City Clerk's Office
201 S. Cortez Street
Prescott, AZ 86303

2.3 Addenda and Bid Tabulations

Changes to this solicitation will be made only by formal written addenda issued by the Grants Administrator. Any such addenda will be posted on the City's website at <http://www.prescott-az.gov/business/bids>. Bidders are responsible for checking the City website for any and all addenda to this solicitation, answers to questions posed by other Bidders, and related information. Changes to this solicitation may be made by the City if, in the sole judgment of the City, the changes will not compromise the City's objectives in this acquisition. All addenda issued by the City shall become a part of the specifications of this solicitation, and will be made part of the resulting agreement. Bid tabulations will be posted on the website with the corresponding solicitation when they become available.

2.4 Proprietary Material

A Bidder shall clearly mark any proprietary information contained in its bid with the words "proprietary information." Bidder shall not mark any Solicitation Form as proprietary.

Marking all or nearly all of a bid as proprietary may result in rejection of the bid. Bidders should be aware that the City is required by law to make its records available for public inspection. The Bidder, by submission of materials marked proprietary, acknowledges and agrees that the City will have no obligation to advocate for non-disclosure in any forum or any liability to the Bidder in the event that the City must legally disclose these materials.

2.5 Multiple Bids

A Bidder may be a party to multiple bids for any solicitation. However, each bid must be submitted separately (in its own complete package) from the others.

2.6 Delivery of Bids

Sealed bids (one (1) original and two (2) copies) must be received at the City Hall, Attention: City Clerk, no later than the date and time listed in Section 2.2. The bids will be opened and read publicly in the Council Chambers at that time.

- **If the bid is delivered by the U.S. Postal Service, the bid should be addressed to:**
City of Prescott
Attention: CITY CLERK Bid Title: CDBG PY15-003 WYGC Drainage & Parking Lot Improvements
201 S. Cortez Street
Prescott, AZ 86303
- **If the bid is delivered by an entity other than the U.S. Postal Service, the bid should be addressed to:**
City of Prescott
Attention: CITY CLERK Bid Title: CDBG PY15-003 WYGC Drainage & Parking Lot Improvements
201 S. Cortez Street
Prescott, AZ 86303

Bidder shall enclose all Bid Forms as discussed in 2.15 Bid Submittals (**one (1) original and two (2) copies**) in a sealed envelope. The envelope should identify the Bidder's name, mailing address, Solicitation and Title, and the time and date of opening. The City shall not consider late bids, telegraphic (fax) or telephone bids. Bidder is solely responsible for ensuring that bids are delivered on time. Delays caused by any delivery service, including the U.S. Postal Service, will not be grounds for an extension of the deadline for receipt of bids. Bids received after the deadline will be returned unopened.

2.7 Cost of Bids

The City shall not be liable for any costs incurred by Bidder in the preparation and submittal of a bid(s) in response to the solicitation or in the participation of any part of the acquisition process.

2.8 Errors in Bids

Bidder is responsible for all errors or omission in their bids, and any such errors or omission will not serve to diminish their obligations to the City.

2.9 Withdrawal of Bids

A bid may be withdrawn by written request of the Bidder prior to the bid due date and time listed in **Section 2.2 Schedule**. No bid may be withdrawn for a period of 90 calendar days after the bid due date and time.

2.10 Changes in Bids

Prior to the bid due date and time listed in Section 2.2, a Bidder may make changes to its bid provided the change is initialed and dated by the Bidder. Corrections and/or modifications received after the closing time specified will not be accepted.

2.11 Rejection of Bids

The City reserves the right to reject any and all bids and to waive any immaterial defects and irregularities in bids.

2.12 Disposition of Bids

All materials submitted in response to the solicitation, including samples, shall become the property of the City upon delivery to the City.

2.13 Incorporation of Solicitation and Response in Agreement

This solicitation, including all bid forms, attachments and addenda, and all promises, warranties, commitments and representations in the successful bid shall be binding and shall become obligations of the agreement.

2.14 Protests

Any protest of a notice that a bid is non-responsive must be filed by 5:00 p.m. on the third business day after such notification. All such protests shall be in writing, contain a complete statement of the grounds for protest, and is filed with the City Clerk, 201 S. Cortez Street, Prescott, AZ 86302, FAX 928-777-1241. Protesting parties must demonstrate as part of their protest that they made every reasonable effort within the schedule and procedures of this solicitation to resolve the basis or bases of their protest during the solicitation process, including asking questions, seeking clarifications, requesting addenda, and otherwise alerting the City to perceived problems so that corrective action could be taken prior to the selection of the Apparent Successful Bidder(s). The City will not consider any protest based on items which could have been or should have been raised prior to the deadline for submitting questions or requesting addenda. The filing of a protest shall not prevent the City from executing an agreement with any other bidder.

2.15 Bid Submittal

Bid (one (1) original and two (2) copies) must be sealed and the envelope must clearly indicate the information as described in Section 2.2. Bidder must fully complete and submit the following documents:

2.15.1 Bid Form A - Bidder Response Cover Sheet

2.15.2 Bid Form B - Price Sheet

2.15.3 Bid Form C – Subcontractors List

2.15.4 Bid Form D – Bid Certification

2.15.5 Bid Form E – Non-Collusion Bidder Affidavit

2.15.7 Bid Form F – Bidder Demographic Information (Optional)

2.15.8 Bid Form G – Bidder Qualifications, Representations and Warranties

2.15.9 Bid Form H - Bidder Certification of Federal Contract and Labor Provisions

3.0 GENERAL CONTRACT TERMS AND CONDITIONS

- 3.1. **Entire Agreement:** This contract, including all attachments referenced herein, constitutes the entire agreement between the City and the Contractor. The City's RFQ/RFP, all addenda to the RFQ/RFP, and the Contractor's response to the RFQ/RFP are explicitly included in this contract. Where there is any conflict among or between any of these documents, the controlling document shall be the first listed in the following sequence: the most recently issued Contract amendment; the Contract; the most recently issued addendum to the City's RFQ/RFP; the City's RFQ/RFP; and the Contractor's response to the RFQ/RFP.
- 3.2. **Term:** The term of this Contract shall commence on the date the Mayor signs the same and shall expire as stated within the Contract.
- 3.3. **Freight:** Prices include freight prepaid and allowed. The Contractor assumes the risk of every increase, and receives the benefit of every decrease, in delivery rates and charges.
- 3.4. **Title:** Prices are F.O.B. destination. Title to items and risk of loss remain with Contractor until City receives items at the delivery point.
- 3.5. **Overages/Undergoes:** Shipments shall correspond with the Contract; any unauthorized advance or excess shipment is returnable at Contractor's expense.
- 3.6. **Schedule:** Unless the City's Contracting Officer requests a change in schedule, the Contractor shall deliver the items or render the services as stated in the Contract. At the City's option, the Contractor's failure to timely deliver or perform may require expedited shipping at the Contractor's expense, or may be cause for termination of the Contract and the return of all or part of the items at the Contractor's expense. If the Contractor anticipates difficulty in meeting the schedule, the Contractor shall promptly notify the City's Contracting Officer of such difficulty and the length of the anticipated delay.
- 3.7. **Payment:** Invoices will be paid within thirty (30) days after the Bidder's completion and the City's acceptance of the goods or services. Payment periods will be computed from either the date of delivery of all goods ordered, the completion of all services, or the date of receipt of a correct invoice, whichever date is later. This section is not intended to restrict partial payments that are specified in the contract. No payment shall be due prior to the City's receipt and acceptance of the items identified in the invoice therefore.
- 3.8. **Unlawful Overcharges:** The Contractor assigns to the City all claims for anti-trust violations and overcharges relating to items purchased by the City.
- 3.9. **Price Warranty:** The Contractor warrants that the prices for the items sold to the City hereunder are not less favorable than those currently extended to any other customer for the same or similar items in similar quantities. The Contractor warrants that prices shown on this Contract are complete, and that no additional charge of any type shall be added without the City's express written consent.
- 3.10. **Warranties:** The Contractor warrants that all goods are merchantable, comply with the City's latest drawings and specifications, and are fit for the City's intended use; all goods comply with all applicable safety and health standards established for such products; all goods are properly packaged; and all appropriate instructions or warnings are supplied.
- 3.11. **Equal Employment Opportunity:** During the term of this Contract, the Contractor agrees as follows: The Contractor will not discriminate against any employee or applicant for employment because of creed, religion, race, color, sex, marital status, sexual orientation, gender identity, political ideology, ancestry, national origin, or the presence of any sensory, mental or physical handicap, unless based upon a bona fide occupational qualification. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their creed, religion, race,

- color, sex, national origin, or the presence of any sensory, mental or physical handicap. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- 3.12. **Diversity:** The City encourages the Contractor to employ a workforce reflective of the region's diversity.
- 3.13. **Discrimination in Contracting:** The Contractor shall not create barriers to open and fair opportunities for subcontractors and suppliers in obtaining or competing for contracts and subcontracts as sources of supplies, equipment, construction and services. In considering offers from and doing business with subcontractors and suppliers, the Contractor shall not discriminate on the basis of race, color, creed, religion, sex, age, nationality, marital status, sexual orientation or the presence of any mental or physical disability in an otherwise qualified disabled person.
- 3.14. **Record Keeping:** The Contractor shall maintain, for at least 36 months after expiration or earlier termination of the term of this Contract, relevant records and information necessary to document the Contractor's utilization of other businesses as subcontractors and suppliers in this contract and in its overall public and private business activities. The Contractor shall also maintain all written quotes, bids, estimates, or proposals submitted to the Contractor by all businesses seeking to participate as subcontractors or suppliers in the contract. The City shall have the right to inspect and copy such records. If this Contract involves federal funds, the Contractor shall comply with all record-keeping requirements set forth in every applicable federal rule, regulation and statute referenced in the contract documents.
- 3.15. **Publicity:** The Contractor shall not advertise or publish the fact that the City has contracted to purchase items from the Contractor without the City's prior written approval.
- 3.16. **Proprietary and Confidential Information:** The Contractor acknowledges that the City is required by law to make its records available for public inspection, with certain exceptions. City staff believes that this legal obligation would not require the disclosure of proprietary descriptive information that contains valuable designs, drawings or formulas. The Contractor, by submission of materials marked proprietary and confidential, nevertheless acknowledges and agrees that the City will have no obligation or any liability to the Contractor in the event that the City must disclose these materials by law.
- 3.17. **Indemnification:** The CONTRACTOR hereby agrees to defend, indemnify, and hold harmless the City, its officers, departments and divisions, employees and agents, from and against any and all claims, damages, losses, expenses, liabilities, attorney fees, court costs or other alternative dispute resolution costs arising out of or resulting from the performance of work under this Agreement or any other claim resulting from Contractor's participation pursuant to this Agreement, whether said claims, liabilities, expenses or lawsuits arise by the acts or omissions of the undersigned or his/her agents. The Contractor further releases and discharges the City, officers, departments and divisions, agents and employees, and any and all persons legally responsible for the acts or omissions of the City, from any and all claims which the Contractor has or may have against the City, its agents or employees, arising out of or in any way connected with the Contractor's activities as set forth below, other than those acts which occur due to the negligence of the City, its employees or agents.
- 3.18. **Insurance:** The Contractor shall secure and maintain, at all times during the term of this Contract, at its own expense, a policy or policies of insurance known as:

- 3.18.1. Commercial General Liability written on an insurance industry standard occurrence form (ISO form CG 00 01) or equivalent including premises/operations, products/completed operations, personal/advertising injury, contractual liability, and independent contractors liability;
- 3.18.2. If any vehicle is used in the performance of this Contract, a policy of Business Automobile Liability written on an insurance industry standard form (ISO form CA 00 01) or equivalent, including coverage for owned, non-owned, leased or hired vehicles; and
- 3.18.3. If any work under this Contract will be performed by a resident of the state of Arizona, Worker's Compensation ("Industrial Insurance") as required by the State of Arizona. The insurance as provided under items 3.19.1 and 3.19.2 above shall be endorsed to include The City of Prescott, its officers, elected officials, employees, agents and volunteers as an Additional Insured per ISO form CG2010 11/85 or CG2026 or equivalent, and to not permit reduction or cancellation by the insurer without forty-five (45) days prior written notice to the City. The Contractor's insurance shall be primary as respects the City, and any other insurance maintained by the City shall be excess and non-contributing with the Contractor's insurance.
- 3.19. **Compliance with Law:** The Contractor, at its sole cost and expense, shall perform and comply with all applicable laws of the United States and the State of Arizona; the Charter, Municipal Code, and ordinances of The City of Prescott; and rules, regulations, orders, and directives of their respective administrative agencies and officers.
- 3.20. **Licenses and Similar Authorizations:** The Contractor, at no expense to the City, shall secure and maintain in full force and effect during the term of this Contract all required licenses, permits, and similar legal authorizations, and comply with all related requirements.
- 3.21. **Taxes:** The Contractor shall pay, before delinquency, all taxes, levies, and assessments arising from its activities and undertakings under this Contract; taxes levied on its property, equipment and improvements; and taxes on the Contractor's interest in this Contract.
- 3.22. **Americans with Disabilities Act:** The Contractor shall comply with all applicable provisions of the Americans with Disabilities Act of 1990 (ADA) in performing its obligations under this Contract. In particular, if the Contractor is providing services, programs, or activities to City employees or members of the public as part of this Contract, the Contractor shall not deny participation or the benefits of such services, programs, or activities to people with disabilities on the basis of such disability. Failure to comply with the provisions of the ADA shall be a material breach of, and grounds for the immediate termination of, this Contract.
- 3.23. **Adjustments:** The City's Agent at any time may make reasonable changes in the place of delivery, installation or inspection; the method of shipment or packing; labeling and identification; and ancillary matters that Contractor may accommodate without substantial additional expense to the City.
- 3.24. **Amendments:** Except for adjustments authorized above, modifications or amendments to the Contract may only be made by a change order or by written document signed by or for both parties. Unless Contractor is otherwise notified, the City's Grants Administrator shall be the City's authorized agent.
- 3.25. **Assignment:** Neither party shall assign any right or interest nor delegate any obligation owed without the written consent of the other, except Contractor may assign the proceeds of this Contract for the benefit of creditors upon 21 days advance written notice to the City.
- 3.26. **Binding Effect:** The provisions, covenants and conditions in this Contract apply to bind the parties, their legal heirs, representatives, successors, and assigns.

- 3.27. **Waiver:** The City's failure to insist on performance of any of the terms or conditions herein or to exercise any right or privilege or the City's waiver of any breach hereunder shall not thereafter waive any other term, condition, or privilege, whether of the same or similar type.
- 3.28. **Applicable Law:** This Contract shall be construed under the laws of the State of Arizona. The venue for any action relating to this Contract shall be in the Superior Court for Yavapai County, State of Arizona.
- 3.29. **Remedies Cumulative:** Remedies under this Contract are cumulative; the use of one remedy shall not be taken to exclude or waive the right to use another.
- 3.30. **Severability:** Any invalidity, in whole or in part, of any provision of this Contract shall not affect the validity of any other of its provisions.
- 3.31. **Gratuities:** The City may, by written notice to the Contractor, terminate Contractor's right to proceed under this Contract upon one (1) calendar day's notice, if the City finds that any gratuity in the form of entertainment, a gift, or otherwise was offered or given by the Contractor or any agent thereof to any City official, officer or employee.

3.32. Termination:

- 3.32.1. **For Cause:** Either party may terminate this Contract in the event the other fails to perform its obligations as described herein, and such failure has not been corrected to the reasonable satisfaction of the other in a timely manner after notice of breach has been provided to such other party.
- 3.32.2. **For Reasons Beyond Reasonable Control of a Party:** Either party may terminate this Contract without recourse by the other where performance is rendered impossible or impracticable for reasons beyond such party's reasonable control such as but not limited to an act of nature; war or warlike operations; civil commotion; riot; labor dispute including strike, walkout, or lockout; sabotage; or superior governmental regulation or control.
- 3.32.3. **For Public Convenience:** The City may terminate this Contract in whole or in part whenever the City determines that such termination is in its best interest (including but not limited to for lack of continuing appropriations). In such a case the Contractor shall be paid for all items accepted by the City.
- 3.32.4. **Notice:** Notice of termination shall be given by the party terminating this Agreement to the other not less than ten (10) working days prior to the effective date of termination.

3.33. Contractor Immigration Warranty

The Contractor understands and acknowledges the applicability to it of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989. The following is only applicable to construction contracts: The Contractor must also comply with A.R.S. §34-301, "Employment of Aliens on Public Works Prohibited," and A.R.S. §34-302, as amended, "Residence Requirements for Employees."

Under the provisions of A.R.S. §41-4401, Contractor hereby warrants to the City that the Contractor and each of its subcontractors ("Subcontractors") will comply with, and are contractually obligated to comply with all Federal Immigration laws and regulations that relate to their employees and A.R.S. §23-214(A) (hereinafter "Contractor Immigration Warranty").

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 Subcontractor's 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.

The City may, at its sole discretion, conduct random verification of the employment records of the Contractor and any of its Subcontractors to ensure compliance with the Contractor's Immigration Warranty. Contractor agrees to assist the City in regard to any random verification performed.

Neither the Contractor nor any 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.

4.0 STANDARD BID INFORMATION

- 4.1. **Default by Bidder:** In case of default by the bidder, the City of Prescott may procure the items or service from other sources and may deduct from any monies due or that may thereafter become due to the bidder the difference between the price named in the contract or purchase order and the actual cost thereof to the City of Prescott. Prices paid by the City shall be considered the prevailing market price at the time such purchase is made. Periods of performance may be extended if the facts as to the cause of delay justify such extension in the opinion of the Purchasing Agent.
- 4.2. **Cash Discounts:** In connection with any cash discount specified on this bid, time will be computed from the date of complete delivery of the supplies, equipment or services as specified or from the date correct invoices are received in the City Finance office if the latter date is later than the date of delivery. For the purpose of earning the discount, payment is deemed to be made on the date of mailing of the City warrant or check.
- 4.3. **Warranty:** Manufacturer's warranties shall remain in effect. All equipment purchased shall be purchased from one (1) vendor. That one vendor shall be fully responsible for all warranty performance relating to any part of component of the purchased equipment. The vendor's responsibility shall include all warranty involving sub-contractors. The vendor shall supply a warranty on all parts and workmanship from the initial delivery date. The vendor shall guarantee further that the equipment to be supplied complies with all applicable regulations.
- 4.4. **Litigation:** The parties hereto expressly covenant and agree that in the event of a dispute arising from this Agreement, each of the parties hereto waives any right to a trial by jury. In the event of litigation, the parties hereby agree to submit to a trial before the Court. Neither party shall be entitled to an award of attorneys' fees, either pursuant to the Contract or another other state or federal statute.
- 4.5. **Brand Names:** Brand names are only used for reference to indicate character or quality desired unless otherwise indicated.

5.0 INSTRUCTIONS FOR SUBMITTAL OF BID FORMS

- 5.1. **Bid Form A - Solicitation Response Cover Sheet:** Bidder shall complete, sign, and submit Form A as the first page of the bid package
- 5.2. **Bid Form B - Price Sheet:** Bidder shall certify that its bid will be valid for 60 days after submission. Bidder may be asked to extend this certification. Bidder shall complete, sign, and submit Form B.
- 5.3. **Bid Form C – Subcontractor List:** Bidder shall complete, sign, and submit Form C
- 5.4. **Bid Form D - Bid Certification:** Bidder shall complete, sign, and submit Form D
- 5.5. **Form E - Non-Collusion - Affidavit:** Bidder shall complete, sign, and submit Form E.
- 5.6. **Form F – Bidders Demographic Optional Information: Form F is for informational purposes only,** is not required to be answered or submitted, and responses will not be taken into consideration in bid evaluation, or in agreement award or administration. Bidder may complete, sign, and submit Form F.

5.7. Form G - Bidder Qualifications, Representations and Warranties

- 5.7.1. Bidder shall complete and submit Solicitation Form G. Bidder shall provide additional information as required. The City reserves the right to inspect any of Bidder's facilities and equipment after the bid due date and time listed in Section 2.2. The Bidder shall make such facilities and equipment available for the City's inspection within eight business hours of the City's request. The City may require additional information concerning a Bidder's facilities, equipment, personnel, and procedures. The Bidder shall supply such information within the time noted in the City's request.
- 5.7.2. The City shall consider awarding agreements only to responsible Bidders. Responsible Bidders are those that have, in the sole judgment of the City, the financial ability, character, reputation, resources, skills, capability, reliability, and business integrity necessary to perform the requirements of the agreement. In determination of responsibility, the City may consider all information available to the City, whether specifically provided by the Bidder in response to this solicitation or other information otherwise available to the City in evaluating the responsibility of the Bidder. Such information may include, but is not limited to, experience and history of the City with current and/or prior contracts held by the Bidder with the City or with other agencies, references provided by the Bidder to the City, information provided by the Bidder as part of the solicitation responses, and information not specifically provided by the Bidder but is otherwise available to the City and has merit in consideration of responsibility, in the opinion of the City. The evaluation of responsibility shall be determined by the City and shall be in the sole opinion of the City. Such evaluation by the City shall be final and not subject to appeal. Furthermore, no agreement will be awarded to a Bidder if any owner of such Bidder has been convicted within the past ten years of a crime involving dishonesty or false statements, or if the Bidder has unsatisfied tax or judgment liens.
- 5.7.3. Bidder shall provide two (2) references, a sub-contractors list (if applicable) and certify there are no unsatisfied tax liens or judgments on record. Bidder shall complete, sign and submit Form G.

5.8 Bid Form H – Bidder Certification of Federal Labor and Contract Provisions described in Appendix I, I (a) and II – Bidder shall sign, date and submit a copy indicating receipt and general understanding of contractor obligations' in said document.

BID FORM A – BIDDER RESPONSE COVER SHEET (RETURN WITH BID)



City of Prescott
Solicitation Response

Solicitation Number: **CDBG PY15-003**

Description: _____

Please note all that apply:

- Total Price including tax (do not consider Options)\$** _____
- Addenda Number(s) Received (if any)** _____
- Original and signed Bid Forms A through H and two (2) copies of same.**

Business Name: _____ DUNS # _____

Business Address: _____ AZ ROC # _____

Business Phone: (_____) _____

Business Contact: _____ e:mail _____

Business Payroll: _____ e:mail _____

Payroll Phone: () _____

Comments: _____

BID FORM B – PRICE SHEET (RETURN WITH BID)

BASE BID						
ITEM	SPEC	DESCRIPTION	QTY	UNIT	COST	TOTAL
1	105.8	CONSTRUCTION STAKING	1	LS		
2	107.15	EROSION CONTROL PLAN	1	LS		
3	109.1	MOBILIZATION	1	LS		
4	109.11	CONTRACT ALLOWANCE	1	LS	\$ 10,000	\$ 10,000
5	205	RAW EARTHWORK (CUT)	300	CY		
6	211	RAW EARTHWORK (FILL)	20	CY		
7	505	CONCRETE HEADWALL	345	SF		
8	510	SITE WALL (CMU)	500	SF		
9	520	HANDRAIL	97	LF		
10	220	RIPRAP (D50=6" PLACED 12" THICK)	150	CY		
11	220	GROUTED RIPRAP (D50=6" PLACED 12" THICK)	4	CY		
12	618	REPLACE STORM DRAIN	1	EA		

TOTAL _____

BID ALTERNATE						
1	332.1	SLURRY SEAL AREA 1 PER MAG SPEC 332	3,580	SF		
2	332.2	SLURRY SEAL AREA 2 PER MAG SPEC 332	4,000	SF		
3	332.3	SLURRY SEAL AREA 3 PER MAG SPEC 332	570	SF		
4	332.4	SLURRY SEAL AREA 4 PER MAG SPEC 332	2,520	SF		
5	332.5	SLURRY SEAL AREA 5 PER MAG SPEC 332	3,470	SF		

TOTAL _____

The undersigned hereby proposes and agrees to furnish any and all required labor, materials, transportation, and services for CDBG PY15-003 West Yavapai Guidance Clinic Drainage and Parking Lot Improvements project and hereby declares that he or she has visited the site and examined the contract documents relating to the work covered by the above bid. Bid is valid for 60 days after submission.

Days Required for Completion Upon Execution of Contract: _____ **days**

Payment Terms: _____ **Dated this** _____ **day of** _____ **2016**

Signature

Title

FORM C - SUBCONTRACTORS LIST (RETURN WITH BID)

	Company Name and ROC License Number	Mailing Address	Phone Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
<p>Note: Davis Bacon Act and Wage Determination are a requirement for all project labor and tradesman. Please inform the project subcontractors of this contract condition and the administrative payroll and recordkeeping requirements.</p>			

Signature _____

Title _____

FORM D – BID CERTIFICATION (RETURN WITH BID)

Bidder Name: _____

The undersigned Bidder hereby certifies as follows:

D.1 That he/she has read The City of Prescott’s solicitation documents, its appendices and attachments, and the following Addenda, and to the best of his/her knowledge, has complied with the mandatory requirements stated therein.

Addendum	Issue Date
_____	_____
_____	_____

D.2 That he/she has had opportunity to ask questions regarding the solicitation, and that such questions having been asked, have been answered by the City.

D.3 That the Bidder’s bid Package consists of the following Bid Forms:

- Bid Form A - Bidder Response Cover Sheet
- Bid Form B - Price Sheet
- Bid Form C – Subcontractors List
- Bid Form D - Bid Certification
- Bid Form E - Non-Collusion Bidder Affidavit (notarized)
- Bid Form F – Bidder Demographic Optional Information
- Bid Form G – Bidder Qualifications, Representations and Warranties
- Bid Form H – Bidder Certification of Federal Contract and Labor Provisions

D.4 That to the best of his/her knowledge, the person, firm, association, partnership or corporation herein, has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive pricing in the preparation and submission of a bid to The City of Prescott for consideration in the award of this solicitation.

D.5 That to the best of his/her knowledge, the person, firm, association, partnership or corporation herein, are the only person, firms, corporations, partnerships, or other associations having any direct or indirect financial interest in the Bidder’s business as legal or equitable owner, creditor (except current bills for operating expenses), or holder of any security or other evidence of indebtedness.

D.6 That the Bidder’s bid is valid for 60 days.

Dated this _____ day of _____ 2016.

Signature

Title

BID FORM E- NON COLLUSION – BIDDER AFFIDAVIT (RETURN WITH BID)

State of _____)
_____) ss.
County of _____)

_____, being first duly sworn, deposes and says:

That he/she is _____ of _____
(Title) (Bidder)

who submits herewith to the City of Prescott, Arizona, a proposal:

That all statements of fact in such proposal are true; That said proposal was not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation;

That said bidder has not, directly or indirectly by agreement, communication or conference with anyone attempted to induce action prejudicial to the interest of the City of Prescott, Arizona, or of any bidder or anyone else interested in the proposed contract; and further,

That prior to the public opening and reading of proposal, said bidder:

1. Did not directly or indirectly, induce or solicit anyone else to submit a false or sham proposal;
2. Did not directly or indirectly collude, conspire, connive or agree with anyone else that said bidder or anyone else would submit a false or sham proposal, or that anyone should refrain from bidding or withdraw his proposals;
3. Did not in any manner, directly or indirectly, seek by agreement, communication or conference with anyone to raise or fix the proposal price of said bidder or of anyone else, or to raise or fix any overhead, profit or cost element of his proposal price, or of that of anyone else;
4. Did not, directly or indirectly, submit his proposed price or any breakdown thereof, or the contents thereof, or divulge information or data relative thereto, to any corporation, partnership, company, association organization, bid depository or to any member or agent thereof, or to any individual or group of individuals, except the City of Prescott, Arizona, or to any person or persons who have a partnership or other financial interests with said bidder in his business.

By: _____

SUBSCRIBED AND SWORN to before me by _____ this _____ day of _____, 2016.

Notary Public Commission Expires

BID FORM F – BIDDER DEMOGRAPHIC INFORMATION (RETURN WITH BID)

I certify that: _____ (Co Name)

a. The demographic and business information of the undersigned are:

Contractor Information

Amount of Contract	Type of Trade Code*	Racial Code*	Hispanic Y/N	Women Owned Y/N	IRS Tax ID#	Section 3 Y/N	Legal Name, Address, City, State, Zip	AZ License No.
\$								

*See Demographic and Trade Code table below for information

Demographic and Trade Codes

Race	Type of Trade Code
11 – White	1 – New Construction
12 – African American	2 – <i>Substantial Rehab</i>
13 – Asian	3 – Repair
14 – American Indian or Alaskan Native	4 – Service
15 – Native Hawaiian or other Pacific Islander	5 – Project Management
16 – American Indian or Alaskan Native and White	6 – Professional
17 – Asian and White	7 – Tenant Services
18 – African American and White	8 – Education Training
19 – American Indian or Alaskan Native and White	9 – Architecture/Engineering
20 – Other Multi-racial	10 - Other

b. The undersigned is: a sole proprietorship; a partnership; a corporation organized in the State of _____; or another organization

(Please describe if box checked another organization)

**BID FORM G – BIDDER QUALIFICATIONS, REPRESENTATIONS AND WARRANTIES
(RETURN WITH BID)**

Bidder Name: _____

The undersigned Bidder hereby certifies as follows:

H1 Taxes and Liens - Bidder has no unsatisfied tax or judgment lien on record.

H2 Subcontractors – Bidder submits a completed and signed **Bid Form C**, a list of all subcontractors it will use in performing the requirements of the agreement resulting from this solicitation. A subcontractor is any separate legal entity used to perform requirements of the proposed agreement. The list shall include the firm’s name, contact person and title, mailing address, telephone number, fax number and a description of the service(s) to be subcontracted. Bidder shall also attach a copy of the letter from the subcontractor stating its commitment to perform the services(s) subcontracted.

H3 References – The City will enter into an agreement only with a Bidder(s) having a reputation of satisfactory performance. The Bidder’s ability to provide timely service; knowledgeable, conscientious, and courteous staff; reasonable care and skill; invoicing consistent with contract pricing, etc., are important to the City. Bidder provides information for two clients, other than the City of Prescott, that presently contract with Bidder for similar goods or services:

Reference #1

Firm Name: _____

Address: _____

Contact Person: _____

Phone Number: _____

Reference #2

Firm Name: _____

Address: _____

Contact Person: _____

Phone Number: _____

Note: The bid evaluators may contact the customer references, as well as any other customers or customer employees including The City of Prescott. A Bidder with unsatisfactory references may have its bid rejected.

H4 Bidder’s Examination - Bidder has made its own examination, investigation and research regarding the requirements of the solicitation including but not limited to the work to be done, services to be performed, any conditions affecting the work and services, the type and quantity of labor, equipment and facilities necessary to perform. Bidder fully understands the character of the work and services, the manner in which payment is to be made, the terms and conditions of the draft agreement (see Appendix II and III), and the solicitation. Bidder acknowledges and agrees that it has satisfied itself by its own examination, investigation and research, and that it will make no claim against the City because of erroneous estimates, statements, or interpretations made by City. Bidder hereby proposes to furnish all materials, equipment, and facilities and to perform all labor which may be required to do the work within the time required and upon the terms and conditions provided in the draft agreement and the solicitation, and at the prices as bid. There will be no amendments to this contract regarding wages.

Dated this _____ **day of** _____ **2016.**

Signature

Title

BID FORM H – BIDDER CERTIFICATION OF FEDERAL LABOR AND CONTRACT PROVISIONS DESCRIBED IN APPENDIX I. AND II. (RETURN WITH BID)

I _____ having read and understand the contract obligation of Appendix I and II. On behalf of Contractors name _____ on this _____ Day of _____, 2016.

I1 Appendix I: FEDERAL LABOR STANDARDS PROVISIONS – Davis Bacon Act

I2 The Appendix IA, Federal Labor Standards Provisions and Davis Bacon Wage determination are hereby incorporated into this Request for Quote and the Contractor shall make themselves aware of all conditions and requirements contained therein as it relates to this contract. Davis-Bacon Act prevailing wages payable to laborers and mechanics employed on covered construction work;

I3 The Davis-Bacon Act.

This Act applies to contracts in excess of \$2,000 for the construction, alteration, and/or repair of public buildings or public works, including painting and decorating, where the United States or the District of Columbia is a direct party to the contract. The Act requires all contractors and subcontractors to pay the various classes of laborers and mechanics employed on the site of the work on the contract the wage rates and fringe benefits determined by the S/L to be prevailing for corresponding classes of employees engaged on similar projects in the locality. In addition, the Act requires that certain labor standards provisions be specified in the contract awarded to the successful bidder (see 29 CFR § 5.5 (a)). An applicable wage determination must also be included in the contract documents.

I4 In case of discrepancy between any clause, condition, requirement, or wording between those documents contained in Appendix A and any other contract quote document, the requirements of Appendix A shall take precedence.

I5 Appendix II: The Certifications (Civil Rights, Equal Employment Opportunity, Affirmative Action for Handicapped Workers -Section 503, Fly Ash, Access to Records and Records Retention, Conflict of Interest, Lobbying) are a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of these Certifications is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U. S. Code. Any person who fails to file the required Certifications shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

(Printed name of authorized contractor or agent)

(Signature of authorized Contractor or agent)

(Title)

(date)

(Printed name of Company)

(date)

Appendix I - FEDERAL LABOR STANDARDS PROVISIONS – Davis Bacon Act

The attached Davis Bacon Wage guidelines are hereby incorporated into this Request for Quote and the Contractor shall make themselves aware of all conditions and requirements contained therein as it relates to this contract. Davis-Bacon Act prevailing wages payable to laborers and mechanics employed on covered construction work;

The Davis-Bacon Act.

This Act applies to contracts in excess of \$2,000 for the construction, alteration, and/or repair of public buildings or public works, including painting and decorating, where the United States or the District of Columbia is a direct party to the contract. The Act requires all contractors and subcontractors to pay the various classes of laborers and mechanics employed on the site of the work on the contract the wage rates and fringe benefits determined by the S/L to be prevailing for corresponding classes of employees engaged on similar projects in the locality. In addition, the Act requires that certain labor standards provisions be specified in the contract awarded to the successful bidder (see 29 CFR § 5.5 (a)). An applicable wage determination must also be included in the contract documents.

In case of discrepancy between any clause, condition, requirement, or wording between those documents contained in Appendix B and any other contract quote document, the requirements of Appendix I. shall take precedence.

The HUD documents to reference include:

HUD – 5370-EZ: General Contract Conditions for Small Construction/ Development Contracts

HUD – 4230- A Request for additional Classification and Wage Rate

Department of Labor Forms Appendix I. (a) :

- Prevailing Wage Decision Number **AZ160008 01/08/2016 AZ8 MOD 0**
- Poster resource: WH-1321 – Davis Bacon posters (English and En Espanol) – Required to be posted at job site with wage determination

The Prevailing Wage Decision Number for this project is:

County: Yavapai

Type: Highway

General Decision Number: AZ160008 01/08/2016 AZ8 MOD 0

RESOURCES:

http://portal.hud.gov/hudportal/HUD?src=/program_offices/labor_relations/olrform

Selecting Davis Bacon Wage Determinations: <http://www.wdol.gov/dba.aspx>

Instructions for Completing Payroll Form, WH-347 <http://www.dol.gov/whd/forms/wh347instr.htm>

WH 347 form <http://www.dol.gov/whd/forms/wh347.pdf>

Making Davis Bacon Work – Contractors Guide <http://www.hud.gov/offices/adm/hudclips/guidebooks/HUD-LR-4812/4812-LR.pdf>

The City of Prescott may issue by addendum an updated Prevailing Wage Decision Number up to 10 days prior to Bid Award.

See Appendix I (a) Davis Bacon Wage Decision

Appendix I (a), Davis Bacon Prevailing Wage for this Project

General Decision Number: AZ160008 01/08/2016 AZ8

Superseded General Decision Number: AZ20150008

State: Arizona

Construction Type: Highway

Counties: Coconino, Maricopa, Mohave, Pima, Pinal, Yavapai and Yuma Counties in Arizona.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016

* CARP0408-005 10/01/2015

	Rates	Fringes
CARPENTER (Including Cement Form Work).....	\$ 24.63	11.54

* ENGI0428-001 06/01/2015

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1.....	\$ 22.59	9.34
Group 2.....	\$ 25.86	9.34
Group 3.....	\$ 26.94	9.34
Group 4.....	\$ 27.97	9.34

POWER EQUIPMENT OPERATORS CLASSIFICATIONS:

GROUP 1: A-frame boom truck, air compressor, Beltcrete, boring bridge and texture, brakeman, concrete mixer (skip type), conductor, conveyor, cross timing and pipe float, curing machine, dinky (under 20 tons), elevator hoist (Husky and similar), firemen, forklift, generator (all), handler, highline cableway signalman, hydrographic mulcher, joint inserter, jumbo finishing machine, Kolman belt loader, machine conveyor, multiple power concrete saw,

pavement breaker, power grizzly, pressure grout machine, pump, self-propelled chip spreading machine, slurry seal machine (Moto paver driver), small self-propelled compactor (with blade-backfill, ditch operation), straw blower, tractor (wheel type), tripper, tugger (single drum), welding machine, winch truck

GROUP 2:

ALL COUNTIES INCLUDING MARICOPA: Aggregate Plant, Asphalt plant Mixer, Bee Gee, Boring Machine, Concrete Pump, Concrete Mechanical Tamping-Spreading Finishing Machine, Concrete Batch Plant, Concrete Mixer (paving & mobile), Elevating Grader (except as otherwise classified), Field Equipment Serviceman, Locomotive Engineer (including Dinky 20 tons & over), Moto-Paver, Oiler-Driver, Operating Engineer Rigger, Power Jumbo Form Setter, Road Oil Mixing Machine, Self-Propelled Compactor (with blade-grade operation), Slip Form (power driven lifting device for concrete forms), Soil Cement Road Mixing Machine, Pipe-Wrapping & Cleaning Machine (stationary or traveling), Surface Heater & Planer, Trenching Machine, Tugger (2 or more drums).

MARICOPA COUNTY ONLY: Backhoe < 1 cu yd, Motor Grader (rough), Scraper (pneumatic tired), Roller (all types asphalt), Screed, Skip Loader (all types 3<6 cu yd), Tractor (dozer, pusher-all).

GROUP 3:

ALL COUNTIES INCLUDING MARICOPA: Auto Grade Machine, Barge, Boring Machine (including Mole, Badger & similar type directional/horizontal), Crane (crawler & pneumatic 15>100 tons), Crawler type Tractor with boom attachment & slope bar, Derrick, Gradall, Heavy Duty Mechanic-Welder, Helicopter Hoist or Pilot, Highline Cableway, Mechanical Hoist, Mucking Machine, Overhead Crane, Pile Driver Engineer (portable, stationary or skid), Power Driven Ditch Lining or Ditch Trimming Machine, Remote Control Earth Moving Machine, Slip Form Paving Machine (including Gunnert, Zimmerman & similar types), Tower Crane or similar type.

MARICOPA COUNTY ONLY: Backhoe<10 cu yd, Clamshell < 10 cu yd, Concrete Pump (truck mounted with boom only), Dragline <10 cu yd, Grade Checker, Motor Grader (finish-any type power blade), Shovel < 10 cu yd.

GROUP 4: Backhoe 10 cu yd and over, Clamshell 10 cu yd and over, Crane (pneumatic or crawler 100 tons & over), Dragline 10 cu yd and over, Shovel 10 cu yd and over.

All Operators, Oilers, and Motor Crane Drivers on equipment with Booms, except concrete pumping truck booms, including Jibs, shall receive \$0.01 per hour per foot over 80 ft in addition to regular rate of pay

Premium pay for performing hazardous waste removal \$0.50 per hour over base rate.

IRON0075-004 08/01/2015

COCONINO, MARICOPA, MOHAVE, YAVAPAI & YUMA COUNTIES

	Rates	Fringes
Ironworker, Rebar.....	\$ 26.00	21.77
Zone 1: 0 to 50 miles from City Hall in Phoenix or Tucson		
Zone 2: 050 to 100 miles - Add \$4.00		
Zone 3: 100 to 150 miles - Add \$5.00		
Zone 4: 150 miles & over - Add \$6.50		

* LABO0383-002 06/01/2015

	Rates	Fringes
Laborers:		
Group 1.....	\$ 16.49	4.95
Group 2.....	\$ 17.39	4.95
Group 3.....	\$ 18.09	4.95
Group 4.....	\$ 19.03	4.95
Group 5.....	\$ 19.89	4.95

LABORERS CLASSIFICATIONS:

GROUP 1: All Counties: Chipper, Rip Rap Stoneman. Pinal County Only: General/Cleanup Laborer. Maricopa County Only: Flagger.

GROUP 2: Asphalt Laborer (Shoveling-excluding Asphalt Raker or Ironer), Bander, Cement Mason Tender, Concrete Mucker, Cutting Torch Operator, Fine Grader, Guinea Chaser, Power Type Concrete Buggy

GROUP 3: Chain Saw, Concrete Small Tools, Concrete Vibrating Machine, Cribber & Shorer (except tunnel), Hydraulic Jacks and similar tools, Operator and Tender of Pneumatic and Electric Tools (not herein separately classified), Pipe Caulker and Back-Up Man-Pipeline, Pipe Wrapper, Pneumatic Gopher, Pre-Cast Manhole Erector, Rigger and Signal Man-Pipeline

GROUP 4: Air and Water Washout Nozzleman; Bio-Filter, Pressman, Installer, Operator; Scaffold Laborer; Chuck Tender; Concrete Cutting Torch; Gunite; Hand-Guided Trencher; Jackhammer and/or Pavement Breaker; Scaler (using boson's chair or safety belt); Tamper (mechanical all types).

GROUP 5: AC Dumpman, Asbestos Abatement, Asphalt Raker II, Drill Doctor/Air Tool Repairman, Hazardous Waste Removal, Lead Abatement, Lead Pipeman, Process Piping Installer, Scaler (Driller), Pest Technician/Weed Control, Scissor Lift, Hydro Mobile Scaffold Builder.

* PAIN0086-001 04/01/2014

	Rates	Fringes
PAINTER		
PAINTER (Yavapai County only), SAND BLASTER/WATER BLASTER (all Counties).....	\$ 19.50	4.85
ZONE PAY: More than 100 miles from Old Phoenix Courthouse \$3.50 additional per hour.		

SUAZ2009-001 04/20/2009

	Rates	Fringes
CEMENT MASON.....	\$ 19.28	3.99
ELECTRICIAN.....	\$ 22.84	6.48
IRONWORKER (Rebar)		
Pima County.....	\$ 23.17	14.83
Pinal County.....	\$ 20.27	8.35
LABORER		
Asphalt Raker.....	\$ 15.49	3.49
Compaction Tool Operator....	\$ 14.59	2.91
Concrete Worker.....	\$ 13.55	3.20
Concrete/Asphalt Saw.....	\$ 13.95	2.58
Driller-Core, diamond, wagon, air track.....	\$ 16.94	3.12
Dumpman Spotter.....	\$ 14.99	3.16
Fence Builder.....	\$ 13.28	2.99
Flagger		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 12.35	1.59
Formsetter.....	\$ 16.09	3.97
General/Cleanup Laborer		
Coconino, Maricopa, Mohave, Pima, Yavapai & Yuma.....	\$ 14.54	3.49
Grade Setter (Pipeline)....	\$ 17.83	5.45
Guard Rail Installer.....	\$ 13.28	2.99
Landscape Laborer.....	\$ 11.39	
Landscape Sprinkler Installer.....	\$ 15.27	
Pipelayer.....	\$ 14.81	2.96
Powderman, Hydrasonic.....	\$ 16.39	2.58
OPERATOR: Power Equipment		
Asphalt Laydown Machine.....	\$ 21.19	6.05
Backhoe < 1 cu yd		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 17.37	3.85
Backhoe < 10 cu yd		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 18.72	3.59
Clamshell < 10 cu yd		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 18.72	3.59

Concrete Pump (Truck Mounted with boom only) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	19.92	7.10
Crane (under 15 tons).....\$	21.35	7.36
Dragline (up to 10 cu yd) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	18.72	3.59
Drilling Machine (including Water Wells).....\$	20.58	5.65
Grade Checker Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	16.04	3.68
Hydrographic Seeder.....\$	15.88	7.67
Mass Excavator.....\$	20.97	4.28
Milling Machine/Rotomill.....\$	21.42	7.45
Motor Grader (Finish-any type power blade) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	21.92	4.66
Motor Grader (Rough) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	20.07	4.13
Oiler.....\$	18.15	8.24
Power Sweeper.....\$	16.76	4.44
Roller (all types Asphalt) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	18.27	3.99
Roller (excluding asphalt)..\$	15.65	3.32
Scraper (pneumatic tired) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	17.69	3.45
Screed Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	17.54	3.72
Shovel < 10 cu yd Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	18.72	3.59
Skip Loader (all types <3 cu yd).....\$	18.28	5.30
Skip Loader (all types 3 < 6 cu yd) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	18.64	4.86
Skip Loader (all types 6 < 10 cu yd).....\$	20.15	4.52
Tractor (dozer, pusher - all) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$	17.26	2.65
PAINTER		
Coconino, Maricopa, Mohave, Pima, Pinal & Yuma..\$	15.57	3.92
TRUCK DRIVER		
2 or 3 Axle Dump or Flatrack.....\$	16.27	3.30
5 Axle Dump or Flatrack.....\$	13.97	2.89
6 Axle Dump or Flatrack (< 16 cu yd).....\$	17.79	6.42

Belly Dump.....	\$ 14.67	
Oil Tanker Bootman.....	\$ 22.03	
Self-Propelled Street Sweeper.....	\$ 13.11	5.48
Water Truck 2500 < 3900 gallons.....	\$ 18.14	4.55
Water Truck 3900 gallons and over.....	\$ 15.92	3.33
Water Truck under 2500 gallons.....	\$ 15.94	4.16

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

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

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

Union Rate Identifiers

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

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

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average

rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

Branch of Construction Wage Determinations
Wage and Hour Division

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

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

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

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

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

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

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

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END OF GENERAL DECISION

APPENDIX II - Federal Contract Provisions – (Contract Requirement)

A. CIVIL RIGHTS - The undersigned is fully aware that this contract is wholly or partially federally funded, and further, agrees to abide by the:

1. **Civil Rights Act of 1964, Title VI**, as amended, that provides no person on the basis of Race, Color, or National Origin shall be excluded from participation, denied program benefits, or subjected to discrimination.
2. **And, Civil Rights Act of 1968, Title VIII**, as amended, will not discriminate in housing on the basis of Race, Color, Religion, Sex, or National Origin.
3. **And, Rehabilitation Act of 1973, Section 504**, as amended, that no otherwise qualified individual shall solely by reason of his or her handicap be excluded from participation and/or employment, denied program benefits, subjected to discrimination under any program receiving federal funds;
4. **And, Housing and Community Development Act of 1974**, Section 109, as amended, that no person shall be excluded from participation (including employment), denied program benefits, or subjected to discrimination on the basis of Race, Color, National Origin, Sex, Age, and Handicap under any program or activity funded in whole or part under Title I (CDBG) of the Act.
5. **And, Age Discrimination Act of 1975**, as amended, that no person shall be excluded from participation, denied program benefits, or subjected to discrimination on the basis of age under any program or activity receiving federal funds.
6. **And, Americans with Disabilities Act of 1990**, as amended, that there shall be no employment discrimination against "qualified individuals with disabilities."
7. **And, Executive Order 11063**, that no person shall, on the basis of race, color, religion, sex, or national origin, be discriminated against in housing and related facilities provided with federal assistance, or lending practices with respect to residential property when such practices are connected with loans insured or guaranteed by the federal government.
8. **And, Executive Order 11246**, as amended, that no person shall be discriminated against, on the basis of race, color, religion, sex, or national origin, in any phase of employment during the performance of federal or federally assisted construction contracts in excess of \$10,000.

B. EQUAL EMPLOYMENT OPPORTUNITY - During the performance of the contract, the CONTRACTOR agrees as follows:

1. The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, creed, sex, color, national origin, familial status, religious affiliation or handicap. The CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, sex, color, national origin, familial status, religious affiliation or handicap. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other

forms of compensation; and selection for training, including apprenticeship. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the GRANTEE setting forth the provisions of this non-discrimination clause.2. The CONTRACTOR will, in all solicitation or advertisements for employees placed by or on behalf of the CONTRACTOR for the GRANTEE, state that all qualified applicants will receive consideration for employment without regard to race, creed, sex, color, national origin, familial status, religious affiliation or handicap.

2. The CONTRACTOR will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this contract so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.
3. The CONTRACTOR will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records, and accounts by the GRANTEE's Department of Housing and/or Community Development and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
4. In the event of the CONTRACTOR's non-compliance with any provision of this contract or with any of such rules, regulations or orders, this Agreement may be canceled, terminated, or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
5. The CONTRACTOR will include the provisions of the subparagraphs 12 (a) through (f) in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provision will be binding upon each subcontractor or vendor. The CONTRACTOR will take such action with respect to any subcontract or purchase order as the GRANTEE's Department of Housing and/or Community Development may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that in the event the CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the GRANTEE's Department of Housing and/or Community Development, the CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

C. AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS SECTION 503 (if contract \$25,000 or over)

1. The CONTRACTOR will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The CONTRACTOR agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

2. The CONTRACTOR agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.
3. In the event of the CONTRACTOR's non-compliance with the requirements of this clause, actions for non-compliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.
4. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the CONTRACTOR's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.
5. The CONTRACTOR will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the CONTRACTOR is bound by the terms of Section 503 of Rehabilitation Act of 1973, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.
6. The CONTRACTOR will include the provisions of this clause in every subcontract or purchase order of \$2,500 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to Section 503 of the Act, so that such provisions will be binding upon each subcontractor with respect to any subcontract or purchase order as the Director of the Office of Federal contract Compliance Programs may direct to enforce such provisions, including action for non-compliance.

D. ACCESS TO RECORDS AND RECORDS RETENTION - The undersigned certifies, to the best of his or her knowledge and belief that:

1. The individual, sole proprietor, partnership, corporation, and/or association agrees to permit the CITY of Prescott, U. S. Department of Housing and Urban Development (HUD), and the Office of the Inspector General and/or their designated representatives to have access to all records for review, monitoring, and audit during normal working hours.
2. The individual, sole proprietor, partnership, corporation, and/or association agrees to retain all records for at least five years following the "official US Department of Housing and Urban Development date of the grant or the resolution of all audit findings, whichever is later.

E. CONFLICT OF INTEREST - The undersigned is fully aware that this contract is wholly or partially federally funded, and further, by submission of the bid or proposal that the individual or firm, certifies that:

1. There is no substantial interest, as defined by Arizona Revised Statute §§38-503 through 505, with any public official, employee, agency, commission, or committee with the CITY of Prescott.
2. Any substantial interest, as defined by Arizona Revised Statute §§38-503 through 505, with any public official, employee, agency, commission, or committee (including members of their immediate family) with the CITY of Prescott that develops at any time during this contract will be immediately disclosed to the CITY of Prescott.

F. ANTI-LOBBYING CERTIFICATION - The undersigned certifies, to the best of his or her knowledge and belief that:

1. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
2. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this Certification be included in the award documents for all sub-awards to all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

G. These Certifications (Civil Rights, Equal Employment Opportunity, Affirmative Action for Handicapped Workers -Section 503, Fly Ash, Access to Records and Records Retention, Conflict of Interest, Lobbying) are a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of these Certifications is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U. S. Code. Any person who fails to file the required Certifications shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Contractor Certification:

(Printed name of authorized signer)

(signature of authorized signer)

(Title)

(date)

(Printed name of firm)

(date)

Appendix III – Sample Contract

CONTRACT NUMBER: _____

Between

The City of Prescott, Arizona

and

THIS AGREEMENT, made and entered into this ___th day of _____, 2016, by and between _____, hereinafter known as the CONTRACTOR, and the CITY OF PRESCOTT, a municipal corporation organized and existing under and by virtue of its City Charter and the laws of the State of Arizona, hereinafter known as the CITY.

FOR GOOD AND VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged by each party to the other, it is hereby agreed as follows:

ARTICLE I - SCOPE OF WORK

The CONTRACTOR shall furnish any and all labor, materials, equipment, transportation, utilities, services and facilities, required to perform the installation of _____ according to building codes for _____, at the following site location _____, Prescott, Arizona. (description of project general scope) The installation shall be in a good and workmanlike manner and be installed to the satisfaction of the CITY through its agents and under the direction and supervision of the Community Development Director or his properly authorized agents (hereinafter referred to as the "Project Director") and strictly pursuant to and in conformity with the price quote sheet attached hereto as Exhibit "A", which exhibit is fully incorporated herein by reference. This agreement in no way creates any third-party beneficiaries.

ARTICLE II - CONTRACT DOCUMENTS

The contract documents consist of this Contract, with the incorporated "Exhibit A". In the event of a discrepancy between this Agreement and Exhibit "A", this Agreement shall control over Exhibit "A".

ARTICLE III - TIME OF COMPLETION

A. The CONTRACTOR hereby agrees to commence work on or before the tenth (10th) day after written notice to do so, and to fully complete the same within forty-five (45) calendar days after the date of the written notice to commence work, subject to such extensions of time as are provided herein, or as may be mutually agreed upon by the parties in writing.

B. It is the CONTRACTOR'S responsibility to establish methods of installation and an installation schedule which will facilitate the completion of work required by this Contract within the Contract period and with full consideration for the seasonal weather during which the work is

scheduled. Judgment as to hazardous conditions shall be made jointly by the CITY and CONTRACTOR.

C. Any request for extension of time shall be made in writing to the Project Director, stating the reason for said request, and such request shall be received by the CITY immediately following the end of the delay-causing condition. The extension of time allowed shall be as determined by the Project Director and approved by the CITY. An extension of time may be granted by the CITY after the expiration of the time originally fixed in the Contract or as previously extended, and the extension so granted shall be deemed to commence and be effective from the date of such expiration.

ARTICLE IV – COMPENSATION

A. For and in consideration of the faithful performance of the work herein embraced as set forth in the Contract Documents, which are a part hereof and in accordance with directions of the CITY, through its agents, and to its satisfaction, the CITY agrees to pay the said CONTRACTOR the sum of _____ Dollars and Zero Cents (\$x,xxx.xx).

B. CONTRACTOR shall satisfy the CITY that all bills for labor and materials incorporated in the work have been paid, and shall complete and submit to the CITY a certification relinquishing any and all claims or right of lien under, in connection with, or as a result of the work under the Contract before final payment shall be made.

C. The intent of the Contract is that maximum payment shall not exceed the agreed total price set forth in Article IV(A).

D. The CITY will pay the CONTRACTOR the 100% the full contract amount upon completion from the date of City approval of the project.

ARTICLE V - CONFLICT OF INTEREST

Pursuant to A.R.S. Section 38-511, the CITY may cancel this contract without penalty or further obligation, if any person significantly involved in initiating, negotiation, securing, drafting or creating the Contract on behalf of the CITY 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 consultant to any other party of the Contract with respect to the subject matter of the Contract. In the foregoing event, the CITY further elects to recoup any fee or commission paid or due to any person significantly involved in initiating, negotiation, securing, drafting or creating the Contract on behalf of the CITY from any other party to the Contract, arising as a result of the Contract.

ARTICLE VI - INDEPENDENT CONTRACTOR STATUS

It is expressly agreed and understood by and between the parties that the CONTRACTOR is being retained by the CITY as an independent contractor, and as such the CONTRACTOR shall not become a CITY employee, and is not entitled to payment or compensation from the CITY or to any fringe benefits to which other CITY employees are entitled other than that compensation as set forth in the Compensation Section of the Contract. As an independent contractor, the CONTRACTOR further acknowledges that he is solely responsible for payment of any and all income taxes, FICA, withholding, unemployment insurance, or other taxes due and owing any governmental entity whatsoever as a result of this Contract. As an independent contractor, the CONTRACTOR further agrees that he will not make any claim, demand or application to or for any right or privilege applicable

to any officer or employee of the CITY, including but not limited to workmen's compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.

ARTICLE VII – NONDISCRIMINATION

The Contractor, with regard to the work performed by it after award and during its performance of this contract, will not discriminate on the grounds of race, color, national origin, religion, sex, disability or familial status in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Contractor will not participate either directly or indirectly in the discrimination prohibited by or pursuant to Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Section 109 of the Housing and Community Development Act of 1974, the Age Discrimination Act of 1975, the Americans With Disability Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, and Arizona Governor Executive Orders 99-4, 2000-4 and 2009-09, as amended.

ARTICLE VIII - INDEMNIFICATION AND HOLD HARMLESS

The CONTRACTOR hereby agrees to defend, indemnify, and hold harmless the City, its officers, departments and divisions, employees and agents, from and against any and all claims, damages, losses, expenses, liabilities, attorney fees, court costs or other alternative dispute resolution costs arising out of or resulting from the performance of work under this Agreement or any other claim resulting from Contractor's participation pursuant to this Agreement, whether said claims, liabilities, expenses or lawsuits arise by the acts or omissions of the undersigned or his/her agents. The Contractor further releases and discharges the City, officers, departments and divisions, agents and employees, and any and all persons legally responsible for the acts or omissions of the City, from any and all claims which the Contractor has or may have against the City, its agents or employees, arising out of or in any way connected with the Contractor's activities as set forth below, other than those acts which occur due to the negligence of the City, its employees or agents.

ARTICLE IX – INSURANCE

The Contractor agrees, at its sole expense, to maintain on a primary basis during the life of this Contract, or the performance of Work hereunder, insurance coverage's, limits, and endorsements, unless otherwise noted herein.

The Contractor agrees the insurance requirements herein, as well as City's review or acknowledgement, is not intended to, and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Contractor under this Contract. Contractor shall obtain and maintain in effect during the term of this Agreement a policy or policies of liability insurance with limits not less than those stated below:

Commercial General Liability – Occurrence Form

1. Commercial General Liability – Contractor agrees to maintain Commercial General Liability at a limit of liability no less than \$1,000,000 Each Occurrence \$2,000,000 Annual Aggregate. Contractor agrees its coverage's will not contain any restrictive endorsement(s) excluding or limiting Product/Completed Operations, Independent Contractors, Broad Form Property Damage, X-C-U Coverage, Contractual Liability or Cross Liability. The Contractor agrees any Self-Insured Retention or deductible shall not exceed \$25,000.

- a. The policy shall be endorsed to include the following additional insured language: **"The City of Prescott shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of, the Contractor"**.

2. Automobile Liability

Business Automobile Liability – Contractor agrees to maintain Business Automobile Liability at a limit of liability no less than \$1,000,000 Each Occurrence. Coverage’s shall include liability for Owned, Non-Owned & Hired Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

3. Worker's Compensation and Employers' Liability

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

ADDITIONAL INSURED ENDORSEMENTS – The Contractor agrees to endorse the City of Prescott as an Additional Insured on the Commercial General Liability with the following Additional Insured endorsement, or similar endorsement providing equal or broader Additional Insured coverage, the CG 2010 10 01 Additional Insured – Owners, Lessees, or Contractors, or CG2010 07 04 Additional Insured – Owners, Lessees, or Contractors – Scheduled Person or Organization endorsement in combination with the additional endorsement of CG2037 10 01 Additional Insured – Owners, Lessees, or Contractors – Completed Operations shall be required to provide back coverage for the Contractor’s “your work” as defined in the policy and liability arising out of the products-completed operations hazard. Attach an actual copy of the endorsement(s). The name of the organization endorsed as Additional Insured for all endorsements shall read “City of Prescott”.

Deductibles, Coinsurance Penalties & Self-Insured Retention. – Contractor agrees to be fully and solely responsible for any costs or expenses as a result of a coverage deductible, coinsurance penalty, or self-insured retention; including any loss not covered because of the operation of such deductible, coinsurance penalty, self-insured retention, or coverage exclusion or limitation. For deductible amounts that exceed the amounts stated herein that are acceptable to City, the Contractor agrees, when requested by City, to maintain a Commercial Surety Bond in an amount equal to said deductible amount.

WAIVER OF SUBROGATION – Contractor agrees by entering in to this written Contract to a Waiver of Subrogation in favor of the City for each required policy providing coverage during the life of this Contract. When required by the insurer, or should a policy condition not permit the Contractor to enter into a pre-loss agreement to waive subrogation without an endorsement, the Contractor agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery against Others, or an equivalent endorsement. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition that specifically prohibits such an endorsement, or voids coverage should the Contractor enter into such an agreement on a pre-loss basis.

RIGHT TO REVISE OR REJECT – Contractor agrees the City reserves the right, but not the obligation, to review or revise any insurance requirement, not limited to limits, coverages and endorsements based on insurance market conditions affecting the availability of coverage. Additionally, the City reserves the right, but not the obligation, to review and reject any insurance policies failing to meet the criteria stated herein, or any insurer(s) providing coverage due to its poor financial condition or failure to operate legally in the State of Arizona. In such events, the City shall provide Contractor written notice of such revisions or rejections.

NO REPRESENTATION OF COVERAGE ADEQUACY – The coverage, limits or endorsements required herein protect the primary interests of the City, and the Contractor agrees in no way should these coverage, limits or endorsements required to be relied upon when assessing the extent or determining appropriate types and limits of coverage to protect the Contractor against any loss exposures, whether as a result of the Project or otherwise.

CERTIFICATES OF INSURANCE – Contractor agrees to provide City a Certificate of Insurance evidencing that all coverage, limits and endorsements required herein are maintained and in full force and effect, and Certificates of Insurance shall provide a minimum thirty (30) day endeavor to notify, when available by Contractor’s insurer. If the Contractor receives a non-renewal or cancellation notice from an insurance carrier affording coverage required herein, or receives notice that coverage no longer complies with the insurance requirements herein, Contractor agrees to notify the City by fax within five (5) business days with a copy of the non-renewal or cancellation notice, or written specifics as to which coverage is no longer in compliance. When notified by City, the Contractor agrees to not continue Work pursuant to this Contract, unless all required insurance remains in effect.

The City shall have the right, but not the obligation, of prohibiting Contractor from entering the Work site until a new Certificate of Insurance is provided to the City evidencing the replacement coverage. The Contractor agrees the City reserves the right to withhold payment to Contractor until evidence of reinstated or replacement coverage is provided to the City. If the Contractor fails to maintain the insurance as set forth herein, the Contractor agrees the City shall have the right, but not the obligation, to purchase replacement insurance, which the Contractor agrees to reimburse any premiums or expenses incurred by the City.

The Contractor agrees the Certificate(s) of Insurance shall:

1. Clearly indicate the City has been endorsed on the Commercial General Liability with a CG 2010 10 01 Additional Insured – Owners, Lessees, or Contractors – Schedule Person or Organization, or CG 2010 07 04 Additional Insured – Owners, Lessees, or Contractors – Scheduled Person or Organization in combination with the CG 2037 10 01 Additional Insured – Owners, Lessees, or Contractors – Completed Operations, or similar endorsement providing equal or broader Additional Insured coverage. Attach an actual copy of the endorsement.
2. Clearly indicate the project name and project number. PY13-005 Adult Care Services – Exterior Grounds Improvements.
3. Clearly identify each policy’s limits, flat & percentage deductibles, sub limits, or self-insured retentions, which exceed the amounts or percentages set forth herein.
4. Clearly indicate a minimum thirty (30) day endeavor to notify requirement in the event of cancellation or non-renewal of coverage.
5. Clearly indicate Certificate Holder(s) as follows:
City of Prescott, 201 South Cortez St., Prescott, AZ 86303

(1) Original: c/o Grants Administrator

(1) Copy: c/o City Clerk

ARTICLE X – AMBIGUITY

This Contract is the result of negotiations by and between the parties. Although it has been drafted by the Prescott City Attorney, it is the result of the negotiations between the parties. Therefore, any ambiguity in this Contract is not to be construed against either party.

ARTICLE XI – DISPUTES

The parties hereto expressly covenant and agree that in the event of a dispute arising from this Agreement, each of the parties hereto waives any right to a trial by jury. In the event of litigation, the parties hereby agree to submit to a trial before the Court. The Contractor further agrees that this provision shall be contained in all subcontracts related to the project which is the subject of this Agreement. The parties hereto further expressly covenant and agree that in the event of litigation arising from this Agreement, neither party shall be entitled to an award of attorneys fees, either pursuant to the Contract, pursuant to ARS Section 12-341.01(A) and (B), or pursuant to any other state or federal statute, court rule, or common law. The Contractor further agrees that this provision shall be contained in all subcontracts related to the project that is the subject of this Agreement.

ARTICLE XII – CONTRACTOR IMMIGRATION WARRANTY

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. The following is only applicable to construction contracts: The Contractor must also comply with A.R.S. § 34-301, “Employment of Aliens on Public Works Prohibited”, and A.R.S. § 34-302, as amended, “Residence Requirements for Employees”.

Under the provisions of A.R.S. § 41-4401, Contractor hereby warrants to the City that the Contractor and each of its subcontractors (“Subcontractors”) will comply with, and are contractually obligated to comply with all Federal Immigration laws and regulations that relate to their employees and A.R.S. § 23-214(A) (hereinafter “Contractor Immigration Warranty”).

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.

The City may, at its sole discretion, conduct random verification of the employment records of the Contractor and any of subcontractors to ensure compliance with Contractor’s Immigration Warranty. Contractor agrees to assist the City in regard to any random verification performed.

Neither the Contractor nor any Subcontractor shall be deemed to have materially breached the Contractor Immigration Warranty if the Contractor or Subcontractor establishes that it has complied with 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.

Article XIII – NON-AVAILABILITY OF FUNDS

Fulfillment of the obligation of the City under this Agreement is conditioned upon the availability of funds appropriated or allocated for the performance of such obligations. If funds are not allocated and available for the continuance of this Agreement, this Agreement may be terminated by the City at the end of the period for which the funds are available. No liability shall accrue to the City in the event this provision is exercised, and the City shall not be obligated or liable for any future payments as a result of termination under this paragraph.

ARTICLE IX This is a federally funded construction project subject to all federal labor laws, including the Davis-Bacon Act. The applicable Davis Bacon Wage Determination is attached hereto and incorporated herein by reference as Exhibit "B".

Dated this _____ day of _____, 2016.

CONTRACTOR

Name: _____

Title: _____

Company: _____

APPROVED by the City of Prescott this _____th day of _____ 2016.

HARRY OBERG, MAYOR

ATTEST:

APPROVED AS TO FORM:

DANA R. DELONG, CITY CLERK

JON M. PALADINI, CITY ATTORNEY



**SUPPLEMENT TO THE
MARICOPA ASSOCIATION OF GOVERNMENTS (MAG)
UNIFORM STANDARD SPECIFICATIONS AND DETAILS
FOR PUBLIC WORKS CONSTRUCTION**

APPENDIX IV

Technical Specifications

March 22, 2016

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TECHNICAL SPECIFICATIONS

ADD the following Sections:

100.1 SCOPE OF WORK

A. Intent of Plans and Specifications:

1. The intent of the Specifications and Scope of Work is to prescribe a complete work for the Project which the Contractor shall perform in a manner acceptable to the City of Prescott and in full compliance with the terms of the Contract.
2. Unless otherwise specified in the Special Conditions, the Contractor shall furnish all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and incidentals, including, but not limited to, dust and traffic control measures, and to perform all work involved in executing the contract in a satisfactory and workmanlike manner within the specified time.
3. The Engineer shall be that person or his designees employed by or contracted by the City Of Prescott responsible for all aspects of the project and with the authority to make revisions to and approve changes to the plans or specifications.

B. Project Description and Location:

1. The Project description and location are as noted in the contract documents and plans.

C. Time of Completion:

1. The Contractor shall commence the work under this contract on or before the tenth (10th) calendar day after receiving written Notice to Proceed from the Owner. The Contractor shall fully complete all work within the calendar days allowed for in the contract, in accordance with the date set forth in the Notice to Proceed. The Contractor shall at all times during the continuance of the Contract prosecute the work with such work force and equipment as is sufficient to complete the project within the time specified.

100.2 STANDARD SPECIFICATIONS & DRAWINGS

- A. Standard details and specifications for this project shall be the Maricopa Association of Governments Standard Specifications and Details (MAG Standards), latest revision, and the City of Prescott Supplement to the Maricopa Association of Governments Uniform Standard Specifications for Public Works, latest revisions, in conjunction with the City of Prescott Standard Details, latest revisions, except as modified in the plans.
- B. Other standard specifications and details will be incorporated within the plans, project documents and technical specifications by reference, as necessary. These may include references to Maricopa Association of Governments Uniform Standard Details for Public Works Construction (MAG Standard Details, Arizona Department of Transportation Standard Specifications and Standard Drawings for Road and Bridge Construction (ADOT Specifications or ADOT Standard Details), and others.

100.3 GENERAL NOTES

- A. All construction shall conform to the Maricopa Association of Governments Standard Specifications and Details (MAG Standards), latest revisions, and City of Prescott Supplement to MAG Specifications (COP Specifications) and City of Prescott (COP) Standard Details, latest revisions, unless specifically modified on the plans.
- B. It shall be the Contractor's responsibility to obtain copies of MAG, and COP Standards and

Specifications as well as all other standards and specifications necessary to completely and accurately interpret the plans.

- C. All plans signed by the Public Works Director are null and void one year from date of signature if construction has not started.
- D. All quantities shown on plans are not verified by the Engineer. The Contractor shall verify all quantities shown and make his bid based upon those verifications. If any discrepancy in quantities is found, Contractor shall notify the Engineer of such no later than 24 hours prior to bid opening.
- E. A City of Prescott Public Works Department permit will be required for all off-site construction and construction within the public right of way.
- F. It is the sole responsibility of the Contractor to obtain, at his own expense, such permits as are required from the appropriate agencies.
- G. The Public Works Department shall be notified a minimum of 24 hours prior to beginning any construction in the public right of way at (928) 777-1640.
- H. Inspection is to be done by the City of Prescott Public Works Department.
- I. Any work performed without the knowledge of the City of Prescott inspector or his representative is subject to removal and replacement of same, to be done at the Contractor's expense.
- J. All work and materials, which do not conform to the specifications, are subject to removal and replacement at the Contractor's expense.
- K. Approval of a portion of the work in progress does not guarantee its final acceptance. Testing and evaluation may continue until the written final acceptance of a complete and workable unit.
- L. The City of Prescott may suspend the work by written notice when, in its judgment, progress is unsatisfactory, work being done is unauthorized or defective, weather conditions are unsuitable, or there is a danger to the public health and safety.
- M. The Contractor shall provide sufficient men and equipment on the job at all times during construction to comply with specifications and to complete work.
- N. Contractor shall be responsible for construction surveying and layout.
- O. The Contractor shall notify "Blue Stake" at 811 or 1-800-782-5348 at least 48 hours prior to construction.
- P. It is the Contractor's responsibility to locate all underground pipelines, telephone and electric conduits and structures in advance of any construction and will observe all possible precautions to avoid any damage to such. The Engineer and/or City will not guarantee any locations as shown on these plans, or those omitted from it.
- Q. The Contractor is to uncover all existing lines being tied into and verify grades, pipe material, and pipe diameter before material submittals and planned construction activities.
- R. Arizona Department of Environmental Quality Requirements shall be complied with.
- S. All water lines shall be provided with 14 AWG HS-CCS wire. Trace wire shall be subject to traceability test.
- T. Water/sewer separation shall be pursuant to AAC R-18-5-502C and COP specifications.
- U. Water mains shall be subject to a pressure and leakage test in accordance with AWWA C-600 Standard.
- V. Water mains shall be disinfected in accordance with ADEQ Engineering Bulletin No. 8 "Disinfection of Water Systems".
- W. Operation of valves to be done by City personnel only.
- X. All pipeline materials shall be installed per manufacturer's requirements unless superseded by COP specifications.

- Y. All materials for water line construction shall meet AAC R-18-4-119.
- Z. Arizona Department of Environmental Quality requirements will apply when more stringent than MAG Standard Specifications; more specifically where they pertain to maximum allowable sewer line/pressure sewer line exfiltration-infiltration rates.
- AA. Sewer line low-pressure air tests shall be done on 100% of all lines.
- BB. Sewer manholes exfiltration tests shall be done on 100% of all manholes. Vacuum testing in accordance with City of Prescott Standards may be used in lieu of exfiltration test.
- CC. Sewer line deflection tests shall be done on 100% of all pipes.
- DD. Prior to project acceptance, the Contractor shall be responsible for providing the City of Prescott with video (DVD) of the entire sewer main installed including service laterals. The video will be previewed and deemed acceptable by the City prior to project release.
- EE. Acceptance of the completed water/sewer system will not be given until 3 ml photo Mylar or Xerox graphic "as-built" reproducible plans and all required digital files have been submitted by a Registered Professional Engineer and approved by the Engineer.
- FF. Contractor shall warrant all work for a minimum of two years after formal acceptance of the work.

100.4 PUBLIC RELATIONS

Description:

~~The Contractor shall be required to furnish a private telephone line to be used solely for receiving incoming calls from local citizens with questions or complaints concerning construction operations or procedures. The Contractor shall be required to publish this telephone number and maintain a 24-hour answering service. The answering service shall be manned by Contractor personnel during all hours during the course of construction that there is work being performed on this project. The Contractor shall maintain a log of incoming calls, responses, and action taken, which shall be submitted to the Engineer weekly and on request.~~

~~The Contractor shall retain the services of a community relations organization for this project. The Contractor shall submit for approval, to the Engineer, the resume of the proposed community relations organization. Included in the resume shall be the names and credentials of the staff. The community relations organization shall be proactive and knowledgeable in the means and effectiveness of various notification techniques. The Engineer will rely on the organization's experience and suggestions in the presentation of information to the public. The Engineer will review the resume and possibly interview the organization. The Engineer will notify the Contractor within ten calendar days of the acceptability of the community relations organization. Upon notification by the Engineer of an acceptable community relations organization, the Contractor shall hire the organization.~~

~~The community relation organization's activities shall include, but not necessarily be limited to:~~

- ~~1. Printing and distribution of public notices.~~
- ~~2. Providing media news releases after review by the Engineer.~~
- ~~3. Planning and attending other public meetings as required by the Engineer.~~
- ~~4. Planning or otherwise participating in the Dedication Ceremonies as requested by the Engineer.~~
- ~~5. Possess the means for the development and fabrication of newsletters, notices, posters and demonstration boards.~~
- ~~6. Providing telephone "Hot Line" 24-hour service.~~

~~A pre-construction meeting will be scheduled between the Engineer and the Contractor to specifically address the hiring of a community relations organization. This meeting will be scheduled as soon as possible after the Award. The intent is to have a community relations organization on board prior to the~~

~~pre-construction meeting, a meeting in which the community relations organization will have an important participatory role.~~

~~The community relations organization shall develop a community relations program. The program shall include but not necessarily be limited to:~~

- ~~A. Distributing a pre-construction information letter to all residents, businesses, schools and churches within an area determined by the Engineer, which shall contain, as a minimum, the following information:
 - ~~1. Name of contractor.~~
 - ~~2. A 24-hour informational telephone number.~~
 - ~~3. Brief description of project.~~
 - ~~4. Names of project manager and superintendent (contractor).~~
 - ~~5. Name of project engineer (Public Works Department).~~
 - ~~6. Construction schedule including anticipated work hours.~~
 - ~~7. Traffic regulations including lane restrictions.~~
 - ~~8. Time and place for the pre-construction meeting. This notification shall be delivered a minimum of five working days prior to the meeting.~~~~
- ~~B. Holding a pre-construction community meeting with affected neighbors, businesses, schools, churches, etc., as directed by the Engineer.~~
- ~~C. Scheduling and conducting progress meetings, as required, with the affected business tenants and property owners.~~
- ~~D. Printing and mailing of public notices and/or newsletters, including a list of the names, addresses and receipt of postage or delivery for recipients of these newsletters and/or notifications.~~
- ~~E. Holding other public meetings as required by the Engineer.~~
- ~~F. The community relations organization shall use the means (Items A through E) or others to inform the local citizens of operations which may create changes to the norm such as high noise levels, road closures, limited access, haul routes, changes to material delivery routes, unusual hours of construction, disruption of bus routes or changes to other passenger delivery/pick-up routes.~~
- ~~G. Newsletters shall be distributed each month. A final draft shall be submitted to the Engineer for review and approved at least two days before the planned distribution. Each distribution area shall be approved by the Engineer. Each distribution shall include twelve copies for the Engineer.~~
- ~~H. The community relations organization shall keep daily personnel time logs which shall include the name of the employee, date of work, amount of time worked, description of work performed and project number.~~

Measurement and Payment:

~~The bid schedule includes an allowance for Public Relations for the purpose of encumbering funds to cover the cost of Public Relations. The amount of the allowance is determined by the Engineer and is not subject to individual bid pricing. All bidders shall incorporate the amount pre-entered in the bid proposal and shall reflect the same in the total bid for this project.~~

~~It shall be understood that this allowance item is an estimate only. The allowance shall not be used~~

~~without approval of the Engineer, and in no case exceed the allowance.~~

~~Reimbursement for Public Relations shall be based on the community relations organization invoice cost, plus an allowable markup to the prime contractor of 15%, for those services approved by the Engineer.~~

~~**Pay Item: 100.4 Public Relations Allowance**~~

101.1 DEFINITIONS AND TERMS

REPLACE the definition of Engineer with the following:

The Engineer shall be that person or his designees, subordinate to the Public Works Director, employed by or contracted by the City Of Prescott responsible for all aspects of the project and with the authority to make revisions to and approve changes to the plans or specifications.

104.1.4 CLEANUP AND DUST CONTROL

ADD the following:

- A. The work under this item shall consist of applying water required for dust control per MAG Specifications and as modified herein.
- B. If in the opinion of the Engineer the Contractor fails to keep dust for his operation under control, the Engineer may order by written order suspension of operations until the situation is remedied. No time extension or additional costs will be allowed for this suspension.
- C. All contractors requesting construction water from the City must submit a Construction Water Meter Application to the Public Works Department. A \$1,000 deposit will be required for hydrant meters. If construction water use occurs during the months of May through September the Contractor shall also include a dust abatement program. Potable water may not be allowed for dust abatement during these months. Potable water can be used to process embankment fill and base materials year round. However, contractors are encouraged to use treated effluent for construction activities. The City of Prescott has two outlets for effluent, the Sundog Wastewater Treatment Plant and the Airport Wastewater Treatment Plant. The City will provide metered standpipes for effluent at both plants. The Contractor will be required to estimate daily and total potable/effluent water usage for the project as identified on the Construction Water Meter application. The Contractor will be responsible for all costs associated with obtaining and delivering construction water.

Measurement and Payment:

No separate measurement or payment shall be made for dust control. This work shall be considered incidental and included in the unit price bid for construction of the appropriate contract pay items.

104.1.5 Final Cleaning Up:

ADD the following:

Upon completion of construction and before Final Acceptance can be made by the Engineer, the Contractor shall clean up each individual construction area to the satisfaction of the Engineer. Small trees, weeds, and brush, which were removed as part of construction work, shall be removed from the project site and properly disposed of. All debris, broken pipe, concrete and other construction debris shall be removed from the project site and properly disposed.

Mailboxes and traffic signs removed during construction shall be reinstalled in "like kind" and shall be considered incidental to the unit prices for utility work included in the bidding schedule.

105.6 COOPERATION WITH UTILITIES

ADD the following:

A. Location of Underground Utilities

1. Contractor shall contact Blue Stake within the time frame specified under Blue Stake law and request field location of underground utilities. At the time these locations have been marked and prior to the commencement of excavation within the affected area, the Contractor shall at his expense manually determine the exact location of all buried facilities.
2. Contractor shall notify all affected utilities prior to the start of construction and shall ascertain the location of the various underground utilities either shown on the plans and/or as may be brought to his attention.
3. Contractor shall perform all operations in accordance with Arizona Blue Stake law.
4. Utility locations shown on the plans are approximate and based on drawings furnished by the respective utility. It shall be the Contractor's responsibility to protect all existing utilities. Should a utility conflict occur, the Contractor shall cooperate with the said utility to resolve the conflict. No claim for extra costs shall be made against the Owner for delays due to any utility conflict.
5. If performance of the Contractor's work is delayed because the utility owners fail to relocate or adjust their facilities in a timely manner, the Contractor may file for an extension of time. To receive consideration, this request shall contain specific information as to the nature of the delay and the actual loss of time involved.
6. Contractor shall assume full responsibility for damage to all marked utilities due to his operations and shall repair the damaged utilities in accordance with regulatory authority requirements at his own expense.

Measurement and Payment:

No separate measurement and payment shall be made for Location of Underground Utilities. This work shall be considered incidental and included in the unit price bid for construction or installation of the appropriate contract pay items.

105.8 CONSTRUCTION STAKING

Replace Section 105.8 in its entirety with the following:

- A. Construction staking shall be the responsibility of the CONTRACTOR. The control for the project is provided in the CONTRACT DOCUMENTS. The CONTRACTOR shall be held responsible for preservation of control monumentation. If any of the control monumentation have been carelessly or willfully destroyed or disturbed by the CONTRACTOR, the cost of replacing them will be charged against him and will be deducted from the payment of work.
- B. The CONTRACTOR shall not retain the ENGINEER of Record for construction staking due to conflict of interest.
- C. Staking shall be performed and certified by a Registered Land Surveyor in good standing with the Arizona State Board of Technical Registration.
- D. Field notes and record drawings shall be provided to the ENGINEER.
- E. The staking shall be performed in such a manner and frequency that the CONTRACTOR is able to construct the project in accordance with the plans and specifications. At a minimum, staking shall include

1. Slope or limit stakes (TCE).
 2. Alignment of Pipeline.
 3. Valves, bends, blow offs, air release valves, tracer wire stations, water meters and hydrant locations.
 4. Horizontal and vertical bend locations.
 5. Tank and appurtenances.
 6. Electrical, instrumentation and control facilities, including, but not limited to, antennae pole.
 7. Site improvements including, but not limited to, retaining walls, curbs, fencing, drainage, chain link fence enclosures, protection posts, gates, etc. The original grade of all retaining walls shall be surveyed and established prior to beginning any earthwork.
 8. Cross-sections will be required, at no additional expense to the City, should quantity disputes arise pertaining to the following: Earthwork, Sub-grade, ABC or Asphaltic Concrete.
 9. Curb stakes at all PC's, PT's, Vertical PI's (grade breaks), Transitions to and from Super Elevated sections and at 50 foot intervals.
 10. Blue top of Sub-grade and ABC at intervals specified for curb. Quarter crown blue tops shall be required when the typical section is four lanes or more without median curb.
 11. Other staking as needed to complete the work in conformance with the plans and specifications.
- F. The ENGINEER and the CONTRACTOR's Superintendent shall meet monthly or as necessary to jointly measure all work items under the contract to determine pay quantities for each pay period. Quantities of work items shall be documented on the respective plan sheets and separately in tabular fashion with Station to Station measurements noted to assure there is no duplication of payment for work performed. Measurements will be for work actually completed. No projections for expected completion of work will be allowed.
- G. All survey data will be as noted below.

SURVEY DATUM REQUIREMENTS

CITY OF PRESCOTT SURVEY DATUM REQUIREMENTS	
COORDINATE UNITS:	International Feet
DISTANCE UNITS:	International Feet
HEIGHT UNITS:	International Feet
DATUM	
GEODETTIC (HORIZONTAL) DATUM:	North American Datum of 1983 (1992), (NAD83 (1992))
COORDINATE SYSTEM:	Arizona Coordinate System (State Plane)
ZONE:	Central (0202)
VERTICAL DATUM:	North American Vertical Datum of 1988, (NAVD88)
GEOID MODEL:	GEOID99 (Conus)
CITY OF PRESCOTT COORDINATE SYSTEM (COPCS) – CONVERSION FROM STATE PLANE	
COPCS NORTHING=	(State Plane Northing x 1.000329975) – 701,456.0090

COPCS EASTING=	(State Plane Easting x 1.000329975) + 69,457.2499	
Note: Distances computed between COPCS coordinates approximate "ground" distances		
STATE PLANE – CONVERSION FROM CITY OF PRESCOTT COORDINATE SYSTEM		
STATE PLANE NORTHING=	(COPCS Northing + 701,456.0090) x 0.999670134	
STATE PLANE EASTING=	(COPCS Easting – 69,457.2499) x 0.999670134	
EXAMPLE - CITY OF PRESCOTT MINGO BASE		
LATITUDE	34°34'29.27969" N	
LONGITUDE	112°28'48.72638" W	
HEIGHT	5582.412'	
STATE PLANE COORDINATES		CITY OF PRESCOTT COORDINATES
NORTHING	1,301,026.703	600,000.0000
EASTING	530,367.742	600,000.0000
ELEVATION	5,673.955'	5,673.955'

Measurement and Payment

The quantity of "Construction Staking" measured for payment shall be the lump sum bid by the CONTRACTOR. The contract unit price per lump sum paid for "Construction Staking" shall be full compensation for all labor, materials, and equipment to perform the construction staking as described in this section.

Pay Item: 105.8 Construction Staking

ADD the following Section:

105.16 AS-BUILT PREPARATION AND COORDINATION

A. As-built data and preparation will be performed by the ENGINEER. The CONTRACTOR shall notify the ENGINEER as required in this Section, provide access to the work, and cooperate with the ENGINEER to accurately depict the as-built conditions. During the construction phase and prior to any backfilling or covering, the ENGINEER will survey the work for the purpose of as-built preparation. Surveying shall be performed and certified by a Registered Land Surveyor in good standing with the Arizona State Board of Technical Registration. The ENGINEER shall supply all horizontal and vertical as-built data in ASCII format, including a northing, easting, elevation and description of all work completed under this contract. The CONTRACTOR shall aid the ENGINEER in determining and providing this information. As-built data shall include, but not be limited to all items noted below.

1. Roadway
 - a) Horizontal centerline alignment(s) including all PC's, PT's, and PI's.
 - b) Cross sections at 50-foot intervals consisting of back of sidewalk, front of sidewalk, top back of curb, flow line, front face of gutter (edge of pavement).
 - c) Valley gutters including flow lines, spandrels, approaches, ADA ramps, installed or relocated signs, traffic signals, and street lights.
2. Storm System
 - a) All drainage structures including manholes, catch basins, junction structures, scuppers, and inlet/outlet structures. Rim and invert elevations shall be included for all structures. Headwall data shall include top of wall/wingwall, footing elevations, inverts, and apron

boundaries weather concrete or rip-rap.

- b) Drainage ditches, swales, and channels; the flow line and sufficient cross sections (minimum of 50-foot intervals) including grade changes, shall be provided to prove conformance to the plans.
3. Water System (Potable and Re-Use)
- a) The alignment of the water main(s) including all horizontal and vertical curves. If the water main continues in a straight horizontal *and* vertical alignment for more than 100 feet, the water main will be surveyed every 100 feet. Sufficient survey shots shall be taken on horizontal and vertical curves to establish an accurate alignment.
 - b) All fittings and appurtenances shall be surveyed, including but not limited to the following: valves, bends, tees, reducers blow offs, air release valves, tracer wire stations, water meters, and hydrant locations.
 - i) Valves shall be shot on the nut and center of the cover. If extensions are used, the length of the extension shall be noted.
 - ii) All fittings shall be shot at the middle of the fitting.
 - iii) Air release valves shall be shot at the main connection, the air release box, and any major alignment changes between the two.
 - c) All mainline water and sewer crossings shall be surveyed for specific elevation separations and be entered on the as-builts.
4. Sewer System (Gravity and Force Mains)
- a) The alignment of the main(s) including all horizontal and vertical curves. If the sewer main continues in a straight horizontal *and* vertical alignment for more than 100 feet, the sewer main shall be surveyed every 100 feet. Sufficient survey shots shall be taken on horizontal and vertical curves to establish an accurate alignment.
 - b) All manholes, cleanouts, backwater valves, lift stations, and force main valves shall be shot. Structures shall have rim and invert elevations included.
 - c) All valves at lift stations and line or isolation valves on force mains shall be shot on the nut and the center of the cover or vault lid.
5. Water tank and appurtenances
- a) Required information for water tanks include, but are not limited to finished floor elevation, footing elevations, inlet, outlet, drain, and overflow locations.
 - b) Site piping and appurtenances shall follow the requirements of 105.16.A.3.
6. Electrical, instrumentation, and control facilities, including, but not limited to, antennae pole.
- a) All exterior poles, antennae, transformers, junction boxes, and pull boxes.
 - b) All exterior power, communication, fiber optic, cable lines, including all conduit and duct

banks.

7. Site improvements
 - a) Shall include, but not limited to, retaining walls including footing elevations, curbs, fencing, drainage, chain link fence enclosures, protection posts, gates, finished ground topography, etc.
 - B. Prior to backfilling or covering any work, the CONTRACTOR shall notify the ENGINEER 48-hours in advance in writing for the item of work. The minimum 48-hours notice time shall not include weekends or holidays. The notification shall be via e-mail to both the CITY and ENGINEER.
 - C. The CONTRACTOR must provide access for the ENGINEER to verify all as-built information prior to backfilling or covering. The CONTRACTOR shall not backfill or cover an item of work until verification has been completed by the ENGINEER. If an item of work is determined by the ENGINEER to be backfilled or covered prior to being recorded by the ENGINEER, the CONTRACTOR at the direction of the ENGINEER shall uncover the item of work at no additional cost to the OWNER.
 - D. The CONTRACTOR shall maintain a redlined copy of the project plans including changes made in construction of the project. The redline copy shall be updated on a weekly basis in preparation for the weekly as-built field meeting. The CONTRACTOR shall provide the ENGINEER with a copy of the redline plans upon completion of the project.
 - E. Weekly field meetings with the CONTRACTOR, ENGINEER and CITY shall occur to review As-Built information for conformance with the specifications. The CONTRACTOR shall provide the ENGINEER with a schedule of work items to be constructed in the upcoming 30 day period, including approximate dates of installation prior to backfilling or covering. The CONTRACTOR field redlines will be reviewed for notation of changes in the work. Missing, erroneous or deficient data must be corrected by the CONTRACTOR at no additional cost to the OWNER.

Measurement and Payment:

No separate measurement and payment shall be made for As-Built Preparation and Coordination. This work shall be considered incidental and included in the unit price bid for construction or installation of the appropriate contract pay items.

106 CONTROL OF MATERIALS

ADD the following:

Contractor shall submit in writing all materials to be used in the project in accordance with ADOT Specification Section 106 and Subsection 730-4.

106.2 SAMPLES AND TESTS OF MATERIALS

REPLACE Section 106.2 in its entirety with the following:

- A. Quality control measures sufficient to produce materials and workmanship of acceptable quality are the responsibility of Contractor. Upon request Contractor shall provide factory certificates of compliance or analysis or both to the Engineer. The Contractor shall provide full-time asphaltic concrete laydown compaction testing and adequate plant control for each paving day. The Contractor shall provide an independent geotechnical firm to perform all soils and concrete testing, as required, per these specifications.
- B. The weekly reports shall state the type of work performed during the report period and other process

control measures taken to assure quality. Type of work must be identified by activity, location, station, and offset, purpose of test, and any other relevant information that the Engineer needs to identify or replicate the quality control testing. Results of all tests, corrective actions, re-tests, and control charts shall be attached to the weekly reports. Although hand written documentation can be included, the quality control report narrative and test results must be typed to insure that clear reproductions of the documents can be made. The report period shall end at midnight each Friday and the report shall be submitted to the Engineer no later than 5:00 pm of the following Wednesday. Payment in the amount of \$500.00 per report will be withheld for each individual report that is not delivered to the Engineer by the time and day specified above. Only one half of the withheld payments will be returned on the next regular project progress payment when the delinquent reports have been turned in and all of the above requirements have been met. Any report turned in more than 10 business days beyond the Wednesday due date will not be eligible for withheld payments to be returned.

Table 1 – Quality Control Minimum Sampling Standard for ABC and Asphalt				
Standard MAG Spec Section	Material	Type of Test(s) Required	Sampling Point	Minimum Sampling Frequency
701, 702	Aggregate Base*	Proctor Density	Roadway and Pipe Bedding	At start of production, then as material changes
	(ABC)	Compaction	Roadway and Pipe Bedding	One per 500ft, per lift, per lane pass
		Gradation, PI	Roadway and Pipe Bedding	One per project, or one per 1,000 tons of fraction thereof
321, 322, 323, 710	Hot In-Place Asphaltic Concrete	Oil Content and Gradation**	If no City Inspector is at plant, sample in-place	One per day or one per 500 tons or fraction thereof
321, 322	Hot In-Place Asphaltic Concrete	Mix Design Properties	If not City Inspector is at plant, sample in-place	One per day or one per 500 tons or fraction thereof
		Density/Nuke	Roadway	One per 500ft per lift, per lane pass
		Density/Core	Roadway	5 to 7 cores per mix/project** (additional cores to be taken if source or mix changes) per Engineer
Remarks: *If Asphalt Millings are used for bedding, they shall meet the requirements of virgin aggregate base course, Asphalt Millings are not accepted as ABC for pavement cross-section. **Asphalt deficient in oil content, at the direction of the City Inspector/Lab, will be cored 50ft on both sides of failed section. The results of these 2 cores will be averaged with the original test result. Also the cores for gauge calibration. The City Inspector, on an as needed basis, may require additional tests.				

Table 2- Quality Control Minimum Sampling Standard for Concrete				
Standard MAG Spec Section	Material	Type of Test(s) Required	Sampling Point	Minimum Sampling Frequency
505, 701, 702, 725	Concrete Flat Work, CIP, Structural	Compressive Strength	At Discharge	One set of three cylinders per 50 C.Y. or one per shift
		Slump, Air, Time and Temperature*	At Discharge	One per set of cylinders
		Thickness	Roadway	See Spec
	Structural Pre-cast** and Re-bar	Certification	Project	One per 100 LF of item. Re-bar size and heat number
701, 702, 725, 728	Lean Mix Concrete (Slurry)	Compressive Strength	At Discharge	One set of three cylinders per shift (per Engineer)
<p>Remarks:</p> <p>*Concrete spec for time is 90 minutes and temperature is 90 degrees.</p> <p>**Manhole Shafts and Concrete Pipe need to have acceptance stamp on them and VCP need D-load test results from Certified Lab.</p> <p>The City Inspector, on an as needed basis, may require additional tests.</p> <p><u>Verification Packet should include the following:</u></p> <p>All laboratories must submit a Verification Packet at the end of the project stating that the testing for the said project was in accordance to ASTM and/or AASHTO test procedures, including P.E.'s stamp.</p> <p>Sampling and testing was in accordance to the City of Prescott Acceptance Sampling Guide.</p> <p>Testing was in accordance to MAG/YAG and the City of Prescott Supplements to MAG for Soils Subgrade and Trench Compaction, Aggregate Base Course and Asphalt sampling and compaction and concrete sampling and cylinder breaks.</p>				

Table 3- Quality Control Minimum Sampling Standard for Soil				
Standard MAG Spec Section	Material	Type of Test(s) Required	Sampling Point	Minimum Sampling Frequency
206, 601, 603, 205, 301	Soil Backfill or Trench Backfill	Proctor Density	In-Place	One per soil type
		Compaction	In-Place	One per 500ft, per lift
		Proctor Density	Roadway	One per soil type
	Subgrade	Compaction	Roadway	One per 500ft, per lift
		Gradation, PI	Roadway In-Place	One per soil type
Manholes and Laterals	Compaction	In-Place	One per structure, pipe and lateral trench at various lifts	
205, 601	Roadway, Excavation, Embankments	Proctor Density	In-Place	One per soil types
		Compaction	In-Place	One per 1,000 C.Y.
		Gradation, PI	In-Place or Source	One per soil type
211	Fill Construction	Compaction	In-Place	One per 500ft, per lift (MAG 211.3)
Remarks: *All Compaction failures will be re-tested using a Sandcone. Any resulting failure will be re-worked before any re-tests are performed. **The Nuclear Gauge shall be calibrated against the Sandcone at least every ten tests or per Engineer. Rock correction shall be used for any + #4 material to obtain Max Proctor Density. The City Inspector, on an as needed basis, may require additional tests.				

ADD the following Section:

106.9 QUALITY ACCEPTANCE TESTING

- A. The Engineer may provide quality acceptance sampling and testing. The number of tests and location of each shall be determined by the Engineer. The expense of the initial sampling and testing shall be paid for by the City. Additional sampling and testing required due to failure of the initial test(s) shall be accomplished as provided by the City and these additional expenses shall be deducted from moneys due Contractor.
- B. Contractor and the Engineer’s representative shall coordinate on a daily basis the following day’s work schedule and any testing that may be necessary. The Engineer’ quality acceptance testing will generally consist of (1) daily sampling and testing for asphalt extraction/gradation and Marshall density for each paving day; and (2) asphaltic concrete core drilling after placement to verify thickness and density. A minimum of one core per each 1,000 square yards of paving shall be randomly sampled by the Contractor’s quality control lab after marking by the City inspector.
- C. Construction quality acceptance testing performed by the City of Prescott does not relieve the Contractor or the manufacturer of materials produced for the Contractor, of the obligation to perform and document quality control testing of materials and workmanship.

Measurement and Payment:

No separate payment shall be made for Contractor Quality Control. This work shall be considered incidental and included in the unit price bid for construction or installation of the appropriate contract pay items. An independent geotechnical firm shall perform all quality control testing. The Contractor shall furnish copies of all test results to the City on a weekly basis.

No separate payment shall be made for Quality Acceptance Testing or any related work performed by

Contractor.

107.6 PUBLIC CONVENIENCE AND SAFETY

ADD the following:

A. Maintenance of Traffic

1. Contractor shall at all times conduct his/her work as to ensure the least possible obstruction to traffic.
2. Unless otherwise provided, the road, while being improved shall be kept open to all traffic by Contractor. When so requested by Contractor and approved by the Engineer, Contractor may by-pass traffic over an approved detour route. Regardless of whether it is through or local traffic, Contractor shall keep the portion of the project being used by traffic in such condition that traffic will be adequately accommodated.
3. Contractor shall also provide and maintain in a safe condition temporary approaches or crossings and intersections with trails, roads, streets, businesses, parking lots, driveways residences, garages and farms; however, Contractor will not be required to remove snow.
4. Before any detour is opened to traffic, the Engineer shall have been satisfied that traffic is able to proceed in a safe manner.
5. Contractor shall bear all expense of maintaining traffic over the road being improved as well as constructing, maintaining and subsequently removing Contractor requested detours, approaches, crossings, intersections and other features as may be necessary without any direct compensation.

B. Access to Businesses/Residences

Contractor shall provide to all residents and businesses affected by the project, access to one of their driveways at all times except as modified by the following: If Contractor finds it unavoidable to temporarily close off access for any time, the residents/businesses affected shall be contacted a minimum of 48 hours in advance and an alternate procedure for access mutually agreed to. Contractor shall provide the Engineer with signed evidence of a mutually accepted agreement between the property owner/business manager/residential manager and Contractor prior to said closure.

C. Safety

1. The safety and convenience of the general public and the residents along the project and the protection of persons and property shall be provided for by the Contractor in accordance with the requirements of this contract.
2. Contractor shall submit a Safety Plan to the Engineer at the preconstruction conference. The plan shall detail the procedures The Contractor will implement to satisfy OSHA and the State Occupational Safety Guidelines related to the worker as well as public safety in construction of excavations, structures and confined air spaces as identified by the Engineer. Contractor's Safety Plan shall include the requirement that all workers and visitors must wear hard hats while within the project limits.
3. The Safety Plan submitted by Contractor shall include proposed methods to prevent unauthorized persons from gaining access to the work areas.
4. In conjunction with the Safety Plan, Contractor shall furnish and install 72" temporary chain link fencing, or approved equal satisfactory to the Engineer, around any unattended excavation deeper than four feet with slopes steeper than 2:1. Temporary fencing shall completely enclose the referenced construction activity and shall be secured after normal working hours to prevent unauthorized access.
5. Unless otherwise approved in writing by the Engineer, open utility trenches shall be limited to 50 ft.

in length except for cast-in-place pipe installations and during non-working hours shall be covered with steel plate in a manner satisfactory to the Engineer.

107.9 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

ADD the following:

Mailboxes and traffic signs removed during construction shall be installed in “like kind” and shall be considered incidental to the unit prices for utility work included in the bid schedule, provided they are not in the bid schedule.

Existing landscape improvements, drainage ditches, etc., shall be restored in “like kind” so that the improvement is put back in as close to its prior state as possible

The Contractor shall restore each individual work site to grades existing before construction work, including wheel ruts and other scarring.

Measurement and Payment:

No separate payment will be made for restoration of items impacted by the Contractor’s construction operation and the cost of these items shall be included in the unit bid prices in the bid schedule.

ADD the following Section:

107.15 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

This project is subject to the Arizona Pollutant Discharge Elimination System (AZPDES) stormwater requirements for construction sites under the Environmental Protection Agency (EPA) delegation to the Arizona Department of Environmental Quality (ADEQ) for the Construction General Permit for Arizona. The following specifications shall apply:

A. General Requirements:

The Contractor shall comply with the Arizona Pollutant Discharge Elimination System (AZPDES) Stormwater requirements for construction sites under the Arizona Department of Environmental Quality (ADEQ) Construction General Permit for Arizona. Under provisions of that permit, the Contractor shall be designated as permittee and shall be responsible for providing the necessary labor and materials, and for taking the appropriate measures to assure compliance with the AZPDES Construction General Permit for Arizona as well as other Federal, State and local requirements pertaining to stormwater discharges. As the permittee, the Contractor is responsible for completing, in a manner acceptable to the ADEQ, all documents required by this regulation including the following:

- (1) Stormwater Pollution Prevention Plan shall be sealed by a professional engineer licensed in the State of Arizona.
- (2) Stormwater Pollution Prevention Plan (SWPPP) for the project including certification form. The Contractor will be required to update and revise the SWPPP as necessary throughout the construction of the project in order to assure compliance with ADEQ permit requirements. The completed SWPPP shall be kept on the project site at all times during construction of the project.
- (3) Notice of Intent (NOI) to be covered by AZPDES Construction General Permit for Arizona including certification of signature.
- (4) Notice of Termination (NOT) of coverage under AZPDES Construction General Permit for Arizona (upon project completion).

Copies of necessary forms and guidance for preparing the SWPPP are available at ADEQ's website www.adeq.state.az.us/envIRON/water/permits/azpdes.html

B. Submittals:

- (1) Preliminary Copies of the NOI and SWPPP shall be submitted to the Engineer at the time of the preconstruction meeting. Any necessary revisions to the SWPPP shall be subject to review by the Engineer, prior to implementation.
- (2) The Contractor shall submit completed, signed NOI forms at least 48 hours prior to the initial start of construction on the project to ADEQ. One copy of the completed, signed NOI form shall be submitted to Arizona Department of Environmental Quality at the following address: Stormwater Program - Water Permits Section/NOI, ADEQ (5415B-3), 1110 West Washington, Phoenix, AZ 850071.
- (3) Failure by the Contractor (or any of its appropriate subcontractors) to submit the NOI forms within the required time frame shall result in delay of the start of construction. The Contractor shall submit a completed copy of the NOI prior to Notice to Proceed. A copy of the completed NOI shall be posted on the construction site and a copy of the SWPPP shall be kept on the construction site.

C. Contractor's Responsibilities:

- (1) It is the Contractor's responsibility to perform inspection of all stormwater pollution control devices on the project on a monthly basis and following each rainfall of 0.50 inches or more at the project site and as required under the AZPDES Construction General Permit for Arizona. The Contractor shall prepare reports on these inspections and retain these reports for a period of three years following project completion as required under the AZPDES Construction General Permit for Arizona. Inspection reports shall be submitted monthly to the contracting agency along with payment requests. The Contractor shall maintain all stormwater pollution control devices on the project in proper working order, including cleaning and/or repair during the duration of the project.
 - (2) No condition of either the AZPDES Construction General Permit for Arizona or the SWPPP shall release the Contractor from any responsibilities or requirements under other environmental statutes and regulations.
- D. Upon total project completion, acceptance, and de-mobilization, the Contractor shall submit its completed, signed NOT form to the ADEQ with Copies to the same agencies who received Copies of the NOI, thereby terminating all AZPDES permit coverage for the project.

Measurement and Payment:

Payment shall be at the lump sum unit price bid in the Contract Documents for all material, labor, and other incidental costs relating to the provision, installation, and maintenance of items relating to this permit during project construction. Such incidental costs shall include Contractor costs in order to assure proper operation of the pollution-control devices installed including all maintenance, cleaning, and disposal costs associated with clean-up and repair following storm events or other runoff or releases on the project.

Pay Item: ~~107.15 Stormwater Pollution Prevention Plan (SWPPP)~~

108.4 CONSTRUCTION SCHEDULE

ADD the following:

- A. At the pre-construction meeting the Contractor shall submit for review by the Engineer a complete construction schedule as stated in the General Conditions of these contract documents.
- B. Once this schedule has been accepted by the Engineer, Contractor shall not deviate from it until a

revised schedule has been submitted and accepted by the Engineer.

- C. The Engineer reserves the right to reject construction schedule submittals when in his opinion the schedule lacks the proper detail.

109.10 PAYMENT FOR MOBILIZATION/DEMobilIZATION

REPLACE Section 109.10 in its entirety with the following:

The Agency will compensate Contractor for a single round trip mobilization/demobilization of Contractor's personnel, equipment, supplies and incidentals, including establishment of offices, buildings and other facilities required for the performance of the work on the project, as well as preparatory work and operations prior to the commencement of the work on the project site.

Measurement and Payment:

Mobilization will be measured for payment by the lump sum bid as a single complete unit of work. Payment for mobilization will be made as provided herein which shall be full compensation for supplying and furnishing all materials, facilities, and services and performing all the work involved as specified above. The total amount allowed for mobilization during the life of the contract shall not exceed nine percent (9%) of the original contract amount. If the bid price exceeds this percentage the excess amount will be paid to the Contractor upon completion of the contract and nine percent of the contract amount shall be used to determine partial payments. Partial payments under this item will be made in accordance with the following provisions:

1. The first payment of one third of the lump sum price for mobilization may be made provided that all submissions required under this Section and the General Conditions of the Contract are submitted by the Contractor at the pre-construction conference to the satisfaction of the Engineer and when the Engineer has determined that a significant amount of equipment has been mobilized to the project site which will be used to perform portions of the project work.
2. The second payment of one third of the lump sum price for mobilization shall be made on the first estimate following completion of thirteen percent (13%) of the contract.
3. The third payment of one third of the lump sum price for mobilization will be made on the first estimate following completion of twenty-six percent (26%) of the contract.

Pay Item: 109.10 Mobilization

ADD the following Section:

109.11 CONTRACT ALLOWANCE

- A. Contract allowance items are provided for the purpose of encumbering funds to cover the costs of possible contract amendment work. The amount of the allowance item is determined by the Engineer and is not subject to individual bid pricing. All bidders shall incorporate the amount pre-entered in the bid proposal and shall reflect the same in the total amount bid for this project.
- B. This allowance item provides an estimated funding to cover unforeseen changes that may be encountered and corresponding extra work needed to complete the contract per plan. Unforeseen extra work, if any, shall be in accordance with the Contract Amendment section of the General Conditions.

It shall be understood that this allowance item is an estimate only and is based on contract amendment history of similar projects. It shall not be utilized without an approved contract amendment. It is further understood that authorized extra work, if any, may be less than the allowance item. The Contractor, by submittal of his bid, acknowledges that the total bid and individual bid items were prepared without anticipation of use of the contract allowance.

Pay Item: 109.11 Contract Allowance

ADD the following Sections:

200.1 DEWATERING

- A. All water encountered during the work shall be disposed of by the Contractor in a manner such that it will not damage public or private property or create a public nuisance or health problem. Contractor shall submit drawings and complete design data showing methods and equipment he proposes to utilize in dewatering prior to completing any dewatering work. This work shall consist of obtaining permits, furnishing equipment, materials, and labor necessary for the control and removal of water, the construction or installation of all facilities necessary to accomplish the work, and the subsequent removal of such facilities except when designated on the project plans or in the special provisions to remain in place.
- B. The Contractor shall keep, where appropriate, the rehabilitated pipe section free from water during rehabilitation. If groundwater is present in any excavation, the static groundwater level shall be drawn down a minimum of one (1) foot below the bottom of excavations to maintain the undisturbed state of natural soils and allow the placement of any fill to the specified density. Disposal of water shall not damage property or create a public nuisance. The Contractor shall have on hand pumping equipment and machinery in good working condition for emergencies and shall have workmen available for its operation. Dewatering systems shall operate continuously until backfill has been completed to one (1) foot above the normal static groundwater level.

Groundwater shall be controlled to prevent softening of the bottom of excavations, or formation of "quick" conditions. Dewatering systems shall not remove natural soils. The Contractor shall control surface runoff to prevent entry or collection of water in excavations.

Release of groundwater to its static level shall be controlled to prevent disturbance of the natural foundation soils or compacted fill and to prevent flotation or movement of structures or pipelines.

Measurement and Payment:

No separate measurement or payment shall be made for dewatering. This work shall be considered incidental and included in the unit price bid for construction or installation of the appropriate contract pay items.

200.2 ~~BY-PASS PUMPING~~

A. ~~Description:~~

- ~~1. Scope: This section specifies the requirements for temporary bypass pumping of sewers~~
- ~~2. Requirements:~~
 - ~~a. Contractor shall provide labor, materials, and supervision to temporarily bypass flow around the Contractor's work.~~
 - ~~b. The Contractor shall have the entire bypassing system in place and tested before bypassing any sewage.~~
- ~~3. At the Pre-construction Conference, the Contractor shall submit drawings and complete design data showing methods and equipment he proposes to utilize in sewer bypassing for approval by the Engineer. The submittal shall include the following information:~~
 - ~~a. Drawings indicating the location of temporary sewer plugs and bypass discharge lines.~~
 - ~~b. Capacities of pumps, prime movers, and standby equipment.~~

- c. ~~Design calculations providing adequacy of the system and selected equipment.~~
 - d. ~~Standby power source.~~
 - e. ~~Staffing plan.~~
 - f. ~~Traffic Control Plan.~~
4. ~~FLOW DATA: It is the responsibility of the Contractor for design, construction, and operation of an adequate and properly functioning bypass. It is also the responsibility of the Contractor to coordinate with the city to gather flow data.~~
 5. ~~PROTECTION: In areas where flows are bypassed, all bypass flow shall be discharged as approved by the Engineer. No bypassing to the ground surface, receiving waters, storm drains or bypassing which results in groundwater contamination or potential health hazards shall be permitted.~~
 6. ~~SCHEDULING: The bypass system shall not be shut down between shifts, on holidays or weekends, or during work stoppages without written permission from the Engineer. Public advisory services will be required to notify all parties whose service laterals will be out of service and to advise against water usage until the main line is back in service.~~

B. Materials:

1. ~~The Contractor shall provide temporary pumps, conduits and other equipment to bypass the sewer flow. Contractor shall furnish the necessary labor and supervision to set up and operate the pumping and bypass system. Engines shall be equipped with mufflers and/or enclosed to keep the noise level less than 50dB or 10dB above ambient noise levels when measured at the property line closest to the noise source. Pumps and bypass lines shall be of adequate capacity and size to handle the flows.~~
2. ~~The Contractor shall maintain on site sufficient equipment and materials to ensure continuous and successful operation of the bypass systems. Standby pumps shall be fueled and operational at all times. The Contractor shall maintain on site a sufficient number of valves, tees, elbows, connections, tools, sewer plugs, piping and other parts or system hardware to ensure immediate repair or modification to any part of the system as necessary.~~
3. ~~All piping, joints and accessories shall be designed to withstand at least twice the maximum system pressure, or 50psi, whichever is greater. All hoses/pipes used for bypass pumping shall be ramped to allow for the ease of vehicular and pedestrian traffic. All hoses/pipes shall be color-coded for identification to prevent cross contamination of water and wastewater lines. Hose/pipes used for wastewater conveyance are not used for water conveyance.~~

C. General:

1. ~~During bypass pumping, sewage shall not be leaked, dumped or spilled outside the sewer system. When bypass pumping operations are complete, all piping shall be drained into the sanitary sewer prior to disassembly. In the event that sewage accidentally drains into the storm drainage system or the street, the Contractor shall immediately stop the overflow, notify the Owner and take the necessary action to clean up and disinfect the spillage to the satisfaction of the Owner. The Contractor shall submit their emergency spillage and cleanup action plan for all sewage spills to the Engineer for approval prior to beginning construction. It shall include but not be limited to a remediation plan that indicates what labor, equipment and resources will be used to restore the site to the condition prior to the spillage.~~
2. ~~The Contractor shall repair without cost to the Owner any damage that may result from this negligence, inadequate or improper installation, maintenance and operation of bypassing system including mechanical or electrical failures, regulatory infractions and penalties resulting from sewer~~

~~spillage.~~

~~D. Flow Control:~~

- ~~1. Complete stoppage or bypassing of flow is required during sewer line and manhole rehabilitation work.~~
- ~~2. When the depth of flow at the upstream manhole of the sewer line section being worked is above the maximum allowable for television inspection, the flow shall be reduced to the level shown below by plugging or blocking of the flow, or by pumping and bypassing of the flow as specified.~~
- ~~3. PLUGGING OR BLOCKING: A sewer line plug shall be inserted into the line upstream of the section being worked. The plug shall be so designed that all or any portion of the sewage can be released. During TV inspection, flow shall be reduced to within the limits specified above. After the work has been completed, flow shall be restored to normal. Precautions shall be taken to prevent flooding damage. See flow precautions below.~~
- ~~4. PUMPING AND BYPASSING: When pumping and bypassing is required the Contractor shall supply the pumps, conduits and other equipment to divert the flow of sewage around the manhole section in which work is to be performed. The bypass system shall be of sufficient capacity to handle existing flow plus additional flow that may occur during peak flow periods or from precipitation and shall be constructed of such material that will prevent leakage during the pumping operation. The Contractor will be responsible for furnishing the necessary labor and supervision to set up and operate the pumping and bypassing systems. All pump drivers shall have noise suppressor exhaust systems to reduce noise levels to less than 50dB, or 10dB above ambient noise levels, when measured at the closest property line.~~
- ~~5. FLOW CONTROL PRECAUTIONS: When flow in a sewer line is plugged, blocked or bypassed; sufficient precautions must be taken to protect the sewer lines from damage that might result from sewer surcharging. Further, precautions must be taken to insure that sewer flow control operations do not cause flooding or damage to public or private property being served by the sewer involved. All piping(s), joints and accessories shall be designed to withstand at least twice the maximum system pressure or a minimum of 50psi whichever is greater. During by pass pumping sewage shall not be leaked, dumped or spilled onto any area outside the sewer system. When by-pass pumping operations are complete all piping shall be drained into the sanitary sewer prior to disassembly. In the event sewage accidentally drains into the drainage system or street, the Contractor shall immediately stop the overflow, notify the Engineer and take the necessary action to clean up and disinfect the spillage to the satisfaction of the Engineer. If sewage is spilled onto public or private property, the Contractor shall wash down, clean up and disinfect the spillage to the satisfaction of the City. The Contractor shall report any and all overflows to the City.~~

~~E. Measurement And Payment:~~

~~Payment for By-pass Pumping shall be made at the lump sum bid by the Contractor~~

~~**Pay Item: 200.2 By-pass Pumping**~~

201 CLEARING AND GRUBBING

201.1 Description:

Replace in its entirety with the following:

This work shall consist of removing objectionable material from the right-of-way, easements, all areas to be graded, and such other areas as may be specified in the special provisions. Clearing and grubbing shall be performed in advance of grading operations.

201.3 Construction Methods:

REPLACE the second paragraph with the following:

All trees and shrubs found suitable for improvement and beautification, which will not interfere with excavation or embankment or cause disintegration of the improvements shall not be disturbed. In any event, the Contractor shall avoid injury to shrubbery, vines, plants, grasses and other vegetation growing outside of the clearing limits. The dragging and the piling of materials of various kinds and the performing of other work which may be injurious to vegetation shall be confined to areas which have no vegetation or which will be covered by embankment or disturbed by excavation during grading operations.

REPLACE the fourth paragraph with the following:

From excavated areas, all stumps, roots and other obstructions 3 inches or over in diameter shall be grubbed to a depth of not less than 24 inches below finish grade.

REPLACE Table 201-1 in its entirety with the following:

TABLE 201-1	
EMBANKMENT CLEARING AND GRUBBING	
Height of Embankment Over Stump	Height of Clearing and Grubbing
0 Feet to 2 Feet	All stumps or roots 6 inches or over in diameter shall be grubbed to 24 inches below original grade. All others shall be cut flush with the ground.
2 Feet to 3 Feet	All stumps 1 foot and over in diameter shall be grubbed to 24 inches below original grade. All others shall be cut flush with the ground.
Over 3 Feet	All stumps shall be cut flush with the ground.

REPLACE the eighth paragraph with the following:

All tree trunks, stumps, brush, limbs, roots, vegetation and other debris removed in clearing and grubbing shall be completely removed from the project and properly disposed of.

201.5 Measurement and Payment, Clearing and Grubbing:

REPLACE with the following:

No separate payment shall be made for clearing and grubbing.

205 ROADWAY EXCAVATION

ADD the following Section:

205.1.1 General:

The bidding schedule quantities for this item of work will be considered to be the final quantities for payment. Adjustments in the bidding schedule quantities for Roadway Excavation as contained in these specifications may be initiated by Contractor or the Engineer if evidence indicates that the required quantity varies by an amount greater than 5% of the bidding schedule quantity. Contractor shall advise the Engineer, in writing, submitting evidence in the form of a construction survey or photogrammetric survey with measurement for the proposed adjustment and requesting an adjustment in quantities. The Engineer will determine the amount of adjustment, if any. The quantity upon which payment will be based will be the bidding schedule quantity plus or minus only that portion of the adjustment that exceeds 5% of the bidding schedule quantity.

Variations caused by shrink/swell of materials shall not be considered for quantity adjustments.

Adjustments in Roadway Excavation quantities due to revisions ordered by the Engineer will be isolated by measurement or calculations. The bidding schedule quantities will be adjusted by the amount either measured or calculated, regardless of the 5% variation requirement above.

205.2 UNSUITABLE MATERIAL

REPLACE the third paragraph with the following:

If material is encountered during excavation that the Engineer determines to be unsuitable, the following shall apply:

1. Material which is located in a cut section at an elevation above finished sub-grade shall not be utilized in construction but shall be removed and disposed of at a site secured by Contractor.
2. Material which is located below the finished sub-grade elevation in excavation areas shall be removed to the limits as determined by the Engineer and the resultant cavity backfilled with aggregate base course in accordance with Section 310.

205.6 Surplus Material

REPLACE the first paragraph with the following:

Unless otherwise shown on the plans, addressed in the special provisions, or approved by the Engineer, no surplus excavated material shall be disposed of within the right-of-way. The Contractor shall make all arrangements for disposal of the material at off-site locations as may be approved by the Engineer. The Contractor shall provide to the Engineer copies of the written consent of the owner of the property upon which he intends to dispose of such material, and any permits that may be required by a governing agency for said disposal.

205.7 Measurement:

REPLACE the first two paragraphs with the following:

The following earthwork operations will be measured as roadway excavation for the quantities of material involved.

Excavating the roadway prism including public and private roadway approaches; excavating slides and slip-outs not resulting from overshooting; excavating excess material; excavating selected material and topsoil from within the limits of the project and removing such materials from stockpiles when stockpiling is ordered; and excavating ditches.

ADD the following:

Measurement for unsuitable material shall be to the nearest cubic yard as calculated in the field.

205.8 Payment: ADD the following:

Payment for unsuitable material shall be at the contract unit price and shall include all excavation, hauling and disposal at a site secured by Contractor, and backfilling with aggregate base course.

~~**Pay Item: 205.1 Roadway Excavation**~~

~~**Pay Item: 205.2 Removal of Unsuitable Material and Backfill With ABC**~~

206 STRUCTURE EXCAVATION AND BACKFILL

206.4.2 Structure Backfill For Earth Retaining Structures:

REPLACE (A) with the following:

(A) Shall conform to the material and the graduation requirements for Select Material, Type B in Table 702-1 unless otherwise approved by the Engineer.

206.4.4 Structure Backfill For Structures Within Paved Areas:

REPLACE in its entirety with the following:

Where a structure is located within an existing street, proposed street, or paved area:

All backfill material with the exception of controlled low strength material shall be compacted to 95% maximum dry density per ASTM D-698. Controlled low strength material shall be 1 sack material as specified in Sections 604 and 728.

211 FILL CONSTRUCTION

211.1 Description:

Replace in its entirety with the following:

Fill construction shall consist of constructing embankments except as may otherwise be specified, including the preparation of the areas upon which they are to be placed; including the construction of dikes.

The bidding schedule quantities for this item of work will be considered to be the final quantities for payment. Adjustments in the bidding schedule quantities for Fill Construction as contained in these specifications may be initiated by Contractor or the Engineer if evidence indicates that the required quantity varies by an amount greater than 5% of the bidding schedule quantity. Contractor shall advise the Engineer, in writing, submitting evidence in the form of a construction survey or photogrammetric survey with measurement for the proposed adjustment and requesting an adjustment in quantities. The Engineer will determine the amount of adjustment, if any. The quantity upon which payment will be based will be the bidding schedule quantity plus or minus only that portion of the adjustment that exceeds 5% of the bidding schedule quantity.

Variations caused by shrink/swell of materials shall not be considered for quantity adjustments.

Adjustments in Fill Construction quantities due to revisions ordered by the Engineer will be isolated by measurement or calculations. The bidding schedule quantities will be adjusted by the amount either measured or calculated, regardless of the 5% variation requirement above.

Measurement and payment shall be in accordance with Sections 211.5 and 211.6

211.2 Placing:

REPLACE the first paragraph with the following:

Rocks or other solid material which are larger than 4 inches in greatest dimension shall not be placed in fill areas. Broken concrete or asphalt shall not be placed in the fill.

211.3 Compacting:

REPLACE the seventh paragraph in its entirety with the following:

The interstices around the rock in each layer shall be filled with earth or other fine material and compacted. Broken portland cement concrete and bituminous pavement shall not be permitted in the fill.

211.4 Tests:

ADD the following:

Quality control testing frequency shall be one per soil type for proctor density testing and one per 500 feet

per 8-inch lift for compaction testing.

211.5 Measurement:

Replace the first paragraph with the following:

The quantities of fill construction used to construct embankments or dikes will be those of the complete bid item within the limits of dimensions shown on the plans.

211.6 Payment:

ADD the following:

~~Pay Item: 211.6 Fill Construction~~

300 STREETS AND RELATED WORK

300.1 Saw Cut

- A. The work under this item shall consist of saw cutting the existing pavement where new asphalt concrete is to match existing bituminous surfaces with no provisions for overlaying the entire section. This item shall also include saw cutting of existing Portland cement concrete pavement, sidewalks, driveways and parking lots where new construction shall match the grade of existing surfaces that are to remain where called for on the project plans or where designated by the Engineer.
- B. Saw cuts shall be made to a full depth of the material to insure a neat vertical joint. Portland cement concrete designated to remain that is damaged by the saw cutting shall be replaced in kind at The Contractor's expense.
- C. No separate measurement or payment will be made for saw cutting, being considered incidental to the cost for work for which saw cutting is required.

301 SUB-GRADE PREPARATION

301.1 Description

ADD the following:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for preparation of natural or excavated areas prior to the placement of any sub-base material, pavement, curbs and gutters, driveways, sidewalks or other structures. Unless provided for in another bid item, this work shall include the removal and disposal of all unsuitable material including existing pavement and other obstructions in accordance with MAG Specification Section 301. The Contractor shall be required to provide and pay for all quality control geotechnical testing in accordance with the MAG Specifications and the City's MAG Supplement.

301.2.1 REPLACE in its entirety with the following:

The contractor shall not use asphalt concrete or other bituminous roadway surfacing materials as embankment fill.

Project earthwork quantities, when included as separate contract pay items, will include removed asphalt/bituminous material volumes, unless there is a pay item for asphalt removal or asphalt milling in the bid schedule or otherwise specified in the Special Provisions.

All unsuitable material and all excess material shall be disposed of in accordance with the requirements of Sections 205.2 and 205.6, respectively. When additional material is required for fill, it shall conform to

Section 210.

301.3 Relative Compaction:

The subgrade shall be scarified and loosened to a depth of eight (8) inches.

(B) Below detached sidewalk not subject to vehicular traffic 95 percent

Sub-grade quality control testing shall be one per 500 lf per lane for compaction testing.

301.7 Measurement:

REPLACE in its entirety with the following:

Measurement for Subgrade Preparation will be by the square yard, measured by the total accepted area of new pavements, including paved shoulders, tapers, turnouts and driveways that are paved or surfaced with an aggregate base material. The areas under concrete curb and gutter, sidewalk and concrete driveway entrances will not be included. Unless provided for in other separate bid items or unless otherwise specified; Clearing and Grubbing, Roadway Excavation, Rock Excavation, Borrow Excavation, and Fill Construction shall not be measured, in which case payment for these earthwork items, if required, shall be included in the unit price for Subgrade Preparation.

301.8 Payment:

REPLACE in its entirety with the following:

Payment for Subgrade Preparation will be made only when it is performed for street or roadway paving projects. Payment shall be compensation in full for stripping, scarifying, grading, excavating, hauling, filling, compacting, and disposing of excess or unsuitable materials, together with all costs incidental thereto.

Pay Item: ~~301 Sub Grade Preparation~~

306 MECHANICALLY STABILIZED SUBGRADE – GEOGRID REINFORCEMENT

306.2 Materials:

~~ADD the following~~

~~Reinforcement Geogrid shall be Tensar BX1200 or approved equal.~~

~~**306.8 Payment:** REPLACE 306.8 in its entirety with the following:~~

~~Measurement of geogrid reinforcement shall be the surface area of accepted geogrid to the nearest square yard. No additional measurement or payment shall be made for geogrid overlap as required by the manufacturer.~~

~~Payment for geogrid reinforcement shall be per square yard installed complete and in place.~~

~~**Pay Item:** 306 Geogrid, Tensar BX-1200~~

310 PLACEMENT AND CONSTRUCTION OF AGGREGATE BASE COURSE

310.1 Description

~~The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the placement of an approved, imported aggregate base course material on top of a prepared subgrade per the required design thickness, grade, cross section and compaction as specified on the project plan documents and in accordance with MAG Specification Sections 310, 701 and 702. Aggregate base course shall not be placed on a prepared subgrade until the City Engineer or authorized representative has inspected and accepted the underlying subgrade. The Contractor shall be required to provide and pay for all quality control~~

~~geotechnical testing in accordance with the MAG Specifications and the City's MAG Supplement. Use of Reclaimed Concrete Material (RCM) is not allowed.~~

~~ADDITION of the following to MAG Section 310.1:~~

~~310.1.1 Reclaimed Asphalt Pavement (RAP)~~

~~Use of Reclaimed Asphalt Pavement (RAP) aggregates or "millings" produced on-site for the intended use in the underlying base or subgrade material *must be approved by the City Engineer or authorized representative*. Imported or stockpiled RAP milling material allowed to be used in lieu of or blended with virgin aggregate base course material shall be screened and meet MAG Specification Sections 310, 701 and 702. RAP millings must be uniformly mixed with an imported virgin aggregate base course material.~~

~~310.2 Placement and Construction:~~

~~ADD the following: Aggregate base course shall not be placed on excessively wet or frozen sub-grade materials as determined by the Engineer.~~

~~310.2.1 Aggregate base course quality control testing frequency shall be as follows:~~

~~Resistance to Degradation and Abrasion One at the start of production and again if source changes Fractured Faces, One Face, PI, and Gradation One per shift~~

~~310.3 Compaction:~~

~~The fifth paragraph shall be REPLACED as follows: For roadway construction, a minimum of one field density test shall be performed per 6-inch lift per 500 feet per lane. For other aggregate base course applications, a minimum of one field density test shall be performed for each 800 square yards.~~

~~Delete (A), (B), and (C) in their entirety, and ADD the following: Aggregate base course shall be compacted to 98% in all instances.~~

~~310.5 Measurement and Payment:~~

~~REPLACE in its entirety with the following:~~

~~Measurement for aggregate base course material will be per ton furnished and placed. Copies of material delivery tickets will be required for quantity verification purposes. Payment shall be made at the unit price bid and shall be considered full compensation for this work item.~~

~~**Pay Item: 310 Aggregate Base Course**~~

~~317 ASPHALT MILLING~~

~~MAG Section 317 shall be replaced in its entirety as follows:~~

~~317.1 Description:~~

~~The work under this section shall consist of milling existing asphalt concrete pavement where shown on the plans or requested by the Engineer.~~

~~317.2 Construction Requirements:~~

~~When milling is specified, the existing asphaltic concrete shall be removed in accordance with the details shown on the project plans with equipment specifically designed to remove such material by means of grinding or chipping to a controlled line and grade. The equipment used shall be capable of removing the existing asphaltic concrete within 0.01 feet of the specified removal depth. The removal shall be accomplished in a manner which does not destroy the integrity of any asphaltic concrete pavement that remains and which does not result in a contamination of the milled asphaltic concrete with the underlying~~

~~base material.~~

~~Pavement to be removed by milling, adjacent to manholes, valve boxes, small radius curbs and other fixed objects that produce confined areas shall be removed with milling equipment specifically designed to operate in restricted areas and capable of removing asphaltic concrete of the specified thickness without damage or displacement of the adjacent object. The removal of asphalt concrete pavement at the approaches to structures shall be accomplished in a manner approved by the City.~~

~~On projects with existing curb and gutter, any asphaltic concrete buildup in the gutter designated to be removed, shall be removed prior to the pavement removal operation by equipment and methods approved by the Engineer. The equipment and methods used shall be capable of removing the asphaltic concrete buildup without causing damage to the curb and gutter~~

~~Upon removal, the excess existing asphalt concrete material shall be delivered and off-loaded and stock-piled by the Contractor to the City Waste Transfer Station on Sundog Ranch Road at a location on site determined by the City. The millings will then become the property of the City.~~

~~Prior to milling and roadway excavation, all existing manholes, valve boxes, etc. shall be lowered and protected. All City facilities shall be protected from debris that may result from any adjustments and the Contractor shall be responsible for any maintenance activity resulting from debris related to the construction. No separate payment shall be made for lowering and protecting existing manholes, valve boxes, etc.~~

~~Under no circumstance shall the removal of existing asphaltic concrete begin until the mix design for replacement asphaltic concrete has been approved by the Engineer.~~

~~The extent of removal of existing asphaltic concrete must be in keeping with the contractor's ability to produce, haul, place and compact replacement asphaltic concrete so that at all times the length of open "trench" is at a minimum. If the contractor's production of replacement asphaltic concrete is stopped for any reason, the removal of asphaltic concrete shall either cease or shall be reduced. The Engineer will be the sole judge as to whether the removal shall cease or be reduced. The Engineer's decision will be based on the reason for the stoppage in asphaltic concrete production, the expected length of the stoppage, the type and depth of the material being removed, and the time of day.~~

~~317.2.1 Quality Control:~~

~~All milling shall be inspected and approved prior to paving. High spots in excess of the tolerances noted shall be milled until in conformance.~~

~~Low spots in excess of 1/2" (one-half inch) shall have a leveling course placed prior to paving at no additional cost to the CITY.~~

~~317.2.2 Paving:~~

~~For mill and overlay areas, replacement asphaltic concrete shall be placed as soon as possible after milling has occurred and been approved. The surface on which the material is to be placed shall be uniform and free of loose material. Any exposed base material shall be compacted to the extent required by the Engineer.~~

~~The "trench" in which asphaltic concrete is being placed shall be filled before the end of each day's work and the lane shall be opened to traffic. The length of open "trench" at any one time shall not exceed two miles or half the length of the work, whichever is the lesser.~~

~~In the event of circumstances beyond the control of the contractor, such as equipment breakdown, or if the production of the replacement asphaltic concrete has been stopped by the Engineer and the contractor is unable to comply with the requirements in the preceding paragraph, the contractor shall provide and maintain such traffic control devices that the Engineer deems necessary under the circumstances in order to provide safe and efficient passage through the work zone.~~

~~If the Engineer deems it to be warranted, the contractor shall provide for the surface drainage of areas where the pavement surface has temporarily been removed.~~

~~317.3 Mean Macrotexture Depth:~~

~~Macrotexture asphalt milling when included as a separate contract pay item shall be performed in accordance with the following:~~

~~Existing asphaltic concrete shall be removed by milling in accordance with the details shown on the project plans and as specified herein. The milling equipment shall be specifically designed to remove material to a controlled line and grade by means of grinding or chipping. The equipment used shall be capable of removing the existing asphaltic concrete uniformly throughout the milled area at the required cross-slope and within 1/8 inch of the specified removal depth. The specified removal depth of the existing bituminous pavement shall be as noted on the plans. The removal shall be accomplished in a manner which does not destroy the integrity of any pavement that remains. During production milling, the contractor shall verify the actual depth of milling required to remove the desired underlying pavement surface. If it is determined by the Engineer that the required milling depth is greater than the specified milling depth, the additional material shall be completely removed to the desired underlying pavement surface, as approved, in accordance with MAG 109.4. The milled material shall be removed and disposed of as specified by the CITY.~~

~~The milled surface shall have a maximum mean macrotexture depth of 4.50 millimeters, as determined in accordance with Arizona Test Method 742- Mean Macrotexture Depth of Milled Pavement.~~

~~At the start of the milling operation, the contractor shall mill a 500-foot test section. The milled surface of the test section shall be evaluated by the Engineer for compliance with the maximum mean macrotexture depth requirement. If the milled surface is in compliance with the macrotexture requirement, the contractor may begin production milling. If the milled surface is not in compliance with the macrotexture requirement, the contractor shall make adjustments to the milling operation and then mill another test section.~~

~~During production milling, the mean macrotexture depth shall be determined at a minimum frequency of one test per one-half mile per lane. If, at any time, during the milling operation the Engineer determines that the macrotexture requirement is not being achieved, the contractor shall stop milling. Milling shall not resume until the Engineer is satisfied that the macrotexture requirement can be met or until successful completion of another test section. The forward speed of the milling machine during production milling shall not exceed the speed used for the test section. The forward speed of the milling machine shall be checked throughout each production day, or at the discretion of the Engineer.~~

~~The profile of the milled surface, in both the longitudinal and transverse directions, shall not vary by more than 1/8 inch over a distance of ten feet.~~

~~Under no circumstance shall the removal of existing asphaltic concrete begin until the mix design for replacement asphaltic concrete has been approved by the Engineer.~~

~~The extent of removal of existing asphaltic concrete must be in keeping with the contractor's ability to produce, haul, place and compact replacement asphaltic concrete so that at all times the length of milled surface is at a minimum. If the contractor's production of replacement asphaltic concrete is stopped for any reason, the removal of asphaltic concrete shall either cease or shall be reduced. The Engineer will be the sole judge as to whether the removal shall cease or be reduced. The Engineer's decision will be based on the reason for the stoppage in asphaltic concrete production, the expected length of the stoppage, the type and depth of the material being removed, and the time of day.~~

~~Asphaltic concrete shall be placed as soon as possible after the milling. The surface on which the material is to be placed shall be uniform and free of loose material.~~

~~The length of milled surface at any one time shall not exceed two miles, or one-half the length of the work, whichever is less. Asphaltic concrete shall be placed on the milled surface before the end of each day's~~

~~work. The lane shall be opened to traffic at the end of each day's work.~~

~~In the event of circumstances beyond the control of the contractor, such as equipment breakdown, or if the production of the replacement asphaltic concrete has been stopped by the Engineer and the contractor is unable to comply with the requirements in the preceding paragraph, the contractor shall provide and maintain such traffic control devices that the Engineer deems necessary under the circumstances in order to provide safe and efficient passage through the work zone.~~

~~If the Engineer deems it to be warranted, the Engineer will require that the contractor provide for the surface drainage of areas where the pavement surface has temporarily been removed.~~

~~Pavement, to be removed by milling, adjacent to manholes, valve boxes, small radius curbs and other fixed objects that produce confined areas shall be removed with milling equipment specifically designed to operate in restricted areas and capable of removing asphaltic concrete of the specified thickness without damage or displacement of the adjacent object. Such areas may be excluded from macrotexture testing at the discretion of the Engineer.~~

~~On projects with existing curb and gutter, any asphaltic concrete buildup in the gutter designated to be removed, shall be removed prior to the pavement removal operation by equipment and methods approved by the Engineer. The equipment and methods used shall be capable of removing the asphaltic concrete buildup without causing damage to the curb and gutter.~~

317.4 Measurement and Payment:

~~Payment for milling shall be based on plan quantities at the unit bid price in the bid schedule to include milling, delivery, and stock piling millings at the City Waste Transfer Station on Sundog Ranch Road.~~

~~Pay Item: 317.2 Asphalt Milling~~

~~Pay Item: 317.3 Macrotexture Milling~~

321 ASPHALT CONCRETE PAVEMENT

~~Asphalt mix design materials, manufacture, and placement shall be in accordance with Section 321 and Section 710 with the additions, clarifications and changes herein:~~

~~**Section 321.3 Weather And Moisture Conditions:** shall be changed as follows:~~

~~Asphalt concrete shall be placed only when the surface on which the material is to be placed is dry, unfrozen, the atmospheric temperature in the shade is at 40 degrees F and rising, and the temperature of the road surface or subsurface is at 50 degrees F and rising as measured in the shade. No asphalt concrete shall be placed when the weather is foggy or rainy, when precipitation is eminent, or when the base or sub base on which the material is to be placed is unstable. Asphalt concrete shall be placed only when the Engineer or his authorized representative determines that weather conditions are suitable and sub base conditions on which the material is to be placed are acceptable.~~

~~**Section 321.4 Application Of Tack Coat:** the first and second paragraphs are modified as follows:~~

~~A tack coat shall be applied to all existing and to each new course of asphalt concrete prior to the placing of a succeeding lift of asphalt concrete.~~

~~The application of the tack coat shall comply with Section 329. The grade of emulsified asphalt shall be SS-1 h as specified in Section 713.~~

~~**Section 321.6 Mix Production:** is supplemented as follows:~~

~~1. STOCKPILING~~

- a. ~~Sufficient virgin mineral aggregate material shall be stockpiled at the site of the hot plant to produce the quantity of asphalt concrete required for a minimum of two successive eight hour shifts; however, this requirement will be modified during the last two days production, or under special conditions with the Engineer's approval.~~
- b. ~~Mineral aggregate shall be stockpiled so that segregation is minimized. An approved divider of sufficient size to prevent intermingling of stockpiles shall be provided.~~

~~2. PROPORTIONING~~

- a. ~~No fine material which has been collected in the dust collection system shall be returned to the mixture unless the Engineer, on the basis of tests, determines that all or a portion of the collected fines can be utilized. If the Engineer so determines, he will authorize in writing the utilization of a specific proportion of the fines; however, authorization will not be granted unless the collected fines are accurately and uniformly metered into the mixture.~~
- b. ~~Mineral aggregate and bituminous material shall be proportioned by volume, by weight, or by a combination of volume and weight.~~
- c. ~~When mineral aggregate and bituminous material are proportioned by weight, all boxes, hopper buckets or similar receptacles used for weighing materials, together with scales of any kind used in batching materials, shall be insulated against the vibration or movement of the rest of the plant due to the operation of any equipment so that the error in weighting with the entire plant operating shall not exceed 2% for any setting nor 1½% for any batch. Bituminous material shall be weighed in a heated, insulated bucket suspended from a springless dial scale system.~~
- d. ~~When mineral aggregate and bituminous material are proportioned by volume, the correct portion of each mineral aggregate size introduced into the mixture shall be drawn from the storage bins by an approved type of continuous feeder which will supply bituminous material and so arranged that the proportion of each mineral aggregate size can be separately adjusted. The continuous feeder for the mineral aggregate shall be mechanically or electrically actuated.~~

~~3. DRYING AND HEATING~~

- a. ~~A recording pyrometer or other approved recording thermometric instrument sensitive to a rate of temperature change of not less than 10° F per minute shall be so placed at the discharge chute of the drier in order to record mineral aggregate and to facilitate reading the recorded temperature. A copy of the recording shall be given to the Engineer. The moisture content of the asphalt concrete immediately behind the paver shall not exceed 1%.~~

~~4. MIXING~~

- a. ~~The production of the plant shall be governed by the rate required to obtain a thorough and uniform mixture of the materials. Mixing shall continue until the uniformity of coating, when tested in accordance with the requirements of AASHTO T 195, is at least 95%.~~
- b. ~~A positive signal system shall be provided to indicate the low level of mineral aggregate in the bins. The plant will not be permitted to operate unless this signal is in good working condition. Each bin shall have an overflow chute or a divider to prevent material from spilling into adjacent bins.~~
- c. ~~The temperature of asphalt concrete upon discharge from the mixer shall not exceed 325° F. If the asphalt concrete is discharged from the mixer into a hopper, the hopper shall be constructed so that segregation of asphalt concrete will be minimized.~~

Section 321.8 Placement: ~~is supplemented as follows:~~

- a. ~~Contractor shall stringline finish ABC grade in the presence of the Engineer or his representative to~~

~~verify compliance to specified tolerances prior to the placement of asphalt concrete. Placement of asphalt concrete shall not begin until adjacent Portland cement concrete items have obtained 75% of design strength.~~

- ~~b. The handling of asphalt concrete shall at all times be such as to minimize segregation. Any asphalt concrete which displays segregation shall be removed and replaced.~~
- ~~c. All wheels and tires of compactors and other equipment shall be wiped when necessary with an approved product in order to prevent the picking up of the asphalt concrete.~~
- ~~d. Before asphalt concrete is placed, the surface to be paved shall be cleaned of objectionable material.~~
- ~~e. The base or sub-grade upon which the asphalt concrete is to be placed shall be prepared in accordance with the applicable requirements for the material involved and maintained in a smooth and firm condition until placement.~~
- ~~f. At any time, the Engineer or his designee may require that the work cease or that the work day be reduced in the event of weather conditions either existing or expected which would have an adverse effect upon the asphalt concrete.~~
- ~~g. The temperature of asphalt concrete just prior to compaction shall be at least 250° F but shall not exceed 300° F, unless permitted by the Engineer.~~
- ~~h. The asphalt concrete shall be placed as a surfacing course. Surfacing courses are defined as courses placed to serve either as a traffic surface or as a surface upon which a finishing course or seal coat is to be placed. The thickness of surfacing courses will be shown on the project plans.~~
- ~~i. In order to achieve, as far as practicable, a continuous operation, the speed of the paving machine shall be coordinated with the production of the plant.~~
- ~~j. Tapered sections exceeding eight feet in width or widened sections not exceeding four feet in width may be placed and finished by other means approved by the Engineer.~~

Section 321.8.4 Compaction Base and Surface: ~~is supplemented as follows:~~

- ~~a. Compacting and smoothing shall be accomplished by the use of self-propelled equipment. Compactors shall be pneumatic tired and tandem powered (steel wheel) and shall be approved by the Engineer.~~
- ~~b. Compactors shall be operated in accordance with the manufacturer's recommendations. Compactors shall be designed and properly maintained so that they are capable of accomplishing the required compaction.~~
- ~~c. Steel wheel compactors shall weigh not less than eight tons and have the vibratory mode option.~~
- ~~d. Pneumatic tired compactors shall be the oscillating type having a width of not less than four feet with pneumatic tires of equal size, diameter and having treads satisfactory to the Engineer. Wobble-wheel compactors will not be permitted. The tires shall be spaced so that the gaps between adjacent tires will be covered by the following tires. The tires shall be inflated to 90 lb. per square inch, or such lower pressure will not vary more than five lb. per square inch from the designated pressure.~~
- ~~e. Pneumatic tired compactors shall be constructed so that the total weight of the compactor can be varied to produce an operating weight per tire of not less than 2,000 lb.~~
- ~~f. Steel wheel compactors shall not be used in the vibratory mode when the surface temperature of the asphalt concrete falls below 180 ° F.~~
- ~~g. Asphalt concrete shall be compacted to not less than 95.0% of laboratory density.~~

- ~~h. Compaction control shall be defined as the responsibility of Contractor on the basis of his anticipated rate of production to determine the number and types of compactors and the sequence and manner in which they shall be used in order to achieve the specified percent density.~~
- ~~i. The responsibility for developing and controlling the compaction lies with Contractor.~~
- ~~j. The City reserves the right to test Contractor's percent of density at any time.~~
- ~~k. Core samples shall be taken by Contractor on a random location basis with locations determined by the Engineer and consist of one core per every 1,000 square yards of roadway, for each day's production. The asphalt cores shall be taken on the following workday or within 24 hours whichever applies and shall be submitted to the City's Quality Assurance firm for testing.~~
- ~~l. For complete acceptance, all core densities must show a minimum relative density of 95.0% based on a 75 blow Marshall Density, AASHTO T-245. The Marshall Density shall consist of two sets of three specimens averaged for each day's production.~~
- ~~m. If the core densities show inadequate compaction the unit price will be adjusted per the table below:~~

Percent Compaction	Reduction in Payment
94.0 - 94.9	5%
93.0 - 93.9	10%
92.0 - 92.9	25%

- ~~n. When the percent compaction is less than 92.0%, Contractor may be required to remove and replace any portions at the discretion of the Engineer at no extra cost to the City.~~

Section 321.8.5 Smoothness: ~~the second sentence is changed as follows:~~

- ~~a. Surfacing course surfaces shall not vary more than 1/8 inch from the lower edge of ten-ft. straightedge when the straightedge is placed parallel to the center of the roadway.~~

Section 321.9 Quality Control: ~~shall be changed as follows:~~

~~A. Contractor Quality Control~~

~~1. GENERAL REQUIREMENTS~~

- ~~a. It shall be the responsibility of Contractor to administer a Quality Control Plan, hereinafter referred to as "Plan", sufficient to assure a product meeting the requirements of these specifications. The Plan may be operated wholly or in part by a subcontractor or an independent organization; however, the Plan's administration, including compliance with the Plan and its modification, shall remain the responsibility of Contractor.~~
- ~~b. Contractor is required to provide and maintain a Quality Control Plan, along with all the personnel, equipment, supplies and facilities necessary to obtain samples, perform tests, and otherwise assure the quality of the project.~~
- ~~c. Contractor shall submit the Quality Control Plan to the Engineer or his designee at the preconstruction conference.~~
- ~~e. Contractor shall perform process control sampling, testing and inspection during all phases of the work and shall perform the process control sampling, testing, and inspection at a rate sufficient to assure that the work conforms to the contract requirements. Contractor shall provide the Engineer a~~

~~certification stating that all of the testing equipment to be used is properly calibrated and will meet the specifications applicable for the specified test procedures.~~

~~2. ELEMENTS OF THE PLAN~~

- ~~a. The Plan shall address all elements which affect the quality of the asphalt concrete including, but not limited to the following: Mix Design, Aggregate Production, Quality of Components, Stockpile Management, Proportioning, Mixing (including addition of Mineral Admixture, if required), Placing and Finishing, Joints, Compaction.~~

~~3. PLAN IMPLEMENTATION~~

- ~~a. The Contractor shall provide testing at the frequencies listed in Table 321.9.1 during production of the asphalt concrete. A laboratory accredited in each of the listed tests by the AASHTO Materials Laboratory (AMRL) shall perform the testing.~~

TABLE 321.9.1		
CONTRACTOR QUALITY CONTROL TESTING REQUIREMENTS		
Test	Sample Point	Frequency
Ignition Binder Calibration, ASTM D 6307	Stockpiles or storage tanks	1 per mix design per project
Ignition Binder Test, ASTM D 6307, C 117 & C116	Plant, truck, or on-grade	1 per 1000 tons, but not less than 1 per day
Gyratory or Marshall Density, ASTM D 4013 or AASHTO T 166	Plant, truck, or on-grade	1 per 1000 tons, but not less than 1 per day
Maximum Theoretical Density, ASTM D 2041	Plant, truck, or on-grade	1 per 1000 tons, but not less than 1 per day
Temperature	On-grade	Continuous Reading
Aggregate Gradation, ASTM C 117 & C 136	Cold Feed	1 per 1000 tons, but not less than 1 per day

- ~~b. Results of each test shall be provided to the Engineer or his designee immediately upon completion and in no case later than the end of the day asphalt was produced. Test results shall be used to control the asphalt concrete production. Production of the asphalt concrete on consecutive paving days shall not commence until the prior day's test results have been submitted to the Engineer or his designee and appropriate actions have been taken in accordance with the criteria listed in Table 321.9.1 and Table 321.9.2.~~

TABLE 321.9.2		
CRITERIA FOR REQUIRED PLANT ADJUSTMENT		
Property	Criteria A (Adjustment)	Criteria S (Stoppage)
Binder Content	±0.4% of Mix Design	±0.5% of Mix Design
Air Voids	4±1.5%	4±2.0%
Gradation	Table 321-3	Table 321-3
Temperature	±10BC of Mix Design	±15BC of Mix Design

- c. ~~The guidelines in Table 321.9.2 and Table 321.9.3 shall be used to determine if the plant will require adjustment or stoppage. If the Contractor's test results indicate the mixture does not comply with Criteria A in Table 321.9.2, an adjustment to the plant will be required to bring the production closer to the middle of the specification bands. The Contractor is responsible for determining the extent and the method of adjustment, and shall notify the Engineer or his designee in writing of what adjustments were made.~~

TABLE 321.9.3	
ALLOWABLE GRADATION VARIATION FROM MIX DESIGN TARGET	
Maximum Aggregate Size	100%
Nominal Maximum Aggregate Size (NMAS)	±5%
#8 (2.36 mm) Sieve to NMAS	±4%
#40 (0.425mm) Sieve	±3%
#200 (0.75 mm) Sieve	±1.5%

- d. ~~If the Contractor's test results indicate the mixture is at or beyond the range established by Criteria S in Table 321.9.2, production shall cease immediately, and shall not resume (except as required to produce material for additional samples) until additional test results verify the adjustments will produce test results meeting Criteria A in Table 321.9.2. The Engineer or his designee may enforce the adjustment or stoppage criteria if the acceptance tests and the quality control tests are not in agreement.~~
- e. ~~A representative of the City shall secure two representative samples of the mixture for each day's production.~~
- f. ~~Samples will be tested for conformance with the mineral aggregate gradation in accordance with the requirements of AASHTO T27. The gradation of the mineral aggregate will be considered to be acceptable unless the average of any three consecutive tests or the results of a single test varies from the mix design gradation percentages as follows:~~

		Number of Tests	
Passing Sieve	Maximum	Three Consecutive	One
Nominal Aggregate Size		$\pm 6\%$	$\pm 8\%$
No. 8		$\pm 4\%$	$\pm 6\%$
No. 40		$\pm 4\%$	$\pm 6\%$
No. 200		$\pm 1.5\%$	$\pm 2.0\%$

- ~~g. Samples will be tested for conformance with the sand equivalent in accordance with AASHTO T176 and will be considered acceptable if the result is 45 or greater and does not vary from the design by more than -10 points. At any time that test results indicate that the gradation of the mineral aggregate or sand equivalent does not fall within all of the limits indicated, the production of asphalt concrete shall cease immediately and shall not begin again until calibration tests indicate that the gradation and sand equivalent is within the limits indicated.~~

~~Section 321.12 Measurement:~~ shall be supplemented as follows:

- ~~a. Measurement under this item shall be to the nearest square yard.~~
- ~~b. No separate measurement shall be given for the thickened edge, COP Standard Detail 201P and as detailed on project drawings. This work shall be considered incidental and included in the unit price bid in the contract documents. Payment shall be made at the unit price bid in the contract documents for the items complete in place, adjusted for compaction and thickness deficiencies as herein provided.~~

~~Section 321.13 Payment:~~ ADD the following:

~~Pay Item: 321 Asphalt Concrete (AC) Pavements~~

~~Pay Item: 321.8.3 Asphalt Leveling Course~~

~~Pay Item: 321.8.6 Asphalt Concrete Overlay~~

~~Pay Item: 321.8.7 Pavement Fabric Interlayer~~

329 TACK COAT

329.3 Application: REPLACE with the following:

- ~~a. The application rate shall be between 0.04 to 0.06 gallons per square yard of diluted material, 50% water and 50% emulsion, using SS-1H.~~
- ~~b. The tack coat shall be applied only as far in advance of placing the asphalt concrete as ordered by the Engineer; however, in no event shall the tack coat be applied and not covered by the asphalt concrete in the same day.~~

329.6 Measurement: REPLACE with the following:

~~Measurement shall be per ton diluted as placed, based on weight tickets.~~

329.7 Payment: ADD the following:

~~Pay Item: 329 AC Bituminous Tack Coat, Type SS-1h~~

~~336 PAVEMENT MATCHING AND SURFACING REPLACEMENT~~

~~336.1 Description: REPLACE the second paragraph with the following:~~

~~Asphalt concrete roadway pavement replacement shall be constructed in accordance with COP Standard Detail 2-01P and as indicated on the plans.~~

~~REPLACE the fourth paragraph with the following:~~

~~All other surface replacement in the right-of-way but not in paved roadways shall be constructed in accordance with COP Standard Detail 2-02P and as indicated on the plans.~~

~~336.2.1 Pavement Widening or Extensions: REPLACE the second paragraph with the following:~~

~~The existing pavement shall be cut and trimmed after placement of required ABC and just prior to placement of asphalt concrete for pavement widening or extension, and the trimmed edges shall be painted with a light coating of emulsified asphalt immediately prior to constructing the new abutting asphalt concrete pavements. No extra payment shall be provided for these items and all costs incurred in performing this work shall be incidental to the widening or pavement extension.~~

~~336.2.3 Temporary Pavement Replacement: REPLACE the first and second paragraphs with the following:~~

~~Temporary pavement replacement with UPM in accordance with COP Standard Detail 2-01P shall be required in right-of-way until permanent hot mix trench pavement replacement can be performed. The Contractor shall install temporary asphalt pavement or the first course of permanent pavement replacement in accordance with MAG Section 336 immediately following backfilling and compaction of trenches that have been cut through existing pavement. Except as otherwise provided in MAG Section 336, this preliminary pavement shall be maintained in a safe and reasonably smooth condition until required backfill compaction is obtained and final pavement replacement is completed. Temporary paving removed shall be hauled from the job site and disposed of by the Contractor at no additional cost to the Contracting Agency.~~

~~Permanent pavement replacement shall replace temporary repairs within 5 working days after completion of temporary work.~~

~~336.2.4.1 Permanent Pavement Replacement: ADD the following:~~

~~(G) AC trench pavement replacement shall be a minimum four inch (4") thickness compacted to 95% of laboratory density in accordance with COP Standard Detail 2-01P, MAG Sections 601.6.~~

~~(H) Permanent hot mix AC pavement replacement shall be required for all trench cuts. Installation of UPM or other high performance cold mix shall not be permitted for permanent installation. The Contractor shall be required to maintain pavement trench cuts to the satisfaction of the Engineer.~~

~~(I) The Contractor shall coordinate with Engineer a minimum of two (2) working days in advance of trench paving.~~

~~REPLACE 1/4-inch with 1/8-inch in the ninth paragraph.~~

~~DELETE the last paragraph of this section in its entirety.~~

~~336.3 Types and Locations of Pavement and Surfacing Replacement: REPLACE paragraphs one through five (inclusive) with the following:~~

~~Normally, the type of pavement replacement and backfill required will be noted on the plans or specified in other portions of the contract documents and construction shall be in accordance with COP Standard Detail~~

~~2-01P and 2-02P. If a type is not noted on the plans or specified in the special provisions, the following criteria will govern:~~

~~T-Top trench repair will be utilized on all streets.~~

~~MAG Standard Detail 200-1, Type C trench repair shall be used to repair existing Portland cement concrete pavement.~~

~~COP Standard Detail 2-02P trench repair shall be utilized to repair surfaces other than asphalt concrete or Portland cement concrete pavement. It may also be used when the condition of the existing pavement does not justify construction of T-Top trench repair. Prior written approval of the Engineer is required for this condition.~~

~~**336.4 Measurement:** REPLACE the first and second paragraphs with the following:~~

~~(A) In computing pay quantities for replacement using COP Standard Detail 2-01P, pay widths shall not exceed the maximum widths as depicted on Table 601-1, plus 24 inches for the T-Top.~~

~~(B) In computing pay quantities for replacement using COP Standard Detail 2-02P, pay widths shall not exceed the maximum widths as depicted on Table 601-1.~~

~~**336.5 Payment:** ADD the following:~~

~~Pavement Matching and Surfacing Replacement shall include all saw cutting, removal and disposal of existing pavement, plus all labor and material for complete installation of permanent pavement replacement. No extra payment will be made for temporary pavement required for maintenance of utility trench cuts or for trench widths in excess of Section 336.4.~~

~~**Pay Item: 336 Pavement Matching and Surfacing Replacement**~~

~~**340 CONCRETE CURB, GUTTER, SIDEWALK, SIDEWALK RAMPS, DRIVEWAY, & ALLEY ENTRANCE**~~

~~**340.2 Materials:** REPLACE the first sentence with the following:~~

~~Concrete shall be Class AA unless otherwise noted.~~

~~ADD the following:~~

~~**340.2.2** Detectable warnings shall be Masco Detectable Warning Panels, or approved equal, color Salem Red.~~

~~**340.3 Construction Methods:** REPLACE the second paragraph with the following:~~

~~The subgrade shall be constructed and compacted true to grades and lines shown on the plans and as specified in Section 301. All soft or unsuitable material shall be removed to a depth of not less than 6 inches below subgrade elevation and replaced as directed by the Engineer. Unsuitable material shall be measured and paid in accordance with Section 205.2. The subgrade shall be compacted to not less than 95% of the maximum dry density.~~

~~All concrete items in this section shall be constructed on a minimum of 4 inches of aggregate base course unless noted otherwise, whether shown on the standard details or not. Aggregate base course shall be compacted to not less than 98% of maximum dry density.~~

~~DELETE Section 304.4 Backfilling, Section 304.5 Measurement, and Section 304.6 Payment in their entirety.~~

~~ADD the following Sections:~~

~~**340.4 Concrete Items;**~~

~~340.4.1 Concrete Curb, Gutter, and Curb Terminations~~

~~The pavement section (base and sub-base) shall extend to the back of curb.~~

~~340.4.2 Concrete Sidewalk, Sidewalk Landing, and Ramp~~

~~Concrete sidewalk, sidewalk landings, and ramps shall be in accordance with City of Prescott Standard Details or as otherwise modified on the plans.~~

~~340.4.3 Concrete Driveway Entrances and 6" Concrete Slabs~~

~~Portland cement concrete pavement shall contain 6% ±1% entrained air. Slump shall be a maximum of 3½".~~

~~Construction Joints shall be a maximum of 15 feet apart. Contractor shall submit a jointing pattern for review and approval prior to construction.~~

~~Driveways shall include the curb returns to the existing grades as shown on MAG Standard Detail 251 and modified by the driveway details in the plans. All concrete used in the driveways and adjacent sidewalk crossings shall be six inches (6") thick.~~

~~Match-up construction shall include ten feet (10') of replacement driveway surfacing from the new top of sidewalk to the existing driveway elevations behind the sidewalk unless otherwise shown on the plans.~~

~~340.4.4 Concrete Valley Gutter~~

~~All concrete valley gutter shall be constructed on a minimum eight-inch (8") thick aggregate base course, whether shown on the standard details or not.~~

~~340.5 Backfilling:~~

~~Unless otherwise specified the Contractor shall backfill behind the curbs, sidewalk or sidewalk ramps with soil native to the area to the lines and grades shown on the plans.~~

~~340.6 Measurement:~~

~~Concrete curbs and gutters of the various types shown on the plans and in the proposal will be measured along gutter flow line through inlets, catch basins, driveways, sidewalk ramps, etc., by the lineal foot to the nearest foot for each type, complete in place. Measurement for curb terminations and transitions shall be included with the linear measurement of the various types of curb or curb and gutter as shown on the plans and in the proposal.~~

~~Concrete sidewalks, driveways, alley intersections, valley gutters and aprons will be measured to the nearest square foot complete in place. When concrete sidewalk, sidewalk ramps, driveways, alley intersections, valley gutters, and/or aprons are cut during trenching operations, the square foot measurement for payment will be in accordance with Section 336.~~

~~Concrete sidewalks, driveways, alley intersections, valley gutters and aprons will be measured to the nearest square foot complete in place.~~

~~Detectable warnings shall not be measured for payment. Detectable warnings are considered integral to the walking surface that they form a part of and the cost is included in the related pay item.~~

~~Curb ramp installations shall be measured as complete installed units and shall include the ramp curb and the walking surfaces between the ramp curb and back of curb and gutter or single curb. Single curb or curb and gutter located at the edge of roadway shall be measured and paid for separately. The surface area of curb ramps shall not be included in the measured quantity for sidewalk.~~

~~Aggregate base course shall be considered incidental to all items in the section.~~

~~No separate measurement or payment for the curb returns and transition curbs for driveways shall be made, the cost being considered incidental to Pay Item 340.3, Concrete Driveway Entrance and 6" Concrete Slab~~

340.7 Payment:

~~Pay Item: 340.4.1 Concrete Curb and Gutter~~

~~Pay Item: 340.4.1.1 Single Curb~~

~~Pay Item: 340.4.2 Concrete Sidewalk~~

~~Pay Item 340.4.2.1 ADA Ramp~~

~~Pay Item: 340.4.3 Concrete Driveway Entrances and 6" Concrete Slabs~~

~~Pay Item: 340.4.4 Concrete Valley Gutter~~

345 ADJUSTING FRAMES, COVERS, VALVE BOXES, WATER METER BOXES AND PULL BOXES

345.1 Description: ~~REPLACE the second paragraph with the following:~~

~~All frames, covers, valve boxes, manholes, etc., shall be adjusted to finished grade after placement of asphalt concrete surface course by the Contractor in accordance with the Standard Details.~~

~~The Contractor shall remove old frames and covers and install new frames and covers in accordance with standard detail drawings.~~

345.3 Adjusting Frames: ~~REPLACE the second paragraph with the following:~~

~~Frames shall be set to the elevations and slopes established by the Engineer and shall be firmly blocked in place with masonry or metal supports. Spaces between the frame and the old seat shall be sealed on the inside to prevent any concrete from entering the hand hole or manhole. Class AA concrete shall be placed around and under the frames to provide a seal and properly seat the frame at the required elevation and slope.~~

~~A single No. 4 rebar hoop will be placed in each concrete collar in accordance with the respective detail. The hoop diameter shall be such that its placement is centered between the edge of the manhole frame or valve box, and the outer edge of the concrete collar, the depth of the hoop shall be centered in the thickness of the collar. Each concrete ring shall be scored radially at quarter circle points. Score lines shall be ¼ inch wide by ½ inch deep. The concrete collar surface shall be rough broom finished. (See COP Standard Detail 270P and 4-05P).~~

~~Existing frames and covers shall be salvaged to the City. All salvaged items shall be delivered to the City of Prescott Wastewater collections, 1505 Sundog Ranch Road and placed as directed by the Engineer.~~

~~REPLACE the fourth paragraph with the following:~~

~~After removal of the temporary asphalt pavement in the area of adjustment, and prior to placement of the final concrete collar ring (as shown on COP Standard Details 270P and 4-05P) the asphalt pavement in proximity of the adjustment shall be rolled with a self-propelled steel wheel roller if requested by the Engineer.~~

~~Traffic shall not be allowed on the concrete collars until the concrete had reached a minimum compressive strength of 2500 psi on residential and 3000 psi on collector and major streets. On major streets the contractor shall use "high-early" in the concrete mix, approved by the Engineer, to minimize delay in reopening the street(s) to traffic.~~

345.4 Adjusting Valve Boxes: ~~REPLACE in its entirety with the following:~~

~~Valve boxes shall be adjusted to the new elevations indicated on the plans, or as established by the Engineer.~~

~~New valve box top risers and caps shall be furnished by the Contractor at existing water valve locations and placed as directed by the Engineer. New valve box top risers and caps shall be considered incidental to the cost of adjustment.~~

~~Existing valve box risers and caps shall be salvaged to the City. All salvaged items shall be delivered to the City of Prescott Water Operations, 1481 Sundog Ranch Road and placed as directed by the Engineer.~~

~~A single No. 4 rebar hoop will be placed in each concrete collar in accordance with the respective detail. The hoop diameter shall be such that its placement is centered between the edge of the manhole frame or valve box, and the outer edge of the concrete collar, the depth of the hoop shall be centered in the thickness of the collar. Each concrete ring shall be scored radially at quarter-circle points. Score lines shall be 1/4 - inch wide by 1/2 - inch deep. The concrete collar surface shall be rough broom finished. (See COP Standard Detail 3-15P).~~

~~Traffic shall not be allowed on the concrete collars until the concrete had reached a minimum compressive strength of 2500 psi on residential and 3000 psi on collector and major streets. On major streets the contractor shall use "high-early" in the concrete mix, approved by the Engineer, to minimize delay in reopening the street(s) to traffic.~~

~~ADD the following Section:~~

~~**345.4.1 Adjusting Meter Boxes:**~~

~~Meter boxes shall be adjusted to the new elevations indicated on the plans, or as established by the Engineer.~~

~~Additional meter box sections, concrete, and miscellaneous items required to protect the utility in accordance with the respective standard detail shall be considered incidental to adjusting the meter box.~~

~~**345.5 Adjusting Manhole and Valve Covers with Adjusting Rings:**~~

~~REPLACE in its entirety with the following:~~

~~Existing sanitary sewer manhole and covers shall be salvaged to the City. All salvaged items shall be delivered to the City of Prescott Wastewater collections, 1505 Sundog Ranch Road and placed as directed by the Engineer.~~

~~Adjusting rings may be used to raise manhole covers in conformance to the dimensions noted on COP Standard Detail 4-03P. The amount of adjustment, thickness of seal or overlay, and cross slope will be considered when using adjusting rings. Each location where an adjusting ring is used must have a sufficient depth of asphalt to assure the proper installation and operation of the ring. The rings shall be made of concrete and installed per the manufacturer's specifications. The rings shall be approved by the Engineer.~~

~~The concrete collar ring around the frame or valve box shall be circular, shall be a minimum of eight (8) inches thick, struck off and finished 1/4" below with the adjacent new pavement surface. Concrete shall be a minimum of Class AA. All concrete shall be obtained from plants approved by the Engineer.~~

~~A single No. 4 rebar hoop will be placed in each concrete collar in accordance with the respective detail. The hoop diameter shall be such that its placement is centered between the edge of the manhole frame or valve box, and the outer edge of the concrete collar, the depth of the hoop shall be centered in the thickness of the collar. Each concrete ring shall be scored radially at quarter-circle points. Score lines shall be 1/4 - inch wide by 1/2 - inch deep. The concrete collar surface shall be rough broom finished. (See COP Standard Detail 4-05P).~~

~~Traffic shall not be allowed on the concrete collars until the concrete had reached a minimum compressive strength of 2500 psi on residential and 3000 psi on collector and major streets. On major streets the~~

~~contractor shall use “high early” in the concrete mix, approved by the Engineer, to minimize delay in reopening the street(s) to traffic.~~

~~**345.6 Measurement:** ADD the following:~~

~~Measurement for adjusting existing frames, covers, valve boxes, and water meter boxes to finished grade shall be the actual number of each type adjusted and accepted.~~

~~Measurement for adjusting new frames, covers, valve boxes, and water meter boxes shall not be measured as adjustment to finished grade is considered incidental to installation of the respective item.~~

~~**345.7 Payment:** ADD the following:~~

~~**Pay Item: 345.3 Adjust Existing Frame and Cover**~~

~~**Pay Item: 345.4 Adjust Existing Valve Box and Cover**~~

~~**Pay Item: 345.4.1 Adjust Existing Meter Box**~~

~~**Pay Item: 345.5 Adjust Existing Manhole**~~

350 REMOVAL OF EXISTING IMPROVEMENTS

REPLACE in its entirety with the following:

350.1 Description:

The work under this section shall consist of the removal, wholly or in part, and satisfactory disposal of all structures and obstructions within the right-of-way which have not been designated on the project plans or specified in the Special Provisions to remain, except for those structures and obstructions which are to be removed and disposed of under other items of work in the contract. The work shall also include salvaging of designated materials and backfilling the resulting cavities.

Existing structures, pavement, sidewalks, curbs, gutters and other existing improvements which are to become an integral part of the planned improvements shall remain even though not specifically noted.

Materials removed and not designated to be salvaged or incorporated into the work shall become the property of the contractor.

All existing utilities not designated for removal shall remain in place and be protected against damage.

The removal of existing improvements shall be conducted in such a manner as not to injure active utilities or any portion of the improvement that is to remain in place.

350.2 Construction Requirements:

Bridges, culverts and other structures in use by traffic shall not be removed until satisfactory arrangements have been made to accommodate the traffic. Blasting or other operations necessary for the removal of an existing structure or obstruction, which may damage new construction, shall be completed prior to commencing the new work.

Items designated to be salvaged shall be carefully stockpiled or stored by the contractor at locations designated in the Special Provisions or as directed by the Engineer.

Items which are to be salvaged or reused in the new construction and are damaged or destroyed as a result of the contractor's operations shall be repaired or replaced by the contractor at no additional cost to the City.

Holes, cavities, trenches and depressions resulting from the removal of structures or obstructions, except in areas to be excavated, shall be backfilled with suitable material which shall be compacted to a density of not less than 95 percent of the maximum density as determined in accordance with the requirements

of Section 601 or Section 211. Backfill of all excavated areas below structures shall be in accordance with Section 206.4.

350.3 Removal of Pavement:

A. Portland Cement Concrete Pavement:

Unless otherwise specified in the Special Provisions, concrete pavement designated on the project plans to be removed shall be removed from the job site and disposed of at a site secured by the contractor.

Where new construction is to join the existing concrete pavement, the pavement shall be saw cut to a true line perpendicular to the centerline of the pavement with straight vertical edges free from irregularities.

B. Bituminous Pavement:

Unless milling is noted on the plans or is a bid item, all bituminous pavement designated on the project plans to be removed, shall be completely removed down to the underlying base course or subgrade. The pavement material shall be removed and disposed of at a site secured by the contractor.

Where new construction is to join existing bituminous pavement, the existing pavement shall be cut to a true line perpendicular to the centerline of the pavement with straight vertical edges free from irregularities. The removal of asphaltic concrete at the approaches to structures shall be accomplished in a manner approved by the Engineer.

350.4 Removal of Storm Pipe and Culverts:

All removed pipe which is to be salvaged or re-laid shall be cleaned of all earth and other material inside and outside prior to being stockpiled or reused. Pipe to be reused shall be stored when necessary to avoid damage or loss before relaying.

Existing pipe to be partially removed shall be cut with straight and smooth edges on a plane perpendicular to the center line of the pipe.

Pipe that is not salvaged shall become property of the Contractor, removed from the project, and disposed of properly.

350.5 Removal of Miscellaneous Concrete:

Miscellaneous concrete shall be defined as all or portions of mortared rubble masonry, curbs, gutters, sidewalks, driveways, aprons, slope paving, island paving, retaining walls, spillways, drainage structures, concrete box culverts, foundations, footings and all other Portland cement concrete or masonry construction, except bridges and pavement. All existing miscellaneous concrete shall be removed to a depth of at least five feet below finished subgrade elevation unless otherwise noted on the project plans or special provisions. Other specification sections that discuss removal of concrete items shall supersede the provisions in this Section.

Where new concrete is to join existing concrete, the existing concrete shall be saw cut to a true line with straight vertical edges free from irregularities.

Concrete removal operations shall be performed without damage to any portion that is to remain in place. All damage to the existing concrete, which is to remain in place, shall be repaired to a condition equal to that existing prior to the beginning of removal operations. The repairing of existing concrete damaged by the contractor's operations shall be at no additional cost to the City.

Existing reinforcement that is to be incorporated in new work shall be protected from damage and shall be

thoroughly cleaned of all adhering material before being embedded in new concrete.

Concrete shall be disposed of as provided in Subsection 350.3.A.

The floors of concrete basements, pits and structures that are located within the right-of-way shall be completely removed.

350.6 Removal of Utilities:

Removal of water mains, sewer mains, and related appurtenances shall be in accordance with Sections 650 and 651, respectively.

All existing utilities not designated for removal shall remain in place and be protected against damage.

A utility may be abandoned in place below a new major structure that is part of the work only if approved by the Agency and solidly filled with grout using methods approved by the Agency. All abandoned utilities to remain and the approved abandonment method shall be noted on the installation record drawings.

Utilities to be removed by the Contractor shall be disconnected and taken out in accordance with the requirements of the utility owner to the limits shown on the plans. Utility removal shall not be performed until a release has been obtained from the utility stating that their respective service connection and appurtenant equipment have been disconnected, removed or sealed and plugged in a safe manner.

The Engineer shall be notified when utilities are encountered that are not shown on the plans.

~~350.6.1 REMOVAL AND DISPOSAL OF ASBESTOS CEMENT PIPE~~

~~A. BACKGROUND:~~

~~Asbestos-Cement Pipe (ACP) is a mixture of Portland cement and asbestos fibers. It was introduced into North America in 1931 and, by 1953, the American Water Works Association (AWWA) had established standards for ACP. Along with many other cities, ACP water mains were installed in the City of Prescott and as a consequence, we have a considerable quantity of this material in service. Some of these mains are old and need to be replaced; some are undersized and need to be upsized; and others are in conflict with new utility installations and need to be relocated. These actions require all or part of the existing ACP system to be removed and disposed. Subsequent to ACP's introduction into the United States, the Environmental Protection Agency (EPA) determined that asbestos, in an airborne condition, is a hazardous material and established laws/guidelines for the handling and disposal of the material. The Asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP) establishes requirements for the removal and disposal of regulated asbestos containing materials. This Policy Statement establishes procedures and identifies responsibilities for the proper handling of asbestos-cement pipe in conformance with the Asbestos NESHAP requirements in effect as of November 1990.~~

~~NOTE: As used herein, the term "Engineer" shall refer to the City of Prescott Public Works Director or his/her designated representative. The term "Excavator" shall refer to that entity (individual or contractor) which actually excavates and exposes the pipe. The term "Generator" means any owner or operator of a source (covered by the regulation) whose act or process produces asbestos containing waste material. The term "extra cost" shall refer to the cost over and above the removal and disposal of the pipe in a non-friable state.~~

~~B. POLICY:~~

~~A. It is the intent of the City of Prescott to comply with the requirements of the Asbestos NESHAPS found at 40 CFR Part 61, Subpart M. This Policy Statement will establish procedures to be used by all Excavators in the removal and disposal of ACP in compliance with NESHAPS. Nothing in this Policy Statement shall be construed to void any provision of a contract or other law, ordinance,~~

~~regulation or policy whose requirements are more stringent.~~

- ~~B. ACP is defined under NESHPS as a Category II, non-friable, non-regulated material in its intact state but which may become friable upon removal, demolition, and/or disposal. Consequently, if the removal/disposal process renders the ACP friable, it is regulated under the disposal requirements of 40 CFR 61.150. If more than 260 linear feet of ACP is removed which on removal will become friable, a NESHAPS notification must be filed with the Yavapai County Environmental Services Department. The notification must be filed at least ten days prior to removal of the material. If it remains in its non-friable state, as defined by the NESHAPS, it can be disposed as a conventional construction waste. EPA defines friable as material, when dry, which may be crumbled, pulverized or reduced to powder by hand pressures.~~
- ~~C. The Generator of the hazardous material is responsible for the identification and proper handling, transportation, and disposal of the material. Therefore, it is the policy of the City of Prescott that if the actions of the Excavator cause the material to become friable, and therefore subject to the regulations, that Excavator becomes the Generator.~~
- ~~D. The requirements of Arizona Revised Statutes, Chapter 2, Article 6.3, Section 40-360.21 through 40-360.32 (Blue Stake Law) are important with respect to implementation of this Policy Statement. The Blue Stake Law mandates the Owner of the facility (in this case the City of Prescott) to maintain installation records and, upon request, to properly locate the underground facility. The Law also places requirements on the Excavator to:~~
- ~~1. Call the Blue Stake Center at least two (2) working days prior to the start of excavation.~~
 - ~~2. Mark the boundaries of the location to be excavated.~~
 - ~~3. Excavate in a careful and prudent manner, including hand digging within twenty-four (24) inches of the underground facility.~~
 - ~~4. Notify the Owner if the Excavator encounters an underground facility that has not been located and marked or has been marked in the wrong location.~~

~~If the Excavator does not comply in full with the Blue Stake requirements and therefore causes non-friable ACP to become friable, any and all extra costs incurred to handle, containerize, transport, and dispose of the asbestos containing waste shall not be paid or reimbursable by the City. If Blue Stake requirements are met and ACP is accidentally or unknowingly disturbed thereby causing it to become friable, the Excavator may seek reimbursement from the City for additional costs to handle, containerize, transport and dispose of the material following the procedures described in Sections E and F below.~~

- ~~E. The Contractor shall retain the services of an independent, qualified, licensed asbestos abatement Consultant. All removal and disposal of ACP shall be under the cognizance of the Consultant. The Excavator is responsible to contact the Consultant a minimum of two (2) working days prior to the initiation of removal/disposal operations.~~

~~The Consultant will monitor the Excavator's work. If the ACP was not planned for removal and the Excavator accidentally disturbs the pipe, the Excavator will cease all work and notify the Engineer immediately for further instructions.~~

- ~~F. It is the intent of the City of Prescott that all ACP shall be removed in such careful and prudent manner that it remains intact and non-friable. The Excavator is responsible to deploy the means, methods, techniques, and sequences to ensure this result. When it is a practical impossibility, as determined by the Engineer, to remove the ACP without creating a friable material, the City will pay the Excavator for the removal of friable material in accordance with the measurement and payment section. The Excavator shall take steps to minimize the amount of the friable waste and abide with~~

~~all asbestos regulatory requirements. The Consultant shall be available to provide recommendations or suggestions, which the Excavator may or may not choose to deploy. The Consultant shall measure or otherwise assess and recommend to the Engineer the amount or percentage of friable waste for which the City should pay for removal and disposal with the remainder being the responsibility of the Excavator. If the ACP is caused to become friable, the Consultant shall conduct perimeter air monitoring upon request by the City. If the Excavator fails to notify the Consultant, fails to excavate and remove the ACP in a careful and prudent manner creating friable material or fails to abide with all asbestos regulatory requirement, the Excavator shall be deemed to be the Generator responsible to handle, transport and dispose of the ACP in accordance with the NESHAPS requirements and will not be reimbursed for any cost incurred. This will include all penalties and associated legal fees of the Generator as well as any penalties assessed against the City of Prescott, and any associated legal fees incurred by the City of Prescott for violation of any of the asbestos regulatory requirements that are caused by the Excavator.~~

~~G. ACP shall NOT be crushed and left in place.~~

~~H. Compliance with all aspects of worker safety and health regulations including but not limited to the OSHA Asbestos Standard is the responsibility of the Excavator. The City of Prescott assumes no responsibility for compliance programs which are the responsibility of the Excavator.~~

~~I. Payment for removal of non-friable existing asbestos cement pipe shall be at the unit bid price shown in the bidding schedule for complete removal, proper disposal and trench backfill in accordance with the specifications.~~

~~J. Payment for removal of friable existing asbestos cement pipe shall be a contingent item at the unit bid price shown in the bidding schedule for complete removal, proper disposal and trench backfill as determined by the Engineer in accordance with Paragraphs E and F and other provisions of the specifications.~~

350.7 Removal of Signs and Delineators:

~~Street signs, traffic control signs, traffic signal material and control devices shall be removed as designated on project drawings, salvaged and delivered to the City at the site designated by the Engineer. The contractor shall dismantle the sign panels and delineators and remove the sign posts from the ground in such a manner as to prevent damage to the posts. The contractor shall not remove the existing signs prior to the completion of the new sign installation, but shall remove them within five working days after the installation of the new signs or as directed by the Engineer.~~

350.8 Removal of Fence:

~~All fence to be removed, shall become the property of the contractor unless designated for salvage on the project plans. If fence is designated to be removed and salvaged, all fence, including gates shall be salvaged in accordance with the requirements of Subsection 202-3.01.~~

~~When designated for salvage, fence and gates shall be carefully dismantled and neatly rolled or coiled. Posts shall be cleaned of all concrete and dirt.~~

~~In areas where new fence or relocated fence is to be installed, Contractor shall perform the removals in such a manner as to prevent the escape of any livestock and/or domestic pets, including the placement and removal of temporary fence when necessary.~~

350.9 Removal of Guardrail:

~~All guardrail to be removed, shall become the property of the contractor unless otherwise specified on the project plans.~~

~~If guardrail is designated to be removed and salvaged, the contractor shall carefully dismantle the guardrail~~

~~and remove the blocks and posts in such a manner as to prevent any damage to the removed items. The guardrail, including panels, end sections, posts and all hardware shall be salvaged in accordance with the requirements of Subsection 350.2.~~

~~**350.10 Measurement and Payment:**~~

~~No separate measurement or payment shall be made for removal of existing improvements unless otherwise noted on the plans or there being removal bid items. This work shall be considered incidental and included in the unit price bid for construction of the appropriate contract pay items.~~

~~Measurement for non friable and friable asbestos cement pipe shall be by the lineal foot of pipe removed.~~

~~Payment for removal of non-friable existing asbestos cement pipe shall be at the unit bid price shown in the bidding schedule for complete removal, proper disposal and trench backfill in accordance with the specifications.~~

~~Payment for removal of friable existing asbestos cement pipe shall be a contingent item at the unit bid price shown in the bidding schedule for complete removal, proper disposal and trench backfill as determined by the Engineer in accordance with Paragraphs E and F and other provisions of the specifications.~~

~~**Pay Item: 350.6.1 Removal, Disposal, and Backfill of Non-Friable ACP**~~

~~**Pay Item: 350.6.1a Removal, Disposal, and Backfill of Friable ACP**~~

~~**401 TRAFFIC CONTROL**~~

~~**401.1 Description:** REPLACE with the following:~~

~~Traffic control during construction shall be performed in accordance with MAG Section 401 and the Manual on Uniform Traffic Control Devices for Streets and Highways, US Department of Transportation Federal Highway Administration, latest edition with the latest revisions, Arizona Department of Transportation Traffic Control Manual, the project plans, and as stated herein.~~

- ~~(A) Prior to beginning the project, Contractor shall submit for approval a Traffic Control Plan for the entire project. He must obtain approval from the Engineer for the Traffic Control Plan and Schedule prior to any construction. Contractor shall submit the Traffic Control Plan to the Director of Public Works at or before the project preconstruction conference.~~
- ~~(B) Written notice shall be given to the Engineer or his representative on the job 48 hours prior to any changes in detours or routes of access. The notice shall give specific details with maps showing the access to all residences and businesses affected by the project.~~
- ~~(C) The Police and Fire Departments shall be continually updated on access routes along and through the site during construction.~~

~~**401.2 Traffic Control Devices:** ADD the following:~~

- ~~(C) All traffic control devices required for the project shall be the responsibility of Contractor.~~
- ~~(D) When required to cross, obstruct, or close a street, traffic way, or sidewalk for a short duration that is approved by the Director of Public Works, the Contractor shall provide and maintain suitable bridges, detours or other approved temporary means for the accommodation of vehicular and pedestrian traffic.~~
- ~~(E) When traffic conditions at the construction site warrant the use of certified police personnel to direct traffic, arrangements shall be made with the City of Prescott Police Department, Yavapai County, or Department of Public Safety for off-duty officers.~~

~~401.6 Measurement: DELETE in its entirety~~

~~401.7 Payment: DELETE in its entirety~~

~~ADD the following:~~

~~401.6 Measurement and Payment:~~

~~Payment for traffic control shall be at the applicable unit price bid in the Contract Documents.~~

- ~~1. Preparation of traffic control plan shall be inclusive of all submittals, reviews and if needed, re-submittals.~~
- ~~2. Flaggers shall be per hour for actual time directing traffic. It does not include travel time or time spent setting up or taking down devices.~~
- ~~3. In the event off-duty police personnel are required to direct traffic, the Bid Schedule includes an allowance for Certified Police Personnel for the purpose of encumbering funds to cover the cost of Certified Police Personnel. The amount of the allowance is determined by the Engineer and is not subject to individual bid pricing. All bidders shall incorporate the amount in the bid proposal and shall reflect the same in the total bid for this project.~~

~~It shall be understood that this allowance is an estimate only. The allowance shall be not used without approval of the Engineer.~~

~~Reimbursement for Certified Police Personnel shall be based on actual cost, plus an allowable markup to the prime contractor of 15%, for use of Certified Police Personnel approved by the Engineer.~~

~~Flagmen, uniformed off-duty law enforcement officers or pilot cars, with driver, will be measured by the hour for each individual, including vehicle and equipment, required to perform traffic control. When an officer is used less than 3 hours, a minimum of 3 hours will be charged. Anything over 3 hours will be measured by the hour.~~

~~Payment will be made at the contract bid price in the proposal for uniformed, off-duty law enforcement officer. If the officer is utilized in excess of 8 hours in any calendar day or in excess of 40 hours in any calendar work week, payment shall be at the rate of 1 1/2 times the contract bid price for all hours worked in excess in either of the above time periods.~~

- ~~4. Barricades and storage shall be at the lump sum bid and shall be inclusive of all temporary signs and devices in the traffic control plan and as required by the MUTCD and the Engineer.~~
- ~~5. Message boards shall be measured by each per day as determined necessary by the approved traffic control plan and the Engineer.~~
- ~~6. Pilot car and driver shall be per hour for actual time used as required by the approved traffic control plan and the Engineer. It does not include travel time or time spent setting up or taking down devices.~~
- ~~7. Incidental traffic related items shall include all other pertinent tools, equipment, devices and or work required to provide safe and effective traffic control in accordance with the approved traffic control plan, the MUTCD and the Engineer.~~

~~Pay Item: 401 Traffic Control Plan (LS)~~

~~Pay Item: 401.2a Barricades and Storage (LS)~~

~~Pay Item: 401.2b Message Boards (each per day)~~

~~Pay Item: 401.2c Incidental Traffic Related Items (LS)~~

~~Pay Item: 401.3a Flaggers (HR)~~

~~Pay Item: 401.3b Off Duty Police Officers (HR)~~

~~Pay Item: 401.3c Pilot Car and Driver (HR)~~

~~402.2 THERMOPLASTIC PAVEMENT MARKINGS~~

~~A. Work under this item shall be performed per ADOT Specifications Section 704.~~

- ~~1. Stop Bars and Crosswalks - Work under this item shall consist of the application of thermoplastic striping material at the locations noted on the project plans. All stop bars shall be 18 inches in width unless otherwise specified. Crosswalks shall be 12 inches in width.~~
- ~~2. Measurement shall be in accordance with ADOT Section 704-5 (Width times Length divided by 4 inches equals LF as shown in bid schedule).~~
- ~~3. Pavement Markings - Pavement markings shall be in accordance with ADOT Section 704-4, ADOT 4-M 1.12 through 4-M 1.17 and as modified herein. Work under this item shall consist of the application of thermoplastic striping material at the locations noted on the project plans.~~

~~Measurement and Payment:~~

~~Measurement and payment for pavement markings shall be at the per each basis for each legend or marking installed in accordance with ADOT Section 704-5.~~

~~Pay Item: 402.2 Thermoplastic Striping~~

~~402.3 TEMPORARY STRIPING~~

~~A. Work under this item, Temporary Striping (paint) where required, shall be performed per ADOT Specifications Section 701-3.05.~~

~~Measurement and Payment:~~

~~Measurement and payment shall be per ADOT Section 708-4 and 708-5.~~

~~Pay Item: 402.3 Temporary Striping~~

~~402.4 PERMANENT PAVEMENT MARKINGS~~

~~A. Work under this item shall be performed per ADOT Specifications Section 708.~~

~~Measurement and Payment:~~

~~Measurement shall be in accordance with ADOT Section 708-4 (Width times Length divided by 4 inches equals LF as shown in bid schedule).~~

~~Payment shall be in accordance with ADOT Section 708-5.~~

~~Pay Item: 402.4 Permanent Striping~~

~~403.1 PERMANENT SIGNING, SIGN POSTS AND DELINEATORS~~

~~Work under this item shall be done in accordance with the project drawings and requirement of the Manual on Uniform Traffic Control Devices (MUTCD), MAG Detail 131, and ADOT Signing and Marking Standards.~~

~~A. General Signing Guidelines~~

- ~~1. All signing shall conform to the most recent editions of the publications shown above with regard to size, color, shape and placement.~~
- ~~2. All signs shall be new (other than those shown to be relocated). All new and relocated signs shall be mounted on new posts with new hardware. Signs designed for installation on existing street light poles shall be mounted with new hardware.~~
- ~~3. Traffic sign dimensions, colors and lettering shall conform to the latest MUTCD specifications. Traffic sign size shall be standard unless otherwise specified here or on the plans.~~
- ~~4. All non mountable curb section signs shall be located at least two (2') feet from the curb face to the nearest edge of the sign. All other roadway signs shall be mounted from six (6') feet to twelve (12') feet from the edge of the pavement to the nearest edge of the sign, unless otherwise noted in the sign summary table or on the plans.~~
- ~~5. Roadways with guardrail signs shall be located at least six (6') feet from the face of the guard rail to the nearest edge of the sign, unless otherwise noted in the sign summary table or on the plans.~~
- ~~6. Sign location shall be coordinated with landscaping plans to ensure sign visibility per AASHTO standards.~~
- ~~7. Signs shall be mounted on street light poles whenever feasible.~~
- ~~8. All signs installed in areas where parking or pedestrian movements occur shall typically be erected at a height of seven (7') feet above the normal edge of pavement or sidewalk to the bottom of the sign or to the lowest sign in a multiple sign installation assembly with the following exceptions:~~
 - ~~a. The height to the bottom of a secondary sign mounted below another sign may be up to two (2') feet less than the height specified above.~~
 - ~~b. If the bottom of a secondary sign that is mounted below another sign is mounted lower than 7 feet above a pedestrian sidewalk or pathway, the secondary sign shall not project more than four (4") inches into the pedestrian facility.~~
 - ~~c. Object markers shall be installed at least four (4') feet above the normal edge of pavement.~~
- ~~9. All R1-1 "STOP" signs and pedestrian warning signs shall be reflective with all reflective sheeting material to be diamond grade.~~
- ~~10. All other signs are to be reflective with all reflective sheeting material to be high intensity prismatic meeting or exceeding ASTM 4956-04.~~
- ~~11. Sign blanks shall be 5052-H38 alloy treated aluminum with Alodine 1200 conversion coating, 0.080" thick with rounded corners.~~
- ~~12. Stop signs are to be shown at all local street intersections within a subdivision unless an engineering study shows that no control or yield control is warranted. Stop signs shall be designed and shown at all collector and non-signalized arterial street intersections.~~
- ~~13. Stop signs and Yield signs shall be a minimum of thirty (30") inches in width. When specified by the City Traffic Engineer thirty-six (36") inch and/or forty-eight (48") inch signs may be required on major collectors and arterial streets.~~

~~B. SIGN POSTS~~

- ~~1. Sign posts shall conform to the COP Standard Detail 821P.~~

- ~~2. For new construction the Telspar, Uni-strut or approved equal twelve gauge, galvanized steel, four (4) sided perforated square tubing is required. Two (2") inch tubing shall be used for smaller signs while two and one-half (2½") inch tubing shall be used for the larger signs.~~
- ~~3. The post shall be tall enough to provide the minimum clearances specified in section A (8).~~
- ~~4. The base and sleeve system for the sign shall be anchored in a minimum of a twenty-four (24") inch deep, twelve (12") inch diameter foundation of concrete. The base shall have a breakaway slip base system. The exposed post from the base shall be four (4") inches to six (6") inches high.~~
- ~~5. Signs over forty-eight (48") inches wide shall be mounted on two (2), two and one-half (2½") inch posts with a horizontal support frame.~~
- ~~6. All station locations are approximate. The Contractor shall verify actual sign locations with the Engineer prior to the installation of all signs.~~
- ~~7. The Contractor shall verify post lengths and elevations prior to installation.~~

~~Measurement and Payment:~~

~~Measurement and payment shall be the unit price per each for posts and delineators and per square foot for sign panels, complete and in place.~~

~~**Pay Item: 403.1a Sign Posts and Delineators**~~

~~**Pay Item: 403.1b Sign Panels**~~

404 LOOP DETECTORS

- ~~A. Loop detectors shall be installed in base course of asphalt concrete pavement and conform to ADOT Specs Section 735 and 732-2.01, ADOT Traffic Signal and Lighting Standard Drawings (1985) 7-1. All loop detectors shall be installed per T.S. 7-1 Detail 2. Installation shall include the home runs and installation of loop wiring into the existing signal cabinet. The hardwiring in the cabinet will be accomplished by City forces.~~
- ~~B. Prior to bidding the Contractor shall verify the location and layout of the existing detector loops and appurtenant home runs to ensure that home runs are re-established in their original configuration. Loop detectors shall be centered in lanes. Contractor shall verify loop layout with project inspector prior to installation.~~

~~Measurement and Payment:~~

~~Payment shall be made on a per each installed basis.~~

~~**Pay Item: 404 Quadrapole Loop Detectors, Complete**~~

405 MONUMENTS:

405.1 Description: ADD the following:

- ~~A. All efforts shall be made to protect survey monuments in hand holes from damage. Monuments shall be located and reset by a Registered Land Surveyor at the Contractors' expense if damaged, or where noted on plans.~~

405.4 Installation: ADD the following:

- ~~A. Existing property monuments disturbed or covered in the course of the work shall be located and reset by a Registered Land Surveyor or under the direct supervision of a Registered Land Surveyor. Monuments set shall be in accordance with Arizona Revised Statutes and Arizona Boundary Survey~~

~~Minimum Standards.~~

~~B. Survey monuments shall be Type "A" with cast iron frame and cover in accordance with COP Standard Detail 120-1, unless otherwise noted. Monuments shall be placed as shown on the plans.~~

~~**405.2 Materials:** REPLACE the second paragraph with the following:~~

~~Concrete shall be Class AA.~~

~~**405.5 Payment:** ADD the following:~~

~~No separate payment shall be made for resetting property monuments. This work shall be considered incidental and included in the unit price bid for construction or installation of the appropriate contract pay items.~~

~~Payment for survey monuments shall be based on a per each unit complete in place.~~

~~**Pay Item: 405 Survey Monument**~~

~~**430 LANDSCAPING AND PLANTING**~~

~~**430.3.2 Seeding:**~~

~~REPLACE in its entirety with the following:~~

~~**430.3.2 Seeding (Hydraulic):**~~

~~A. Seeding consists of furnishing and applying chemical fertilizer; furnishing and planting seed and furnishing, applying and affixing mulch. The areas to be seeded are disturbed or un-vegetated areas. Slopes are required to be seeded immediately upon completion; coordination with grading operations will be required.~~

~~Application rates of seed as specified are for Pure Live Seed (PLS). PLS is determined by multiplying the sum of the germination and hard or dormant seed by purity. Weed content of seed shall not exceed 0.5 percent. No substitution of species, strain or origin of seed will be allowed unless evidence is submitted in writing by the Contractor to the Engineer showing that the specified materials are not reasonably available during the contract period. The substitution of species, strains or origins shall be made only with the written approval of the Engineer, prior to making said substitution.~~

~~The seed shall be delivered to the project site in standard, sealed, undamaged containers. Each container shall be labeled in accordance with Arizona Revised Statutes and the U.S. Department of Agriculture rules and regulations under the Federal Seed Act. Labels shall indicate the variety or strain of seed, the percentage of germination, purity and weed content, and the date of analysis, which shall not be more than 9 months prior to the delivery date.~~

~~**B. SEED MIX**~~

Botanical Name	Common Name	Seed/ Lb.	Rate/Acre PLS (Pure Live Seed)
Agropyron dasystachym	Thickspike Wheatgrass	154,000	3.0
Bouteloua gracilis	Blue Gramma	825,000	2.0
Koeleria crisata	Prairie Junegrass	825,000	1.0
Mulenbergia wrightii	Spike Muhly	1,000,000	1.5
Festuca arizonica	Arizona Fescue	500,000	2.0
Sitnian hystrix	Squirrel Tail	192,000	4.0
Sporobolus cryptandrus	Sand Dropseed	5,298,000	0.75

~~C. Seed Supply Agreement:~~

~~The required species may be in short supply during this project. Therefore, the Contractor shall enter a contractual agreement with a seed collector/supplier that verifies that sufficient supply of specified plant materials will be available on or immediately prior to the seeding dates. This requirement shall be fulfilled within 45 days following the preconstruction conference in order to allow sufficient time for seed collection. The Contractor shall provide written notification to the Engineer verifying that the required species are available and secured for the project. The collection contractor shall test the seed for purity and viability and hold the seed in a manner which maintains its' viability. The Contractor shall submit purity and viability test results to the Engineer for approval prior to the initiation of seeding operations. If it is required to be held for more than a year from initial testing the seed shall be tested again for viability. The Contractor shall compensate the seed supplier a percentage of the seed cost to hold seed material and for the seed tests as identified in Basis for Payment.~~

~~D. General:~~

~~The slurry for the hydroseed process shall be as follows:~~

SLURRY MIX	RATE
Hydrofiber: Silva, Conwed, or Spray mulch x-100 wood fiber, or equivalent	800 lbs./acre
Tackifier:	80 lbs. active ingred./acre
Starter fertilizer: Ammonium Phosphate	16-20-0 200 lbs./acre
Seed mix:	As Specified
Soil conditioner	1000 lbs./acre

~~The seed shall be applied within 30 minutes after being combined with the slurry mix.~~

INGREDIENTS FOR SLURRY APPLICATION	PERCENTAGES (MINIMUM)
Nitrogen	5
Phosphoric Acid	3
Water soluble Potash	1
Humas	50
Humic Acids	15
Soluble Metallic Iron	1

~~E. Wood Cellulose Fibers:~~

~~Wood fiber mulch shall consist of a specially prepared wood fiber processed to contain no growth germination inhibiting factors. The mulch shall be virgin wood and be manufactured and processed so the fibers will remain in uniform suspension in water under agitation to form a homogenous slurry. The mulch shall have a pH range between 4.5 to 6.5.~~

~~When hydraulically sprayed on the ground, the material will form a blotter-like cover impregnated uniformly with seed. The cover will allow the absorption of moisture and allow rainfall to percolate to the underlying area.~~

~~F. Tacking Agent:~~

~~Binder shall be free flowing, non-corrosive powder produced from natural plant gum marketed under M-Binder, M145 Binder, AZ-TAC or approved equal. It shall have gelling properties to inhibit the tendency of water and fiber to move downhill as they are sprayed on steep slopes.~~

~~G. Construction Requirements:~~

~~1. General:~~

~~The Engineer will regularly observe the weighing of seed, mixing of slurry mix, and application of seed.~~

~~2. Seeding:~~

~~Seeding shall be done immediately following the final grading or disking of each cut slope and each fill slope. The soil surface shall be loose. The Contractor will be required to mobilize frequently to accomplish this goal. No seeding shall be carried out under wind conditions exceeding 5 m.p.h. Scheduling of seeding mobilization will be coordinated with the Engineer at the weekly construction meetings. In no case shall a decision by the Engineer relieve the Contractor from the requirement of seeding prior to measurable rainfall. If measurable rain falls prior to seeding, or if the surface of the graded area has formed a crust or slightly hardened surface, the Contractor shall be responsible for ripping, blading or loosening the ground surface, or otherwise repairing and/or preparing the affected areas for seed, after they adequately dry out and prior to seeding, at no cost to the Owner. The use of specialized equipment or manual methods may be required to prepare the surface for seeding, if seeding is not accomplished immediately after grading or disking.~~

~~Seed is to be accomplished during the window of June 1 to July 15 and November 1 to January 30. These windows are to allow expected seasonal rains to start germination process.~~

~~All areas disturbed by construction are to be seeded. This may be more area than shown on the plans. All areas are to be approved by Engineer. The Contractor shall coordinate seeding operations with slope construction so that the tops of cuts and toes of fills can be reached with hydroseed equipment.~~

~~Hoses may be used where heavy equipment cannot access.~~

~~3. Tillage:~~

~~All slopes steeper than 3:1 shall either have a loose, friable soil depth of 2" or more or be tilled a minimum of 4" in depth as they are constructed.~~

~~Tillage shall be accomplished with a ripper bar, chisel plow or harrow tool or with other equipment which will provide thorough soil cultivation.~~

~~Tillage shall be performed long the contour. The slopes behind guardrail, and in the ditch line in cut shall be left with roughened surface to aid in water absorption. Seeded areas which are not behind guardrail or between the ditch line and the roadway on a cut shall be left in a Firm surface free of foreign material that would interfere in the seeding operation.~~

~~No work shall be done when the moisture content of the soil is unfavorable or the ground is otherwise in a condition not conducive to tillage.~~

~~Planting:~~

~~The Contractor shall submit a batch (tank) mix for the Engineer's approval prior to mixing any seed/mulch slurry. Batch mixing and coverage will be monitored throughout seeding operations. The Contractor is to coordinate monitoring with the Engineer in advance of mixing.~~

~~After the tillage is complete and accepted by the Engineer, seed shall be planted by slurry mix (cut slopes steeper than 3:1).~~

~~All areas to be seeded shall have a starter fertilizer of ammonium phosphate 16-20-0 applied at a rate of 200 pounds per acre and soil condition at the rate of 1,000 pounds per acre.~~

~~Any material sprayed on non-designated areas shall be immediately removed by the Contractor at his~~

~~expense. Non-designated areas include pavement, guardrails, signs, plants and existing vegetation.~~

~~*Anchorage by Tacking:*~~

~~Mulch shall be anchored by tacking using a slurry consisting of a minimum of 150 pounds of binder, 400 pounds of wood fiber mulch and 700 gallons of water per acre.~~

~~*Preservation of Seeded Areas:*~~

~~Any material sprayed on non-designated areas shall be immediately removed by the Contractor at his expense. Non-designated areas include pavement, guard rails, signs, plants, and existing vegetation.~~

~~*Warranty:*~~

~~The Contractor shall guarantee that 75% of the applied tackifier remain in place for a period of 30 days after acceptance of the seeding application. Any areas that have less than 75% of the tackifier remaining shall be reseeded, re-mulched and retacked at the Contractor's expense.~~

~~Areas that require reseeding and re-mulching under the warranty shall be done at no additional cost to the City of Prescott. The 30 day period(s) shall be within the allotted contract time.~~

~~**Measurement and Payment:**~~

~~Seeding will be measured by the acre, to the nearest tenth acre, measured along the ground surface for the areas which have been plated and mulched, as determined by the Engineer. The Contractor may be reimbursed a partial payment based on the invoice amount for the cost to hold and test the seed in conformance with the Seed Supply Agreement.~~

~~The accepted quantities of seeding, measured as provided above, will be paid for at the contract price per acre for the full performance of the work herein described, which price shall be full compensation for the work completed including all equipment, labor and materials required.~~

~~**Pay Item: 430.3.2 Seeding (Hydraulic)**~~

~~ADD the following Section:~~

~~**431 REMOVE AND REPLACE LANDSCAPE ROCK**~~

~~Landscaping shall be protected and restored in accordance with Section 107.9. Existing landscaping rock shall be removed, stockpiled, and replaced in its original position as closely as possible.~~

~~**Measurement and Payment:**~~

~~Payment shall be per lump sum amount.~~

~~**Pay Item: 431 Remove and Replace Landscape Rock**~~

~~**505 CONCRETE STRUCTURES**~~

~~**505.1.1 Minor Structures: REPLACE with the following:**~~

~~Concrete structures such as manholes, catch basins, median barriers, headwalls, cattle guards, and other miscellaneous structures as defined by the Engineer are hereby defined as Minor Structures. Minor structures shall be precast units. MAG Type D Catch Basins shall be cast-in-place. Cattle guards, median barriers, and headwalls, at the option of the Contractor, may be either constructed of cast-in-place concrete, or furnished as precast units. Precast units shall be fabricated in accordance with shop drawings submitted by the Contractor and approved by the Engineer, in accordance with the requirements of Section 105.2. All structures not defined as Minor Structures shall be classified as Major Structures.~~

505.1.1A CONCRETE DRAINAGE OUTLET/STRUCTURE

The work consists of constructing a concrete drainage outlet(s) and structure(s) as designated on the project drawings in accordance with MAG Specifications Sections 505, and 725 and as modified herein. All cast-in-place concrete shall be class "AA" 4,000 psi. Sub-grade and base materials under the structure shall be compacted to not less than 95% of the maximum dry density as determined by AASHTO T-99. No additional payment will be made for aggregate base materials required under concrete structures. The base material shall be considered incidental to the construction of this item and provided for in the unit price for the work. Measurement and payment under this item shall be to the nearest square foot complete in place in accordance with the respective detail for flat work, and per each unit installed for structures.

505.1.1B CONCRETE HEADWALL

Work under this item shall be in accordance with MAG Specifications Sections 505, 725, 726 and 727; MAG Standard Details 501-1 and 501-2; and the project drawings. Concrete shall be Class AA, 4,000 psi. Payment shall be made per each headwall installed complete in accordance with the respective detail.

505.1.1C CONCRETE CATCH BASIN

~~Work under this item shall be in accordance with MAG Standard Details 530 through 540-2, MAG Specifications Sections 505 and 725 and above mentioned specifications for Portland Cement Concrete. All grates shall be bicycle safe type. Measurement and payment under this item shall be per each catch basin complete in place in accordance with the respective detail, to include grates.~~

505.1.1D SCUPPER

~~Work under this item shall be in accordance with MAG Standard Detail 203 and 206. Concrete shall be Class AA, 4,000 psi. Measurement and payment under this item shall be per each scupper installed complete in place in accordance with the respective detail.~~

505.1.1E CONCRETE RETAINING WALL

~~Work under this item shall be in accordance with the project drawings. Measurement and payment under this item shall be to the nearest square foot of the retaining wall measured from the top of the footing to the top of the wall complete in place in accordance with the respective detail.~~

~~**505.6.2 Adverse Weather Concreting:** REPLACE in its entirety with the following:~~

~~Adverse weather concreting shall be in accordance with Section 725.~~

~~**505.12 Payment:** Add the following:~~

~~**Pay Item: 505.1.1A Concrete Drainage/Outlet Structure**~~

~~**Pay Item: 505.1.1B Concrete Headwall**~~

~~**Pay Item: 505.1.1C Concrete Catch Basin**~~

~~**Pay Item: 505.1.1D Scupper**~~

~~**Pay Item: 505.1.1E Concrete Retaining Wall**~~

601 TRENCH EXCAVATION, BACKFILLING AND COMPACTION

601.1 Description: ADD the following:

A. Unless specifically identified, no investigation of subsurface soil conditions for water or sewer main

installation has been made for project limits.

- B. Excavation, backfilling and compaction shall be in accordance with this Section and COP Standard Details as noted.
- C. All water encountered during the work shall be disposed of by the Contractor in a manner such that it will not damage public or private property or create a public nuisance or health problem. The costs of furnishing pumps, pipes, special bedding, and over excavation as required to provide a stable foundation, and other equipment and materials shall be incidental to the work in accordance with Section 200.1 of these specifications.

601.2.3 Trench Grade: REPLACE the first paragraph with the following:

All construction staking shall be in accordance with Specification Section 105.8.

REPLACE the second paragraph with the following:

For all pipe, the Contractor shall excavate for and provide an initial granular bedding at least 6 inches thick. This bedding material shall be placed at a uniform density with minimum compaction and fine graded as specified below.

601.2.5 Over Excavation: REPLACE the second paragraph with the following:

Unauthorized excavation below the specified grade line shall be refilled at the Contractor's expense with bedding material compacted to a uniform density of not less than 95 percent of the maximum density as determined by AASHTO T-99 and T-191 or ASTM D6938. When AASHTO T-99, method A or B, and T-191 are used for density determination, ARIZ 227c will be used for rock correction.

ADD the following Section:

601.2.11 ROCK EXCAVATION FOR UTILITY AND/OR DRAINAGE CONSTRUCTION

A. Definition of Rock.

When rock is encountered, it shall be stripped of earth and shale, and the Engineer notified in order that he may measure or cross-section the same. In lieu of stripping the earth overburden prior to excavation/blasting, the Engineer and the Contractor may mutually agree on a method to define the vertical limits of rock. Any rock excavated before such measurement or agreement is made, will not be estimated, allowed, or paid for. Rock excavation shall be defined to include: all hard, solid rock in ledges; bedded deposits and unstratified masses; all natural conglomerate deposits so firmly cemented as to present all the characteristics of solid rock; and masonry or concrete structures not shown on the plans. Shales, hard pan, masonry and concrete rubble boulders less than one cubic yard which are not a part of or attached to substrata of rock, shall not be considered rock excavation. Additionally, material to be considered "rock" shall be of such hardness that it cannot be excavated using hydraulic backhoe with combined breakout force, for bucket and stick cylinders, of at least 100,000 pounds.

B. Blasting

1. It is the Contractor's responsibility to determine the type of material he will encounter and whether blasting will be necessary.
2. Blasting shall be done only by experienced, qualified blasters. Blasting shall be done in accordance with the recommendations for best practice in Section 9 of the AGC Manual of Accident Prevention in Construction and in accordance with the recommendations for best practices of the Institute of Makers of Explosives. Also, all blasting must comply with the requirements of the Division of Industrial Safety and OSHA and all other federal, state and local ordinances.
3. When work requires blasting or explosive conditions, precautions shall be taken to protect life and

property, and give proper warning to persons who may be in vicinity of work before blast is set off.

4. Blasting shall be performed in such a manner that no damage will result to any building, structure, pipeline, or facility on or off the site of work, above or below ground. Any damage suffered as a result of blasting shall be immediately settled, including repair or replacement.
5. Blasting shall be done in such a manner that the earth is not loosened or disturbed below the footing or foundation of any proposed structure. Loosened material below footings or foundations shall be replaced with Class C concrete.
6. The stemming of each hole or cover over explosive shall be sufficient to prevent surface blast wave, but in no case less than three (3) feet six (6) inches. Multiple holes shall be shot using millisecond delays.
7. The Contractor shall enlist the services of an experienced explosives engineer for advice on blasting methods and for the protection of existing structures or facilities.
8. Blasting procedures shall comply with all rules and regulations as specified and determined by the Fire Marshall or the Public Works Director of Prescott.

601.4.2 Bedding: REPLACE the first two paragraphs with the following:

Bedding shall be a minimum of six inches and shall be in accordance with COP Standard Detail 2-01P for paved areas and COP Standard Detail 2-02P for unpaved areas. Bedding/shade material shall be of granular consistency such as sand or crushed aggregates conforming to the following gradation and plasticity requirements:

Sieve Size	Percentage Passing By Weight
1"	100
No. 200	< 25
PI	10 Max.

Volcanic cinders or glass materials are not acceptable.

Use of open graded rock i.e., 3/8" pea gravel or 3/4" rock must be approved by the engineer prior to placement and will be considered only in special circumstances.

Water consolidation by any means shall not be permitted.

Bedding and shading material shall not be considered "corrosive" or "aggressive" soil per the definitions in AWWA (including C105), DIPRA and other similar standards and industry accepted documents. The CONTRACTOR shall submit material certification documents from the bedding and shading material supplier indicating that the bedding and shading material to be provided is not considered "corrosive" or "aggressive" soil to ferrous metals, and shall include the pH, resistivity, oxidation/reduction, and sulfide values of the material within the certification package. Upon delivery of the material, the Contractor's geotechnical engineer shall provide quality control testing by testing samples of the bedding/shading material for corrosivity. Contractor's geotechnical engineer shall provide a letter sealed by a registered professional engineer, licensed in the state of Arizona, that the bedding/shading material is not corrosive to ferrous metals as defined by AWWA C105. If the material is found to be corrosive, the Contractor must install polyethylene encasement per Section 610.6 at no additional cost to the City. Testing shall occur a minimum of every 1,000 linear feet of pipe installed.

601.4.3 Backfill: REPLACE in its entirety with the following:

Backfill material shall be in accordance with COP Standard Detail 2-01P for paved areas and COP Standard Detail 2-02P for unpaved areas. In paved areas, backfill from 1-foot above the pipe to the bottom of the base course shall be non-shrink slurry backfill compacted in 1-foot lifts. In unpaved areas, backfill from 12-inches above the pipe to 6-inches below existing grade shall be minus 3-inch native material similar in nature to material existing prior to excavation.

Trench backfill quality control testing frequency shall be one per soil type for Proctor Density testing and one per 1-foot vertical lift per 200 linear feet of trench.

601.4.4 Compaction Densities: REPLACE in its entirety with the following:

All backfill material with the exception of non-shrink slurry backfill shall be compacted to 95% maximum dry density per ASTM D-698.

601.4.5 Compaction Methods: REPLACE in its entirety with the following:

Water consolidation by any means shall not be permitted.

601.7 Payment: REPLACE in its entirety with the following:

ADD the following Section:

601.7 Measurement:

No separate measurement or payment shall be made for trench excavation, backfilling, compaction, or placement of temporary pavement. This work shall be included in the respective unit bid price for water, sewer, or storm main and lateral construction.

Rock excavation within the roadway excavation limits shall not be measured separately. It will be included in Roadway Excavation. No separate payment will be made for roadway rock excavation. It shall be combined as one item under roadway excavation.

Rock Excavation within structural excavation limits shall not be measured separately. It will be considered incidental and shall be included in the appropriate bid item.

Rock excavation within trenches shall be measured in accordance with the following:

- a. Width of trench for rock excavation shall be based on pipe outside diameter plus 24 inches.
- b. Depth for rock excavation shall be actual depth from top of rock to bottom of rock, or to bottom of normal bedding section, whichever depth occurs first.

601.8 Payment:

Payment for rock trenching shall be at the unit price bid per cubic yard which shall include the cost of blasting, excavation, removal, hauling and disposal.

Pay Item: 601.2.11 Rock Removal (trench)

~~610 WATER MAIN CONSTRUCTION~~

~~**610.1 Description:** REPLACE in its entirety with the following:~~

~~Water main construction shall be in accordance with all applicable standard specifications and COP Standard Details.~~

~~**610.3 Materials** REPLACE the second paragraph with the following:~~

~~(A) Water Main piping shall be slip joint Class 350 ductile iron unless otherwise noted on the project plans, in accordance with MAG Section 610 and 750. Trace wire per COP Standard Detail 3-19P shall be required for all water main installations. Water main piping shall be furnished new in full lengths with manufacturer, class rating, and all other applicable information clearly marked on the barrel. Water main piping for 2-inch shall be copper in accordance with MAG Section 754 and encased in polyethylene protective wrapping in accordance with MAG Section 610.6.~~

~~REPLACE the third paragraph with the following:~~

~~Ductile iron water pipe and fittings - Section 750. Concrete pressure pipe-steel cylinder type - Section 758.~~

~~ADD the following:~~

~~(C) All ductile iron water main and fittings shall be encased in polyethylene protective wrapping in accordance with MAG Section 610.6 where called for on the plans or after contractor testing of bedding and shading material is found to be corrosive in accordance with AWWA C105.~~

~~All copper and brass water main and fittings shall be encased in polyethylene protective wrapping in accordance with MAG Section 610.6.~~

~~(D) All water mains shall have NSF-PW seal clearly marked on each barrel and installed with trace wire in accordance with COP Standard Detail 3-19P.~~

~~(E) Thrust restraint shall generally be accomplished through the use of restrained joints in lieu of thrust blocking. The preferred joint restraint system shall be "Field-Lok" gasket or approved equal except that vertical deflections, tees, valves and bends shall be restrained utilizing Mega-Lug, as manufactured by Ebba Iron, or equal.~~

~~(F) Required minimum lengths of joint restraint shall be per MAG Standard Detail 303. In locations where lines perpendicular to main lines are shown as restrained, the main line piping shall be restrained for a minimum of 10 feet or one joint (whichever is greater) each side of the main line "Tee". Concrete thrust blocking will be required at connections to existing lines at the locations noted on the plans. Thrust blocks placed at these connections shall be in conformance with MAG Details and shall be adequately braced to allow system operation during curing of the concrete thrust blocks. Heavy plastic sheeting shall be used to wrap fittings to be restrained with thrust blocks to prevent covering with concrete on nuts and threading on fittings.~~

~~(G) All lateral water main connecting piping, valves and fittings shall be constructed using restrained joints from the main line "Tee" to the connection point at the existing water main at the locations shown on the plans.~~

~~(H) Prior to ordering of materials and scheduling connections to existing water mains and services, the contractor shall complete investigations to verify the size, type and location of the existing water mains and services.~~

~~(I) COP Technical Specifications for "Air Release Valves" is expanded to include Combination Air Release-Vacuum Breaker valves at the locations shown on the plans constructed as shown in Detail 3-17P.~~

~~(J) Payment for water main shall be at the unit price in the bidding schedule and shall include all connections, fittings, joints, flanges, thrust restraint and incidentals unless specifically itemized in the bidding schedule.~~

~~**610.4 Construction Methods:** REPLACE the first five paragraphs with the following:~~

~~All water mains shall have a minimum cover of 48 inches over the top of the pipe.~~

~~Cover for water mains will be measured from existing or proposed finished grade of pavement or from~~

~~natural ground, whichever is deeper.~~

~~No water main shall be deflected, either vertically or horizontally, in excess of 80% of the manufacturers' recommendation for the pipe or coupling, without the appropriate use of bends or offsets.~~

~~REPLACE the twelfth (12th) paragraph with the following:~~

~~All corporation stops used for testing and chlorination shall be removed and a stainless steel full circle repair clamps shall be installed.~~

~~DELETE the fifteenth (15th) paragraph in its entirety.~~

~~ADD the following:~~

~~(C) The existing water main shall not be taken out of service prior to completion and ADEQ Approval to Operate the replacement water main and connection of all water services and fire hydrants to the replacement system.~~

~~(D) The existing water system shall not be taken out of service at any time without the approval of the Engineer. With the approval of the Engineer, the existing water main may be taken out of service for limited periods to facilitate project construction. City water Operations shall be contacted a minimum of 48 hours prior to a planned water service disruption.~~

~~(E) The Contractor shall prepare and submit to the Engineer a plan for each connection to the existing system which demonstrates the ability to complete all work within the allowed period.~~

~~(F) All temporary connections and/or elements which must be placed in service prior to full system disinfection, testing and approval shall be disinfected in accordance with Paragraph 4.7 of AWWA C651 after approval of the engineer.~~

~~(G) All existing water service connections shall be replaced in accordance with the provisions of the COP Technical Specifications for "Water Service Replacement".~~

610.5 Separation:

610.5.1 General: ADD the following:

~~Concrete encased water mains that cross storm drains and/or other dry utilities which clear the crossed line by less than 12 inches shall incorporate a 6" sand pad to break the frictional contact.~~

610.9 FIRE HYDRANTS

~~ADD the following:~~

~~(A) Hydrant installation shall be in accordance with COP Standard Details 3-07P, 3-08P, 3-10P, and as specified on the project plans. Hydrants shall be Waterous, Mueller, East Jordan, or as approved by the Engineer.~~

~~(B) All ductile iron water pipe used in fire hydrant installation shall be Class 350.~~

~~(C) All new fire hydrants and connecting piping shall be constructed using restrained joints from the main line "Tee" to the hydrant.~~

~~(D) Payment for hydrant installation shall be at the unit price in the bidding schedule and shall include the hydrant, piping, valve, box and cover, and all appurtenant fittings, as noted for a complete assembly.~~

610.11 METER SERVICE CONNECTIONS

~~REPLACE 610.11(A) with the following:~~

~~A. Type K soft copper pipe or tubing shall be used except as otherwise called for on the plans.~~

~~REPLACE 610.11(B) with the following:~~

~~B. When the existing main is not abandoned and the existing meter is to be connected to the new line, the corporation stop and saddle shall be removed and a stainless steel full circle repair clamp shall be installed.~~

~~ADD the following:~~

~~(E) Water Service Connection~~

- ~~1) New Water Service shall be in accordance with COP Standard Detail 3-16P. All service piping and fittings from main tap to meter box shall be encased in polyethylene protective wrapping in accordance with MAG Section 610.6. Existing water service shall be abandoned in place and existing meter box and cover shall be salvaged and delivered to the COP Maintenance Yard and placed as directed by the Engineer. The Contractor shall supply all necessary materials for new water service including service saddle, corporation stops, piping, meter yoke, boxes and covers, plus all appurtenant fittings to connect to customers existing service line. The Contractor shall maintain a minimum four (4) feet of cover material over water service and set new box and yoke as indicated on plans.~~
- ~~2) The Contractor shall take all necessary steps to maintain water service. Customers affected by water disruption due to water service installation/connection shall be notified by written flyer delivered by the Contractor a minimum of 24 hours in advance of scheduled water service disruption. The Contractor shall not disconnect or disrupt water service until new water main and services pass hydrostatic and disinfection tests and is accepted by the Engineer. Customers shall not be without water service for a total time period greater than 4 hours. The Contractor shall supply bottled potable water and temporary water service meeting all state health requirements for periods of water service disruption exceeding 4 hours. No separate payment will be made for water service maintenance or Contractor written notification of water service disruption.~~
- ~~3) No separate measurement or payment will be made for adjustment of new water meter boxes to finished grade. This work is considered as incidental to the construction of the water service replacement.~~
- ~~4) The Contractor shall install water service line from the main to the new water meter location and continue to a point after the existing water meter location. This point of connection shall be a maximum of ten feet (10') from the existing meter location. Contractor shall remove existing valves, pressure regulators, nipples, connectors, etc. and replace per specifications. All private service lines shall be Type "K" copper in accordance with MAG Section 754 and encased in polyethylene protective wrapping in accordance with MAG 610.6. The Contractor shall maintain a minimum of four (4) feet of cover material, including ditch inverts, over new private water service line and utilize existing in-situ material for backfill. The Contractor shall supply all necessary material for new private water service installation including a curb stop, plus an approved type pressure regulator, in an accessible box per COP Standard Detail 3-16P at the new meter box location and all appurtenant fittings to connect to existing service line.~~
- ~~5) The Contractor shall remove the existing water meter and reinstall in the new yoke at the new meter box location with all appurtenant fittings and adapters. The City shall supply the Contractor with new meters for use in new locations that were not previously served or there is no existing meter to remove.~~
- ~~6) The Customer Box called out in Standard Detail 3-16P for the curb stop and pressure regulator on the customer side of the meter box shall be minimum #1 box, and the curb stop, regulator, box and lid~~

~~shall be provided and installed by the Contractor.~~

- ~~7) The Contractor shall be required to distribute written notices approved by the Engineer to all customers 24 hours in advance of proposed private service line reconnection work.~~
- ~~8) Existing improvements disturbed by the Contractor shall be restored in "like kind" to the satisfaction of the Engineer. No extra payment will be made for restoring existing improvements in "like kind" to include concrete walkways, retaining walls, landscape improvements, etc.~~
- ~~9) It shall be the Contractor's responsibility to review existing water meter location and points of private service line reconnection locations and ascertain all work including existing improvement restoration costs to perform the private service line reconnection work as specified. Costs associated for private service line reconnection work shall be at the appropriate unit bid price in the bidding schedule and shall include private service line piping, curb stop and pressure regulator, plus all appurtenant fittings and existing improvement restoration work as specified.~~
- ~~10) The pressure regulators shall be set at 65psi. The Contractor shall bench-test or otherwise provide written verification from the supplier prior to installation that the pressure regulators have been set at the required psi.~~
- ~~11) Payment for new water service and reconnection shall be at the appropriate unit bid price shown in the bidding schedule and shall include service saddle, corporation stops, curb stops, piping, meter yoke, adapters, boxes, pressure regulator, plus all appurtenant fittings for complete assembly for connection to existing service line. Contractor to supply and install all fittings necessary to install meter into new yoke.~~

~~(F) Commercial Water Service (Greater than 2")~~

- ~~1) The Contractor shall install water service line from the main to the new water meter location and continue to a point after the existing water meter location. This point of connection shall be a maximum of ten feet (10') from the existing meter location. Contractor to furnish and install gate valve and Pressure Regulating Valve (PRV) after meter vault. PRV shall be installed in accordance with the International Building Code as adopted by the City of Prescott. All commercial service lines shall be a minimum of 4" Class 350 Ductile Iron Pipe in accordance with Section 610. The Contractor shall maintain a minimum of four (4) feet of cover material over new water service line and may utilize existing in-situ material for backfill provided it meets the project specification. The Contractor shall supply all necessary material for commercial water service installation including a customer shutoff valve and PRV, in an accessible vault per COP Standard Detail 3-06P at the new meter vault location and include all appurtenant fittings to connect to existing service line.~~
- ~~2) The Contractor shall be required to distribute written notices approved by the Engineer to all customers 24 hours in advance of proposed private service line reconnection work.~~
- ~~3) Existing improvements disturbed by the Contractor shall be restored in "like-kind" to the satisfaction of the Engineer. No extra payment will be made for restoring existing improvements in "like-kind" to include concrete walkways, retaining walls, landscape improvements, etc. It shall be the Contractor's responsibility to review existing water meter location and points of service line connection locations and ascertain all work including existing improvement restoration costs to perform the service line connection work as specified.~~
- ~~4) Measurement and Payment for commercial water service shall be at the appropriate unit bid price in the bidding schedule and shall include piping, customer shutoff valve, PRV and vault, including all appurtenant fittings and existing improvement restoration work as required.~~

~~(G) Traffic Rated Meter Box~~

- 1) ~~Meter boxes located within traffic areas shall be Christy model B1324 by Christy Concrete Products or approved equal.~~
- 2) ~~Pre-cast concrete meter boxes shall have H-20 loading and be constructed of high density reinforced concrete with a minimum compressive strength of 4,000psi. Covers to be furnished with the boxes shall be a steel checker plate, H-20 loading, and lid.~~

610.14 Blocking: ~~REPLACE the first paragraph with the following:~~

~~All pipe lines, valves and fittings shall be restrained using mechanical joints, mechanical joint restraints, or gasket joint restraints in accordance with standard details.~~

610.15 TESTING

~~REPLACE the first paragraph with the following:~~

~~Water lines, including all fittings and connections to the water mains shall be tested for water tightness by subjecting each section to hydrostatic testing in accordance with applicable provisions of AWWA C-600, except as modified below, and the City Of Prescott Water Line Testing and Acceptance Procedures, and shall consist of pressure testing and allowance testing.~~

~~Testing shall be performed by the Contractor and shall be witnessed by the Engineer for approval.~~

~~Payment for testing of water mains shall be included in the unit bid price for water main construction~~

610.16 Disinfection Water Lines: ~~REPLACE with the following:~~

~~Water main and services shall be disinfected in accordance with MAG Section 611 and the City Of Prescott Water Line Testing and Acceptance Procedures. The Owner or his representative shall perform the sampling for bacteriological and residual chlorine testing. The Contractor shall notify the Owner 24 hours in advance to coordinate disinfection testing.~~

~~All valves in the lines being disinfected shall be opened and closed several times during the 24 hour period of disinfection.~~

~~Payment for disinfection of water mains shall be included in the unit bid price for water main construction~~

610.19 Measurement and Payment: ~~ADD the following:~~

~~Pay Item: 610 Water Main~~

~~Pay Item: 610.9 Fire Hydrant Assembly~~

~~Pay Item: 610.11.E Water Service Connection~~

~~Pay Item: 610.11.F Commercial Water Service~~

~~Pay Item: 610.11.G Traffic Rated Concrete Meter Box~~

615.1 SEWER LINE CONSTRUCTION

615.1 Description: ~~REPLACE the second (2nd) paragraph with the following:~~

~~High density polyethylene (HDPE) pipe shall conform to Section 738. Vitrified clay pipe shall conform to Section 743. Polyvinylchloride (PVC) pipe and fittings shall conform to Section 745. Ductile iron pipe shall conform to Section 750.~~

~~ADD the following:~~

~~A. Sanitary sewer main construction shall be in accordance with all applicable COP Standard Details and~~

~~MAG Section 750. All sanitary sewer piping and fittings shall be ASTM 3034 SDR-35 PVC or AWWA C-151 ductile iron Class 350 with an epoxy coating (Protecto Coat 401, Series 431 Perma-Shield, or approved equal). Sewer pipe shall be furnished new in full lengths with manufacturer, class, rating and other pertinent information clearly marked on the barrel. All ductile iron sewer main shall be encased in polyethylene protective wrapping in accordance with MAG Section 610.6 where called for on the plans or after contractor testing of bedding and shading material is found to be corrosive in accordance with AWWA C105.~~

- ~~B. Field cuts and taps of Ductile Iron Pipe shall be re-coated with Protecto Coat 401, Series 431 Perma-Shield, (or approved equal) field kit in accordance with the manufacturer's recommendations.~~
- ~~C. Where noted on project plans, mechanical joint or restrained joint, Class 350, ductile iron sewer main shall be installed ten feet (minimum) each direction from water/sewer interface where vertical separation is less than two feet or until six feet of horizontal separation is attained per MAG Standard Detail 404.~~
- ~~D. The method of construction of manhole and sewer main replacements is of prime importance to the City of Prescott. Maintenance of sewage flows is critical and shall be the responsibility of the Contractor. The Contractor's construction schedule shall be phased as to allow for minimal pumping of sewage flows for manholes and sewer main under construction.~~
- ~~E. Payment for sanitary sewer main will be at the appropriate unit bid prices for sewer main, as shown in the bidding schedule and shall include all excavation, backfill and compaction in accordance with trench details and all materials necessary for installation of the new sewer main.~~

615.7 SANITARY SEWER SERVICE

~~DELETE the last sentence in the fourth (4th) paragraph.~~

ADD the following:

- ~~A. All new or replacement sewer services, and any existing sewer services disturbed during construction, shall be replaced to the location indicated on project plans with a new minimum four-inch (4") ASTM 3034 SDR-35 PVC or AWWA C-151 Ductile Iron, Class 350, with an epoxy coating (Protecto Coat 401, Series 431 Perma-Shield, or approved equal) sewer pipe, backwater valve, manufactured wye, and appurtenances in accordance with COP Standard Details 4-02P, 4-14P, 440-2P, 440-3P and 440-5P, except as modified herein.~~
- ~~B. If individual sewer service disruption is anticipated, the Contractor shall notify the property owner 24 hours in advance. Sewer service must be restored within four hours or some alternate means of sewage disposal provided to allow for the resumption of individual sewer service.~~
- ~~C. Payment for sanitary sewer service shall be at the unit price indicated on the bidding schedule for the sewer service installation, and shall include connecting each existing sewer service including all labor, material, equipment, removal of existing pipe, new pipe, coupling concrete reinforcement, new concrete encasement, fittings, by-pass pumping and other work required to connect the existing yard line service to the new sewer main.~~

615.9 Manholes: ADD the following:

- ~~A. The Contractor is to provide to the Engineer a detailed written description of the method of construction for manhole and sewer replacement for each individual area of work. This should include, but is not limited to the following:~~
 - ~~1. Maintenance of sewage flows during construction and curing of concrete.~~
 - ~~2. Type of concrete for manhole bases, i.e. pre-cast, "high early", etc.~~

3. ~~Method of curing concrete, i.e. protection against freezing, development strength before barrels and cones are set, etc.~~
4. ~~What steps will be taken to ensure the grade around the manholes will not sink when complete, i.e. compaction testing, special base preparation, etc.~~

615.11 Testing: ~~REPLACE Section 615.11 in its entirety with the following:~~

1. ~~Sanitary sewers shall be low pressure air tested in accordance with ADEQ Engineering Bulletin 11, Chapter IV and in accordance with the Arizona Administrative Code Title 18 Chapter 9 Part E301(D)(2)(j)(i), one hundred percent (100%) of the total length of pipe shall be tested.~~
2. ~~100% of new sewer main construction, regardless of pipe material shall be deflection tested in accordance with the following:~~
 - a. ~~The pipe section to be tested shall be cleaned free of dirt, sand, water, or other foreign materials.~~
 - b. ~~Backfill and compaction will have been completed prior to testing. Initial tests will be done immediately upon completion of the first reach of pipe for each diameter to ascertain if the Contractor's means, materials and methods are producing the desired quality within permissible tolerances.~~
 - c. ~~Test mandrels shall be solid sleeve or cage type with outside diameter and type of pipe permanently and clearly identified on the mandrel body. Worn, damaged or deformed mandrels will not be allowed. The mandrel shall have a cable attached at each end to enable removal if it becomes stuck.~~
 - d. ~~For acceptance, the mandrel must pass through the entire section between manholes or other structures in one pass when pulled by hand, without the use of excessive force. All testing shall be witnessed by the Engineer or his representative and the Engineer reserves the right to order additional tests in excess of twenty percent of new main installed.~~
 - e. ~~Any section of the installation which fails to pass the deflection test will be repaired and retested.~~
3. ~~Force mains shall be pressure tested at a minimum of 50 PSI above the design working pressure for two (2) hours in accordance with AAC R-18-9-E301.4.01.~~
4. ~~Testing is considered incidental to the price bid for sewer main installation and no additional payment shall be made for this item.~~

615.11.1 Closed Circuit Television Inspection:

1. DESCRIPTION

~~This section defines the requirements for internal television inspection of the sewer main and service laterals after they have been installed for all new construction and shall include the connection point to the existing system. The Contractor shall inspect the sewer interior using a color closed circuit television (CCTV) camera and document the inspection on video with audio location and date information, video title information and hard copy inspection logs.~~

~~Upon completion of sewer main rehabilitation, the Contractor shall perform Closed Circuit Televising (CCTV) inspection for 100% of the newly rehabilitated sewer main to provide a video record and associated written report to become the property of the Engineer. The Engineer shall be notified a minimum of 48 hours in advance of proposed scheduled sewer camera inspection, so Engineer may witness the video recording. Any inspection completed without Engineer witnessing will not be accepted.~~

2. SUBMITTALS

- a. ~~The Contractor shall submit samples of main and lateral (if separate) inspection logs and reports for approval in accordance with Section 105.2.~~
 - A. ~~The Contractor shall be responsible for modifications to his equipment and/or inspection procedures to achieve report material of acceptable quality. No work shall commence prior to approval of the material by the Engineer. Once accepted, the report material shall serve as a standard for the remaining work.~~
 - B. ~~Contractor shall maintain a copy of all inspection documentation (reports, DVD,) for the duration of the work and warranty period.~~
 - C. ~~Mainline inspection reports shall be provided by the Contractor and shall show all observations, at a minimum: project title, name of Owner, time of day, manhole-to-manhole pipe section, pipe segment length, pipe material, line size, compass direction of viewing, lateral identification and clock position, direction of camera's travel, pipe depth, name of operator and footage counter reading at the beginning and end of each manhole-to-manhole pipe segment. Report shall identify any deficiencies observed.~~
 - D. ~~Video of sewer mainlines shall at a minimum include the following information: project title, time of day, pipe material, line size, compass direction of viewing, direction of camera's travel, and footage counter reading continuously through-out each manhole-to-manhole pipe section. The video shall pause at and identify all observations.~~
 - E. ~~Service lateral inspection reports shall be provided by the Contractor and shall show all observations, at a minimum: project title, time and date, property address of service, manhole-to-manhole pipe section, pipe segment length, pipe material, line size, direction of camera's travel, name of operator and footage counter reading at the beginning and end of each service. Report shall identify any deficiencies observed.~~
 - F. ~~Video of sewer lateral shall show, at a minimum: project title, street address, time and date, pipe material, line size, direction of camera's travel, and counter reading at the beginning and end of each service. The video shall pause at and identify all observations including the connection point to the existing service line.~~
- b. ~~The Contractor shall supply finished video recordings upon completion of sewer construction. Four (4) sets of the videos (DVD) and reports shall be submitted to the City.~~

3. EQUIPMENT

- a. ~~Cameras: For inspection of sewer, the camera shall be equipped with a rotating head, capable of 90-degree rotation from the horizontal and 360-degree rotation about its centerline. Minimum camera resolution shall be 400 vertical lines and 460 horizontal lines. The camera lens shall not have less than 140-degree viewing angle and shall have automatic or remote focus and iris controls. The focal distance shall be adjustable through a range of from 2 inches to infinity. Camera(s) shall be intrinsically safe and shall be operative in 100-percent humidity conditions. Lighting intensity shall be remote controlled and shall be adjusted to minimize reflective glare. Lighting and camera quality shall provide a clear, in-focus picture of the entire inside periphery of the sewer.~~
- b. ~~Recording Media: Video recordings of all sewer line inspections shall be made on DVD. The audio portion of the composite video shall be sufficiently free from electrical interference and background noise to provide complete intelligibility of the oral report. Each video shall be identified with labels showing the Owner's name, Contractor's name, Engineer's name and each manhole-to-manhole pipe segment of sewer line represented on the video. Each video shall be submitted at the completion of~~

~~the project for records.~~

- ~~c. Footage Counter: A footage counter device which measures the distance traveled by the camera in the sewer device shall be accurate to plus or minus 2 feet in 1,000 feet.~~
- ~~d. Depth Gauge: The camera shall be fitted with a depth gauge to identify sags present in the main lines. The gauge shall have 1/4" increment markings to measure the depth of the pipe sag. The depth of the sag and location shall be noted as an observation and recorded on the report.~~
- ~~d. Video Titling: Video recording equipment shall include genlocking capabilities to the extent that computer generated data, (i.e., footage, date, size etc.) as determined by the Owner can be overlaid onto video, and both indicated on the television monitor and permanently recorded on the inspection video recording.~~

~~4. FLOW CONTROL~~

- ~~a. Flow control is required for TV inspection and for sewer line rehabilitation. Limited sewage flow, as defined below, is acceptable for TV inspection.~~
- ~~b. Depth of flow shall not exceed 40% of pipe diameter as measured in the manhole when performing television inspection.~~
- ~~c. Bypass pumping, if required, shall conform to the requirements of Section 200.2 and shall be incidental to Closed Circuit Television Inspection.~~

~~5. INSPECTION METHODS~~

- ~~a. The Engineer and the City's wastewater collection representative shall have access to observe the video monitor and all other operations at all times. The system of cabling employed to transport the camera and transmit its signal shall not obstruct the camera's view.~~
- ~~b. Contractor shall physically measure and record on the inspection log, the length of each sewer reach from the centerline of its terminal manholes.~~
- ~~c. The camera may travel through the sewer in either direction. Maximum rate of travel shall be 30 feet per minute when recording.~~
- ~~d. The camera image shall be down the center axis of the pipe when the camera is in motion. The Contractor is required to provide a 360-degree sweep of the pipe interior, at points of interest, in order to more fully document the existing condition of the sewer. Points of interest may include, but are not limited to, defects, encrustations, mineral deposits, debris, sediment and any location determined not to be clean or part of a proper line installation and defects in the liner including, but not limited to, bumps, folds, tears, dimples, etc.~~
- ~~e. The video and all inspection documentation should include the sewer line and manhole identifiers shown on the plans. After the rehabilitation of the sewer main is complete, the Contractor shall use the upstream manhole as the identifier in conjunction with the distance meter.~~
- ~~f. The City will review videos and logs to ensure compliance with the requirements listed in this specification and contract documents. If the sewer line, in the sole opinion of the City, is not adequately clean, it shall be cleaned and re-inspected by the Contractor at no additional cost to the Owner. If the construction work, in the sole opinion of the City, has not been properly installed, it shall be reinstalled and re-inspected by the Contractor at no additional cost to the Owner.~~

~~Final acceptance of the project will not be granted until sewer line video results, including any re-inspection of deficient sewer main, meet the satisfaction of the Engineer and are in accordance with this Section.~~

~~615.14 Measurement and Payment: ADD the following:~~

~~Measurement and payment shall be for the complete work of CCTV Inspection at the unit price in the bid schedule. Measurement for sewer main shall be linear feet from center of manhole to center of manhole. Measurement for service laterals shall be per each lateral.~~

~~Cleaning and bypass pumping for CCTV is incidental to video inspection and will not be measured or paid.~~

~~Pay Item: 615 Sanitary Sewer Main~~

~~Pay Item: 615.7 Sanitary Sewer Service~~

~~Pay Item: 615.8 Sanitary Sewer Cleanout~~

~~Pay Item: 615.11.1 Mainline Closed Circuit Television (LF)~~

~~Pay Item: 615.11.1a Service Lateral Closed Circuit Television (EA)~~

618 STORM DRAIN CONSTRUCTION

618.1 Description: ADD the following:

Work under this item shall be in accordance with Section 601 and as modified herein.

DELETE the second paragraph in its entirety.

618.2 Materials: REPLACE the first paragraph the following:

The concrete pipe, HDPE pipe, CMP pipe, specials, joints, gaskets, and testing shall be according with Sections 621, 735, 736, and 738 except as specified below or as modified by special provisions.

All CMP shall have 2²/₃" x 1/2" corrugations with a minimum gauge of 14. Steel lined or paved CMP will not be allowed.

(B): Rubber Gasket Joints: ADD the following:

(3) All joints for CMP shall conform to Section 621.3.1 and shall be watertight.

618.3 Construction Methods: REPLACE the first (1st) paragraph with the following:

Excavation, bedding, backfilling, and compaction of backfill and bedding of trenches shall be accomplished in accordance with Sections 601 and 603 for HDPE pipe, or as modified by special provisions.

618.6 Measurement:

Measurement shall be in accordance with Sections 618.6.

618.7 Payment: ADD the following:

~~Pay Item: 618 Storm Pipe~~

625 MANHOLE CONSTRUCTION AND DROP SEWER CONNECTIONS

~~625.1.1 Sewer Manholes: REPLACE in its entirety with the following:~~

~~Construction shall consist of furnishing all materials and constructing manholes complete in place, as detailed, including foundation walls, manhole frames, covers, and any incidentals thereto, at locations shown on the plans.~~

~~Sanitary sewer manhole construction shall be in accordance with COP Standard Details 4-03P, 4-12P, 423-1P, 423-2P, and 426AP. Final grade adjustment in roadway sections shall be in accordance with COP~~

~~Standard Detail 4-05P.~~

625.2 Materials: ~~REPLACE in its entirety with the following:~~

~~Unless otherwise shown on the plans or modified by special provision, materials to be used shall conform with the following:~~

~~Cement mortar for manholes Class D, Section 776.~~

~~Concrete for manholes Class A, Section 725.~~

~~Pipe used in manholes or drop sewer connections shall comply with pipe requirements of Section 615.~~

~~Manhole frame, cover and steps, Section 787 and cast in accordance with standard details.~~

~~Plastic manhole steps, which conform to O.S.H.A. and A.S.T.M. C-487 requirements. The manufacturer shall furnish the Engineer a certification indicating conformance.~~

625.3 Construction Methods: ~~REPLACE in its entirety with the following:~~

~~A. Manholes:~~

~~Manholes shall be constructed of precast concrete sections, frames and covers, in accordance with the standard details. The invert channels shall be smooth and semi-circular in shape, conforming to the inside of the adjacent sewer sections. Changes in direction of flow shall be made with a smooth curve, having a radius as large as the manhole will permit. Changes in size and grade of the channels shall be made gradually and evenly.~~

~~Invert channels may be formed of concrete having a smooth mortared surface, or may be constructed by laying a full section of sewer pipe through the manhole and cutting out the portion of pipe above the floor after the surrounding concrete has hardened. The floor of the manhole outside the channels shall be smoothed and shall slope towards the channels.~~

~~Existing manholes shall be totally removed, including the bases, and disposed of by the Contractor. Existing rings and covers shall be salvaged and delivered to the City Wastewater Collection Yard at 1505 Sundog Ranch Rd. No separate payment will be made for removing manholes or salvaging manhole rings and covers. The cost of this item of work shall be included in the cost of manhole construction.~~

~~The excavation shall be made cylindrical to a diameter sufficient in size to permit sheeting if necessary and leave room that the precast concrete sections may be properly assembled.~~

~~Concrete foundations shall be Class A concrete and in accordance with the Standard Details and Section 505 for both poured-in-place and pre-cast bases. Cast-in-place concrete bases and inverts shall cure for a minimum of 72 hours, depending on concrete development strength before barrels and cones can be placed and before sewage flows across the inverts.~~

~~Frame and Cover. All machined surfaces on the frame and cover shall be such that the cover will lie flat in any position in the frame and have a uniform bearing through its entire circumference. Any frame and cover which creates any noise when passed over by automobiles shall be replaced. Frames shall be set in accordance with COP Standard Detail 4-03P.~~

~~Backfilling shall be done in accordance with the requirements for trench backfilling as stated in Section 601. Quality control density testing shall be one test per 16-inches of fill, beginning at two (2) feet above the crown of the pipe. A minimum of two density tests are required for each manhole. Each density test taken shall be in a different quadrant of the manhole as the previous test. If four tests are required, each quadrant shall have a density test.~~

~~B. Watertight Ring and Cover~~

~~Installation of watertight ring and cover shall be in accordance with COP Standard Detail 4-03P and 4-03BP as indicated on the plans. Rings and covers shall be approved by the City prior to installation.~~

~~C. Drop Sewer Manholes~~

~~1. Drop manholes that intercept existing mains (upper invert) shall not have a block-out for the pipe during the casting process. Said manholes shall be core drilled in place once the appropriate invert elevation has been verified in the field.~~

- ~~i. Core drilling shall not commence without approval from the Engineer.~~
- ~~ii. The pipe shall be sealed at the penetration using a Link-Seal Modular Seal or approved equal.~~

~~2. Internal Drop~~

- ~~i. Internal drop systems shall be installed in drop manholes where indicated on the plan sheets and accordance with COP Standard detail 426A-P.~~
- ~~ii. Internal drop systems shall be constructed using Reliner Inside Drop System as manufactured by Reliner/Duran Inc or approved equal.~~
- ~~iii. Manholes with internal drop systems require Internal Manhole Coating, and shall have the protective coating installed and tested prior to the installation of the drop system. Manhole coating shall be in accordance with Section 626.1.~~

~~D. Sanitary sewer cleanout shall be installed in accordance with COP Standard Detail 4-13P.~~

~~E. All water encountered during the work shall be disposed of by Contractor in a manner such that it will not damage public or private property or create a public nuisance or health problem in accordance with Section 220.1. The costs of special bedding, and over excavation as required to provide a stable foundation, and other equipment and materials shall be incidental to the work.~~

~~F. Testing of Sanitary Sewer Manholes.~~

~~All manholes installed shall be tested by exfiltration or by vacuum testing per ASTM C-1244-3 and in accordance with Arizona Administrative Code Title 18 Chapter 9 Part E301(D)(3)(e).~~

~~Testing of sanitary sewer manholes is considered incidental to the price bid for manhole installation and no additional payment shall be made.~~

~~**625.5 Measurement:** REPLACE in its entirety with the following:~~

~~Measurement of manholes shall be per manhole installed, complete in place regardless of depth.~~

~~Measurement of drop manholes shall be per manhole installed, complete in place regardless of depth.~~

~~Measurement for internal drops shall be per drop installed, complete in place regardless of depth.~~

~~Measurement for cleanouts shall be per cleanout installed, complete in place.~~

~~**625.6 Payment:** REPLACE in its entirety with the following:~~

~~Payment for manhole installation shall be at the appropriate unit bid price in the bidding schedule and shall include all excavation, backfill, installation, grade ring adjustment, and all necessary materials for complete manhole installation.~~

~~Payment for drop manhole installation shall be at the bid unit price and shall include all excavation, backfill, installation, internal coating, internal drop assembly, core drilling, grade ring adjustment, and all necessary materials for complete manhole installation~~

~~Payment for internal drop system in existing manholes shall be at the bid unit price and shall include complete installation of the internal drop assembly, and internal coating in accordance with COP Standard Detail 426A-P and all materials necessary for installation of the new drop sewer connections.~~

~~Pay Item: 625 Sanitary Manhole~~

~~Pay Item: 625a Sanitary Drop Manhole~~

~~Pay Item: 625b Internal Drop System~~

~~626.1 MANHOLE COATINGS~~

~~A. DESCRIPTION~~

- ~~1. This section specifies the coating system used for the lining of the manholes as indicated on the drawings. Contractor shall furnish all labor, materials and equipment required to clean, modify and coat the manholes. Contractor shall comply with the local authority and all Occupational Safety and Health Administration (OSHA) requirements for confined space entry. The coating shall yield a hard, durable chemical resistant coating and shall be specifically designed to be applied on a dry surface. The finish coating shall provide a watertight seal and shall adhere to all components of pipeline liner systems.~~
- ~~2. Specific coating terminology used in this section is in accordance with definitions contained in ASTM D16, ASTM D 3960 and the following definitions:~~
 - ~~a. Dry Film Thickness (DFT): The thickness of one fully cured continuous application of coating.~~
 - ~~b. Field Coat: The application or the completion of application of the coating system after installation of the surface at the site of the work.~~
 - ~~c. Shop Coat: One or more coats applied in a shop or plant prior to shipment to the site of erection or fabrication, where the field or finishing coat is applied.~~
 - ~~d. Tie Coat: An intermediate coat used to bond different types of paint coats. Coatings used to improve the adhesion of a succeeding coat.~~
 - ~~e. Photochemically Reactive Organic Material: Any organic material that will react with oxygen, excited oxygen, ozone or other free radicals generated by the action of sunlight on components in the atmosphere giving rise to secondary contaminants and reaction intermediates in the atmosphere which can have detrimental effects.~~
 - ~~f. Volatile Organic Compound (VOC) Content: The portion of the coating that is a compound of carbon is photochemically reactive and evaporates during drying or curing, expressed in grams per liter or pounds per gallon.~~
 - ~~g. Touch-Up Painting: The application of a paint on areas of painted surfaces to repair marks, scratches and areas where the coating has deteriorated to restore the coating film to an unbroken condition.~~
- ~~3. Quality Assurance~~
 - ~~a. References: This section contains references to the following documents. They are a part of this section as specified and modified. In case of conflict between the requirements of this section~~

~~and those of the listed documents, the requirements of this section shall prevail.~~

~~ASTM D 16-93 Standard Terminology Relating to Paint, Varnish, Lacquer and Related Products.~~

~~ASTM D 3359 A-92 Methods for Measuring Adhesion by Tape Test.~~

~~ASTM D 3960-92 Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings.~~

~~ASTM F 595 B-89 Federal Standard Colors.~~

- b. ~~Standardization: Materials and supplies provided shall be the standard products of manufacturers. Materials in each coating system shall be the products of a single manufacturer.~~

~~4. Delivery and Storage~~

- a. ~~Materials shall be delivered to the job site in their original, unopened containers. Each container shall bear the manufacturer's name, coating type, batch number, date of manufacture, storage life and special directions.~~
- b. ~~Materials shall be stored in enclosed structures and shall be protected from weather and excessive heat or cold. Flammable materials shall be stored in accordance with state and local codes. Materials exceeding storage life recommended by the manufacturer shall be removed from the site.~~

B. MATERIALS

- ~~1. The pre-approved coatings for the lining of manholes include; Sewer Shield Liner 150 as manufactured by Environmental Coatings, Mesa, Arizona, Sauereisen No. 210 as manufactured by Sauereisen, Inc., Pittsburgh, Pennsylvania or Raven 405 as manufactured by Raven Lining Systems, Broken Arrow, Oklahoma. The coating color shall be approved by the owner.~~
- ~~2. Primer shall be as recommended by the manufacturer for each application.~~
- ~~3. Defect filler shall be as recommended by the manufacturer for each application. The coating shall contain no more than 20% filler, sand; no fiberglass fillers.~~
- ~~4. Applicator Experience and Qualifications~~

~~The coating applicator must have a minimum of two (2) years experience in applying either the specified coating or an equivalent coating and shall be certified as an applicator by the manufacturer. They shall submit a successful performance history for the application of either the specified coating or a similar coating in the wastewater industry:~~

- a. ~~The coating applicator shall submit three (3) references relating to the quality of workmanship performed on other projects using the same coating being proposed or an equivalent coating.~~
- b. ~~The coating applicator shall be an Arizona Licensed contractor with an AE License or equivalent.~~
- c. ~~The coating Contractor shall submit a manufacturer's certification to apply the coating specified herein for each applicator involved in the coating process.~~

~~5. Product Data~~

~~Before materials are delivered to the job site, the Contractor shall provide the following information in accordance with these Specifications.~~

- a. ~~For the filler, primer and finish coating, the Contractor shall furnish a Material Safety Data Sheet (MSDS).~~

- b. ~~For the filler and finish coating, the Contractor shall provide the manufacturer's application instructions, which shall include the following:~~
- ~~(i) Surface preparation recommendations.~~
 - ~~(ii) Primer type, where required.~~
 - ~~(iii) Maximum dry and wet mil thickness per coat.~~
 - ~~(iv) Minimum and maximum curing time between coats, including atmospheric conditions for each.~~
 - ~~(v) Curing time before submergence in liquid.~~
 - ~~(vi) Thinner to be used with coating material.~~
 - ~~(vii) Ventilation requirements.~~
 - ~~(viii) Minimum atmospheric conditions during which the coating shall be applied.~~
 - ~~(ix) Allowable application methods.~~
 - ~~(x) Maximum allowable moisture content.~~
 - ~~(xi) Maximum storage life.~~
- c. ~~List of materials proposed to be used under this section and manufacturer's data for each material.~~

C. COATING

- ~~1. Coating products shall not be used until the Owner has inspected the materials and the coating manufacturer's technical representative has instructed the Contractor and Owner in the surface preparation, mixing and application of the coating. The coating manufacturer's technical representative must be a factory representative, not a local representative or an affiliate of the Contractor.~~
- ~~2. Field coats shall consist of one or more finish coats to build up the coating to the specified dry film thickness. Unless otherwise specified, finish coats shall not be applied until other work in the area is complete and until all previous coats have been inspected.~~
- ~~3. All items of equipment, or parts and surfaces of equipment, which are immersed when in service, with the exception of pumps and valves shall have all surface preparation and coating work, performed in the field.~~
- ~~4. Preparations~~
 - ~~a. Surfaces to be coated shall be clean and dry. Before applying coating or surface treatments, oil, grease, dirt, rust, loose mill scale, old weathered coatings and other foreign substances shall be removed except as specified. Oil and grease shall be removed before mechanical cleaning is started. Where mechanical cleaning is accomplished by blast cleaning, the abrasive used shall be washed, graded and free of contaminants, which might interfere with the adhesion of the coatings. The air used for blast cleaning shall be sufficiently free of oil and moisture to not cause detrimental contamination of the surfaces to be coated. The Contractor shall examine all surfaces to be coated and shall correct all surface defects as required by manufacture before application of any coating.~~
 - ~~b. Contractor shall protect the sewer from debris, overspray or any detrimental activity due to restoration of the manholes.~~
 - ~~c. Holes shall be filled using a grout as recommended by the coating manufacturer, and approved by the Engineer. The grout filler shall be used to bring all areas of holes and pitting up to the~~

~~nominal surface of the manhole so that there is an even interior surface in the manhole without waves, pits or holes. Any exposed rebar shall be cleaned, and all areas of corrosion removed, prior to application of the grout as recommended by the coating manufacturer and approved by the Engineer.~~

- ~~d. After surface preparation is complete, all loose material shall be removed from the sewer and manholes.~~
- ~~e. The Contractor shall repair all defects in the coating system where directed by the Engineer.~~
- ~~f. Surface preparations for each type of surface shall be in accordance with the specific requirements of the coating system specification sheet (COATSPEC). COATSPEC shall be supplied by the manufacturer.~~

5. Application

- ~~a. The surface of the installed coating will be cleaned and prepared to permit visual inspection by the Engineer. Any areas of the coating showing poor adhesion, excessive air inclusion or edge or seam defects shall be properly repaired and re-inspected.~~
- ~~b. Coated surfaces shall be free from runs, drops, ridges, waves, laps and brush marks. Coats shall be applied so as to produce an even film of uniform thickness completely coating corners and crevices. Painting shall be done in accordance with the requirements of SSPC Paint Application Specification No. 1. SSPC Paint Application Specification shall be supplied by the manufacturer.~~
- ~~c. The Contractor's equipment shall be designed for application of the materials specified. The coating shall be obtained with the proper thickness and surface characteristics as recommended by the coating manufacturer.~~
- ~~d. Each coat shall be applied evenly and sharply cut to line. Care shall be exercised to avoid over-coating or spattering on surfaces not to be coated.~~
- ~~e. Film Thickness and Continuity: Coating system thickness is the total thickness of the finished coats. The surface area covered for various types of surfaces shall not exceed those recommended by the manufacturer. Coatings shall be applied to the thickness specified, and in accordance with these Specifications. In testing for continuity of coating about welds, projections (such as bolts and nuts), and crevices, the Owner will determine the minimum conductivity for smooth areas of like coating where the dry mil thickness has been accepted. This conductivity shall then be taken as the minimum required for these rough or irregular areas. Pinholes and holidays shall be repainted to the required coverage.~~
- ~~f. Safety and Ventilation: Requirements for safety and ventilation shall be in accordance with SSPC Paint Application Guide No. 3. SSPC Paint Application Guide shall be supplied by the manufacturer.~~
- ~~g. Cleanup: Upon completion of coating, the Contractor shall remove surplus materials, protective coverings and accumulated rubbish and thoroughly clean all surfaces and repair any over spray or other paint-related damage.~~

6. Testing

- ~~a. Spark Testing: All coated surfaces shall be spark tested for holes. The spark tester used shall provide 14,000 volts. If pinholes are found, the Contractor shall repair the coating as recommended by the manufacturer and retest. All testing and repair work shall be at the Contractor's expense.~~

- a. ~~Adhesion Testing: The Contractor shall perform an adhesion test after proper cure in accordance with ASTM D3359 to demonstrate that the specified field coatings adhere to the substrate. Test results showing an adhesion rating of 5A on immersed surfaces and 4A or better on all other surfaces shall be considered acceptable.~~

~~D. DEFECT REPAIR~~

- 1. ~~The Contractor shall repair all defects in the coating system where directed by the Engineer.~~
- 2. ~~Where unacceptable adhesion test results are obtained, the Contractor shall be responsible for removing and reapplying the specified coatings at no expense to the Owner.~~

~~E. WARRANTY~~

~~The coating applicator shall supply a minimum five-year warranty, for the coating that has been approved through the submittal process. The coating applicator shall also supply a warranty from the coating manufacturer addressed to the City. The warranty shall state, at a minimum, that the coating is applied in accordance with the manufacturer's instruction and that the coating will not fail for a period of five years. The definition of coating failure is that blistering, cracking, embrittlement or softening of the coating is starting to occur.~~

~~All structural rehabilitation work performed by the Contractor shall be guaranteed against faulty workmanship and/or materials for a period of 2 years after final acceptance of work.~~

~~F. MEASUREMENT AND PAYMENT~~

~~Payment for manhole coating shall be per square foot as measured from the invert to the ring & cover. The unit price shall include by-pass pumping and all materials necessary for internal coating of manholes specified on the plan sheets.~~

~~Pay Item: 626.1 Coat Manhole~~

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

~~630.3 GATE VALVES~~

~~630.3.1 General: REPLACE the fifth (5th) paragraph with the following:~~

~~All valves shall be designed for a minimum of 250 psi rated pressure unless otherwise noted.~~

~~REPLACE the thirteenth (13th) paragraph with the following:~~

~~Valves 20 inches and smaller may be furnished with flanged ends or mechanical joint ends, unless otherwise noted.~~

~~ADD the following:~~

- A. ~~Valves shall be resilient wedge gate valves, Waterous 2500 series, Clow, Mueller, or equal, suitable for use in line and in wet tapping water mains in conjunction with tapping sleeves. Gate valves shall be mechanical joint except where flange joints are specifically detailed in project plans or where required for tapping sleeves and hydrant installation.~~
- B. ~~Valve blocking shall be provided on all valves in accordance with COP Standard Detail 3-05P. No separate payment will be made for valve blocking and the cost shall be included in the water main unit price.~~
- C. ~~Valve boxes shall be in accordance with COP Standard Detail 3-15P.~~
- D. ~~Debris caps shall be installed on all valves within project limits according to MAG Standard Detail 392~~

~~and shall be color-coded according to COP Standard Detail 3-15P. Debris caps shall be SW Services DC600 or approved equal.~~

- ~~E. Retrofit Debris Caps on Valves: Debris caps shall be installed on all valves within project limits according to MAG Standard Detail 392 and shall be color-coded according to COP Standard Detail 3-15P. Debris caps shall be SW Services DC600 or approved equal.~~
- ~~F. The Contractor shall notify customers of scheduled water service disruption a minimum of 24 hours in advance of construction. Customers shall not be without water service nor shall the water main line be out of operation for a total time period greater than four (4) hours, inclusive of contract time period from issuance of Notice to Proceed to Final Acceptance by the Engineer.~~

630.3.2 Supplements Specifically Relating to Valve Size:

~~(C) Valves, 14 inches through 20 inches: REPLACE with the following:~~

~~(C) Valves 14 inches through 16 inches:~~

~~REPLACE the first paragraph with the following:~~

~~Valves shall be iron body resilient-seated gate valves in accordance with the latest revision of AWWA C-509 or AWWA C-515.~~

~~DELETE the third paragraph in its entirety.~~

~~(D) Valves 24 inches and larger: REPLACE with the following:~~

~~(D) Valves 18 inches and larger:~~

~~REPLACE the first paragraph with the following:~~

~~(C) Valves, 14 inches through 20 inches: REPLACE with the following:~~

~~(C) Valves, 14 inches through 16 inches:~~

~~REPLACE the first paragraph with the following:~~

~~Valves shall be iron body resilient-seated gate valves in accordance with the latest revision of AWWA C-515.~~

~~REPLACE the second paragraph with the following:~~

~~Valves shall be for operation in a horizontal position. The valve shall have bevel gears. The gears and stuffing box shall be enclosed in a watertight iron case, for operation in a buried location. The case shall be filled with grease at the factory.~~

630.4 TAPPING SLEEVES AND VALVES

~~ADD the following:~~

- ~~A. The City of Prescott Utility Operations shall be notified 48 hours in advance to schedule water main tap. If the Contractor is not ready for the tap at the scheduled time, the tap will be rescheduled. City crews will not remain on standby until the Contractor is ready for the tap. The rescheduled tap shall include a new 48 hour notification.~~

~~630.4.1 Tapping Sleeves and Valves: REPLACE the third paragraph with the following:~~

~~Once the tap has been installed, the Contractor shall not operate the valve.~~

~~ADD the following:~~

~~A. Debris caps shall be installed on tapping sleeve valve according to MAG Standard Detail 392 and shall be color-coded according to COP Standard Detail 3-15P. Debris caps shall be SW Services DC600 or approved equal.~~

630.4.3 Tapping and Associated Fees: ~~ADD the following:~~

~~A. The Contractor shall be responsible for payment to the City Utility Operations for the quoted costs for the City Water Department to perform water main tap work. The water tap fees are as follows:~~

1" Tap	\$100.00
2" Tap	\$130.00
4" Tap	\$240.00
6" Tap	\$260.00
8" Tap	\$325.00
10" Tap	\$380.00
12" Tap	\$435.00

~~B. The Contractor shall add the cost of this work to the unit price bid in the bidding schedule for tapping, sleeve, valve, box and cover. Tapping sleeves shall be in accordance with COP Standard Detail 3-05P and this Section.~~

630.5 Butterfly Valves:

~~(A) 16 inch and larger: REPLACE with the following:~~

~~(A) 18 inch and larger:~~

~~REPLACE (1) with the following:~~

~~Valve body shall be of cast iron or ductile iron with connecting ends one of or a combination of Flanged (Short Body) or mechanical joint.~~

~~DELETE (B) in its entirety.~~

630.6 AIR RELEASE, COMBINATION VALVES, AND BLOW OFF ASSEMBLY

~~ADD the following:~~

~~C. Air/vacuum release valves shall be in accordance with COP Standard Detail 3-17P.~~

~~D. Combination Air Valves~~

- ~~1. Air valves shall be standard combination style. Cast iron air valves shall comply with AWWA C-512 except as modified herein. Valves shall be of the size shown and shall have threaded or flanged ends to match piping. Bodies shall be of high-strength cast iron, conforming to ASTM A126 class B, or NSF 61 certified reinforced nylon. Floats of cast iron air valves shall be heavy stainless steel, suitable to withstand 1,000 psi external pressure. Seats of cast iron air valves shall be Buna-N. Other internal components of cast iron air valves shall be constructed of stainless steel, bronze, delrin, or cast iron as appropriate. Internal components for reinforced nylon valves shall be NSF 61 certified nylon, polypropylene, EPDM or NBR 70. Inlet and outlet ports for large orifice valves shall be baffled to prevent the action of high volume airflows from interfering with valve operations. Interior and exterior carbon steel surfaces shall be epoxy coated. Valves shall be designed for a minimum of 300 psi water working pressure, unless~~

~~otherwise shown.~~

- ~~2. Internal protective coatings shall be provided in accordance with AWWA C-550.~~
 - ~~a. Liquid epoxy lining and coating materials shall be listed in the NSF Listing for Drinking Water Additives, Standard 61, certified for use in contact with potable water.~~
 - ~~b. The minimum dry film thickness for epoxy linings shall be 0.203 mm (0.008-inch or 8 mils). Liquid epoxy lining shall be applied in two (2) coats in accordance with AWWA C-210.~~
- ~~3. Combination air valves shall be in accordance with COP Standard Detail 3-17P, unless shown otherwise. They shall have both large and small orifices in a single body. The large orifice shall serve to vent large quantities of air during filling operations and shall automatically open to relieve vacuum conditions. The small orifice shall vent small quantities of air under full line pressure that may become entrained in the system and collect at high points. Valves shall be APCO Series 140, Val-Matic Corp. Series 200, or equivalent~~

ADD the following Section:

~~630.6.1 Blow Off Installation:~~

~~A. Blow off installation shall be in accordance with COP Standard Detail 3-18P. Contractor shall be required to provide Mega-Lug restraint for all joints for a distance specified per MAG Standard Detail 303.~~

~~630.8 Measurement: REPLACE with the following:~~

~~Measurement will be by the unit each of the various kinds and sizes of valves, manholes, vaults, or tapping sleeves and valves, including valve boxes and covers, retrofit debris covers, air release valve assemblies, combination valve assemblies, and blow off assemblies.~~

~~630.9 Payment: ADD the following:~~

~~Payment for valves, box and cover shall be per each at the unit bid price shown in the bidding schedule. Valves on tapping sleeves and hydrant installations shall be included in the appropriate bid item in the bidding schedule.~~

~~Payment for retrofit debris cap shall be per each installed complete and in place.~~

~~Payment for tapping sleeves shall be at the unit price bid in the bidding schedule and include the tapping fee, tapping sleeve, valve, box and cover, and all appurtenant fittings for complete assembly.~~

~~Payment for air release valve installation shall be at the unit price bid in the bidding schedule and shall include all materials and appurtenant fittings as noted for a complete installation.~~

~~Payment for combination air valve assembly shall be at the unit price bid in the bidding schedule and shall include all materials and appurtenant fittings as noted for a complete installation.~~

~~Payment for blow off installation shall be at the unit price bid in the bidding schedule and shall include all materials and appurtenant fittings as noted for complete installation. No extra payment shall be made for Mega-Lug restraint.~~

~~Pay Item: 630.3a Gate Valve, Box, & Cover~~

~~Pay Item: 630.3b Retrofit Debris Cap~~

~~Pay Item: 630.4 Tapping Sleeve, Valve, Box, and Cover~~

~~Pay Item: 630.6a Air Release Valve Assembly~~

~~Pay Item: 630.6b Combination Valve Assembly~~

~~Pay Item: 630.6.1 Blow-Off Assembly~~

~~ADD Section 650 as follows:~~

~~650 ABANDONMENT AND REMOVAL OF WATER MAIN~~

~~650.1 Abandonment of Water Main:~~

~~A. Abandonment of existing water main shall not commence until hydrostatic and disinfection test results for the new main have been accepted by the Engineer. The Contractor shall contact the Engineer a minimum of 48 hours in advance of abandonment activities to schedule City water crews to coordinate valve operation. Water customers affected by water service disruption due to water main abandonment shall be notified by written flyer delivered by the Contractor a minimum of 24 hours in advance of scheduled water service disruption. Scheduled water service disruptions are limited to a maximum of 4 hours.~~

~~B. Abandonment of existing main shall include the removal of all valves, hydrants, and appurtenances within the reach to be abandoned. All valves and hydrants to be abandoned shall be salvaged to the City unless otherwise noted on the plans or special provisions. All salvaged items shall be delivered to the City of Prescott Water Operations, 1481 Sundog Ranch Road and placed as directed by the Engineer. Removed materials not identified to be salvaged shall become the property of the Contractor and properly disposed of. Removed or salvaged materials shall not be used in new main installation.~~

~~At all locations indicated on the plans, a minimum of four (4) feet of water main shall be removed capped and the appropriate thrust restraint installed.~~

~~Existing valves to be abandoned shall include removing the valve, valve box, and cover in its entirety. Abandonment of appurtenances located in any structure (manhole, vault, etc.) shall include the complete removal and proper disposal of the appurtenance and the structure.~~

~~Abandonment of valves, hydrants, and appurtenances shall include the installation of the requisite number of mechanical joint caps as necessary to seal all pipe remaining in place.~~

~~C. Restoration for water main abandonment shall include excavation, backfilling, compaction and re-surfacing in accordance with Section 601.~~

~~D. Pavement matching and surface replacement shall be incidental to water main abandonment.~~

~~650.2 Removal of Water Main:~~

~~A. Removal of water main shall not commence prior to authorization from the Engineer.~~

~~B. Water main removal shall include the complete removal of all existing water main, valves, hydrants, structures, and appurtenances within the reach as indicated on the plans. All valves and hydrants to be removed shall be salvaged to the City unless otherwise noted on the plans or special provisions. All salvaged items shall be delivered to the City of Prescott Water Operations, 1481 Sundog Ranch Road and placed as directed by the Engineer. Materials not otherwise identified to be salvaged shall become the property of the Contractor and properly disposed of. Removed or salvaged materials shall not be used in new main installation.~~

~~C. Removal of water main shall include excavation, backfilling, compaction, disposal and salvage in accordance with Section 601.~~

~~D. Pavement matching and surface replacement shall be measured and paid accordance with Section~~

~~336. Any other restoration shall be considered incidental.~~

650.3 Measurement:

~~Measurement for abandonment of water main and laterals shall be by the lineal foot of pipe abandoned, measured horizontally through valves and fittings. Hydrants, valves, fittings, vaults, services, and other appurtenances shall be considered incidental to water main abandonment.~~

~~Measurement for removal of water mains and laterals shall be by the lineal foot of pipe removed, measured horizontally through valves and fittings. Hydrants, valves, fittings, vaults, services, and other appurtenances shall be considered incidental to water main abandonment.~~

650.4 Payment:

~~Payment for water main abandonment shall be at the appropriate unit bid price and shall include all work and appurtenant fittings necessary for complete abandonment. Pavement matching and surface replacement shall be incidental to water main abandonment.~~

~~Payment for water main removal shall be at the appropriate unit bid price and shall include all work and appurtenant fittings necessary for complete removal. Pavement matching and surface replacement shall be measured and paid accordance with Section 336. Any other restoration shall be considered incidental.~~

~~**Pay Item: 650.1 Water Main Abandonment**~~

~~**Pay Item: 650.2 Water Main Removal**~~

ADD Section 651 as follows:

~~651 ABANDONMENT AND REMOVAL OF SANITARY SEWER~~

~~651.1 Abandonment of Sanitary Sewer:~~

- ~~A. Abandonment of sanitary sewer shall not occur until all existing sanitary sewer services have been transferred to another main or lateral, and abandonment is approved by the Engineer.~~
- ~~B. Abandonment of sanitary sewer shall include gravity and/or force mains, manholes, vaults, wet wells, and other appurtenances within the reach noted on the plans to be abandoned.~~
- ~~C. Manhole frames, covers, vault access hatches, and clean-out frame & covers shall be salvaged to the City unless otherwise noted on the plans or special provisions. All salvaged items shall be delivered to the City of Prescott Wastewater Collections, 1505 Sundog Ranch Road and placed as directed by the Engineer. Materials not otherwise identified to be salvaged shall become the property of the Contractor and properly disposed of. Removed or salvaged materials shall not be used in new sewer installation.~~
- ~~D. Restoration for sanitary sewer abandonment shall include all excavation, backfilling, compaction, and resurfacing in accordance with Section 601.~~

~~651.1.1 Sanitary Sewer Mains:~~

- ~~A. Abandonment of sanitary sewer mains shall include all gravity mains, laterals, and force mains, and shall be accomplished by pipe bursting or grout filling as indicated on the plans.~~
 - ~~1. Pipe bursting shall be performed using industry standard methods and equipment.~~

~~A pipe bursting plan including equipment used, means and methods shall be submitted and approved in accordance with Section 105.2 prior to beginning bursting operations.~~

~~Valves shall be removed and disposed of prior to pipe bursting, and shall become property of~~

~~the contractor. All valves shall be properly disposed of in accordance with these specifications.~~

- ~~2. Grouting shall be accomplished following industry standard methods, using a cement based grout to fill the void of the existing sanitary sewer main. The grouting material must have a minimum compressive strength of 100 PSI and shall have flow characteristics appropriate for filling a sanitary sewer.~~

~~Injection of the grout material shall be done with sufficient pressure and injection locations to fill the existing sanitary sewer line. The method shall adequately provide for the removal and legal disposal of existing sewage in the lines and any pipe materials removed, and release of air from the system to facilitate proper abandonment.~~

~~A grouting plan including equipment used injection locations, grout mix design, and means and methods shall be submitted and approved in accordance with Section 105.2 prior to beginning grouting operations.~~

~~651.1.2 Manholes, Vaults, and Wet Wells:~~

- ~~A. Abandonment of manholes, vaults, wet wells and other structural appurtenances shall include the complete removal of each structure within the reach to be abandoned as indicated on the plans.~~
- ~~B. All items removed and not salvaged shall become property of the contractor and properly disposed of in accordance with these specifications.~~
- ~~C. Backfilling after removal shall be in accordance with Section 601.~~
- ~~D. Pavement matching and surface replacement shall be incidental to sewer abandonment.~~

~~651.2 Removal of Sanitary Sewer:~~

- ~~A. Removal of sanitary sewer shall not commence prior to authorization from the Engineer.~~
- ~~B. Removal of sanitary sewer shall include the complete removal of gravity and/or force mains, manholes, vaults, wet wells, and other appurtenances within the reach noted on the plans to be removed.~~

~~Existing sanitary sewer that is removed coincident with the installation of new sanitary sewer shall be considered incidental to the installation and shall not be measured or paid for under this section.~~

- ~~C. Manhole frames, covers, vault access hatches, and clean-out frame & covers shall be salvaged to the City unless otherwise noted on the plans or special provisions. All salvaged items shall be delivered to the City of Prescott Wastewater collections, 1505 Sundog Ranch Road and placed as directed by the Engineer. Materials not otherwise identified to be salvaged shall become the property of the Contractor and properly disposed of. Removed or salvaged materials shall not be used in new sewer installation.~~
- ~~D. Removal of sewer main, laterals, or force main that tie into an existing manhole that is to remain in service shall include complete removal of the penetrating pipe and grouting the hole with lean, non-shrink grout. A water stop shall be used to ensure the integrity of the manhole.~~

~~The water stop proposed shall be submitted for review and approval prior to removal activities in accordance with Section 105.2~~

- ~~E. Removal of sanitary sewer shall include excavation, backfilling and compaction in accordance with Section 601. Disposal, salvage, and bypass pumping shall be considered incidental to sewer removal.~~
- ~~F. Pavement matching and surface replacement shall be measured and paid in accordance with Section 336. Any other restoration shall be considered incidental.~~

651.3 Measurement:

~~Measurement for abandonment of sewer main, laterals, and force main shall be by the lineal foot of pipe abandoned, measured horizontally through manholes, vaults, valves, and fittings. Valves, fittings, services, cleanouts, and other appurtenances shall be considered incidental to sewer abandonment.~~

~~Abandonment of manholes and wet wells shall be the number of each abandoned. Vaults shall be considered incidental to sewer abandonment unless otherwise noted in the special provisions.~~

~~Measurement for removal of sewer main, laterals, and force main shall be by the lineal foot of pipe abandoned, measured horizontally through manholes, vaults, valves, and fittings. Valves, fittings, services, cleanouts, and other appurtenances shall be considered incidental to sewer abandonment.~~

~~Measurement for manholes and wet wells shall be the number of each removed. Vaults shall be considered incidental to sewer abandonment unless otherwise noted in the special provisions.~~

651.4 Payment:

~~Payment for abandoning sewer mains, laterals, and force main shall be made at the contract unit price. Said price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the work. Pavement matching and surface replacement shall be incidental to sewer abandonment.~~

~~Payment for abandoning manholes and wet wells shall be made at the contract unit price. Said price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the work. Pavement matching and surface replacement shall be incidental to sewer abandonment.~~

~~Payment for removing sanitary sewer shall be made at the contract unit price. Said price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the work. Pavement matching and surface replacement shall be measured and paid in accordance with Section 336. Any other restoration shall be considered incidental.~~

~~Payment for removing manholes and wet wells shall be made at the contract unit price. Said price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the work. Pavement matching and surface replacement shall be measured and paid in accordance with Section 336. Any other restoration shall be considered incidental.~~

~~Pay Item: 651.1 Abandonment of Sanitary Sewer~~

~~Pay Item: 651.1a Abandonment of Sanitary Manhole~~

~~Pay Item: 651.2 Removal of Sanitary Sewer~~

~~Pay Item: 651.2a Removal of Sanitary Manhole~~

701 AGGREGATE

701.4 Reclaimed Concrete Material (RCM)

REMOVE in its entirety and REPLACE with the following:

Use of Reclaimed Concrete Material (RCM) is not allowed.

701.5 Reclaimed Asphalt Pavement (RAP):

REMOVE in its entirety.

710 ASPHALT CONCRETE

SECTION 710.2.1 Asphalt Binder: shall be deleted and replaced as follows:

- a. The asphalt binder shall be a Performance Grade (PG) PG 64-22 Asphalt conforming to the requirements of AASHTO M 320-09 Performance-Graded Asphalt Binder. The binder grade shall be as specified in the contract documents or as directed by the Engineer.
- b. The Engineer may review a request by the Contractor to change from a PG 64-22 binder grade to a PG 64-16 grade. The owner may require the Contractor to provide supporting justification and/or data for changing the grade of binder from PG 64-22 to PG 64-16.

SECTION 710.3.2 Mix Design Criteria: add the following:

- a. The intent of this supplement is to use only 1/2 inch or 3/4 inch Marshall or Gyratory Mix Designs within the specification unless specifically called out in the project specifications.
- b. The asphalt mix design shall be for high traffic volume, unless otherwise specified.

SECTION 710.3.2.1 Marshall Mix Design: make the following change:

- a. In Table 710-3 change the Tensile Strength Ratio minimum percent requirement from 65 to 75. A tensile strength ratio of 75 percent may require more than one percent mineral admixture.

725 PORTLAND CEMENT CONCRETE

725.1 General: ADD the following:

All Portland cement concrete placed under this contract shall be Class AA with a maximum water/cement ratio of 0.45.

Adverse Weather Concreting

A. Hot Weather Concreting:

Hot weather is defined as any combination of high ambient temperature, low relative humidity, and wind velocity which would tend to impair the quality of fresh concrete. These effects become more pronounced as wind velocity increases. Since last minute improvisations are rarely successful, preplanning and coordination of all phases of the work are required to minimize these adverse effects.

Place concrete according to recommendations in ACI 305R and as follows, when hot-weather conditions exist:

1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is CONTRACTOR's option.
2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

As an absolute minimum, the Contractor shall insure that the following measures are taken:

1. An ample supply of water, hoses, and fog nozzles are available at the site.
2. Spare vibrators are on hand in the ratio of one spare vibrator for each three in use.
3. Preplanning has been accomplished to insure prompt placement, consolidation, finishing, and curing

of the concrete.

4. Concrete temperature on arrival should be approximately 60°F and in any event shall not exceed 90°F. The use of cold water and ice is recommended.
5. The subgrade is moist, but free of standing water.
6. Fog spray is utilized to cool the forms and steel. Under extreme conditions of high ambient temperature, exposure to the direct rays of the sun, low relative humidity, and wind, even strict adherence to these measures may not produce the quality desired and it may be necessary to restrict concrete placement to early morning only. If this decision is made, then particular attention must be directed to the curing process since the concrete will be exposed to severe thermal stresses due to temperature variation; heat of hydration plus midday sun radiation versus nighttime cooling.

B. Cold Weather Concreting:

Comply with ACI 306 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.

1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.

C. Wet Weather Concreting: Placing of concrete shall be discontinued when the quantity of rainfall is such as to cause a flow or wash to the surface. Any concrete already placed and partially cured shall be covered to prevent dimpling. A construction joint will be installed prior to shut down.

D. Replacement of Damaged or Defective Concrete: Upon written notice from the Engineer, all concrete which has been damaged or is defective, shall be replaced by the Contractor at no cost to the Contracting Agency.

E. References:

- (1) ACI-305 Hot Weather Concreting
- (2) ACI-306 Cold Weather Concreting
- (3) ACI-308 Recommended Practices for Curing Concrete

F. No separate payment shall be made for adverse weather concreting. The work shall be considered incidental and included in the unit price bid for construction or installation of the appropriate contract pay item.

725.5 Admixtures and Additives: REPLACE the third (3rd) paragraph in its entirety with the following:

Air entraining admixtures incorporated into the approved concrete mix design shall meet the requirements of ASTM C260. All Portland cement concrete shall contain 6%, plus or minus 1%, entrained air of evenly dispersed air bubbles at the time of placement. The air-entraining agent shall contain no chlorides. The air-entraining agent shall be added to the batch in a portion of the mixing water. The solution shall be batched by means of a mechanical batcher capable of accurate measurement. Air entrainment in the concrete shall be tested in accordance with AASHTO T-152. Air entrainment shall be tested at time of sampling in accordance with ASTM C143 and C231 respectively. The cost of this testing shall be the responsibility of the

Contractor.

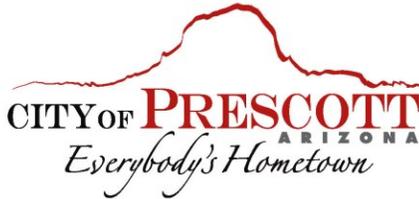
725.8 Tests and Test Methods:

725.8.1 Field Sampling and Tests: REPLACE the fourth (4th) paragraph in its entirety with the following:

The slump of Portland cement concrete shall be tested in accordance with the requirements of AASHTO T119, ASTM C143 and ASTM C231 respectively. Concrete that does not meet the specification requirements as to slump shall not be used, but shall be removed from the job at no cost to the CITY. Slump tests shall be taken in the field by a representative of the Contractor's quality control firm. The cost of this testing shall be the responsibility of the Contractor.

725.8.2 Concrete Cylinder Test: MODIFY with the following:

Concrete cylindrical specimens for compression tests shall be taken in the field by a representative of the Contractor's quality control firm in accordance with AASHTO T141 and T-23. These samples will be tested for compressive strength in accordance to AASHTO T22. Concrete samples will be taken in accordance with MAG 725.8.2 and 725.8.3 except as noted hereinafter. One set of not less than four (4) cylinders per fifty (50) cubic yards or ½ days pour shall be prepared and retained to verify compressive strength of the mixture. One (1) cylinder shall be tested at seven (7) days and two (2) at twenty-eight (28) days. The fourth (4th) cylinder shall be retained for up to sixty (60) days. If the 28-day test does not meet the minimum strength requirement, cores shall be taken as provided herein and the cost of such will be the responsibility of the Contractor. Acceptance shall be based on minimum 28-day strength requirements. The cost of testing shall be the responsibility of the Contractor.



CDBG PY15-003
WEST YAVAPAI GUIDANCE CLINIC
DRAINAGE AND PARKING LOT IMPROVEMENTS

APPENDIX V

SPECIAL PROVISIONS

SPONSOR:

CITY OF PRESCOTT, ARIZONA
COMMUNITY DEVELOPMENT, CDBG PROGRAM ADMINISTRATION

ENGINEER:

GRANITE BASIN ENGINEERING

PROJECT NUMBER: CDBG PY15-003

The Special Provisions shall modify and supersede the various sections of the City of Prescott (COP) Supplement to the Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details for Public Works Construction, Technical Specifications.

In case of conflicts between the referenced specifications, the following order of precedence shall govern:

1. Addenda;
2. These Special Provisions;
3. The COP General Conditions;
4. City of Prescott (COP) Supplement to the Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details for Public Works Construction, Technical Specifications;
5. Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details for Public Works Construction;
6. Project Plans.

SPECIAL PROVISIONS

The CITY OF PRESCOTT SUPPLEMENT TO THE MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS is hereby amended by the SPECIAL PROVISIONS.

107.15 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

ADD the following:

The project site disturbance is less than one (1) acre and therefore does not require coverage under the Arizona Pollutant Discharge Elimination System (AZPDES) Construction General Permit (CGP) for Arizona. However, the Contractor is still responsible for providing all necessary labor and materials, and for taking the appropriate measures to assure compliance with the AZPDES Construction General Permit for Arizona as well as other Federal, State and local requirements pertaining to stormwater discharges.

Pay Item: Erosion Control Plan

205 ROADWAY EXCAVATION

205.1.1 General: ADD the following:

The term "Roadway Excavation" shall include "Raw Earthwork (Cut)" and any over-excavation necessary for construction of proposed improvements. The reported volume in the project quantities is always considered "in place" and does not include any shrink or swell that may occur when the material is excavated, moved or compacted. No additional volumes will be considered based on "truck counts", weight scales, etc.

Pay Item: Raw Earthwork (Cut)

205.2 UNSUITABLE MATERIAL

205.8 Payment: REPLACE with the following:

No separate measurement and payment shall be made for removal of unsuitable material. This work shall be considered incidental and included in the applicable unit price bid for construction.

211 FILL CONSTRUCTION

211.1 Description: ADD the following:

The term "Fill Construction" shall include "Raw Earthwork (Fill)" and any backfill or embankment necessary for construction of proposed improvements. The reported volume in the project quantities is always considered "in place" and does not include any shrink or swell that may occur when the material is excavated, moved or compacted. No additional volumes will be considered based on "truck counts", weight scales, etc.

Pay Item: Raw Earthwork (Fill)

220 RIPRAP CONSTRUCTION

220.1 Description: ADD the following:

Work under this item shall be in accordance with the Project Plans. The intent is to line the channel conveying offsite runoff through the property with rock riprap to prevent erosion. The extent of riprap placement is illustrated on Sheet 5, which includes the area surrounding the proposed concrete headwall.

The drainage channel crosses over an 8” sewer main behind the existing dumpster enclosure. Riprap in this area shall be grouted as shown on the Project Plans and shall include a 24” key both up and downstream from the sewer crossing as shown on Sheet 4. The riprap around the corner of the existing dumpster enclosure shall also be grouted as illustrated on Sheet 5 to prevent undermining of the structure.

220.3 Preparation of Ground Surfaces: ADD the following:

Finish grade elevations on the Project Plans represent top of riprap. The area to be riprapped must be over-excavated the full thickness of the riprap prior to placement of any fabric. The Contractor shall notify the Owner and call the Engineer for inspection of the excavation prior to placement of any fabric or riprap.

Pay Item: Riprap (D50=6" Placed 12" Thick)

Pay Item: Grouted Riprap (D50=6" Placed 12" Thick)

301 SUB GRADE PREPARATION

301.8 Payment: REPLACE with the following:

No separate measurement and payment shall be made for Sub Grade Preparation. This work shall be considered incidental and included in the applicable unit price bid for construction.

332 ASPHALT EMULSION SLURRY SEAL COAT

ADD the following:

- A. All work under this item shall be per MAG Section 332 except as modified herein.
- B. Asphalt Emulsion Slurry Seal Coat shall be Type II.
- C. In Table 715-1 Pounds of Aggregate per Square Yard shall be 16 – 18.
- D. Payment shall be per square yard covered. Payment for providing a product of less than 16 pounds per square yard shall be reduced by 10% for each pound under 16 per square yard.
- E. The successful lower bidder must demonstrate experience in the placement of asphalt emulsion slurry seal. The successful low bidder shall submit verification of having completed 160,000 square yards or more of Type II asphalt emulsion slurry seal for state, county, or municipal agencies within the last five years. Said submittal shall contain contact information for those agencies that have firsthand knowledge of the firm’s experience and quality of workmanship. Said submittal shall be included in the bid package.
- F. Should the asphalt emulsion slurry seal work be subcontracted, the same requirements apply to the designated subcontractor. It shall be the prime contractor’s responsibility to assure that these requirements are met.
- G. The City reserves the right to reject any and all bids for which these qualifications are not met.

Alternate Bid Item: 332.1 – Asphalt Emulsion Slurry Seal Coat (Area 1)

Alternate Bid Item: 332.2 – Asphalt Emulsion Slurry Seal Coat (Area 2)

Alternate Bid Item: 332.3 – Asphalt Emulsion Slurry Seal Coat (Area 3)

Alternate Bid Item: 332.4 – Asphalt Emulsion Slurry Seal Coat (Area 4)

Alternate Bid Item: 332.5 – Asphalt Emulsion Slurry Seal Coat (Area 5)

505 CONCRETE STRUCTURES

505.1 Description: ADD the following:

Work under this item shall be in accordance with the Project Plans. The intent is to construct a reinforced concrete outlet headwall around the existing culverts discharging offsite runoff onto the property. Plan, profile and section views of the proposed headwall are detailed on Sheet 3. The headwall includes a vertical drop from the existing pipe inverts to the floor of the headwall (splash pad) and a 6” high curb along the outer edge with a 12” opening for low flows. There is a 12” key beneath the curb that extends beneath the adjacent riprap to prevent undermining of the headwall. All concrete shall be Class ‘A’ with No. 4 steel reinforcement at 12” on center each way in accordance with Section 727.

Pay Item: Concrete Headwall

510 CONCRETE BLOCK MASONRY

510.1 Description: ADD the following:

Work under this item shall be in accordance with the Project Plans. The intent is to construct a site wall with reinforced 8”x8”x16” CMU (Concrete Masonry Unit) to prevent offsite stormwater from flowing across the parking lot. Profile and section views of the proposed site wall are detailed on Sheet 3; the plan view is illustrated on Sheet 5. The site wall shall tie into the existing dumpster enclosure and extend into the existing slope along the east side of the property. Handrail shall be installed along the top of the site wall along the existing parking lot and sidewalk in accordance with City of Prescott Standard Detail 145P. The contractor shall protect the existing parking lot pavement and concrete sidewalk in place while constructing the footing and stem, and any other related items, necessary for the wall in accordance with Section 107.9. Any peripheral damage caused by the Contractor shall be replaced in kind at the Contractor’s expense.

Pay Item: Site Wall (CMU)

601.2.11 ROCK EXCAVATION FOR UTILITY AND/OR DRAINAGE CONSTRUCTION

601.8 Payment: REPLACE the following:

No separate measurement and payment shall be made for Rock Excavation. This work shall be considered incidental and included in the applicable unit price bid for construction.

618 STORMDRAIN CONSTRUCTION

618.1 Description: ADD the following:

Work under this item shall be in accordance with the Project Plans. The “Headwall Detail” on Sheet 3 shows the extent of stormdrain replacement. The intent is to cut the existing stormdrain and install approximately 6 L.F. of new 21” diameter corrugated metal pipe (CMP) with concrete collar per MAG SD 505.

Pay Item: Replace Stormdrain

520 STEEL AND ALUMINUM HANDRAILS

618.1 Description: ADD the following:

Work under this item shall be in accordance with the Project Plans. The intent is to construct handrail along the top of the site wall along the existing parking lot and sidewalk in accordance with City of Prescott Standard Detail 145P. Profile and section views of the proposed handrail are detailed on Sheet 3; the plan view is illustrated on Sheet 5.

Pay Item: Handrail

CITY OF PRESCOTT GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) & CITY OF PRESCOTT (COP) CONSTRUCTION STANDARDS & SPECIFICATIONS, LATEST REVISIONS, UNLESS SPECIFICALLY APPROVED BY THE CITY AND MODIFIED ON THE PLANS, IN CONJUNCTION WITH THE LATEST REVISIONS OF THE MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD SPECIFICATIONS AND DETAILS (MAG STANDARDS), UNLESS SPECIFICALLY MODIFIED ON THE PLANS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF MAG AND CITY OF PRESCOTT STANDARDS AND SPECIFICATIONS AS WELL AS ALL OTHER STANDARDS AND SPECIFICATIONS NECESSARY TO COMPLETELY AND ACCURATELY INTERPRET THESE PLANS.
- ALL PLANS SIGNED BY THE CITY ENGINEER ARE NULL AND VOID ONE YEAR FROM DATE OF SIGNATURE IF CONSTRUCTION HAS NOT STARTED. RESUBMITTAL AND REVIEW SHALL BE REQUIRED, AFTER ONE YEAR.
- ALL QUANTITIES SHOWN ON THE PLANS ARE APPROXIMATE, ARE NOT VERIFIED BY THE PUBLIC WORKS DIRECTOR, AND ARE FURNISHED SOLELY FOR THE CONTRACTOR'S CONVENIENCE. THEY DO NOT NECESSARILY CORRESPOND TO BID SCHEDULE ITEMS. PAYMENT SHALL BE BASED ON BID SCHEDULE ITEMS FOR ACTUAL QUANTITIES PROVIDED AND INSTALLED. THE CONTRACTOR SHALL NOT BE RELIEVED OF HIS RESPONSIBILITY FOR INDEPENDENTLY ESTIMATING WORK QUANTITIES PRIOR TO BIDDING.
- CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT PERMITS(S) WILL BE REQUIRED FOR ALL OFF-SITE CONSTRUCTION AND CONSTRUCTION WITHIN THE PUBLIC RIGHT OF WAY.
- IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AT HIS OWN EXPENSE, SUCH PERMITS AS ARE REQUIRED FROM THE APPROPRIATE AGENCIES.
- THE PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION IN THE PUBLIC RIGHT OF WAY.
- ANY WORK PERFORMED WITHOUT THE KNOWLEDGE AND APPROVAL OF THE PUBLIC WORKS DIRECTOR AND/OR ALL WORK MATERIALS NOT IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATION OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA. THE ENGINEER AND THE CITY OF PRESCOTT WILL NOT GUARANTEE ANY LOCATIONS OR ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING A COMPLETE AND ACCURATE ON-SITE DETERMINATION OF THE LOCATIONS, MATERIALS, AND SIZE OF ALL UTILITIES. STRUCTURES, AND FIELD CONDITIONS WHICH MAY AFFECT THE PROGRESS OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STRUCTURES AND UTILITIES ENCOUNTERED DURING CONSTRUCTION AND SHALL FIELD EXPOSE EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING IN THE VICINITY.
- THE CONTRACTOR IS REQUIRED TO CONTACT BLUE STAKE (1-800-STAKEIT) A MINIMUM OF TWO WORKING DAYS (48 HOURS) PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE APPROPRIATE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION AND/OR SUPPORT OF ALL UTILITIES, POWER POLES, ETC., THAT MAY BE NECESSARY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE PUBLIC WORKS DEPARTMENT FOR APPROVAL, TRAFFIC CONTROL PLANS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL DETERMINE AND SUBMIT FOR APPROVAL THE EXACT SIGNING/TRAFFIC CONTROL DEVICES NECESSARY AND ALL TRAFFIC CONTROL WORK SHALL BE IN ACCORDANCE WITH THE LATEST REVISIONS THEREOF. NO STREET IS TO BE CLOSED, RESTRICTED, OR CONSTRUCTED UPON UNTIL A TRAFFIC CONTROL PLAN IS PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE PUBLIC WORKS DIRECTOR ONE WEEK IN ADVANCE FOR REVIEW AND APPROVAL.
- APPROPRIATE EMERGENCY AGENCIES SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO ANY CLOSING OF STREETS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION SURVEYING AND LAYOUT WITH CONTROL PROVIDED BY THE DESIGN ENGINEER OR HIS DESIGNEE.
- THE CONTRACTOR IS RESPONSIBLE FOR QUALITY CONTROL MEASURES SUFFICIENT TO PRODUCE MATERIALS AND WORKMANSHIP OF ACCEPTABLE QUALITY. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL SUBMIT A QUALITY CONTROL PLAN. THE CONTRACTOR AT HIS OWN EXPENSE SHALL PROVIDE AN INDEPENDENT GEOTECHNICAL FIRM TO PERFORM QUALITY CONTROL TESTING SUCH AS SOILS AND CONCRETE TESTING, AND FULL TIME ASPHALTIC CONCRETE LAYDOWN COMPACTION TESTING AND ADEQUATE PLANT CONTROL FOR EACH PAVING DAY. THE CITY, BY SEPARATE CONTRACT, WILL BE RESPONSIBLE FOR QUALITY ASSURANCE TESTING AS IT MAY DEEM NECESSARY.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS OF TESTING AND INSPECTION, INCLUDING THE PRESENCE OF CITY INSPECTORS, REQUIRED AT NIGHT OR ON WEEKENDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RE-WORK AND/OR REMOVAL AND REPLACEMENT OF ALL MATERIALS REPRESENTED BY FAILING TESTS OR SUBSTANDARD WORKMANSHIP.
- THE CONTRACTOR SHALL IMPLEMENT BEST-HOUSE-KEEPING MEASURES, AND EROSION AND SEDIMENT CONTROL MEASURES, TO PREVENT THE TRANSPORT OF CONSTRUCTION MATERIALS INTO DRAINAGE INLETS, STORM DRAIN MANHOLES, UTILITY STRUCTURES, OR ONTO ADJACENT STREETS AND PROPERTIES.
- APPROVAL OF A PORTION OF THE WORK IN PROGRESS DOES NOT GUARANTEE ITS FINAL ACCEPTANCE. TESTING AND EVALUATION MAY CONTINUE UNTIL THE WRITTEN FINAL ACCEPTANCE OF A COMPLETE AND WORKABLE UNIT.
- THE CITY OF PRESCOTT MAY SUSPEND THE WORK BY WRITTEN NOTICE WHEN, IN ITS JUDGEMENT, PROGRESS IS UNSATISFACTORY, WORK BEING DONE IS UNAUTHORIZED OR DEFECTIVE, WEATHER CONDITIONS ARE UNSTABLE, OR THERE IS A DANGER TO THE PUBLIC HEALTH AND SAFETY. ALL OBSTRUCTIONS IN THE RIGHT OF WAY SHALL BE REMOVED BEFORE ANY CONSTRUCTION IS PERMITTED.
- REMOVAL OF STRUCTURES AND OBSTRUCTIONS AS NECESSARY TO COMPLETE THE WORK, OTHER THAN SPECIFICALLY SCHEDULED IN THE BID, IS INCIDENTAL TO THE CONTRACT. NO SEPARATE MEASUREMENT OF OR PAYMENT FOR UNSCHEDULED REMOVAL ITEMS WILL BE MADE.
- CLEARING AND GRUBBING IS CONSIDERED INCIDENTAL TO THE WORK UNLESS SPECIFICALLY IDENTIFIED IN THE BID SCHEDULE. NO SEPARATE MEASUREMENT OF OR PAYMENT FOR CLEARING AND GRUBBING, AND TREE REMOVAL, WILL BE MADE. THE SITE OF ALL EXCAVATION, EMBANKMENTS, AND FILLS SHALL FIRST BE CLEARED OF STUMPS, TRASH, WEEDS, RUBBISH, TOPSOIL, AND LOOSE Boulders WHICH SHALL BE REMOVED AND DISPOSED OF PRIOR TO BIDDING. THE CONTRACTOR MUST SATISFY HIMSELF REGARDING THE CHARACTER OF THE SUBSOILS TO INCLUDE THE AMOUNT OF SHAM, CLAY, SAND, QUICKSAND, HARDPAN, GRAVEL, ROCK, WATER, AND ALL OTHER MATERIAL TO BE ENCOUNTERED AND WORK TO BE PERFORMED.
- THE CONTRACTOR SHALL GUARD AGAINST DAMAGE DURING CONSTRUCTION TO EXISTING PROPERTIES AND IMPROVEMENTS. ANY ITEMS DAMAGED BY THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND OR BETTER AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL KEEP SUITABLE EQUIPMENT ON HAND AT THE JOBSITE FOR MAINTENANCE DUST CONTROL, AND SHALL CONTROL DUST AS DIRECTED BY THE APPROPRIATE AGENCIES AT THE STREET AND TRAFFIC SIGNS SHALL BE RELOCATED BY THE CONTRACTOR IF NECESSARY, AT THE DIRECTION OF THE PUBLIC WORKS DIRECTOR.
- BACKFILL COMPACTION SHALL BE TYPE 1 (MAG, SECTION 601) UNLESS OTHERWISE NOTED.
- AGGREGATE BASE COURSE SHALL NOT BE PLACED ON SUBGRADE UNTIL SUBGRADE REQUIREMENTS HAVE BEEN ACHIEVED.
- NO PAVING CONSTRUCTION SHALL BE STARTED UNTIL ALL UNDERGROUND UTILITIES WITHIN THE

- ROADWAY PRISM ARE VERIFIED FOR DETAIL CONFORMANCE, COMPLETED AND TESTED (TO INCLUDE BUT NOT LIMITED TO) SEWER TESTING, LOW AIR TESTING OF MAIN LINE AND SERVICES, TRACE WIRE TESTING, DEFLECTION TESTING AND VERIFICATION OF MANHOLES CONFORMING TO COP DETAIL 420P. WATER TESTING, CHLORINATION/DISINECTING OF MAIN LINE AND SERVICES, PRESSURE TESTING, TRACE WIRE TESTING AND VERIFICATION OF VALVE BOXES CONFORMING TO COP DETAIL 391P.
- ALL ASPHALT CONCRETE MIXTURES SHALL BE PER APPLICABLE MAG SPECIFICATIONS AS AMENDED BY THE CITY OF PRESCOTT. ASPHALT CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE FOR APPROVAL PRIOR TO START OF CONSTRUCTION.
- ALL ASPHALT FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC. SHALL BE ADJUSTED TO FINISH ASPHALT GRADE AFTER PLACEMENT OF SURFACE COURSE BY THE CONTRACTOR PER COP STANDARD DETAILS.
- ACCEPTANCE OF THE COMPLETED PAVING STRUCTURES WILL NOT BE GIVEN UNTIL REPRODUCIBLE "AS-BUILT" PLANS HAVE BEEN SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE CITY.
- ALL CONCRETE TO BE AT LEAST 3000 PSI CLASS "A" PORTLAND CEMENT CONCRETE, UNLESS OTHERWISE SPECIFIED ON THE PLANS, SPECIFICATIONS, OR IN STANDARD DETAILS.
- EDGES OF CONCRETE STRUCTURES TO HAVE A 3/4" CHAMFER, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- CONCRETE SURFACES TO HAVE A BROOM FINISH UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL EXPANSION JOINTS TO BE SEALED WITH 1/2" EXPANSION JOINT, PRE-FORMED JOINT FILLER AND SEALER, IN ACCORDANCE WITH MAG SECTION 729.
- DRIVEWAY ENTRANCES WILL BE LOCATED AS SPECIFIED ON THE PLANS UNLESS MODIFIED IN THE FIELD BY THE ENGINEER. ALL DRIVEWAY ENTRANCES SHALL BE COMPACTED OVER 6" THICK AGGREGATE BASE COURSE PER MAG SPECIFICATION 702 AND CONFINED TO 95% OF STANDARD PROCTOR DENSITY, UNLESS OTHERWISE NOTED.
- ALL DISTURBED FENCES SHALL BE REPLACED IN KIND. CONTRACTOR SHALL EXTEND FENCE TO THE CLOSEST UPRIGHT SUPPORT NECESSARY FOR STABILITY.
- MAILBOXES SHALL BE REMOVED AND REINSTALLED AS DIRECTED BY THE U.S. POSTAL SERVICE AND THE CITY OF PRESCOTT TEMPORARY LOCATIONS SHALL BE PER U.S.P.S.
- NO JOB WILL BE CONSIDERED COMPLETE UNTIL ALL CURBS, PAVEMENT, AND SIDEWALKS HAVE BEEN SWEEPED CLEAN OF ALL DIRT AND DEBRIS.
- THE CONTRACTOR SHALL WARRANT ALL WORK FOR A MINIMUM TWO YEAR PERIOD AFTER FORMAL ACCEPTANCE OF THE WORK BY THE CITY.

EROSION CONTROL PLAN GENERAL NOTES

- A COPY OF THE APPROVED GRADING AND DRAINAGE PLAN FOR THIS PROJECT AND EROSION CONTROL PLAN (ECP) SHALL BE MAINTAINED ON THE SITE AND AVAILABLE FOR REVIEW.
- THE CONTRACTOR SHALL PERFORM, AT A MINIMUM, A VISUAL INSPECTION OF THE CONSTRUCTION SITE ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS OF RAINFALL GREATER THAN OR EQUAL TO A HALF AN INCH (1/2-INCH). THE OPERATOR SHALL PREPARE A REPORT DOCUMENTING HIS/HER FINDINGS ON THE CONDITIONS OF THE ECP CONTROLS AND NOTE ANY EROSION PROBLEM AREAS. THE OPERATOR'S REPORT IS TO BE MAINTAINED ON SITE BY THE OPERATOR. FACILITIES SHALL BE MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, ALL TEMPORARY SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CONSTRUCTION IS COMPLETED. PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL AND THE POTENTIAL FOR EROSION HAS PASSED AS DETERMINED BY THE CITY ENGINEER OR HIS/HER DESIGNEE.
- THE IMPLEMENTATION OF THESE PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
- THE FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO INSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS. ADDITIONALLY, THEY MUST BE INSTALLED AND IN OPERATION PRIOR TO ANY GRADING OR LAND CLEARING. WHEREVER POSSIBLE, NATURAL VEGETATION SHOULD BE RETAINED AND MAINTAINED FOR SILT AND EROSION CONTROL.
- CONSTRUCTION SITES ARE DYNAMIC IN NATURE AS SUCH THIS PLAN MUST BE UPDATED TO ACCURATELY REFLECT SITE FEATURES AND OPERATIONS WHICH MAY BECOME EVIDENT DURING CONSTRUCTION, AND/OR DURING OR AFTER RAINFALL EVENTS. THE PLAN MUST ALSO BE AMENDED AS DETERMINED BY THE DESIGN ENGINEER, OR THE CITY ENGINEER AS NOT EFFECTIVE AT MINIMIZING POLLUTANT DISCHARGES FROM THE SITE.
- THE SCHEMATIC EROSION CONTROL MEASURES SHOWN ARE A MINIMUM. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL MEASURES TO PROMOTE SOIL PREPARATION TO PROMOTE AND SUSTAIN GROWTH. ALL EROSION CONTROL STRUCTURES SHALL REMAIN IN PLACE UNTIL EXPOSED SLOPES HAVE BEEN PERMANENTLY STABILIZED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND MAINTAINING HYDRO-SEED UNTIL STABILIZED. ANY DEVIATION SHALL BE APPROVED BY THE ENGINEER.
- ALL SITE REVEGETATION SHALL BE COMPLETED WITHIN 90 DAYS OF COMPLETION OF GRADING WORK, OR PRIOR TO RELEASE OF SUBDIVISION GUARANTEE OR ISSUANCE OF CERTIFICATE OF OCCUPANCY, WHICH EVER OCCURS FIRST. PERMANENT BANK/SLOPE STABILIZATION SHALL BE CERTIFIED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT DOCUMENTING THE BANK/SLOPE STABILIZATION WAS COMPLETED ACCORDING TO PLAN PRIOR TO FINAL SUBDIVISION RELEASE OR CERTIFICATE OF OCCUPANCY.
- THE CONTRACTOR SHALL PROTECT ALL PERMANENT AND EXISTING STORM WATER FACILITIES FROM SEDIMENT/SILT DURING CONSTRUCTION.
- SILT FENCING AND/OR OTHER SEDIMENT CONTROL (I.E. STRAW BARRIERS, HAY BALES, ETC.) SHALL BE USED AT THE TOE OF ANY ERODIBLE SLOPE, FOLLOWING CONTOURS OF SLOPE (DO NOT INSTALL SILT FENCE ACROSS ANY DRAINAGE COURSE).
- ONCE THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS MET THE FINAL STABILIZATION REQUIREMENTS OF THE PERMIT, THE AUTHORIZED SITE REPRESENTATIVE MAY FILE A NOTICE OF TERMINATION (NOT) WITH ADEQ, WITH A COPY SUBMITTED TO THE CITY OF PRESCOTT ENGINEERING DIVISION TO TERMINATE COVERAGE UNDER THE PERMIT.

EXISTING LEGEND

	SUBJECT PROPERTY BOUNDARY		EXISTING FIRE HYDRANT
	EXISTING EDGE OF PAVEMENT		EXISTING WATER VALVE
	EXISTING RAIL FENCING		EXISTING WATER METER
	EXISTING ELEVATION CONTOUR (1' C.I.)		EXISTING REDUCED PRESSURE ASSEMBLY
	EXISTING WATERLINE (BLUE/STAKE)		EXISTING SEWER CLEAN-OUT
	EXISTING 6" WATERLINE (GIS BASED)		EXISTING SEWER MANHOLE
	EXISTING SEWERLINE		EXISTING ELECTRIC METER
	EXISTING 8" SEWERLINE (GIS BASED)		EXISTING AREA LIGHT
	EXISTING UNDERGROUND ELECTRIC		EXISTING UTILITY POLE
	EXISTING OVERHEAD ELECTRIC		EXISTING SIGN
	EXISTING FLOWLINE		EXISTING DRAINAGE INLET
	EXISTING DRAINAGE PIPE		EXISTING TREE

PROPOSED LEGEND

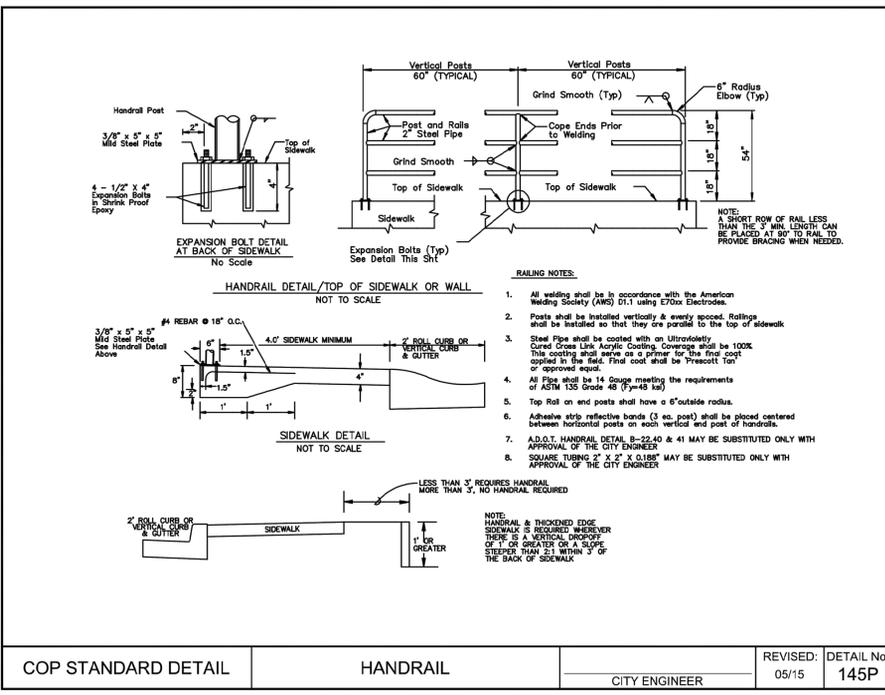
	SUBJECT PROPERTY BOUNDARY		PROPOSED 6" RIPRAP
	PROPOSED ELEVATION CONTOUR (1' C.I.)		PROPOSED GROUDED 6" RIPRAP
	PROPOSED FLOWLINE		PROPOSED TREE REMOVAL
	PROPOSED LIMITS OF WORK		
	PROPOSED SAFETY RAILING		
	PROPOSED FINISHED GRADE SPOT ELEVATION		

PROJECT QUANTITIES

GENERAL ITEMS	QTY	UNIT
1 MOBILIZATION	1	LS
2 WATER & DUST CONTROL	1	LS
3 CLEARING & GRUBBING	0.25	ACRE
4 RAW EARTHWORK (CUT)	300	CY
5 RAW EARTHWORK (FILL)	20	CY
6 SWPPP IMPLEMENTATION	1	LS

CONSTRUCTION ITEMS	QTY	UNIT
7 REMOVE EXISTING TREES	11	EA
8 RELOCATE PARKING SIGNS	3	EA
9 SITE WALL (CMU) PER PLAN, PROFILE & DETAILS ON SHEET 3	500	SF
10 HEADWALL (RC) PER PLAN & DETAILS ON SHEET 3	345	SF
11 HANDRAIL PER COP SD 145P	97	LF
12 RIPRAP D50=6" PLACED 12" THICK OVER FILTER FABRIC	130	CY
13 GROUDED RIPRAP D50=6" PLACED 12" THICK OVER FILTER FABRIC	4	CY

PAVING ITEMS (BID ALTERNATE)	QTY	UNIT
14 SLURRY SEAL AREA 1 PER MAG SPEC 332	3,580	SF
15 SLURRY SEAL AREA 2 PER MAG SPEC 332	4,000	SF
16 SLURRY SEAL AREA 3 PER MAG SPEC 332	570	SF
17 SLURRY SEAL AREA 4 PER MAG SPEC 332	2,520	SF
18 SLURRY SEAL AREA 5 PER MAG SPEC 332	3,470	SF



COP STANDARD DETAIL HANDRAIL
 CITY ENGINEER REVISED: 05/15 DETAIL No. 145P

CALL GRANITE BASIN ENGINEERING, INC. BEFORE ANY WORK BEGINS
 1-800-STAKE-IT
 1-800-782-5348
 (OUTSIDE MARICOPA COUNTY)

REVISIONS	DESCRIPTION	DATE	BY

GRANITE BASIN ENGINEERING, INC.
 1981 Commerce Center Drive, Suite B
 Prescott, AZ 86301
 928-717-0171

WEST YAVAPAI GUIDANCE CLINIC
 3343 NORTH WINDSORG DRIVE,
 PRESCOTT VALLEY, ARIZONA 86314

WEST YAVAPAI GUIDANCE CLINIC
 DRAINAGE IMPROVEMENT PLANS
 STANDARD NOTES, DETAILS, LEGEND & QUANTITIES

Professional Engineer Seal for M. Danner, No. 37846, State of Arizona, Exp. 12/31/2016.

JOB: 15128	DATE: 4/19/2016	SCALE: AS SHOWN
DRAWN: TD	DESIGNED: TD	CHECKED: DB

STRUCTURAL NOTES

GENERAL REQUIREMENTS:

THESE DRAWINGS, AND THEIR ASSOCIATED STRUCTURAL CALCULATIONS, HAVE BEEN PERFORMED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE STRUCTURAL ENGINEERS IN THIS OR SIMILAR LOCALITIES. THEY NECESSARILY ASSUME THAT THE WORK INDICATED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND BY WORKERS WHO HAVE A WORKING KNOWLEDGE OF THE INTERNATIONAL BUILDING CODE (IBC), AMERICAN CONCRETE INSTITUTE (ACI), CONVENTIONAL FRAMING REQUIREMENTS, AND OF INDUSTRY-ACCEPTED STANDARD GOOD PRACTICE.

AS NOT EVERY CONDITION OR FRAMING ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, IT IS UNDERSTOOD THAT THE CONTRACTOR WILL USE INDUSTRY-ACCEPTED STANDARD GOOD PRACTICE FOR ALL MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.

ALL DETAILS SHOWN APPLY WHETHER SPECIFICALLY REFERENCED OR NOT.

OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND RESOLVED BEFORE PROCEEDING WITH THE WORK.

DO NOT USE SCALED DIMENSIONS. USE WRITTEN DIMENSIONS OR, WHERE NO DIMENSION IS PROVIDED, CONSULT THE ENGINEER BEFORE PROCEEDING WITH THE WORK. TYPICAL DETAILS ARE NOT CUT ON DRAWINGS, BUT APPLY UNLESS NOTED OTHERWISE. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF A STRUCTURAL ENGINEER REGISTERED IN ARIZONA.

THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PROTECT THE STRUCTURE DURING CONSTRUCTION.

BASIS FOR DESIGN:

BUILDING CODE: 2006 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) WITH CITY/COUNTY AMENDMENTS, ACI 318

FOUNDATION AND EARTHWORK:

THE SOIL DESIGN VALUES FOR THE FOUNDATION ARE:
ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
ALLOWABLE LATERAL BACKFILL PRESSURE (ACTIVE) = 30 PSF/FT
ALLOWABLE LATERAL BACKFILL PRESSURE (PASSIVE) = 225 PSF/FT

ALL FOUNDATIONS SHALL BEAR ON COMPACTED GRANULAR SOIL. CONCRETE FOOTING EXCAVATIONS SHALL BE CLEAN AND FREE OF LOOSE DEBRIS OR UNCOMPACTED MATERIAL AT TIME OF CONCRETE PLACEMENT.

BACKFILL AROUND EXTERIOR WALLS BELOW GRADE SHALL NOT BE PLACED UNTIL AFTER THE CONCRETE OR GROUT HAS REACHED FULL DESIGN STRENGTH.

ALL FOOTINGS SHALL EXTEND A MINIMUM OF 12 INCHES BEYOND THE END OF NON-CONTINUOUS WALLS.

CONCRETE:

ALL CONCRETE SHALL BE READY MIXED CONFORMING WITH ASTM C 94, TYPE I OR TYPE II PORTLAND CEMENT SHALL BE USED FOR ALL CONCRETE UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER. PORTLAND CEMENT SHALL CONFORM TO ASTM C 150.

MINIMUM 28-DAY CONCRETE STRENGTH SHALL BE AS FOLLOWS:

FOUNDATIONS = 3,500 PSI
STEMS = 3,500 PSI

THE LATEST EDITIONS OF THE FOLLOWING ACI STANDARDS OF RECOMMENDED PRACTICE SHALL APPLY TO ALL CONCRETE WORK:

- A) ACI 318 CODE REQUIREMENTS FOR REINFORCED CONCRETE
- B) ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS

ALL CONCRETE SHALL HAVE A MINIMUM CEMENTITIOUS MATERIAL CONTENT OF 5 SACKS PER CUBIC YARD. CONCRETE SLUMP SHALL NOT BE MORE THAN 4 INCHES. ANY DEVIATIONS FROM THESE REQUIREMENTS SHALL BE MADE ONLY WITH THE APPROVAL OF THE ENGINEER OF RECORD.

NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY THE TESTING AGENCY.

MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE, 4 INCHES OR LESS IN THICKNESS, NEED BE VIBRATED ONLY AT AREAS OF REINFORCEMENT, THICKENED AREAS, AND ADJACENT TO PENETRATIONS.

CONCRETE SHALL NOT BE DROPPED MORE THAN 4 FEET VERTICALLY.

ALL ITEMS TO BE CAST IN CONCRETE SUCH AS REINFORCING, DOWELS, BOLTS, ANCHORS, PIPES, SLEEVES, ETC., SHALL BE SECURELY POSITIONED IN THE FORMS BEFORE THE CONCRETE IS PLACED.

NO CONSTRUCTION JOINTS (OTHER THAN THOSE SHOWN ON DRAWINGS) SHALL BE INSTALLED WITHOUT APPROVAL OF THE ENGINEER.

CONCRETE FOOTINGS AND PADS MAY BE POURED AGAINST NEAT EXCAVATIONS, PROVIDED PLAN DIMENSIONS ARE ADHERED TO.

PROVIDE 3/4 INCH CHAMFER ON ALL EXPOSED EDGES OF BEAMS, COLUMNS, WALLS, ETC., UNLESS NOTED OTHERWISE ON DRAWINGS.

PROVIDE 1/2 INCH PREFORMED JOINT FILLER WHERE EXTERIOR SLAB ABUTS VERTICAL SURFACES, TYPICAL UNLESS NOTED OTHERWISE.

DURING COLD/HOT WEATHER CONCRETE CONSTRUCTION, PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH, IN COMPLIANCE WITH ACI 305 AND ACI 306.

CONCRETE MIXES SHALL BE DESIGNED BY A CERTIFIED LABORATORY AND APPROVED BY THE ENGINEER.

ALL CONCRETE SHALL HAVE WATERPROOF COATING.

MASONRY:

CONCRETE MASONRY UNITS SHALL BE LOAD-BEARING CONFORMING TO ASTM C 90, TYPE 1.

GRADE N, WITH A MINIMUM 28-DAY NET COMPRESSIVE STRENGTH OF 2,500 PSI.

MASONRY MORTAR SHALL CONFORM TO ASTM C 270 FOR TYPE S MORTAR WITH A MINIMUM 28-DAY GROSS COMPRESSIVE STRENGTH OF 2,500 PSI.

MASONRY GROUT SHALL CONFORM TO ASTM C 476 COARSE GROUT, WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI. CELLS AND COURSES OF HOLLOW UNIT MASONRY WITH REINFORCING BARS SHALL BE FILLED SOLID WITH GROUT.

MAXIMUM GROUT LIFT SHALL BE 8'-0". IF GROUT LIFT EXCEEDS 4'-0", PROVIDE CLEAN CUTS IN BLOCK WALLS.

MINIMUM 28-DAY MASONRY STRENGTH SHALL BE 2,500 PSI.

PROVIDE A MINIMUM OF ONE BAR DIAMETER OF GROUT BETWEEN REINFORCING AND MASONRY UNITS.

ALL CELLS CONTAINING REINFORCEMENT SHALL BE GROUTED SOLID.

SOLID GROUT ALL MASONRY BELOW GRADE.

ALL GROUT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION (STINGER) IMMEDIATELY AFTER PLACEMENT, AND THEN RECONSOLIDATED APPROXIMATELY 3 TO 5 MINUTES LATER.

ALL MASONRY UNITS SHALL HAVE WATERPROOF COATING.

VERTICAL REINFORCING:

#5 AT 32 INCHES ON CENTER IN CONCRETE MASONRY UNIT STEM PORTION FULL HEIGHT OF WALL, CENTERED IN GROUTED CELL AND AT ALL WALL INTERSECTIONS, CORNERS, WALL ENDS, JAMBS, OVER LINTELS, AND EACH SIDE OF CONTROL JOINTS (MINIMUM UNLESS NOTED OTHERWISE ON PLANS/DETAILS). #5 AT 16 INCHES ON CENTER IN CONCRETE STEM PORTION DOWEL ALL REINFORCING TO FOUNDATION WITH DOWELS TO MATCH AND LAP VERTICAL WALL OR COLUMN REINFORCING. SEE FOUNDATION PLANS FOR SPECIFIED REINFORCEMENT.

CONTROL JOINTS: UNLESS NOTED OTHERWISE ON THE PLANS, PLACE CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUN OF WALL EXCEEDS 24'. CONTROL JOINTS SHALL NOT OCCUR AT WALL CORNERS, INTERSECTIONS, ENDS, WITHIN 24' OF CONCENTRATED POINTS OF BEARING OR JAMBS, OR OVER OPENINGS UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS.

HORIZONTAL REINFORCING:

(MINIMUM UNLESS NOTED OTHERWISE ON PLANS/DETAILS) FOR 8-INCH THICK CONCRETE MASONRY UNITS, ONE #4 BAR IN CENTER OF 8-INCH DEEP CONTINUOUS GROUTED BOND BEAM AT INTERVALS NOT TO EXCEED 32 INCHES ON CENTER AND AT TOP OF PARAPET OR FREE-STANDING WALLS.

(MINIMUM UNLESS NOTED OTHERWISE ON PLANS/DETAILS) FOR CONCRETE STEM AND FOOTING, ONE #4 BAR AT INTERVALS NOT TO EXCEED 12 INCHES ON CENTER.

PLACE HORIZONTAL BARS CONTINUOUS THROUGH CONTROL JOINTS. TO MAINTAIN HORIZONTAL BOND BEAM CONTINUITY, PROVIDE BENT BARS AT CORNERS AND WALL INTERSECTIONS TO MATCH THE HORIZONTAL BOND BEAM REINFORCEMENT.

PROVIDE 48 BAR DIAMETER LAP SPLICES FOR TYPICAL REINFORCEMENT. PROVIDE 63 BAR DIAMETER LAP SPLICES IF ADJACENT BARS ARE SEPARATED BY 3 INCHES OR LESS (THIS INCLUDES SPLICES FOR 2 BARS PER CELL IN 8-INCH MASONRY).

REINFORCING STEEL:

REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615, GRADE 60 FOR #4 REBAR AND SMALLER AND GRADE 60 FOR #5 REBAR AND LARGER, UNLESS NOTED OTHERWISE.

ALL DIMENSIONS SHOWING THE LOCATION OF REINFORCING STEEL NOT NOTED AS 'CLEAR' OR 'CLR' ARE TO CENTER OF STEEL, UNLESS NOTED OTHERWISE ON THE DRAWINGS. MINIMUM CLEAR COVER FOR NON-PRESTRESSED CONCRETE REINFORCING SHALL BE AS FOLLOWS:

TOLERANCE LOCATION	MINIMUM COVER	+ / -
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3"	3/8"
EXPOSED TO EARTH OR WEATHER:		
#5 AND SMALLER BARS:	2"	
#6 AND LARGER BARS:	2"	3/8"
SLABS ON GRADE:	2"	1/4"

UNLESS NOTED OTHERWISE, TENSION LAP SPLICES OF REINFORCING STEEL IN CONCRETE BEAMS, SLABS AND FOOTINGS SHALL BE CLASS 'B' TENSION LAP SPICE ACCORDING TO THE LATEST EDITION OF ACI 318. STAGGER SPLICES A MINIMUM OF ONE LAP LENGTH IF SPLICING OF THE BARS IS REQUIRED, NO MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE LOCATION. ALL BAR SPICE LOCATIONS AND DETAILS ARE SUBJECT TO THE APPROVAL OF THE ENGINEER.

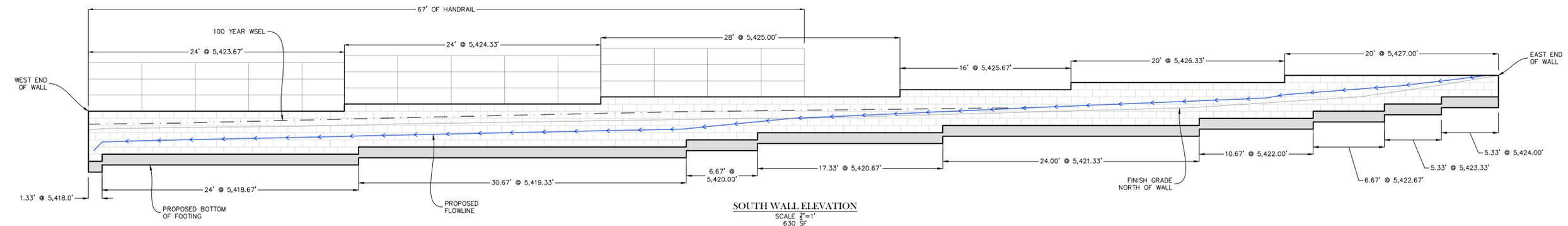
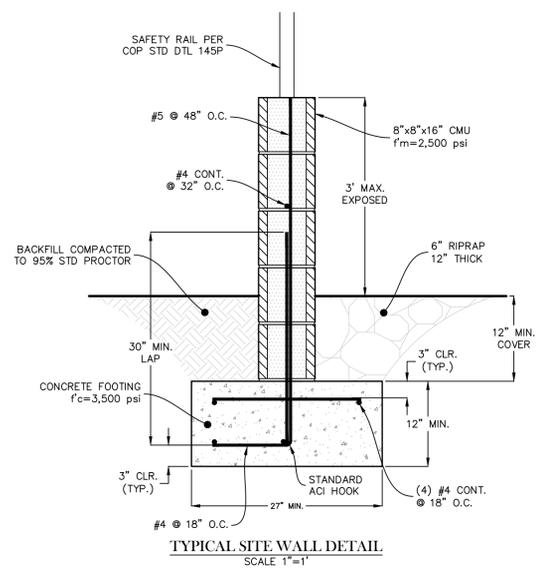
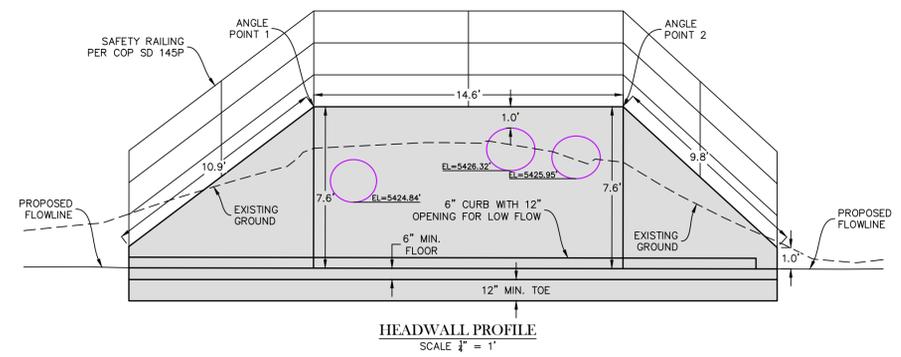
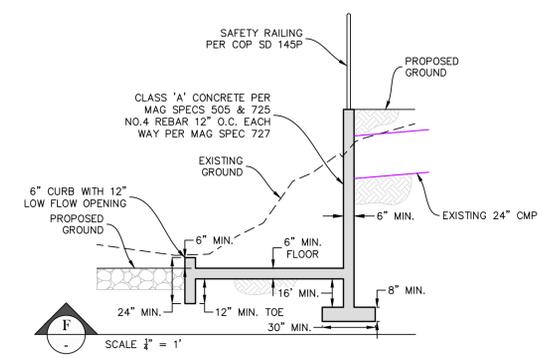
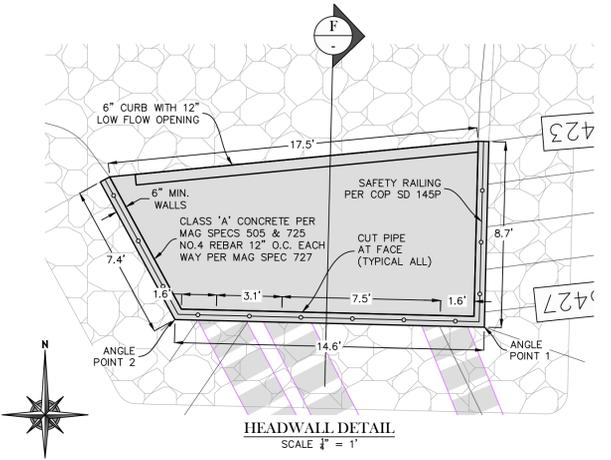
PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF FOOTINGS, STEM WALLS AND BEAMS.

WELDING OF REINFORCING BARS SHALL CONFORM TO ASTM SPECIFICATION A-706 USING ONLY GRADE 60 BARS AND E90 SERIES ELECTRODES. WELDING OF REINFORCING BARS SHALL BE MADE ONLY AT LOCATIONS SHOWN ON PLANS OR DETAILS. NO TACK WELDING OF REINFORCING BARS SHALL BE DONE WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE ENGINEER.

REINFORCING BAR SPACINGS GIVEN ARE MAXIMUM ON-CENTER SPACINGS. DOWEL ALL VERTICAL REINFORCING TO FOUNDATION.

ALL REINFORCING STEEL SHALL BE ACCURATELY PLACED, ANCHORED, AND SUPPORTED BY CHAIRS, SPACERS OR HANGERS.

PROVIDE 48 BAR DIAMETER LAP SPLICES FOR TYPICAL REINFORCEMENT IN MASONRY. PROVIDE 63 BAR DIAMETER LAP SPLICES IF ADJACENT BARS ARE SEPARATED BY 3 INCHES OR LESS (THIS INCLUDES SPLICES FOR 2 BARS PER CELL IN 8-INCH MASONRY).



Professional Engineer Seal for Granite Basin Engineering, Inc. License No. 1-800-574-5448

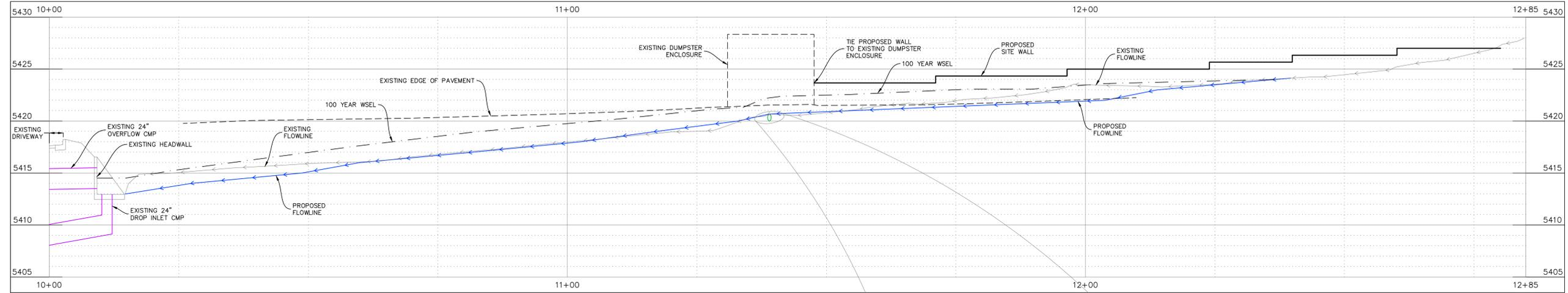
Table with 5 columns: REVISIONS, DESCRIPTION, NUM., DATE, BY. Includes checkboxes for review, bid, approval, recording, and construction.

GRANITE BASIN ENGINEERING, INC. 1981 Commerce Center Drive, Suite B, Prescott, AZ 86301, 928.717.0171

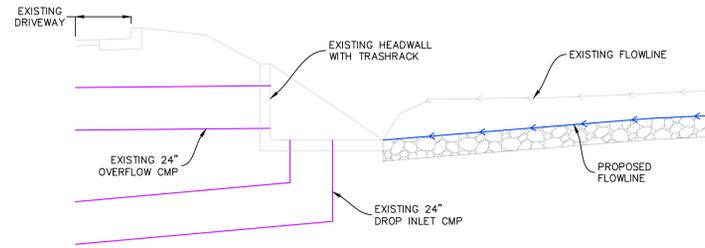
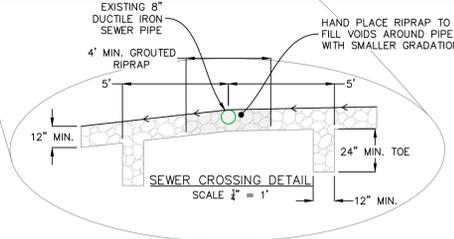
WEST YAVAPAI GUIDANCE CLINIC 3343 NORTH WINDSONG DRIVE, PRESCOTT VALLEY, ARIZONA 86314

Professional Engineer Seal for West Yavapai Guidance Clinic, License No. 37846

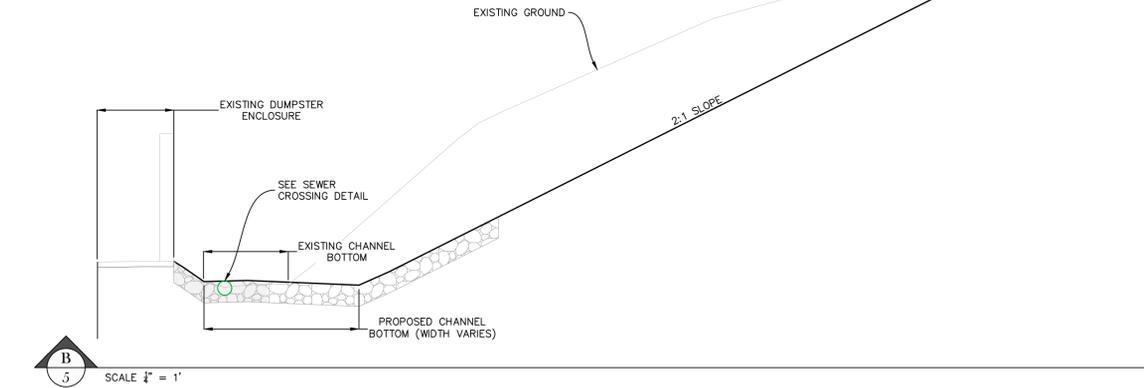
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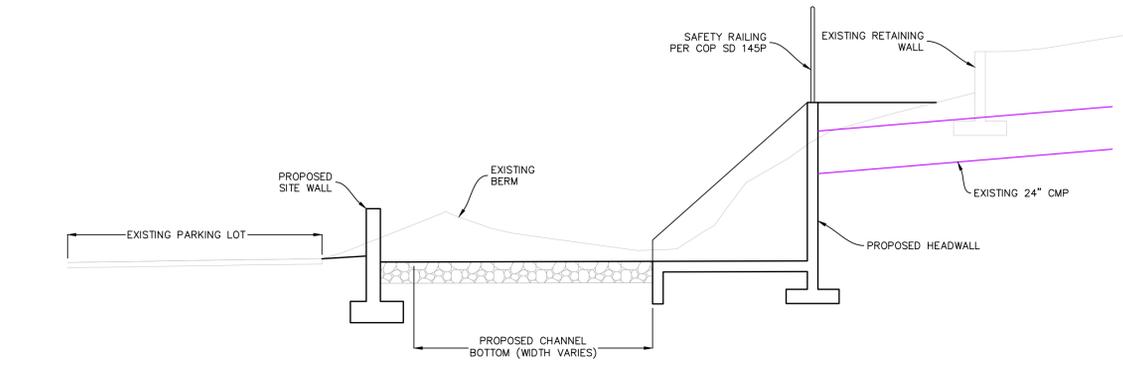
CHANNEL FLOWLINE PROFILE
 HORIZONTAL 1"=10'
 VERTICAL 1"=5'



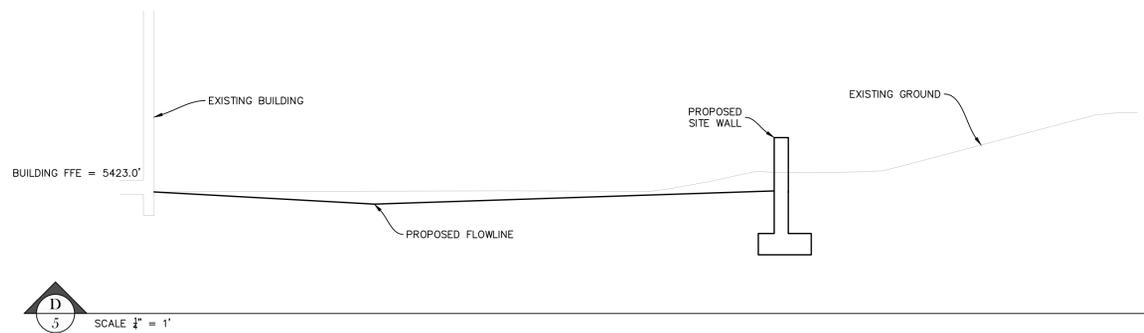
A
 SCALE 1/4" = 1'



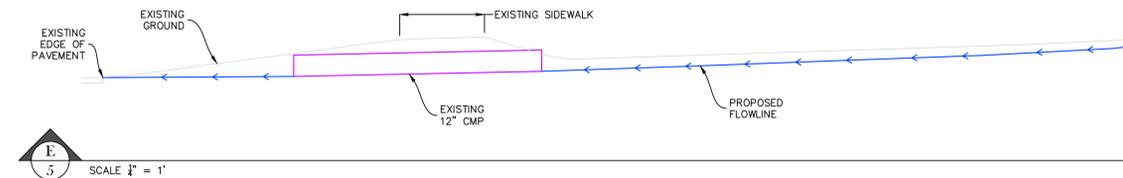
B
 SCALE 1/4" = 1'



C
 SCALE 1/4" = 1'



D
 SCALE 1/4" = 1'



E
 SCALE 1/4" = 1'

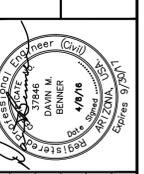
CALL FOR QUOTES
 BEFORE WORK STARTS
 1-800-STAKE-IT
 1-800-782-5348
 (OUTSIDE MARICOPA COUNTY)

REVISIONS	DATE	BY

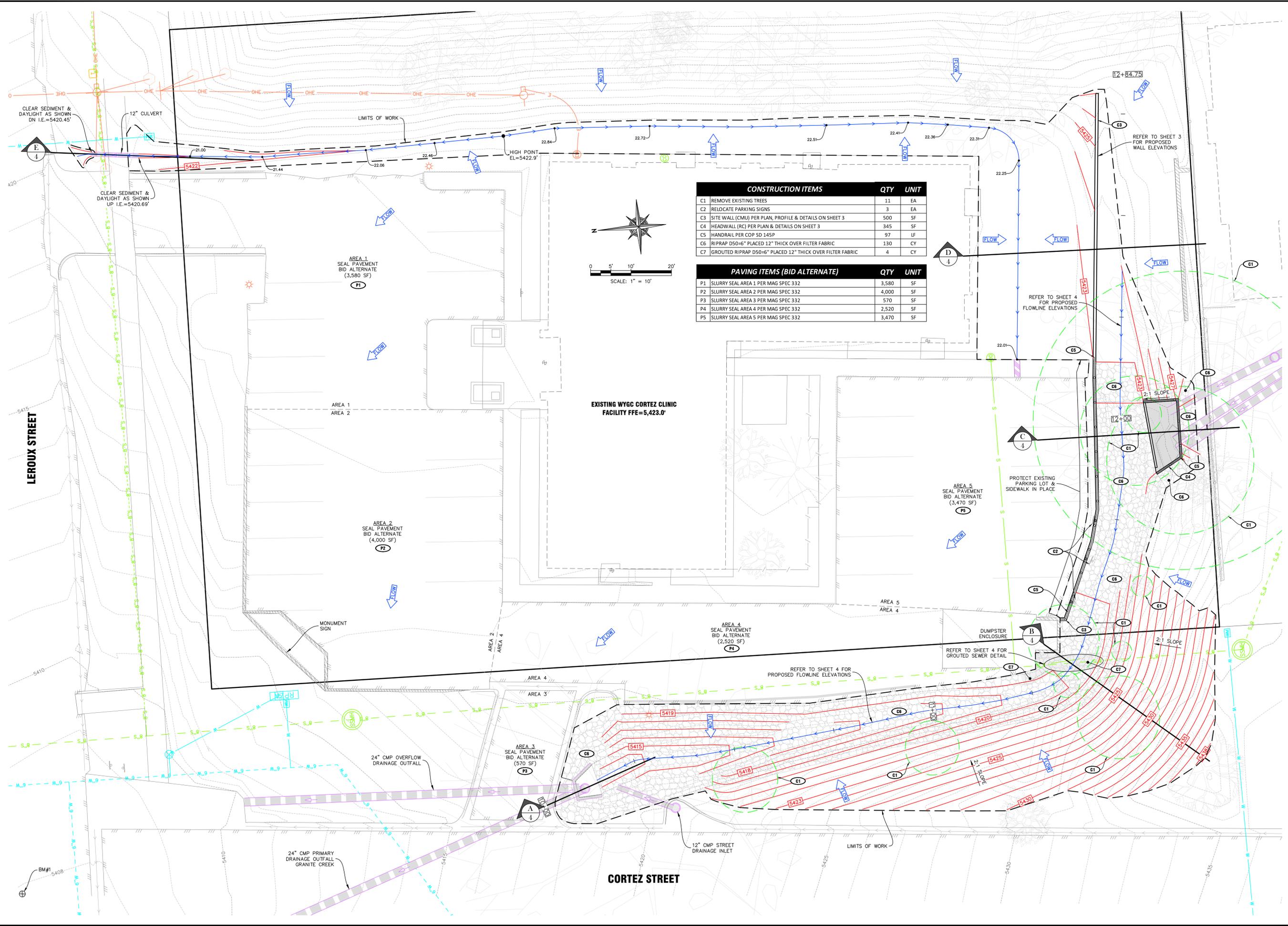
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 Phoenix, AZ 85001
 602.717.0171

WEST YAVAPAI GUIDANCE CLINIC
 3343 NORTH WINDSONG DRIVE,
 PRESCOTT VALLEY, ARIZONA 86314

WEST YAVAPAI GUIDANCE CLINIC
 DRAINAGE IMPROVEMENT PLANS
 SECTIONS, PROFILES & DETAILS



JOB:	15128
DATE:	4/8/2016
SCALE:	AS SHOWN
DRAWN:	TD
DESIGNED:	TD
CHECKED:	DB



CONSTRUCTION ITEMS		
QTY	UNIT	
11	EA	C1 REMOVE EXISTING TREES
3	EA	C2 RELOCATE PARKING SIGNS
500	SF	C3 SITE WALL (CMU) PER PLAN, PROFILE & DETAILS ON SHEET 3
345	SF	C4 HEADWALL (RC) PER PLAN & DETAILS ON SHEET 3
97	LF	C5 HANDRAIL PER COP SD 145P
130	CY	C6 RIPRAP D50=6" PLACED 12" THICK OVER FILTER FABRIC
4	CY	C7 GROUTED RIPRAP D50=6" PLACED 12" THICK OVER FILTER FABRIC

PAVING ITEMS (BID ALTERNATE)		
QTY	UNIT	
3,580	SF	P1 SLURRY SEAL AREA 1 PER MAG SPEC 332
4,000	SF	P2 SLURRY SEAL AREA 2 PER MAG SPEC 332
570	SF	P3 SLURRY SEAL AREA 3 PER MAG SPEC 332
2,520	SF	P4 SLURRY SEAL AREA 4 PER MAG SPEC 332
3,470	SF	P5 SLURRY SEAL AREA 5 PER MAG SPEC 332

CALL GRANITE BASIN BEFORE WORK BEGINS
 1-800-STAKE-IT
 1-800-782-5348
 (OUTSIDE MARICOPA COUNTY)

REVISIONS	DATE	BY

FOR REVIEW ONLY
 FOR BID ONLY
 FOR APPROVAL ONLY
 FOR RECORDING ONLY
 FOR CONSTRUCTION ONLY
 FOR AS-BUILT ONLY

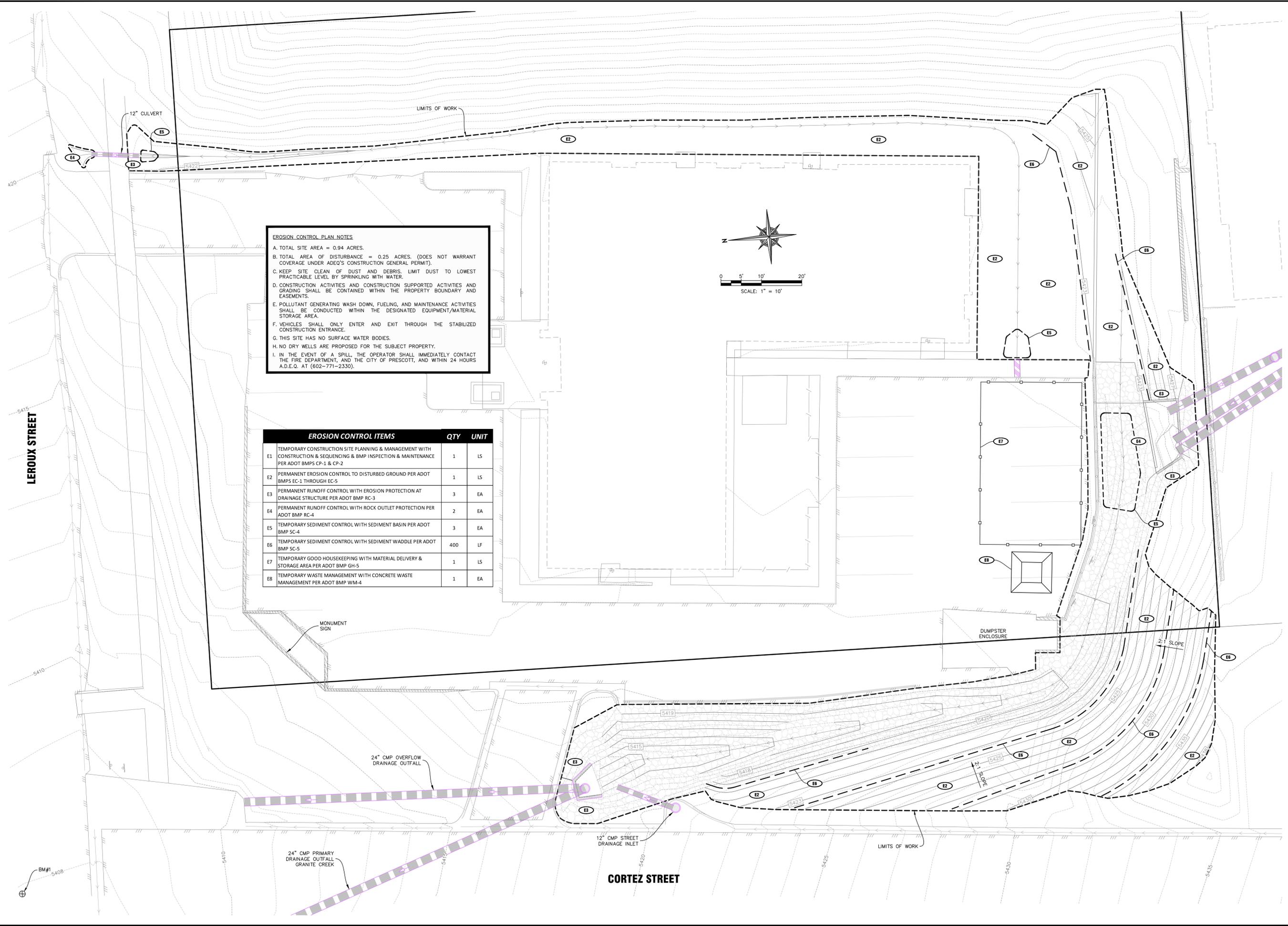
GRANITE BASIN
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 Phoenix, AZ 85024
 602.717.0171

WEST YAVAPAI GUIDANCE CLINIC
 3343 NORTH WINDSONG DRIVE,
 PRESCOTT VALLEY, ARIZONA 86314
 WEST YAVAPAI GUIDANCE CLINIC
 DRAINAGE IMPROVEMENT PLANS
 GRADING & DRAINAGE PLAN

15128
 DATE: 4/8/2016
 SCALE: AS SHOWN
 DRAWN: TD
 DESIGNED: TD
 CHECKED: DB

5

SHEET 5 OF 6



EROSION CONTROL PLAN NOTES

A. TOTAL SITE AREA = 0.94 ACRES.

B. TOTAL AREA OF DISTURBANCE = 0.25 ACRES. (DOES NOT WARRANT COVERAGE UNDER ADEQ'S CONSTRUCTION GENERAL PERMIT).

C. KEEP SITE CLEAN OF DUST AND DEBRIS. LIMIT DUST TO LOWEST PRACTICABLE LEVEL BY SPRINKLING WITH WATER.

D. CONSTRUCTION ACTIVITIES AND CONSTRUCTION SUPPORTED ACTIVITIES AND GRADING SHALL BE CONTAINED WITHIN THE PROPERTY BOUNDARY AND EASEMENTS.

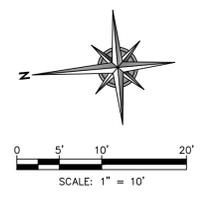
E. POLLUTANT GENERATING WASH DOWN, FUELING, AND MAINTENANCE ACTIVITIES SHALL BE CONDUCTED WITHIN THE DESIGNATED EQUIPMENT/MATERIAL STORAGE AREA.

F. VEHICLES SHALL ONLY ENTER AND EXIT THROUGH THE STABILIZED CONSTRUCTION ENTRANCE.

G. THIS SITE HAS NO SURFACE WATER BODIES.

H. NO DRY WELLS ARE PROPOSED FOR THE SUBJECT PROPERTY.

I. IN THE EVENT OF A SPILL, THE OPERATOR SHALL IMMEDIATELY CONTACT THE FIRE DEPARTMENT, AND THE CITY OF PRESCOTT, AND WITHIN 24 HOURS A.D.E.Q. AT (602-771-2330).



ITEM	DESCRIPTION	QTY	UNIT
E1	TEMPORARY CONSTRUCTION SITE PLANNING & MANAGEMENT WITH CONSTRUCTION & SEQUENCING & BMP INSPECTION & MAINTENANCE PER ADOT BMPs CP-1 & CP-2	1	LS
E2	PERMANENT EROSION CONTROL TO DISTURBED GROUND PER ADOT BMPs EC-1 THROUGH EC-5	1	LS
E3	PERMANENT RUNOFF CONTROL WITH EROSION PROTECTION AT DRAINAGE STRUCTURE PER ADOT BMP RC-3	3	EA
E4	PERMANENT RUNOFF CONTROL WITH ROCK OUTLET PROTECTION PER ADOT BMP RC-4	2	EA
E5	TEMPORARY SEDIMENT CONTROL WITH SEDIMENT BASIN PER ADOT BMP SC-4	3	EA
E6	TEMPORARY SEDIMENT CONTROL WITH SEDIMENT WADDLE PER ADOT BMP SC-5	400	LF
E7	TEMPORARY GOOD HOUSEKEEPING WITH MATERIAL DELIVERY & STORAGE AREA PER ADOT BMP GH-5	1	LS
E8	TEMPORARY WASTE MANAGEMENT WITH CONCRETE WASTE MANAGEMENT PER ADOT BMP WM-4	1	EA

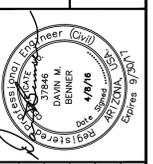
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