



**LINKING AGREEMENT
FOR COOPERATIVE PURCHASE**

ACHEN-GARDNER CONSTRUCTION, LLC

SEWER REHABILITATION

PROJECT NO. 2019-05

This Linking Agreement for Cooperative Purchase (hereinafter “**Linking Agreement**”) is made and entered into on this ____ day of _____, 2021 (“Effective Date”) by and between the Town of Paradise Valley, an Arizona municipal corporation (hereinafter designated as the “**Town**”) and Achen-Gardner Construction, LLC, a(n) Arizona limited liability company authorized to do business in Arizona (hereinafter designated as “**Contractor**”), whose principal place of business is located at: 550 South 79th St., Chandler, AZ 85226, (each individually a “Party,” together “Parties”).

RECITALS

A. On April 7, 2020, under the S.A.V.E Cooperative Purchasing Agreement, the City of Scottsdale entered into a contract with Contractor to purchase goods and services described in the Job Order Contract for Water Resources Underground Infrastructure 2020-059-COS (“**Cooperative Purchasing Agreement**”), which is attached hereto as **Exhibit A** and incorporated herein. The Cooperative Purchasing Agreement permits its cooperative use by other governmental agencies including the Town; and

B. Pursuant to A.R.S. § 41-2631 et seq. and Town of Paradise Valley Resolution Nos. 1205 and 1207, the Town has authority to utilize cooperative purchasing contracts of the Federal government and State of Arizona public agencies and public procurement units, including Mohave Educational Services Cooperative, Inc., and engage contractors under the terms thereof.

C. The Town desires to contract with Contractor for supplies or services identical or nearly identical to the supplies or services Contractor is providing other units of government under the Cooperative Purchasing Agreement as the basis of this Linking Agreement, and Contractor desires to enter into this Linking Agreement to provide the supplies and services set forth in this Linking Agreement.

AGREEMENT

NOW, THEREFORE, Contractor and the Town, in consideration of the foregoing Recitals, which are incorporated herein by reference, and for the consideration hereinafter set forth, promise, covenant, and agree as follows:

1. Scope of Work; Terms, Conditions, and Specifications.

- 1.1. Contractor shall provide Town the supplies and/or services, generally described as sewer rehabilitation of seven (7) pipe segments, and more particularly identified in the Project Specifications for Sewer Rehabilitation: Seven Locations For Pipe Repair, Prepared by Project Engineering Consultants dated June 2021 (“**Scope of Work**”) attached hereto as **Exhibit B** and incorporated herein by this reference.
- 1.2. Contractor agrees to comply with all the terms, conditions and specifications of the Cooperative Purchasing Agreement. Such terms, conditions and specifications are specifically incorporated into and are an enforceable part of this Linking Agreement, except to the extent otherwise provided in Exhibit C. As used in this Linking Agreement, all references to the City of Scottsdale or City in the Cooperative Purchasing Agreement shall mean the Town of Paradise Valley, Arizona.
- 1.3. Contractor shall comply with all specific requirements and/or options of the Town, as specified in **Exhibit C** attached hereto and incorporated herein by reference. **To the extent there is any conflict between Exhibit B or C and the Cooperative Purchasing Agreement, Exhibits B and C take precedence.**
2. Payment. Payment to the Contractor for the services, materials and/or equipment provided, shall be made in accordance with the price list and terms set forth in the Cooperative Purchasing Contract. The total compensation for the supplies and/or services purchased under this Linking Agreement shall not exceed three hundred three thousand, one hundred sixty eight dollars and fifty six cents (\$303,168.56), as provided in **Exhibit B-1**.
3. Contract Term and Renewal.
 - 3.1. According to the Cooperative Purchasing Agreement, purchases can be made from the date of the award, which was April 7 2020, for two years (April 6, 2022), unless the term of the Cooperative Purchasing Agreement is extended by the original contracting parties.
 - 3.2. The term of this Linking Agreement shall commence upon the Effective Date set forth above and shall remain in full force and effect through June 30, 2022 or until all work under this Linking Agreement is completed and satisfactory to the Town, whichever is earlier, unless terminated as otherwise provided in this Linking Agreement. At the Town’s option, the Town Manager may extend this Linking Agreement up to six months.
4. Certificates of Insurance. All insurance provisions of the Cooperative Purchasing Contract shall apply, including without limitation, the requirement to name the Town and its elected officials, employees, volunteers and agents, as an additional insureds. Prior to commencing work under this Linking Agreement, Contractor shall furnish the Town with Certificate(s) of Insurance issued by the Contractor’s insurer(s) as evidence that policies providing the required coverages, conditions and limits required by this Linking Agreement are in full force and effect.
5. E-verify. Contractor complies with A.R.S. § 23-214 and agrees to comply with the requirements of A.R.S. § 41-4401.
6. Boycott of Israel Prohibited. To the extent Title 35 is applicable to the Contract, the Contractor warrants that it is not and will not participate in prohibited activity in contravention of A.R.S. § 35-393.01.
7. Cancellation for Conflict of Interest. This Linking Agreement may be cancelled pursuant to A.R.S. § 38-511.

(Signatures on Following Page)

IN WITNESS WHEREOF, the Parties have hereunto subscribed their names.

TOWN OF PARADISE VALLEY,
an Arizona municipal corporation

By: Jill Keimach
Its: Town Manager

ATTEST:

Duncan, Miller, Town Clerk (SEAL)

APPROVED AS TO FORM:

Andrew J. McGuire, Town Attorney

CONTRACTOR
Achen-Gardner, LLC, an Arizona limited liability
company

By: _____

Its: _____

EXHIBIT A

**LINKING AGREEMENT
FOR COOPERATIVE PURCHASE**

ACHEN-GARDNER CONSTRUCTION, LLC

SEWER REHABILITATION

COOPERATIVE PURCHASING CONTRACT

See attached: Job Order Contract for Water Resources Underground Infrastructure 2020-059-COS



CITY OF SCOTTSDALE

JOB ORDER CONTRACT

NO. 2020-059-COS

TABLE OF CONTENTS

RECITALS.....	1
ARTICLE 1 - CONTRACTOR'S SERVICES AND RESPONSIBILITIES	1
ARTICLE 2 - CITY'S SERVICES AND RESPONSIBILITIES	17
ARTICLE 3 - CONTRACT TIME AND JOB ORDER TIME.....	21
ARTICLE 4- CONTRACT PRICE AND JOB ORDER PRICE	24
ARTICLE 5 - CHANGES TO THE CONTRACT PRICE AND TIME.....	25
ARTICLE 6 - PROCEDURE FOR PAYMENT.....	31
ARTICLE 7 - CLAIMS AND DISPUTES	35
ARTICLE 8 - SUSPENSION, TERMINATION AND CANCELLATION.....	37
ARTICLE 9 - INSURANCE AND BONDS.....	40
ARTICLE 10 - INDEMNIFICATION	47
ARTICLE 11 - GENERAL PROVISIONS.....	50
ARTICLE 12 - DEFINITIONS.....	61
EXHIBIT A - STATUTORY PERFORMANCE BOND	
EXHIBIT B - STATUTORY PAYMENT BOND	
EXHIBIT C - CITY OF SCOTTSDALE PUBLISHED BENCHMARKS	

CITY OF SCOTTSDALE

CONTRACT NO. 2020-059-COS

THIS CONTRACT, entered into this 7th day of April, 2020, between the City of Scottsdale, an Arizona municipal corporation ("CITY"), and Achen-Gardner Construction, L.L.C., an Arizona limited liability company ("Contractor").

RECITALS

- A. The Mayor of the City of Scottsdale, Arizona, is authorized and empowered by the provisions of the City Charter to execute contracts for construction and related services.
- B. The City intends to contract for construction and related services for one or more individual Job Orders.
- C. The Contractor has represented to the City the ability to provide or procure the required construction and related services and, based on this representation, the City engages Contractor for these services.

FOR AND IN CONSIDERATION of the mutual covenants and considerations contained in this Contract, it is agreed by the City and the Contractor as follows:

ARTICLE 1 - CONTRACTOR'S SERVICES AND RESPONSIBILITIES

1.1. GENERAL SERVICES

- A. The Contractor will furnish any and all labor, materials, equipment, transportation, utilities, services and facilities specified in the individual Job Order for which it is issued a Job Order Notice to Proceed in accordance with this Contract. The City may determine it is in its best interest to furnish materials and equipment for an individual Job Order in accordance with the Job Order.
- B. The Work will be performed in a good, workmanlike and substantial manner and to the satisfaction of the City Engineer and under the oversight of the City Engineer, or his properly authorized agents, within the care and skill of a qualified contractor in Scottsdale, Arizona.
 - 1. Minor design services may be required for some Job Orders. For those Job Orders that may require design services, the Contractor shall seek the services of an Arizona registered architect or engineering professional to prepare plans for permitting. The procurement of design services will be in accordance with City of Scottsdale procurement procedures. If the services of a design professional are used, the design professional must maintain at least \$1,000,000 Professional Liability Coverage.
 - 2. All documents prepared by the Contractor are subject to review by the City. Review by the City is solely for the benefit of the City and is not intended to be for the benefit of any other person and does not relieve the Contractor from the professional liability associated with the documents it has prepared.

3. The Contractor's Representative shall be reasonably available to the City and shall have the necessary expertise and experience required to supervise the Contract Services. A Contractor's Representative will be assigned for each Job Order. The Contractor's Representative will communicate regularly with the City and will be vested with the authority to act on behalf of the Contractor.
- C. The City is a member of \$AVE cooperative purchasing group. \$AVE includes the State of Arizona, Maricopa County, many Phoenix metropolitan area municipalities, and many K-12 unified school districts. Under \$AVE Cooperative Purchasing Agreement, and with the concurrence of successful Respondents under this solicitation, a member of \$AVE may access a contract resulting from this solicitation issued by the City. By signing the JOC Contract, the Contractor agrees to allow other \$AVE members the ability to purchase their needs and "use" this contract for JOC requirements.

1.2. GOVERNMENT APPROVALS AND PERMITS

- A. Unless otherwise provided, the Contractor shall obtain or assist the City in obtaining all necessary permits, approvals and licenses required for the prosecution of the Work from any government or quasi-government entity having jurisdiction over the Project. The Contractor is responsible for obtaining payment for the necessary environmental permits or file the necessary environmental notices.
- B. Copies of these permits and notices must be provided to the City's Representative before starting the permitted activity. This provision does not constitute an assumption by the City of an obligation of any kind for violation of the permit or notice requirements.
- C. The City will pay City of Scottsdale review and permit(s) fees for building and demolition permits. The City will pay City review fees for grading and drainage, water, sewer, storm water management, and landscaping. The City will also pay for City utility design fees for permanent services.
- D. The Contractor is responsible for all other permits and review fees not specifically listed in Article 1.2(C) above.
- E. The Contractor is responsible for the cost of construction-related water meter(s), water and sewer taps, fire lines and taps, and all water bills on the project meters until Substantial Completion of the Project. Arrangements for construction water will be the Contractor's responsibility. Construction water does not include "test water" required to complete new water line pressure tests.
- F. The M.A.G. Standard Specification 107.12 is modified to read as follows: "The Contractor, at its own expense, is responsible for the acquisition of any necessary temporary easements for construction purposes, storage, maintenance, and refuse haul-off as indicated upon the plans, which are required in addition to existing easements or rights-of-way secured by the City."

1.3. PRE-CONSTRUCTION CONFERENCE

- A. After execution of a Job Order and before the commencement of any Work on any individual Job Order, a pre-construction conference will be scheduled.
- B. The purpose of this conference is to establish a working relationship between the Contractor, utility firms, and various City departments. The agenda will include critical elements of the work schedule, submittal schedule, level of Record Drawings required, cost breakdown of major lump sum items, payment application and processing, coordination with the involved utility firms, and emergency telephone numbers for all representatives involved in the course of construction.
- C. At a minimum, attendees will include a Contractor Representative who is authorized to execute and sign documents on behalf of Contractor, the job superintendent, and Contractor's safety officer.
- D. The Job Order Notice to Proceed date will be established.
- E. The Contractor will provide a Baseline Project Schedule indicating duration, manpower and equipment resources required to complete all major work activities. The City and Design Team will review and comment on the Baseline Project Schedule. The Contractor will revise the Baseline Project Schedule to the satisfaction of the City's Representative. No work will begin until the City accepts the Baseline Project Schedule.
- F. The Contractor will submit a Schedule of Values based on the work and bids accepted from selected Subcontractors. These values will reflect the actual labor time, materials, profit and overhead for the Work or may be submitted in accordance with the Contractor's price book already approved by City.

1.4. CONTROL OF THE WORK

The Contractor shall properly guard and protect all partially finished work and shall be responsible for the Work until the entire Job Order is completed and accepted by the City. Any payment for completed portions of the Work will not release the Contractor from this responsibility; however, Contractor will turn over the entire Work in full compliance with the specifications or Job Order before final settlement is made. In case of suspension of the Work for any cause whatever, Contractor is responsible for the Project and will take all precautions necessary to prevent damage to the Project and will erect any necessary temporary structures, signs, or other facilities at no cost to the City.

- A. After all Work under the Job Order is completed, the Contractor shall remove all loose concrete, lumber, wire, reinforcing, debris and other materials not incorporated in the Work from the site of the Work.
- B. Unless the Job Order states that it is the responsibility of the City or a separate contractor, the Contractor shall provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities, other temporary facilities, temporary fencing, roll-offs, and dust control to permit the Contractor to complete the Work consistent with the Job Order.

- C. The Contractor shall perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Job Order. The Contractor shall at all times exercise complete and exclusive control over the means, methods, sequences and techniques of construction.
- D. Survey stakes and marks required for the completion of the construction shown on the plans and described in the specifications shall be furnished by the Contractor.
- E. Where the Job Order requires that a particular product be installed or applied by an applicator approved by the manufacturer, Contractor shall ensure the Subcontractor employed for the work is approved.
- F. Before ordering materials or doing work, the Contractor and each Subcontractor will verify measurements at the Site and shall be responsible for the correctness of these measurements. No extra charge or compensation will be allowed because of differences between actual dimensions and the dimensions indicated on the drawings; differences, which may be found, will be submitted to the City for resolution before proceeding with the Work.
- G. The Contractor shall take field measurements and verify field conditions and carefully compare these field measurements, conditions and other information known to the Contractor with the Job Order before starting activities. Errors, inconsistencies or omissions discovered shall be immediately reported to the City.
- H. The Contractor shall establish and maintain all building and construction grades, lines, levels, and benchmarks, and shall be responsible for the accuracy and protection of these items. This work shall be performed or supervised by an Arizona licensed civil engineer or surveyor.
- I. Any person employed by the Contractor or any Subcontractor who, in the opinion of the City, does not perform his work in a proper, skillful and safe manner or is intemperate or disorderly shall, at the written request of the City, be removed from the Work by the Contractor or Subcontractor employing this person, and shall not be employed again in any portion of the Work without the written approval of the City. The Contractor or Subcontractor shall hold the City harmless from damages or claims, which may occur in the enforcement of this Article.
- J. The Contractor assumes responsibility for the proper performance of the Work of Subcontractors and any acts and omissions in connection with this performance. Nothing in the Contract Documents is intended or considered to create any legal or contractual relationship between the City and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.
- K. The Contractor shall coordinate the activities of all Subcontractors. If the City performs other work on the Project or at the Site with separate contractors under the City's control, the Contractor shall reasonably cooperate and coordinate its activities with those of the separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.
- L. On a daily basis, the Contractor shall prepare a Contractor's Daily Report. The

City will provide a sample report format to the Contactor. The report shall detail the activities that took place during the course of the day, all equipment utilized and the number of hours operated, and all personnel on the Site including Subcontractors. Unless otherwise arranged, the Daily Reports shall be submitted on a daily basis to the City's CPM Inspector or the Project Coordinator. The Daily Reports shall also be made available to the City's Representative upon request. Failure to provide Daily Reports as arranged or requested above may result in the retention of monthly progress payments until the Reports are brought up to date.

- M. In the event of noncompliance with this Article 1.4, the City may require the Contractor to stop or suspend the construction in whole or in part. Any suspension due to the Contractor's noncompliance will not be considered a basis for an increase in the Contract Price or extension of the Contract Time.

1.5. CONTROL OF THE WORK SITE

- A. Throughout all phases of construction, including suspension of the work, the Contractor must keep the site reasonably free from debris, trash and construction wastes to permit the Contractor to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Upon Substantial Completion of the Work, or a portion of the work, the Contractor shall remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the work to permit the City to occupy the Project or a portion of the Project for its intended use.
- B. **Dust Control.** The Contractor shall take whatever steps, procedures or means required to prevent abnormal dust conditions due to its construction operations in connection with this Contract. The dust control measures shall be maintained at all times during construction of the Project to the satisfaction of the City, in accordance with the requirements of the Maricopa County Health Department Air Pollution Control Regulations and City of Scottsdale Supplement to M.A.G. Standard Specifications together with applicable provisions of Federal and State Law.
- C. **Dust Control Coordinator.** At any City construction site with greater than 1 acre of disturbed surface area, subject to a permit issued by a Control Officer requiring control of PM-10 emissions from dust generating operations, the Contractor must have at all times at the Site, at least one Dust Control Coordinator trained in accordance with the requirements of A.R.S. §49-474.05 during primary dust generating operations that is related to the purposes for which the Dust Control Permit was issued. The Dust Control Coordinator must have full authority to ensure that dust control measures are implemented at the Site, including authority to conduct inspections, deploy dust suppression resources, and modify or shutdown activities as needed to control dust. The Dust Control Coordinator must be responsible for managing dust prevention and dust control on the Site, including the use of leaf blowers and street sweeping equipment. The Dust Control Coordinator must have a valid Dust Training Certification Identification Card readily accessible on the Site while acting as the Dust Control Coordinator.

- D. The requirements described in the above paragraph do not apply if Contractor can establish to the satisfaction of the Contract Manager that one of the exemptions under A.R.S. §49-474.05 applies.
- E. A Subcontractor who is engaged in dust generating operations at a Site that is subject to a Dust Control Permit issued by a County Control Officer and that requires the control of PM-10 emissions from dust generating operations must register with the County Control Officer. The Subcontractor must have its registration number readily accessible on the Site while conducting any dust generating operations.
- F. If applicable, the Contractor will maintain ADA and ANSI accessibility requirements during construction activities in an occupied building or facility. ADA and ANSI accessibility requirements must include, but not be limited to, parking, building access, entrances, exits, restrooms, areas of refuge, and emergency exit paths of travel. The Contractor is responsible for the coordination of all work to minimize disruption to building occupants and facilities. Only materials and equipment used directly in the work will be brought to and stored on the site by the Contractor. When equipment is no longer required for the work, it will be removed promptly from the site. Protection of construction materials and equipment stored at the site from weather, theft, damage and all other adversity is solely the responsibility of the Contractor.
- G. The Contractor shall supervise and direct the work. The Contractor is solely responsible for the means, methods, techniques, sequences and procedures of construction. The Contractor shall employ and maintain on the work a qualified supervisor or superintendent who has been designated in writing by the Contractor as the Contractor's representative at the site. The representative must have full authority to act on behalf of the Contractor and all communications given to the representative shall be as binding as if given to the Contractor. The representative must be present on the Site at all times as required to perform adequate supervision and coordination of the work. Where appropriate, all Provisions of M.A.G., Section 105.5, will be applicable.
- H. In the event of abnormal weather conditions, such as windstorms, rainstorms, etc., the Contractor shall immediately inspect the work site and take all necessary actions to ensure that public access and safety are maintained.
- I. **Damage to Property at the Site.** The Contractor is responsible for any damage or loss to property at the Site, except to the extent caused by the acts or omissions of the City or its representatives, employees or agents and not covered by insurance.
- J. **Damage to Property of Others.** The Contractor shall avoid damage, as a result of the Contractor's operations, to existing sidewalks, curbs, streets, alleys, pavements, utilities, adjacent property, the work of Separate Contractors and the property of the City. The Contractor shall repair any damage caused by the operations of the Contractor.
- K. **Failure of Contractor to Repair Damage.** If the Contractor fails to commence the repair of damage to property as required in paragraphs (I.) and (J.) above, and diligently pursue the repair, then the City, after 10 days written notice to the

Contractor (provided the Contractor has not commenced the repair during the 10 day period), may elect to repair the damages with its own forces and to deduct from payments due or to become due to the Contractor amounts paid or incurred by the City in correcting the damage.

1.6. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- A. Shop Drawings, Product Data, Samples, O & M Manuals and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. The Contractor will review, approve and verify that all submittals meet the intent of the Contract Documents.
- B. Three (3) copies of each Shop Drawing, Product Data, Sample, and similar submittals required by the Contract Documents shall be delivered to the City in compliance with the approved schedule so as to cause no delay in the Work or in the activities of the City or of separate contractors. One hardcopy of O & M Manuals and two flash drive digital copies shall be provided to the City. Submittals made by the Contractor, which are not required by the Contract Documents, may be returned without action.
- C. The Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples, O & M Manuals, or similar submittals until the respective submittal has been approved by the City. All Work shall comply with approved submittals. The Contractor will not be relieved of responsibility for any errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals by the City's approval. Deviation from the original specifications will be specifically noted on the submittal to the City and the City will be allowed 7 days to approve or reject any deviations.
- D. By approving, verifying and submitting Shop Drawings, Product Data, Samples, O & M Manuals and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria, or will do so, and has checked and coordinated the information contained within the submittals with the requirements of the Work and of the Job Order.
- E. The Contractor will not be relieved of responsibility for deviations from requirements of the Job Order by the City's approval of Shop Drawings, Product Data, Samples, O & M Manuals or similar submittals unless the Contractor has specifically informed the City in writing of the deviation at the time of submittal and the City has given written approval to the specific deviation. The Contractor will not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals by the City's approval.
- F. Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, O & M Manuals or similar submittals, to revisions other than those requested by the City on previous submittals.
- G. Informational submittals upon which the City is not expected to take responsive

action will be so identified in the Contract Documents.

- H. When professional certification of performance criteria of materials, systems or equipment is required by the Job Order, the City shall be entitled to rely upon the accuracy and completeness of the calculations and certifications.

1.7. QUALITY CONTROL, TESTING AND INSPECTION

- A. Inspection. The City's CPM Inspectors may be stationed on the Work site to report to the City's Representative or his Designee as to the progress of the Work. The City's Representative or his Designee may also report as to the manner in which the Work is being performed and report whenever it appears that material furnished or Work performed by the Contractor fails to fulfill the requirements of the specifications, this Contract or the Job Order. The Inspector may direct the attention of the Contractor to any failure or infringement, but this inspection will not relieve the Contractor from any obligation to furnish acceptable materials or to provide completed construction that complies with the Contract or the Job Order in every way. The Inspector is solely for the purpose of assisting the City's Representative and should not be confused with an Inspector with a City regulatory agency or with an inspector from a laboratory under Article 1.8. Any inspections conducted by the City are solely for the benefit of the City and shall not be relied upon as a waiver of compliance with any of the Contract documents, plans, or specifications.
- B. In case of any dispute arising between the Inspector and the Contractor as to material furnished or the manner of performing the Work, the Inspector will have the authority to reject materials or suspend the Work until the question and issue can be referred to and decided by the City. Inspectors are not authorized to revoke, alter, enlarge, relax, or release any requirements of the specifications. Inspectors will in no case act as foremen or perform other duties for the Contractor or interfere with the management of the Work by the Contractor.
- C. Inspection or supervision by the City's Representative or Designee will not be considered as direct control of the individual workman and his work. The direct control will be solely the responsibility of the Contractor.
- D. The furnishing of these services for the City will not make the City responsible for or give the City control over construction means, methods, techniques, sequenced procedures or for safety precautions or programs or responsibility for the Contractor's failure to perform the Work in compliance with the Contract Documents.

1.8. MATERIALS TESTING

All materials used in the Work will be new and unused, unless otherwise noted, and will meet all quality requirements of the Job Order.

- A. All construction materials to be used on the Work or incorporated into the Work, equipment, plant, tools, appliances or methods to be used in the Work may be subject to the inspection and approval or rejection of the City. Any materials

rejected by the City shall be removed immediately and replaced in a manner acceptable to the City at no further cost to the City.

- B. The procedures and methods used to sample and test material will be determined by the City. Unless otherwise specified, samples and test will be made in compliance with the following: The City of Scottsdale Minimum Sampling Frequency Guide, the City of Scottsdale Material Testing Manual, and the standard methods of AASHTO or ASTM, DSPM and MAG supplements.
- C. The City will select a pre-qualified City or Independent Testing Laboratory and will pay for initial City Acceptance Testing.
 - 1. When the first and subsequent tests indicate noncompliance with the Job Order, the cost associated with that noncompliance will be paid for by Contractor.
 - 2. When the first and subsequent tests indicate noncompliance with the Job Order, all retesting will be performed by the same testing agency. The cost associated with the noncompliance will be paid by Contractor.
 - 3. The Contractor will cooperate with the selected testing laboratory and all others responsible for the testing and inspecting of the Work and will provide them access to the Work at all times.
- D. At the option of the City, materials may be approved at the source of supply before delivery is started.
- E. Code compliance testing and inspections required by codes or ordinances, or by a plan approval authority, and which are made by a legally constituted authority, will be the responsibility of and will be paid by the Contractor, unless otherwise provided in the Job Order.
- F. The Contractor's convenience and quality control testing and inspections will be the sole responsibility of the Contractor and paid by the Contractor.
- G. All soils and materials testing will be performed and paid for by the City. The City will order tests and distribute test results for all construction areas. The City will be responsible for ordering testing and will distribute test results within 24 hours of receipt.

1.9. PROJECT RECORD DOCUMENT/AS BUILTS

- A. During the construction period, the Contractor will maintain at the jobsite a set of blue-line or blackline prints of the Construction Document drawings and Shop Drawings for Project Record Document purposes.
 - 1. The Contractor will mark these drawings to indicate the actual installation where the installation varies appreciably from the original Construction Documents. The Contractor shall give particular attention to information on concealed elements which would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:

- Dimensional changes to the drawings.
 - Revisions to details shown on drawings.
 - Depths of foundations below first floor.
 - Locations and depths of underground utilities.
 - Revisions to routing of piping and conduits.
 - Revisions to electrical circuitry.
 - Actual equipment locations.
 - Duct size and routing.
 - Locations of concealed internal utilities.
 - Changes made by Change Order.
 - Details not on original Contract Drawings.
2. The Contractor shall mark completely and accurately Record Documents, prints of Construction Documents or Shop Drawings; whichever is the most capable of indicating the actual physical condition. Where Shop Drawings are marked, show cross-reference on the Construction Documents location.
 3. The Contractor shall mark Project Record Drawings sets with red erasable colored pencil.
 4. The Contractor shall note Request for Information (RFI) Numbers, American Standards Institute (ASI) Numbers and Adjustment Numbers, etc., as required to identify the source of the change to the Construction Documents.
 5. The Contractor shall at the time of Substantial Completion, submit Project Record Drawing prints and Shop Drawings to the City or its representative for review and comment.
- B. Immediately upon receipt of the reviewed Project Record Drawings from the City, Contractor shall correct any deficiencies or omissions to the drawings and prepare the following for submission to the City:
1. A complete set of PDF electronic files of all Project Record Drawings prepared in Microstation format compatible with City of Scottsdale CADD requirements. If a Design Professional is contracted with, the Design Professional will provide files of the original Construction Documents to the Contractor for use in preparing these final Record Documents, or the Contractor may contract with the Design Professional to revise and update the electronic drawing files. Each drawing will be clearly marked with "As-Built Document."
 2. A complete set of As-Built reproducible mylars from the final AutoCAD drawings and an electronic pdf file on CD are required.
 3. The original copy of the Project Record Drawings (redline mark-ups).

1.10. PROJECT SAFETY

- A. If applicable governmental regulations and sound work rules for maintaining a safe place and environment are not followed, the site environment in which the Contractor operates may, on occasion, present a potential safety and health hazard to any who may be on the Job Site. The Occupational Safety and Health Act (OSHA) and the City of Scottsdale loss control procedures are the minimum standard for safety and environmental protection and shall be fully complied with at all times. All Work shall be performed in compliance with all applicable federal, state and local laws, ordinances, statutes, rules and regulations including ADOSH policies and procedures. The Contractor will be required to attend a City safety briefing session at the pre-construction meeting. The session will be attended by the Contract Administrator, the designated Risk Management staff, and a Contractor's Representative.

The Contractor shall provide a safe job site and work environment for the safety and health of employees and members of the general public and comply with all legal requirements including but not limited to the following:

- Occupational Safety and Health Act (OSHA)
- Electrical Safe Work Practices Standards
- OSHA Personal Protective Equipment Standards
- National Fire Protection Association (NFPA) 70E Standard for Electrical Safety in the Workplace
- OSHA Fall Protection Standards
- OSHA Confined Space Entry
- All other applicable requirements of OSHA and local codes and agencies having jurisdiction.

Contractors that violate the aforementioned rules and regulations may be subject to job shutdown and or removal from City facilities.

- B. The Risk Management Division makes available a packet which contains the City's OSHA compliance guidelines, emergency evacuation, the City's safety and health plan, and other safety information.
- C. Contractor shall conduct tailgate safety meetings regularly to ensure that safety on the job is given priority.
- D. Contractor shall contact the City's Representative and the Risk Management Division within 24 hours of the occurrence of an accident or injury arising out of Contractor's Work under this Contract.
- E. Contractor's employees are encouraged to abate or remedy any unsafe act or condition which may arise in the course of the Contractor's Work under this Contract.
- F. The City reserves the right to conduct safety audits at the Job Site and stop unsafe acts at any time. In addition, the City shall be notified within 4 hours should any OSHA inspection occur at a City Job Site.

- G. The Contractor recognizes the importance of performing the Work in a safe manner so as to prevent damage, injury or loss to:
 - 1. All individuals at the Site, whether working or visiting;
 - 2. The Work, including materials and equipment incorporated into the Work or stored on-Site or off-Site; and
 - 3. All other property at the Site or adjacent to the Site.
- H. The Contractor assumes responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work.
- I. The Contractor shall, before commencing construction, designate a Safety Representative with the necessary qualifications and experience to supervise the implementation and monitoring of all safety precautions and programs related to the Work. Unless otherwise required by the Contract Documents, the Contractor's Safety Representative shall be an individual stationed at the Site who may have responsibilities on the Project in addition to safety.
- J. The Contractor must provide OSHA 300A Summary log information including total recordable cases, total case rates, and lost workday incident rates for the past 2 calendar years. This information can be compared to Bureau of Labor Statistics (BLS) rates to determine whether a contractor has below average or above average accident/injury rates. Bureau of Labor Statistics information may be obtained through Risk Management. The Safety Representative shall make routine daily inspections of the Site and will hold weekly safety meetings with the Contractor's personnel, Subcontractors and others as applicable.
- K. The Contractor and Subcontractors shall comply with all Legal Requirements relating to safety, as well as any City-specific safety requirements contained in the Contract Documents, provided that the City-specific requirements do not violate any applicable Legal Requirement.
- L. The Contractor shall immediately report in writing any safety-related injury, loss, damage or accident arising from the Work to City's Representative and, to the extent mandated by Legal Requirements, to all government or quasi-governmental authorities having jurisdiction over safety-related matters involving the Project or the Work.
- M. The Contractor's responsibility for safety under this Article 1.10 is not intended in any way to relieve Subcontractors and Sub-Subcontractors of their own contractual and legal obligations and responsibility for:
 - 1. Complying with all Legal Requirements, including those related to health and safety matters; and
 - 2. Taking all necessary measures to implement and monitor all safety precautions and programs to guard against injury, losses, damages or accidents resulting from their performance of the Work.

- N. The Contractor and Subcontractors shall provide Material Safety Data Sheets for all substances that are delivered to the City of Scottsdale, that come under the Occupational Safety and Health Administration Toxic and Hazardous Substances – Hazard Communication Standard, 29 CFR 1910.1200 Hazard Communication (reference Occupational Safety and Health Standards, Subpart Z Toxic and Hazardous Substances – Hazardous Communication Standard).

All Contractors and all Subcontractors using chemicals on City of Scottsdale property shall use only the safest chemicals, with the least harmful ingredients. These chemicals shall be approved for use by a City of Scottsdale representative *before bringing them on the property.*

Contractor and all Subcontractors shall make every attempt to apply approved chemicals with highly volatile organic compounds outside of working hours. Adequate ventilation shall be used at all times during the application of these approved chemicals.

In conjunction with the Occupational Safety and Health Standards, Subpart Z Toxic and Hazardous Substances – Hazard Communication Standard, 29 CFR 1910.1200 Hazard Communication, the Contractor and Subcontractors are informed of the presence of (or possible presence of) chemicals in the area where the Work requested will be performed. Contractor or all selected Subcontractors shall contact the City of Scottsdale for specific information relative to the type of chemicals present and location of appropriate Material Safety Data Sheets.

Unless included in the Work, if Contractor encounters onsite material which it reasonably believes to contain asbestos, polychlorinated biphenyl (PCB), or other hazardous substances or materials regulated by Public Health Laws, it will immediately stop Work and report the condition to the City.

If the material is found to contain asbestos, PCB or other hazardous substances or materials regulated by Public Health Laws, Contractor will not resume Work in the affected area until the material has been abated or rendered harmless. The Contractor and the City may agree, in writing, to continue Work in non-affected areas onsite. An extension of the Contract Time may be granted as provided in Article 5.

- O. Upon discovery of hazardous materials, Contractor will comply with all applicable laws/ordinances and regulations and take all appropriate health and safety precautions.

1.11. WARRANTY

The provisions of M.A.G., Section 108.8 will apply with the following additional requirements:

Should Contractor fail to begin repairs or corrective work within 14 calendar days after receipt of written notice from the City, the City may perform the necessary work and the Contractor agrees to reimburse the City for the actual cost.

The warranty period on any part of the Work repaired or replaced shall be extended

for a period of 1 year from the date of the repair or replacement.

- A. The Contractor's warranty obligation excludes defects caused by abuse, alterations, or failure to maintain the Work by persons other than the Contractor or anyone for whose acts the Contractor may be liable.
- B. Nothing in this warranty is intended to limit any manufacturer's warranty which provides the City with greater warranty rights than those found in this Article 1.11 or the Contract Documents. Contractor shall provide the City with copies of all manufacturers' warranties upon Substantial Completion of each Job Order.

1.12. CORRECTION OF DEFECTIVE WORK

- A. Contractor agrees to correct any Work that is found to not be in conformance with the Contract Documents, including that part of the Work subject to Article 1.11 above, within a period of 1 year from the date of Substantial Completion of the Work or any portion of the Work, or within any longer period to the extent required by the Contract Documents. All removal/replacement work, as directed by the City to the Contractor, in compliance with this Contract, MAG standards and City codes will have cost determinations by the City and be issued as a deduct or change order to the Project. A Progress Payment, or partial or entire use or occupancy of the Project by the City will not constitute acceptance of Work not in accordance with the Contract Documents.

During the Work, Contractor shall take meaningful steps to begin correction of any nonconforming Work as notified by the City. This includes the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If Contractor fails to begin the necessary steps during the Work, the City, in addition to any other remedies provided under the Contract Documents, may provide the Contractor with written notice that the City will commence correction of any nonconforming Work with its own forces.

Contractor shall take meaningful steps to begin correction of nonconforming Work subject to Article 1.11 above. These measures include but are not limited to timely correction of the Work. If Contractor fails to initiate necessary measures for this Work within 7 days of receipt of written notice from the City, the City, in addition to any other remedies provided under the Contract Documents, may provide Contractor with written notice that the City will begin correction of the nonconforming Work with its own forces.

- B. If the City does perform this corrective Work, Contractor shall be responsible for all reasonable costs incurred by the City in performing the correction.
- C. Contractor shall immediately respond to any nonconforming Work that creates an emergency.
- D. The warranty period referenced above applies only to Contractor's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies the City may have regarding the Contractor's other obligations under the Contract Documents.

1.13. SUBCONTRACTOR AND MAJOR SUPPLIER SELECTIONS

- A. Contractor will select major Subcontractors and major Suppliers, subject to first obtaining the City's approval. Major Subcontractors may be selected based on qualifications or a combination of qualifications and price. Subcontractors must not be selected based on price alone. Except as noted below, the selection of major Subcontractors/Suppliers is the responsibility of Contractor, but the City must approve in writing the selection of all Subcontractors. In any case, Contractor is solely responsible for the performance of the selected Subcontractors/Suppliers.
1. Contractor will prepare a Subcontractor/Supplier selection plan and submit the plan to the City for approval or the Contractor may use the City's plan as described in Article 1.13(B). This Subcontractor selection plan will identify those Subcontractor trades anticipated to be selected by qualifications only as provided in Article 1.13(B) and those Subcontractor trades anticipated to be selected by qualifications and competitive bid as provided in Article 1.13(C). This plan will also identify those Subcontractors that will not be selected through a formalized qualifications-based selection process. The Subcontractor selection plan must be consistent with the selection requirements included in this Contract.
- B. **Selection by qualifications only** - The City may approve the selection of a Subcontractor(s) or Supplier(s) based only on their qualifications when the Contractor can demonstrate it is in the best interest of the Project.
1. The Contractor will apply the Subcontractor selection plan approved by the City in the evaluation of the qualifications of a Subcontractor(s) or Supplier(s) and provide the City with its review and recommendation. The selection plan will be the Contractor's own selection plan approved by the City or the City's selection plan as provided in this Article 1.13(B).
 2. The Contractor will negotiate costs for services/supplies from the Subcontractor(s)/Supplier(s) under the approved qualifications only method.

City Selection Plan:

3. The Contractor may elect to comply with the following City procedures in its selection of Subcontractor(s) or Suppliers(s) based on qualifications only:
 - a. The Request for Qualifications (RFQ) will contain the best description of the services or material desired; and
 - b. A statement that only unpriced statements of qualifications will be considered; and
 - c. State the requirements for the project, such as drawings and descriptive literature; and

- d. State the criteria for evaluating the qualifications; and
 - e. A closing date and time for receipt of a statement of qualifications and the location where the statements should be delivered or mailed; and
 - f. A statement that discussions may be held; and
 - g. A statement that only statements of qualifications determined to be acceptable will be considered for award.
- 4. The RFQ may be amended after the submission of the statements of qualifications. Any amendment will be distributed only to bidders who submitted statements of qualifications. Those bidders will be permitted to submit new unpriced statements of qualifications or to amend statements already submitted.
 - 5. Statements of Qualifications will not be opened publicly, but will be opened in the presence of the Contractor. The contents of unpriced statements of qualifications will not be disclosed to unauthorized persons.
 - 6. Statements of Qualifications will be evaluated solely in accordance with the criteria stated in the RFQ and will be determined to be either acceptable for further consideration or unacceptable. A determination that the statement is unacceptable will be in writing, state the basis of the determination and be retained by the Contractor. The Contractor will notify the bidder of the determination and the bidder will not be given an opportunity to amend its statement of qualifications further.
 - 7. The Contractor may conduct discussions with any bidder who submits an acceptable or potentially acceptable statement of qualifications. During discussions, the Contractor will not disclose any information derived from any other bidder's statement of qualifications.
 - 8. The Contractor will negotiate costs for services/supplies from the Subcontractor(s)/Supplier(s) selected under this method.
- C. **Selection by qualifications and competitive bid** – The Contractor will apply the City's Subcontractor selection plan stated above or the Contractor's selection plan, if previously approved by the City, in the Contractor's evaluation of the qualifications of Subcontractor(s)/Supplier(s) and will provide the City with the selected process to prequalify prospective Subcontractors/Suppliers. Selection may not be based on price alone. All Work by major Subcontractors and major Suppliers will then be competitively bid to the prequalified Subcontractors unless a Subcontractor or Supplier was selected in accordance with Article 1.13(B) above. The Contractor may elect to comply with the following procedures in step 2 of its competitive bid process.
- 1. The Contractor will develop Subcontractor and Supplier interest, submit the names of a minimum of 3 qualified Subcontractors or Suppliers for each

trade in the Project and solicit bids for the various Work categories. If there are not 3 qualified Subcontractors/Suppliers available for a specific trade or there are extenuating circumstances, the Contractor may request approval by the City to submit less than 3 names. Without first giving written notice to the City, no change in the recommended Subcontractors/Suppliers will be allowed.

2. If the City objects to any nominated Subcontractor/Supplier or to any self-performed Work for good reason, the Contractor will nominate a substitute Subcontractor/Supplier that is acceptable to the City.
 3. The Contractor will distribute Drawings and Specifications, and when appropriate, conduct a prebid conference with prospective Subcontractors and Suppliers. The Contractor will then review the price bids submitted by Subcontractors and Suppliers and make its selection based on the responsive and responsible bidder with the lowest price.
 4. If the Contractor desires to self-perform certain portions of the Work, it must request to be one of the approved Subcontractor bidders for those specific bid packages. The Contractor's bid will be evaluated in accordance with the process identified in the Invitation for Bids. If events warrant and the City concurs that in order to ensure compliance with the Project Schedule or cost, the Contractor may self-perform Work without bidding or re-bidding the Work. (For horizontal construction, as defined in A.R.S. § 34-101(15), the Contractor must self-perform not less than 45% of the Work as required by A.R.S. § 34-603(l) (3).)
- D. If after receipt of sub-bids or after award of Subcontractors and Suppliers, the City objects to any nominated Subcontractor/Supplier or to any self-performed Work for good reason, the Contractor will nominate a substitute Subcontractor or Supplier, preferably if this option is still available, from those who submitted Subcontractor bids for the Work affected. Once the substitute Subcontractors and Suppliers are consented to by the City, the Contractor's proposed price for the Work or portion of the Work will be correspondingly adjusted to reflect any higher or lower costs from any substitution. Under no circumstances will the City's objection or comment on any Subcontractor or Supplier relieve the Contractor of its sole responsibility for control over the methods, means and processes by which the Work is accomplished. The City must approve in writing the selected Subcontractor Selection Plan before work commences on any Job Order.

ARTICLE 2 - CITY'S SERVICES AND RESPONSIBILITIES

2.1 DUTY TO COOPERATE

The City will, throughout the performance of the Contract Services, cooperate with the Contractor and perform its responsibilities, obligations and services in a timely manner to facilitate the Contractor's timely and efficient performance of the Contract Services and so as not to delay or interfere with Contractor's performance of its obligations under the Contract Documents.

2.2 INFORMATION AND SERVICES

- A. The City will furnish the Contractor, at no cost to Contractor, the following information or services for this Project:
 - 1. One copy of data pertinent to the Work. However, Contractor will be responsible for searching the records and requesting information required for the Project.
 - 2. All available data and information relative to policies, standards, criteria, studies, etc.
 - 3. Project funding and budget allocations and any changes affecting the funding or budget allocations.
 - 4. For purpose of determining the Job Order Price, any Plans and Specifications.
 - 5. For purpose of Project Record Drawings, a CADD file of the Construction Documents in Microstation format compatible with City of Scottsdale CADD requirements.

2.3 CITY'S REPRESENTATIVE

- A. The City's Representative will provide City-supplied information and approvals to permit the Contractor to fulfill its obligations under the Contract Documents.
- B. The City's Representative will also provide the Contractor with notice if it observes any failure on the part of the Contractor to fulfill its contractual obligations, including any default or defect in the Project or non-conformance with the drawings and specifications.

2.4 DESIGN PROFESSIONAL SERVICES

- A. The City may contract separately with one or more Design Professionals to provide architectural or engineering design of the Project in accordance with the provisions of A.R.S. §34-603.
- B. The City may contract with the Design Professional to provide some or all of the following services during the performance of the Work:
 - 1. The Design Professional will provide administration of the Work. The City and the Contractor will endeavor to communicate through the Design Professional. Communications by and with the Design Professional's consultants will be through the Design Professional.
 - 2. The Design Professional will visit the Site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in accordance with the Contract Documents. The Design Professional will keep the City informed of progress of the Work and will

endeavor to guard the City against defects and deficiencies in the Work.

3. Upon Contractor's submittals, the Design Professional will review and approve or take other appropriate action on submittals as Shop Drawings, Product Data and Samples in accordance with Article 1.6.
4. All drawings produced for projects considered to be performed under Contractor are the property of the City and are owned in whole by the City for any and all future use and considerations.

2.5 CITY'S SEPARATE CONTRACTORS

The City is responsible for all Work performed on the Project or at the Site by separate contractors under the City's control. The City will contractually require its separate contractors to cooperate with and coordinate their activities so as not to interfere with the Contractor in order to enable the Contractor to timely complete the Work consistent with the Contract Documents. The Contractor agrees to reasonably cooperate and coordinate its activities with those of the separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

2.6 FURNISHING OF SERVICES AND INFORMATION

- A. The City will be responsible for the payment or waiver of the following:
 1. City review and permit(s) fees for building, encroachment, and demolition permits including City, State and County.
 2. City review fees for grading and drainage, water, sewer and landscaping.
 3. Utility design fees or permanent services fees are paid by the City, but all submittals are the responsibility of the Contractor.
 4. Obtaining Nationwide 404 Permits.
 5. City Development Fees.
- B. Unless expressly stated to the contrary in the Contract Documents, the City will provide, at its own cost and expense, for the Contractor's information the following:
 1. To the extent available, surveys describing the property, boundaries, topography and reference points for use during construction, including existing service and utility lines;
 2. Temporary and permanent easements, zoning and other requirements and encumbrances affecting land use, necessary to permit the proper design and construction of the Project and enable the Contractor to perform the Work;
 3. A legal description and Street or Physical address of the Site;
 4. To the extent available, as-built record or historical drawings of any existing

structures at the Site;

5. To the extent available, environmental studies, reports and impact statements describing the environmental conditions, including hazardous materials, in existence at the Site; and
6. To the extent available, Geotechnical studies describing subsurface conditions and other surveys describing other latent or concealed physical conditions at the Site.

The City will provide all City standards and guidelines, supplementary conditions and special provisions that will be included in the plans and specifications for the Project. These may include but are not limited to: disposal of surplus material, special security provisions, investigation of underground facilities, traffic controls and regulations, special quality control testing and termite treatment requirements.

The City is responsible for securing and executing all necessary Contracts with adjacent land or property owners that are necessary to enable the Contractor to perform the construction. The City is further responsible for all costs, including attorneys' fees, incurred in securing these necessary Contracts.

2.7 PROJECT MANAGEMENT SERVICES

- A. The City may contract separately with one or more Technical Consultants to provide project management assistance for the Project. The Technical Consultant's contract as well as contracts with other firms hired by the City will be furnished to the Contractor. The Contractor will not have any right, however, to limit or restrict any Contract Modifications that are mutually acceptable to the City and Technical Consultant.
- B. The Technical Consultant services will augment the City staffing resources to effectively manage the objectives of the City and this Project with the goal of managing the key Project communication, cost and time parameters.
- C. The Technical Consultant may provide preprogramming and design standards.
- D. The City may contract with the Technical Consultant to provide some or all of the following services during the performance of the construction:
 1. Oversight of the Construction. The City may hire Technical Consultants to assist it in oversight of the Construction Project. The Technical Consultants will:
 - a. Conduct Site visits at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed construction and to determine in general if the construction is being performed in accordance with the Construction Documents. The Technical Consultant will keep the City informed of progress of the construction and will endeavor to guard the City against defects and deficiencies in the construction.

The Technical Consultant may have authority to reject construction which does not conform to the Construction Documents and to require additional inspection or testing of the construction in accordance with Articles 1.7 and 1.8;

- b. Review and recommend approval of Contractor's Payment Requests;
- c. Interpret matters concerning performance under and requirements of the Contract Documents on written request of the City. The Technical Consultant's response to any requests will be made with reasonable promptness and within any time limits agreed upon;
- d. Analyze, recommend and assist in negotiations of Change Orders;
- e. Conduct inspections to determine Substantial Completion and Final Acceptance.
- f. Receive and forward to the City for the City's review and records written warranties and related documents required by the Contract Documents and assembled by the Contractor.

2.8 PERMIT REVIEW AND INSPECTIONS

For clarification, permitting activities are handled by the City of Scottsdale Developmental Services, Fire and Planning Departments. Obtaining any permits and submittals are the responsibility of the City.

2.9 UTILITY COMPANY COORDINATION

The Contractor will be responsible for coordinating utility design work for permanent service to the Project and will ensure that the work takes place in a timely manner and does not impact the Project Schedule. Any utility design fees for permanent services to a Job Order will be paid by the City in accordance with Article 2.6.

ARTICLE 3 - CONTRACT TIME AND JOB ORDER TIME

3.1 CONTRACT TIME

- A. Contract Time for this Job Order Contract will commence on or about the 7 day of April, 2020, and will be for 2 (two) year(s) with the option to extend for 3 (three) additional years in 1 (one) year increments.
 - 1. The option to extend may be exercised based on the Contractor's successful performance and the needs of the City.
 - 2. A Contract Modification will be processed for each extension and will commence on or about the anniversary date of the Contract. Each extension must be authorized by the City Engineer or designee.
- B. The Contract will remain in full force and effect during the performance of any Job

Order.

3.2 JOB ORDER TIME

- A. Job Orders may be issued at any time during the term of this Contract.
- B. Each individual Job Order will include a Job Order Notice to Proceed date, Duration of the Work as determined in accordance with this Article 3.2 and a calculated Substantial Completion date.
- C. Contractor agrees that it will commence performance of the Work and achieve each individual Job Order Time.
- D. Each Job Order Time will be subject to adjustment in accordance with Article 5.

3.3 SUBSTANTIAL COMPLETION

- A. Substantial Completion of each Job Order is when all construction has been completed with the exception of final inspection punch list work. The purpose of granting or acknowledging substantial completion is to stop Job Order Time.
- B. Before notifying the City in accordance to Article 3.3(C), Contractor shall inspect the Work and prepare and submit to the City a comprehensive list of items to be completed or corrected. Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item on the list does not alter the responsibility of Contractor to complete all Work in accordance with the Contract Documents.
- C. Contractor will notify the City when it believes a Job Order, or to the extent permitted in the Contract Documents, a portion of the Job Order, is substantially complete.
- D. Within 5 days of the City's receipt of Contractor's notice, the City and the Contractor will jointly inspect the Work to verify that it is substantially complete in accordance with the requirements of the Contract Documents.
- E. If the Work is substantially complete, the City will prepare and issue a Certificate of Substantial Completion that will state:
 - 1. The date of Substantial Completion of the Work or portion of the Work;
 - 2. The remaining items of Work that have to be completed within 30 calendar days before Final Acceptance;
 - 3. Provisions (to the extent not already provided in the Contract Documents) establishing the City's and the Contractor's responsibility for the Project's security, maintenance, utilities and insurance pending Final Acceptance.
- F. The City, at its option, may use a portion of the Work which has been determined to be substantially complete provided, however, that:

1. Certificate of Substantial Completion has been issued for the portion of Work addressing the items in Article 3.3(E) (2);
2. The Contractor and the City have obtained the consent of their sureties and insurers, and to the extent applicable, the appropriate government authorities having jurisdiction over the Project, and
3. The City and the Contractor agree that the City's use or occupancy will not interfere with the Contractor's completion of the remaining Work.

3.4 PUNCH LIST PREPARATION

A minimum of 7 days before Substantial Completion Contractor, in conjunction with the City, will prepare a comprehensive list of Punch List items, which the City may edit and supplement. Contractor will proceed promptly to complete and correct the Punch List items. Failure to include an item on the Punch List does not alter the responsibility of Contractor to complete all Work in accordance with the Contract Documents. Warranties required by the Contract Documents will not commence until the date of Final Acceptance unless otherwise provided in the Contract Documents. Seven (7) days before the City issues its Final Acceptance Letter, Contractor will deliver to the City all Operation and Maintenance Manuals necessary for the City to assume responsibility for the operation and maintenance of that portion of the Work.

3.5 FINAL ACCEPTANCE

Upon receipt of written notice that the Work or identified portions of the Work is ready for final inspection and acceptance, the City and the Contractor will jointly inspect to verify that the remaining items of Work have been completed as provided in Article 3.3(E). If completed, the City will issue a Final Acceptance Letter.

3.6 LIQUIDATED DAMAGES

- A. The Contractor understands that if Substantial Completion is not attained within the Job Order Time of the Work as may be adjusted for each Job Order, the City will suffer damages, based on the anticipated loss caused by the breach and the difficulty in determining and accurately specifying the damages. Contractor agrees that if Substantial Completion is not attained within the Job Order Time as adjusted, Contractor will pay the City the amount prescribed in Article 3.6(B) below as liquidated damages for each Day that Substantial Completion extends beyond the date determined by the Job Order Time as adjusted.
- B. The following will be the liquidated damages for each Job Order unless a specific amount has been determined for each individual Job Order.

LIQUIDATED DAMAGES

Original Job Order Amount		Daily Charges
From more than	To and including	Calendar Day or Fixed Date
\$00	\$25,000	\$200
25,001	50,000	250
50,001	100,000	280
100,001	500,000	430

500,001	750,000	500
750,001	1,000,000	570
1,000,001	1,250,000	610
1,250,001	1,500,000	650

ARTICLE 4- CONTRACT PRICE AND JOB ORDER PRICE

4.1 CONTRACT PRICE

This Contract will have a maximum contract amount of \$10,000,000 for the initial two year term and a maximum amount of \$5,000,000 for each successive one year renewal. Contractor agrees at its own cost and expense, to do all the Work as specified in the Contract Documents and any Work contingent to the Contract and necessary for the construction of the improvements. The Contractor will completely construct the Work and install the materials, free and clear of all claims, liens, and charges of any kind, in the manner and under the conditions specified within the time or times stated in each Job Order.

- A. In no event will any individual Job Order Price exceed \$2,000,000. If the City opts to extend this Contract in accordance with Article 3.1(A), the Contract Modification may increase the maximum amount, if necessary, at that time.
- B. The Job Order Price is subject to adjustments made in accordance with Article 5.
- C. The Contractor will be responsible for payment of all State of Arizona and City of Scottsdale transaction privilege (sales) taxes due on construction income, whether or not these taxes are specifically separated in the bid amount.
- D. Unless otherwise provided in the Contract Documents, the Job Order Price is considered to include all sales, use, consumer and other taxes throughout the term of this Contract, whether or not yet effective or merely scheduled to go into effect.
- E. The Contractor must secure and maintain, during the life of the Contract, State of Arizona and City of Scottsdale Transaction Privilege (sales) Tax Licenses.

To obtain a State of Arizona Privilege (Sales) Tax License Application, please go to the following website:

<https://azdor.gov/forms/tpt-forms/joint-tax-application-tpt-license>

To obtain a City of Scottsdale Transaction (Sales) Tax License Application, please go to the following website:

<http://www.scottsdaleaz.gov/taxes>

The Contractor must demonstrate compliance with the E-Verify Program as provided in Article 11.34 and as required by A.R.S. §41-1080 before issuance of any License by the City.

4.2 RESPONSIBILITY FOR PRIVILEGE (SALES) TAXES

- A. The Contractor is responsible for payment of all applicable State of Arizona and City of Scottsdale transaction privilege (sales) taxes due on construction income whether or not these taxes are specifically separated in the bid amount. The taxes are to be reported on either a progressive billing (accrual) basis or cash receipts basis, depending on the method chosen at the time application was made for the Privilege (sales) Tax License.

City Privilege (sales) tax exemptions/deductions may be applicable to certain projects. The Contractor is advised to consider this as it prepares its bid. Please review, in detail, Sections 415, 465, and 110 of the Scottsdale Revised City Code, Appendix C to determine if exemptions/ deductions are applicable. For tax guidance, please reference the City Code and other tax resources at the following website:

<http://www.scottsdaleaz.gov/taxes/>

The State of Arizona has similar exemptions; please reference A.R.S. Title 42 at the following website:

<http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp?Title=42>

For further questions regarding tax treatment, please contact the Arizona Department of Revenue at 602-255-3381 and the City of Scottsdale Tax & Audit Section at 480-312-2400.

- B. Any Contingencies and Allowances as agreed upon between the City and the Contractor will be stated in Exhibit A, attached and by reference made a part of this Contract.

ARTICLE 5 - CHANGES TO THE CONTRACT PRICE AND TIME

5.1 DELAYS TO THE WORK

- A. Delays may be compensable, concurrent, excusable or non-excusable as defined in Article 12.
- B. If the Contractor is delayed in the performance of the Work due to acts, omissions, conditions, events, or circumstances beyond its control and due to no fault of its own or those for whom the Contractor is responsible, the Contract Times for performance may be reasonably extended by Job Order Adjustment.
- C. The Contractor will request an increase in the Job Order Time by written notice including an estimate of the probable effect of delay on progress of the Work. In the case of a continuing delay only one request is necessary.
- D. Written notice will be received within 5 days of the commencement of the cause of the delay.

1. If written notice is received more than 5 days after commencement of the

cause of the delay, the period of delay will be considered to commence 14 days before the giving of any notice.

- E. By way of example and subject to the Force Majeure provisions of Article 11.8, events that may entitle the JOC to an extension of the Contract Time include acts or omissions of the City or anyone under the City's control (including separate contractors), Acts of God or public enemy changes in the Work, Differing Site Conditions, Hazardous Conditions, unusual delay in transportation, and excessive inclement weather conditions not reasonably anticipated, war or other national emergency making performance temporarily impossible or illegal, or strikes or labor disputes not brought about by any act or omission of the JOC.
- F. If adverse weather conditions are the basis for a request for additional Job Order Time, the requests will be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction.
- G. It is understood, however, that permitting Contractor to proceed to complete any Work, or any part of the Work, after the date to which the time of completion may have been extended, will in no way act as a waiver on the part of the City of any of its legal rights.
- H. In the event that Contractor sustains damages as a result of expenses incurred by a delay for which the City is responsible, Contractor and the City will negotiate to determine the amount of any damages. This provision is made in accordance with Arizona Revised Statutes Section 34-607 (E) and is effective only if the delay caused by the City is unreasonable under the circumstances and was not within the contemplation of the parties. This provision will not be construed to void any provision of this Contract pertaining to notice of delays, arbitration or other settlement provisions applicable to disputes, or provisions relating to liquidated damages.
- I. In addition to Contractor's right to a time extension for those events stated in this Article 5.1, Contractor may also be entitled to an appropriate adjustment of the Contract Price provided, however, that the Contract Price will not be adjusted for those events stated in this Article that are beyond the control of both Contractor and the City, including the events of war, acts of terrorism, floods, labor disputes (but not including Contractor's own work force and those of its subcontractors), earthquakes, epidemics, excessive inclement weather conditions not reasonably anticipated.

5.2 DIFFERING SITE CONDITIONS

- 5.2.1.** If Contractor encounters a Differing Site Condition(s), the Contractor may be entitled to an adjustment in the Contract Price or Contract Time(s) to the extent the Contractor's cost or time of performance are the direct result of a Differing Site Condition(s).
- 5.2.2.** Upon encountering a Differing Site Condition, the Contractor will provide prompt written notice to the City of the condition, which notice will not be later than 7

days after the condition has been encountered. Final costs must be submitted within thirty (30) days after notice is received by the City, unless extended by written agreement of the parties. The Contractor must give the City's Contract Administrator written notice of and an opportunity to observe, such condition before disturbing or altering the Differing Site conditions. The failure of the Contractor to give written notice and make the Claim as required by this Article and Article 7.1.5 shall constitute a waiver by the Contractor of any rights arising out of or relating to such Differing Site Conditions. (Final costs must be submitted within thirty (30) days after notice is received by the City, unless extended by written agreement of the parties.)

- 5.2.3.** In order for the JOC to obtain any additional compensation or time extensions for Differing Site Conditions, the JOC must demonstrate that it encountered a material difference at the Site, as defined in Article 13, that required it to expend additional cost or time. The JOC will also establish that it actually and reasonably relied upon the representations found in the Contract Documents concerning the Site conditions.

5.3 APPLICATION FOR EXTENSION OF TIME

- 5.3.1** If performance by Contractor is delayed for a reason set forth in Article 5, Contractor may be allowed a reasonable extension of time in conformance with this Article. Before the Contractor's time extension request may be considered, Contractor shall notify the City of the condition which allegedly has caused or is causing the delay, and shall submit a written application to the City identifying:

1. Liquidated damage assessment rate, as specified in the Contract;
2. Original Job Order Price;
3. The original Contract start date and completion date;
4. Any previous time extensions granted (number and duration); and
5. The extension of time requested.

- 5.3.2** In addition, the application for extension of time shall set forth in detail:

1. The nature of each alleged cause of delay in completing the Work;
2. The date upon which each such cause of delay began and ended and the number of dates attributable to each such cause;
3. A statement that Contractor waives all claims except for those delineated in the application, and the particulars of any claims which the Contractor does not agree to waive. For time extensions for Substantial Completion and final completion payments, the application shall include a detailed statement of the dollar amounts of each claim item reserved; and
4. A statement indicating Contractor's understanding that the time extension is granted only for purposes of permitting continuation of Contract

performance and payment for Work performed and that the City retains its right to conduct an investigation and assess liquidated damages as appropriate in the future.

- 5.4 ERRORS, DISCREPANCIES AND OMISSIONS** If Contractor observes errors, discrepancies or omissions in the Contract Documents, it will promptly notify the City and request clarification. Contractor shall provide a copy of this notice to the City's Representative.

- B. If the Contractor proceeds with the Work affected by the errors, discrepancies or omissions, without receiving any clarifications, it does so at its own risk. Adjustments involving these circumstances made by the Contractor before clarification by the Design Professional will be at Contractor's risk.

5.5 CITY REQUESTED CHANGE IN WORK

- A. The City reserves the right to make, at any time during the progress of the Work, any alterations as may be found necessary or desirable.
- B. These alterations and changes will not invalidate this Contract nor release the surety and Contractor agrees to perform the Work as altered, the same as if it had been a part of the original Contract Documents. Contractor will notify the surety of the changes and will assure that the alternations and changes are adequately covered by the surety bond.
- C. The City will request a proposal for a change in Work from Contractor, and an adjustment in the Contract Price or Contract Times will be made based on a mutual agreed upon cost and time.

5.6 LEGAL REQUIREMENTS

The Job Order Price or Job Order Times will be adjusted to compensate Contractor for the effects of any changes in the Legal Requirements enacted after the date of the Contract affecting the performance of the Work.

5.7 JOB ORDER ADJUSTMENTS

- A. In accordance with Scottsdale Revised Code §2-200 and related Rules and Procedures, the City and Contractor will negotiate in good faith and as expeditiously as possible the appropriate Adjustments to the Contract. Upon reaching an agreement, the parties will prepare and execute an appropriate Adjustment reflecting the terms of their agreement. The change in Work may or may not include an Adjustment in the Job Order Price or Job Order Time.
- B. All changes in Work authorized by Job Order Adjustments will be performed under the conditions of the Contract Documents. The decision to make an Adjustment in the Contract rests solely with the City and any decision to make a Contract Adjustment must be promptly complied with by Contractor, subject to the provisions of Article 5.8.
- C. The execution of a Job Order Adjustment by Contractor shall constitute conclusive

evidence of the Contractor's agreement to the ordered changes in work, this Contract as thus amended, the Contract Price, and the time for performance by the Contractor. The Contractor, by executing the Job Order Adjustment, waives and forever releases any claim against the City for any additional time or compensation for matters relating to, arising out of, or resulting from the work included within or affected by the executed Job Order Adjustment of which the Contractor knew or should have known.

5.8 UNILATERAL DETERMINATION OF CHANGE ORDER VALUE

If no mutual agreement occurs between the City and Contractor, the change in Contract Price, if any, shall be derived by determining the reasonable actual costs incurred or savings achieved, resulting from revisions to the Work. Such reasonable actual costs or savings shall include a component for direct job site overhead and profit but shall not include home-office overhead or other indirect costs and components. The calculation of actual costs shall conform to the markup schedule in Article 5.12 below. Any such costs or savings shall be documented in the format and with such content and detail as the City requires. Contractor shall promptly submit such documentation and other backup as the City may require in evaluating the actual costs incurred.

5.9 ADDITIONAL CHANGE ORDER COST REQUIREMENTS

Contractor's or Subcontractor's submittals shall include the cost of materials, sales tax, and the cost of all transport. The cost of items listed shall be directly related to the Job Order Adjustment. Indirect costs not specifically related to the Job Order Adjustment shall not be considered. Contractor's or Subcontractor's Direct Labor Costs shall be limited to the hourly rate of directly involved workmen, employer contributions toward Contractor standard benefits, pensions, unemployment or social security (if any), and employer costs for paid sick and annual leave. Contractor's or Subcontractor's Overhead shall include license fees, bond premiums, supervision, wages of timekeepers and clerks, incidentals, home and field office expense, and vehicle expense directly related to the Project, and all other direct Project expenses not included in the Contractor's material, direct labor, and equipment costs.

5.9.1 The allowance for overhead and profit shall be limited to the following schedule:

1. For the Contractor, for any work performed by the Contractor's own forces, fifteen (15%) percent of the Subtotal of Costs to the Contractor.
2. For the Contractor, for any work performed by his Subcontractor, six (6%) percent of the amount due to the Subcontractor.
3. For each Subcontractor or Sub-subcontractor involved, for any work performed by their own forces, fifteen (15%) of their materials and direct labor costs.
4. For each Subcontractor, for work performed by his Sub-Subcontractor(s), six (6%) percent of the amount due to the Sub-subcontractor.

5.10 LIMITATION OF COMPENSABLE ITEMS

5.10.1 For Job Order Adjustment, the total cost or credit to the City shall be based on the following schedule:

1. Contractor's Materials Costs.
2. Contractor's Direct Labor Costs.
3. Contractor's Equipment Costs (includes owned/rented equipment).
4. Applicable Subcontractor Costs.
5. Subtotal of Costs to the Contractor.
6. Contractor's Overhead and Profit.
7. Total Cost or Credit to the City.

5.11 FIELD ORDERS

- A. The City has authority to initiate Field Orders that do not materially and adversely affect the Work, including the design, quality, performance and workmanship required by the Contract Documents. Field Orders will be made by written order and will be binding on the City and the Contractor. Contractor will carry out any written orders promptly.
- B. Field Orders will not involve an Adjustment in the Job Order Price or Job Order Times unless or until it becomes a Contract Adjustment.
- C. The Contractor may make minor changes in the Work, provided, however that the Contractor will promptly inform the City, in writing, of any changes and record the changes, if appropriate, on the Project Record Documents maintained by the Contractor.

5.12 JOB ORDER PRICE ADJUSTMENTS

- A. The increase or decrease in Job Order Price resulting from a change in the Work will be determined by one or more of the following methods:
 1. Unit prices stated in the Contract or as subsequently agreed to between the parties;
 2. A mutually agreed upon accepted, lump sum, properly itemized and supported by sufficient substantiating data to permit evaluation by the City; and
 3. Costs, fees and any other markups.
- B. If an increase or decrease cannot be agreed to as stated in Article 5.8(A) (1) through Article 5.8(A) (3) the cost of the change of the Work will be determined by

the reasonable expense and savings in the performance of the Work resulting from the change, including a reasonable overhead and profit, as may be stated in the Contract. Contractor will maintain a documented, itemized accounting evidencing the expenses and savings associated with these changes.

- C. If unit prices are stated in the Contract Documents or are later agreed to by the parties, but application of the unit prices will cause substantial inequity to the City or the Contractor because of differences in the character or quantity of the unit items as originally contemplated, the unit prices will be equitably adjusted.
- D. If the City and the Contractor disagree upon whether Contractor is entitled to be paid for any services required by the City, the amount to be paid, other disagreements over the Scope of Work, proposed changes to the Work, the time required to complete the Work, the City and Contractor will resolve the disagreements in accordance with Article 7.
 - 1. As part of the negotiation process, Contractor will furnish the City with a good faith estimate of the costs to perform the disputed services, or the additional time required in accordance with the City's interpretations.
 - 2. If the parties are unable to agree and the City expects Contractor to perform the services in accordance with the City's interpretations, Contractor will proceed to perform the disputed services, conditioned upon the City issuing a written order to the Contractor:
 - (a) directing the Contractor to proceed; and
 - (b) specifying the City's interpretation of the services that are to be performed.
- E. Emergencies. In any emergency affecting the safety of persons or property, Contractor will act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Job Order Price or Job Order Time(s) resulting from emergency work under this Article 5.8(F) will be determined as provided in this Article 5.

ARTICLE 6- PROCEDURE FOR PAYMENT

6.1 JOB ORDER PAYMENT REQUEST

- A. At the pre-construction conference prescribed in Article 1.3, Contractor will submit for the City's review and approval a Schedule of Values. The Schedule of Values will include values for all items comprising the Job Order Price and will serve as the basis for monthly progress payments made to Contractor throughout the Work.
- B. At least 5 working days before the date established for a progress payment, Contractor shall meet with the City's Representative to review the progress of the Work as it will be reflected on the Job Order Payment Request.
- C. The Job Order Payment Request will constitute Contractor's representation that the Work has been performed consistent with the Contract Documents, has progressed to the point indicated in the Job Order Payment Request, and that title

to all Work will pass to City free and clear of all claims, liens, encumbrances, and security interests upon the incorporation of the Work into the Project.

6.2 PARTIAL PAYMENTS

- A. Partial payment will be made for Job Orders with Job Order Time greater than 30 Days and may be made if the Job Order Time is less than 30 Days.
- B. The Job Order Payment Request may request payment for equipment and materials not yet incorporated into the Project if construction progress is in reasonable conformance with the approved schedule.
- C. For equipment and materials suitably stored at the Site, the equipment and materials will be protected by suitable insurance and the City will receive the equipment and materials free and clear of all liens and encumbrances.
 - 1. For materials and equipment stored off the Site, the City must approve the storage. The material and equipment must be stored within Maricopa County and be accessible for the City's inspection. Title to the materials and equipment will include applicable insurance, bonding, storage and transportation to the Site.
 - 2. All bonds and insurance required for stored materials will be in the City's name.

6.3 PAYMENT OF JOB ORDER PRICE

- A. Payments should be provided on the City format for a Pay Application which is based on the agreed upon "Schedule of Values." The City will make payment in accordance with A.R.S. §34-607. Payment will be made no later than 14 days after the Job Order Payment Request is certified and approved, but in each case less the total of payments previously made.
- B. The City will pay the Contractor all amounts properly due. If the City determines that the Contractor is not entitled to all or part of a Contractor Payment Request, it will notify the Contractor in writing within 7 days after the date the Contractor Payment Request is received by the City. The notice will indicate the specific amounts the City intends to withhold, the reasons and contractual basis for the withholding, and the specific measures the Contractor must take to rectify the City's concerns. The Contractor and the City will attempt to resolve the City's concerns. If the parties cannot resolve the concerns, the Contractor may pursue its rights under the Contract Documents, including those under Article 7.

6.4 RETENTION ON JOB ORDER PAYMENTS

In compliance with Arizona Revised Statutes §34-607, there is no retention for Job Order Contracting construction services.

6.5 FINAL PAYMENT

- A. After receipt of a final Contractor Payment Request, the City will make final

payment as required by this Article, provided that Contractor has completed all of the Work in conformance with the Contract Documents and a Final Acceptance Letter has been issued by the City.

- B. At the time of submission of its final Contractor Payment Request, Contractor will provide the following information:
 - 1. An affidavit that there are no claims, obligations or liens outstanding or unsatisfied for labor, services, material, equipment, taxes or other items performed, furnished or incurred for or in connection with the Work which *will in any way affect the City's interests; and*
 - 2. A general release executed by the Contractor waiving, upon receipt of final payment by the Contractor, all claims, except those claims previously made in writing to the City and remaining unsettled at the time of final payment.

6.6 PAYMENTS TO SUBCONTRACTORS OR SUPPLIERS

- A. Contractor will pay its Subcontractors or suppliers within 7 calendar days of receipt of each progress payment from the City. Contractor will pay for the amount of Work performed or materials supplied by each Subcontractor or supplier as accepted and approved by the City with each progress payment. No Contract between the Contractor and its Subcontractors and suppliers may materially alter the rights of any Subcontractor or supplier to receive prompt payment as provided in this Contract.
- B. If Contractor fails to make payments in accordance with these provisions, the City may take any one or more of the following actions and the Contractor agrees that the City may take these actions:
 - 1. To hold the Contractor in default under this Contract;
 - 2. Withhold future payments until proper payment has been made to Subcontractors or suppliers in accordance with these provisions;
 - 3. Reject all future offers to perform work for the City from the Contractor for a period not to exceed 1-year from the Substantial Completion date of this Project; or
 - 4. Terminate this Contract.
- C. If the Contractor's payment to a Subcontractor or supplier is in dispute, the Contractor and Subcontractor or supplier agree to submit the dispute to any one of the following dispute resolution processes within 14 calendar days from the date any party gives notice to the other:
 - 1. Binding arbitration;
 - 2. A form of alternative dispute resolution (ADR) agreeable to all parties; or
 - 3. A City of Scottsdale facilitated mediation.

When a disputed claim is resolved through ADR or otherwise, the Contractor and Subcontractor or supplier agrees to implement the resolution within 7 calendar days after the resolution date.

- D. Should the City fail or delay in exercising or enforcing any right, power, privilege, or remedy under this Section, the failure or delay will not be considered a waiver, release, or modification of the requirements of this Section or of any of the terms or provisions of this Contract.
- E. Contractor will include these prompt payment provisions in every subcontract, including procurement of materials and leases of equipment for this Contract.

6.7 RECORD KEEPING AND FINANCE CONTROLS

- A. Records of Contractor's direct personnel payroll, reimbursable expenses related to each Job Order and records of accounts between the City and Contractor shall be kept on a generally recognized accounting basis and will be available for 3 years after completion of the Project.

From the effective date of this Contract and until 3 years after the date of final payment by the City of Scottsdale to Contractor, the City, its authorized representative, or the appropriate federal or state agencies, reserve the right to audit the Contractor's records to verify the accuracy and appropriateness of all pricing data, including data used to negotiate Contract Documents and any change orders. The City of Scottsdale or its authorized representative will have access, during normal working hours, to all necessary Contractor and Subcontractor facilities, and will be provided adequate and appropriate workspace, in order to conduct audits in compliance with the provisions of this Article. The City of Scottsdale will give the Contractor or Subcontractor reasonable advance notice of intended audits.

- B. The City reserves the right to decrease Job Order Price or payments made on this Contract if, upon audit of the Contractor's records, the audit discloses the Contractor has provided false, misleading, or inaccurate cost and pricing data.
- C. The Contractor will include a similar provision in all of its contracts with Subconsultants and Subcontractors providing services under the Contract Documents to ensure the City, its authorized representative, or the appropriate federal or state agency, has access to the Subconsultants' and Subcontractors' records to verify the accuracy of cost and pricing data.
- D. The City reserves the right to decrease Job Order Price or payments made on this Contract if the above provision is not included in Subconsultants' and Subcontractors' contracts, and one or more Subconsultants or Subcontractors do not allow the City to audit their records to verify the accuracy and appropriateness of pricing data.
- E. If an audit in accordance with this Article, discloses overcharges of any nature by Contractor to the City in excess of 1% of the total contract billings, the actual cost of the City's audit will be reimbursed to the City by Contractor. Any adjustments

or payments which must be made as a result of any audit or inspection of the Contractor's invoices or records will be made within a reasonable amount of time (not to exceed 90 days) from presentation of the City's findings.

- F. This audit provision includes the right to inspect personnel records as required by Section 11.34.

ARTICLE 7- CLAIMS AND DISPUTES

7.1 REQUESTS FOR CONTRACT ADJUSTMENTS AND RELIEF

- 7.1.1** If either Contractor or the City believes that it is entitled to relief against the other Contractor for any event arising out of or related to Contract Services, that party will provide written notice to the other party of the basis for its claim for relief. The claims shall set forth in detail all known facts and circumstances supporting the claim; final costs associated with any claim upon which notice has been given must be submitted in writing to the City within thirty (30) days after notice has been received.
- 7.1.2** This notice will, if possible, be made before incurring any cost or expense and in accordance with any specific notice requirements contained in applicable sections of the Contract.
- 7.1.3** In the absence of any specific notice requirement, written notice will be given within a reasonable time, not to exceed 10 days, after the occurrence giving rise to the claim for relief or after the claiming party reasonably should have recognized the event or condition giving rise to the request, whichever is later.
- 7.1.4** This notice will include sufficient information to advise the other party of the circumstances giving rise to the claim for relief, the specific contractual adjustment or relief requested and the basis of the request. ANY NOTICE OF CLAIM NOT FILED WITH THE CITY WITHIN SUCH TIME AND IN COMPLIANCE WITH THE PRECEEDING PROVISIONS SHALL BE CONSIDERED TO HAVE BEEN WAIVED AND SHALL BE DISMISSED.
- 7.1.5** In the event Contractor seeks to make a claim for an increase in the Contract Price, as a condition precedent to any liability of the City therefore, unless emergency conditions exist, the Contractor shall strictly comply with the requirements of this section and such claim shall be made by the Contractor before proceeding to execute any work for which a claim is made. Failure to comply with this condition precedent shall constitute a waiver by the Contractor of any claims for compensation.
- 7.1.6** The Contractor must continue its performance under this contract regardless of the existence of any claims by the Contractor.
- 7.1.7** In a claim by Contractor against the City for compensation in excess of the Contract sum, any liability of the City to the Contractor shall be strictly limited and computed in accordance with the Contract documents and shall in no event include indirect costs (such as home office overheads or consequential damages of the Contractor or any estimated costs or damages).

7.2 DISPUTE AVOIDANCE AND RESOLUTION

- A. The parties are fully committed to working with each other throughout the Project and agree to communicate regularly with each other at all times so as to avoid or minimize disputes or disagreements. If disputes or disagreements do arise, the Contractor and the City each commit to resolving the disputes or disagreements in an amicable, professional and expeditious manner so as to avoid unnecessary losses, delays and disruptions to the Work.
- B. The Contractor and the City will first attempt to resolve disputes or disagreements at the field level through discussions between the Contractor's Representative and the City's Representative.
- C. If a dispute or disagreement cannot be resolved through Contractor's Representative and the City's Representative, Contractor's Senior Representative and the City's Senior Representative, upon the request of either party, will meet as soon as conveniently possible, but in no case later than 30 days after the request is made, to attempt to resolve the dispute or disagreement. Before any meetings between the Senior Representatives, the parties will exchange relevant information that will assist the parties in resolving their dispute or disagreement.
- D. The City and Contractor agree to negotiate in good faith in accordance with this Contract's procedure for the recovery of damages related to expenses incurred by the Contractor for a delay for which the City is responsible, that is unreasonable under the circumstances, and that was not within the contemplation of the parties to the Contract.

7.3 DUTY TO CONTINUE PERFORMANCE

Unless provided to the contrary in the Contract Documents, Contractor will continue to perform the Work and the City will continue to satisfy its payment obligations to the Contractor, until final resolution of any dispute or disagreement between the Contractor and the City.

7.4 REPRESENTATIVES OF THE PARTIES

A. City's Representatives

1. The City designates the individual listed below as the City's Senior Representative. This individual has the authority and responsibility for avoiding and resolving disputes under Article 7.2(C):

Dave Lipinski
City Engineer
One Civic Center – 2nd Floor
7447 East Indian School Road
Scottsdale, AZ 85251
(480) 312-2641

2. The City will designate an individual for each Job Order as the City's

Representative. This person will manage the Job Order.

B. Contractor's Representatives

1. Contractor designates the individual listed below as Contractor's Senior Representative. This individual has the authority and responsibility for avoiding and resolving disputes under Article 7.2(C):

Name: Daniel Spitz, PE, AVS
Achen-Gardner Construction
Address: 550 South 79th Street
Chandler, AZ 85226
Telephone No: 480-403-9432

2. Contractor will designate an individual for each Job Order as Contractor's Representative.

ARTICLE 8 – SUSPENSION, TERMINATION AND CANCELLATION

8.1 CITY'S RIGHT TO STOP JOB ORDER SERVICES

- A. The City may, at its discretion and without cause, order the Contractor in writing to stop and suspend any Job Order. Immediately after receiving this notice, the Contractor will discontinue advancing the Job Order. The suspension will not exceed 180 consecutive days. If the City suspends the Job Order for 181 consecutive Days or more, the suspension will be considered a termination for convenience.
- B. The Contractor may seek an adjustment of the Job Order Price or Job Order Time if its cost or time to perform the Contract Services has been adversely impacted by any suspension or stoppage of Work by the City.

8.2 TERMINATION FOR CONVENIENCE

- A. Upon receipt of written notice to the Contractor, the City has the right to terminate this Contract or abandon any portion of any Job Order for which services have not been performed by the Contractor.
 1. Contractor will estimate the value of the Work it has completed and submit its appraisal to the City for evaluation. The City will have the right to inspect the Work to appraise the Work completed.

Contractor will receive compensation for services performed to the date of the termination as stated in Article 8.2. The fee will be paid in accordance with Article 6.5(B) of this Contract and will be an amount mutually agreed upon by the Contractor and the City. If there is no mutual agreement, the final determination will be made in accordance with Article 7.

2. The Contractor will not be entitled to anticipated profit or anticipated overhead but is entitled to recover apportioned profit and overhead proportional to the amount of the Work completed. In no event will the fee

exceed that stated in Article 8.2(D) of this Contract or as amended.

3. The City will make the final payment within 60 days after Contractor has delivered the last of the partially completed items and the final fee has been agreed upon.

If the City terminates this Contract in compliance with this Article and proceeds to construct the Job Order through its employees, agents or third parties, the City's rights to use the Work product will be as stated in Article 8.3.

- B. Upon termination of construction services during any Job Order, Contractor will proceed with the following obligations:

1. Stop Work as stated in the notice;
2. Place no further subcontracts or orders;
3. Terminate all subcontracts to the extent they relate to the Work terminated;
4. Assign to the City all right, title and interest of Contractor under the subcontracts terminated, in which case the City will have the right to settle or to pay any termination settlement proposal arising out of those terminations; and
5. Take any action that may be necessary for the protection and preservation of the property related to the Contract that is in the possession of the Contractor and which the City has or may acquire an interest.
6. Comply with the requirements of Article 6.5(B)(1) and (2).

- C. Contractor shall submit complete termination inventory schedules no later than 60 days from the date of the notice of termination.

- D. The City will pay Contractor the following:

1. The direct value of its completed Work and materials supplied as of the date of termination;
2. The reasonable costs and expenses attributable to the termination;
3. The Contractor will be entitled to profit and overhead on completed Work only but will not be entitled to anticipated profit or anticipated overhead. If it appears the Contractor would have sustained a loss on the entire Work had the Job Order been completed, the Contractor will not be allowed profit and the City will reduce the settlement to reflect the indicated rate of loss;
4. The Contractor will maintain all records and documents for 3 years after final settlement. These records will be maintained and subject to auditing as required in Article 6.7; and

5. Take any action that may be necessary for the protection and preservation of the property related to the Job Order or Orders that is in the possession of the Contractor and in which the City has or may acquire an interest.

8.3 CANCELLATION FOR CAUSE

- A. The City may also cancel this Contract or any part of it with 7 days notice for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any of the terms and conditions of this Contract. Unsatisfactory performance, despite a reasonable opportunity to cure as judged by the City's Representative and failure to provide the City, upon request, with adequate assurances of future performance will all be causes allowing the City to cancel this Contract for cause. In the event of cancellation for cause, the City will not be liable to the Contractor for any amount, and the Contractor will be liable to the City for any and all damages sustained as a result of the default that caused the cancellation.

8.4 CITY'S RIGHT TO PERFORM AND CANCEL FOR CAUSE

- A. If the Contractor persistently fails to:
 1. Provide a sufficient number of skilled workers;
 2. Supply the materials required by the Contract or Job Order Documents;
 3. Comply with applicable Legal Requirements;
 4. Timely pay, without cause, Subconsultants or Subcontractors;
 5. Prosecute the Contract Services with promptness and diligence to ensure that a Job Order is completed by the Job Order Time, as the times may be adjusted; or
 6. Perform material obligations under the Contract Documents;

Then the City, in addition to any other rights and remedies provided in the Contract Documents or by law, will have the rights stated in Articles 8.2 and 8.3.

In the event the City cancels this Contract or any part of the services under any Job Order, the City will notify the Contractor in writing, and immediately upon receiving this notice, Contractor will discontinue advancing the Work under this Contract or the Job Order and proceed to close all operations of any affected Job Order or this Contract.

- B. If the City provides Contractor with a written order to provide adequate maintenance of traffic, adequate cleanup, adequate dust control or to correct deficiencies or damage resulting from abnormal weather conditions, and Contractor fails to comply in a time frame specified, the City may have the Work accomplished by other sources at Contractor's expense.
- C. Upon the occurrence of an event stated in Article 8.3(B), the City may provide written notice to Contractor that it intends to cancel the Contract unless the

problem cited is cured, or commenced to be cured, within 7 days of Contractor's receipt of notice.

1. If Contractor fails to cure, or reasonably commence to cure, the problem, then the City may give a second written notice to Contractor of its intent to cancel within an additional 7 day period.
 2. If Contractor, within this second 7 day period, fails to cure, or reasonably commence to cure the problem, then the City may declare the Contract cancelled for default by providing written notice to the Contractor of this declaration.
- D. Upon declaring the Contract cancelled in accordance with Article 8.3(B), and for the purpose of completing the Work, the City may for all Job Orders enter upon the premises and take possession of all materials, equipment, scaffolds, tools, appliances and other items, which have been purchased or provided for the performance of the Work, all of which Contractor now transfers, assigns and sets over to the City for this purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment and other items.
- E. If through any cause, Contractor fails to fulfill in a timely and proper manner its obligations under this Contract, or if Contractor violates any of the covenants, Contracts, or stipulations of this Contract, the City may withhold any payments to the Contractor for the purpose of setoff until the exact amount of damages due the City from the Contractor is determined by a court of competent jurisdiction.
- F. In the event of a cancellation, Contractor will not be entitled to receive any further payments under the Contract Documents until the Work on all Job Orders is finally completed in accordance with the Contract Documents. At that time, Contractor will only be entitled to be paid for Work performed and accepted by the City before its default.
- G. If the City's cost and expense of completing the Work exceeds the unpaid balance of a Job Order Price, then Contractor will be obligated to pay the difference to the City. These costs and expense will include not only the cost of completing the Work, but also losses, damages, costs and expense, including attorneys' fees and expenses, incurred by the City in connection with the procurement and defense of claims arising from the Contractor's default.
- H. If the City cancels this Contract for cause and the cancellation is determined to have been without legal right, the cancellation for cause will be considered to have been a termination for convenience in accordance with the provisions of Article 8.2.

ARTICLE 9 - INSURANCE AND BONDS

9.1 INSURANCE REQUIREMENTS

- A. At the same time as execution of this Contract, Contractor will furnish the City of Scottsdale a Certificate of Insurance on a standard insurance industry ACORD

form. The ACORD form will be issued by an insurance company authorized to transact business in the State of Arizona.

- B. Contractor, Subcontractors and Subconsultants must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, insurance against claims for injury to persons or damage to property, which may arise from or in connection with the performance of the Work by the Contractor, his agents, representatives, employees, or Subcontractors.
- C. The insurance requirements are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract.
- D. The City in no way warrants that the minimum limits contained in this Contract are sufficient to protect the Contractor from liabilities that might arise out of the performance of the Contract Services under this Contract by the Contractor, his agents, representatives, employees, Subcontractors or Subconsultants and the Contractor is free to purchase any additional insurance as may be determined necessary. The City will not pay for higher limits, but if the Contractor pays for insurance with higher limits, the Contractor will name the City as an additional insured on any additional insurance.
- E. Claims Made. In the event any insurance policies required by this Contract are written on a "claims made" basis, coverage shall continue uninterrupted throughout the term of this Contract by keeping coverage in force using the effective date of this Contract as the retroactive date on all "claims made" policies. The retroactive date for exclusion of claims must be on or before the effective date of this Contract and can never be after the effective date of this Contract. Upon completion or termination of this Contract, the "claims made" coverage shall be extended for an additional three (3) years using the original retroactive date, either through purchasing an extended reporting option; or by continued renewal of the original insurance policies. Submission of annual Certificates of Insurance, citing the applicable coverages and provisions specified herein, shall continue for three (3) years past the completion or termination of this Contract.
- F. Self-Insured Retentions. Any self-insured retentions and deductibles must be declared to and approved by the City. If not approved, the City may require that the insurer reduce or eliminate any self-insured retentions with respect to the City, its officers, officials, agents, employees, and volunteers.

9.2 MINIMUM SCOPE AND LIMITS OF INSURANCE

The Contractor must provide coverage with limits of liability not less than those stated below.

A. Commercial General Liability-Occurrence Form

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

Fire Damage (Any one fire)	\$100,000
Medical Expenses (Any one person)	OPTIONAL

B. Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles

Combined Single Limit Per Accident For Bodily Injury and Property Damage	\$1,000,000
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C. Workers Compensation and Employers Liability

Workers Compensation	<i>Statutory</i>
Employers Liability:	
Each Accident	\$500,000
Disease - Each Employee	\$500,000
Disease - Policy Limit	\$1,000,000

D. Coverage Terms and Required Endorsements

1. The City of Scottsdale, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, the Contractor including the City's general supervision of the Contractor; products and completed operations of the Contractor; and automobiles owned, leased, hired, or borrowed by the Contractor.
2. The City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Contract.
3. The Contractor's insurance coverage must be primary insurance with respect to the City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by the City, its officers, officials, agents, and employees will be in excess of the coverage provided by the Contractor and must not contribute to it.
4. The Contractor's insurance must apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Coverage provided by the Contractor must not be limited to the liability assumed under the indemnification provisions of this Contract.
6. All policies must contain a waiver of subrogation against the City, its officers, officials, agents, and employees, for losses arising from Work performed by the Contractor for the City.
7. Workers' Compensation and Employers Liability Coverage: The insurer must agree to waive all rights of subrogation against the City, its officers, officials, agents, employees, and volunteers for losses arising from Work performed by the Contractor for the City.
8. If the Contractor receives notice that any of the required policies of

insurance are materially reduced or cancelled, it will be Contractor's responsibility to provide prompt notice to the contract administrator of same to the City, unless such coverage is immediately replaced with similar policies.

E. Builders Risk Insurance (Course of Construction)

To be provided if determined by the City as necessary with each Job Order.

The Contractor bears all responsibility for loss to all Work being performed and to buildings under construction. Unless waived in writing by the City of Scottsdale, the Contractor will purchase and maintain in force Builders Risk-Installation insurance on the entire Work until completed and accepted by the City. This insurance will be Special Causes of Loss or Open Perils policy form, for the completed value, at replacement cost equal to each Job Order contract price and all subsequent modifications. The policy shall be endorsed to cover flood losses if the project is located in a High Hazard or Moderate Hazard Flood Zones. The Contractor's Builders Risk-Installation insurance will be primary and not contributory; and waive all rights of subrogation against the City of Scottsdale, its officers, officials and employees.

This Builders Risk-Installation insurance must name the City of Scottsdale, the Contractor and all tiers of Subcontractors as respects their insurable interest at the date of loss. It must contain a provision that subject insurance will not be canceled or materially altered without at least 30 days advance notice to the City. The Contractor is also required to give the City thirty (30) days advance written notice of the coverage termination for each project. The City will also be named as a Loss Payee under Builders Risk-Installation coverage.

This Builders Risk-Installation insurance must cover the entire Work including reasonable compensation for architects and Contractor's services and expenses and other "soft costs" made necessary by an insured loss. Builders Risk-Installation insurance must provide coverage from the time any covered property comes under the Contractor's control and or responsibility, and continue without interruption during course of construction, renovation and or installation, including any time during which any project property or equipment is in transit, off site, or while on site for future use or installation. Insured property must include, but not be limited to, scaffolding, false work, and temporary buildings at the site. This insurance must also cover the cost of removing debris, including demolition as may be legally required by operation of any law, ordinance, regulation or code

The Contractor must also purchase and maintain Boiler and Machinery insurance with the same requirements as Builders Risk-Installation insurance stated above if the Work to be performed involves any exposures or insurable property normally covered under a Boiler and Machinery insurance policy or made necessary as required by law and or testing requirements in the performance of this Contract.

The Contractor will be responsible for any and all deductibles under these policies and the Contractor waives all rights of recovery and subrogation against the City under the Contractor-provided Builders Risk-Installation insurance described in this Article.

The Builders' Risk insurance must be endorsed so that the insurance will not be canceled or lapse because of any partial use or occupancy by the City. Builders' Risk Insurance must be maintained until whichever of the following first occurs: (i) final payment has been made; or (ii) until no person or entity, other than the City, has an insurable interest in the property required to be covered.

By signing this Contract, all rights of subrogation are waived against the City of Scottsdale, its officers, officials, agents and employees.

9.3 OTHER INSURANCE REQUIREMENTS

The policies are to contain, or be endorsed to contain, the following provisions:

- A. Contractors Professional Limits of Liability: Contractor must carry limits of \$1,000,000 each Project and \$2,000,000 in the Aggregate under a stand-alone policy or included by endorsement under the Commercial General Liability policy. The Contractor, its successors and or assigns, is required to maintain this Professional Liability insurance as specified in this Contract for a minimum period of 3 years following completion and acceptance of the Work. Certificates of Insurance citing that applicable coverage is in force and contains the provisions required by this Contract must be submitted for the 3-year period.
 - 1. Contractor's insurance coverage must be primary insurance with respect to the City, its officers, officials, agents, and employees. Insurance or self-insurance maintained by the City, its officers, officials, agents, and employees must be in excess of the Contractor's insurance and will not contribute to it.
 - 2. Contractor's insurance must apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability. The coverage provided by the Contractor and its Subcontractors must not be limited to the liability assumed under the indemnification provisions of this Contract.
 - 3. The policies must contain a waiver of subrogation against the City, its officers, officials, agents, and employees for losses arising from Work performed for the City.
- B. Contractor, its successors and assigns, is required to maintain Commercial General Liability insurance as specified in this Contract for a minimum period of 3 years following completion and acceptance of the Work. The Contractor must submit a Certificate of Insurance evidencing the Commercial General Liability insurance during this 3 year period containing all the insurance requirements including naming the City of Scottsdale, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.

9.4 SUBCONSULTANT'S AND SUBCONTRACTOR'S INSURANCE

Unless the Contractor's Subconsultants and Subcontractors can provide the same level of coverage as detailed in Article 9.2 and name the City and the Contractor as Additional

Insureds, the Contractor's certificates must include all Subcontractors and Subconsultants as insureds under its policies or the Contractor must maintain separate certificates and endorsements for each Subcontractor and Subconsultant. All coverages for Subcontractors and Subconsultants must be in the amounts shown in Article 9.2. Certificates must contain a provision that the insurance will not be canceled or materially altered without at least 30 days advance notice to the City. The City must also be named as a Loss Payee under the Builders Risk-Installation coverage.

9.5 NOTICE OF CANCELLATION

If the Contractor receives notice that any of the required policies of insurance are materially reduced or cancelled, it will be Contractor's responsibility to provide prompt notice to the contract administrator of same to the City, unless such coverage is immediately replaced with similar policies. Each insurance policy required by the insurance provisions of this Contract must provide the required coverage and must not be suspended, voided, canceled by either party, reduced in coverage or in limits until 30 days written notice has first been given, by certified mail, return receipt requested to:

Melanie Gibson
Capital Project Management
7447 E. Indian School Road, Suite 205
Scottsdale, Arizona 85251

Daniel Spitz, PE, AVS
Achen-Gardner Construction
Address: 550 South 79th Street
Chandler, AZ 85226

9.6 ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers duly licensed or approved to conduct business in the State of Arizona and with an A. M. Best rating of no less than B++6. The City in no way warrants that the above required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency. Failure to maintain insurance as required may result in termination of this Contract at the City's option.

9.7 VERIFICATION OF COVERAGE

- A. Contractor must furnish the City Certificates of Insurance (ACORD form or equivalent approved by the City) and with original endorsements effecting coverage as required by this Contract. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.
- B. All certificates and endorsements are to be received and approved by the City before Contract Services commence except for Builders Risk Insurance, which will be received and approved as provided in Article 9.2(E). Each insurance policy required by this Contract must be in effect at or before the earlier of commencement of Contract Services under the Contract Documents or the signing of this Contract except for Builders Risk Insurance which must be in effect before commencement of the Work and remain in effect for the duration of the Project.

Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of contract.

- C. All Certificates of Insurance required by this Contract must be sent directly to the City of Scottsdale, Capital Project Management Office. **The project number and project description must be included on the Certificates of Insurance.** The City reserves the right to require complete, certified copies of all insurance policies required by this Contract, at any time. Failure to provide a Certificate of Insurance with the appropriate verbiage will result in rejection of the Contractor's Certificate and delay in contract execution.

Additional Certificates of Insurance submitted without referencing a Contract number will be subject to rejection and returned or discarded.

9.8 APPROVAL

Any modification or variation from the insurance requirements in this Contract must be approved by the Risk Management Division, whose decision is final. This action does not require a formal Contract Modification, but may be made by administrative action.

9.9 BONDS AND OTHER PERFORMANCE SECURITY

- A. Before execution of each individual Job Order, Contractor must provide a performance bond and a payment bond for all construction services, each in an amount equal to the full amount of the agreed upon cost for that Job Order. Contractor may, at its own option, provide Payment and Performance Bonds for the entire Job Order Contract amount, but there shall be no obligation for the City to reimburse the Contractor for bond costs incurred, except on an actual cost basis as each individual Job Order is issued. Bonds must be submitted in accordance with Title 34, Chapter 6 of the Arizona Revised Statutes and must be in substantially the same form as Exhibits A and B, attached to this Contract.
- B. Each bond must be executed by a surety company or companies holding a Certificate of Authority to transact surety business in the State of Arizona, issued by the Director of the Arizona Department of Insurance. A copy of the Certificate of Authority must accompany the bonds. The Certificate must have been issued or updated within 2 years before the execution of this Contract.
- C. The bonds must be made payable and acceptable to the City of Scottsdale.
- D. The bonds must be written or countersigned by an authorized representative of the surety and the bonds must have attached a certified copy of the Power of Attorney of the signing official.
 - 1. If one Power of Attorney is submitted, it must be for twice the total Job Order Price.
 - 2. If two Powers of Attorney are submitted, each must be for the total Job Order Price. Personal or individual bonds are not acceptable.
 - 3. Upon the request of any person or entity appearing to be a potential

beneficiary of bonds covering payment of obligations arising under the Contract Documents, the Contractor must promptly furnish a copy of the bonds or must permit a copy to be made.

- E. All bonds submitted for this Project must be provided by a company which has been rated "A or better" by the A.M. Best Company.

ARTICLE 10 - INDEMNIFICATION

10.1 CONTRACTOR'S GENERAL INDEMNIFICATION

Contractor's General Indemnification. To the fullest extent permitted by law, Contractor, its successors, assigns and guarantors, must defend, indemnify and hold harmless the City of Scottsdale, its agents, representatives, officers, directors, officials and employees from and against all allegations, demands, proceedings, suits, actions, claims, damages, losses, expenses, including but not limited to, reasonable attorney fees, court costs, and the cost of appellate proceedings, and all claim adjusting and handling expense, investigation and litigation, for bodily injury or personal injury (including death), or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, related to, arising from or out of, or resulting from any acts, omissions, negligence, recklessness, or intentional wrongful conduct to the extent caused by the Contractor or any of its owners, officers, directors, agents or employees performing Work or Services under this Contract, including but not limited to, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable and any injury or damages by any of the Contractor employees. This indemnity includes any claim or amount arising out of, or recovered under, the Worker's Compensation Law or arising out of the failure of the Contractor to conform to any federal, state, or local law, statute, ordinance, rule, regulation, or court decree. It is the specific intention of the parties that the City shall, in all instances, except for Claims arising solely from the negligent or willful acts or omissions of the City, be indemnified by the Contractor from and against any and all claims. It is agreed that the Contractor will be responsible for primary investigation, defense, and judgment costs where this indemnification is applicable. In consideration of the award of this Contract, the Contractor agrees to waive all rights of subrogation against the City, its officers, agents, representatives, directors, officials, and employees for losses arising from the work performed by the Architect for the City.

Insurance provisions in this Contract are separate and independent from the indemnity provisions of this Article and will not be construed in any way to limit the scope and magnitude of the indemnity provisions. The indemnity provisions of this paragraph will not be construed in any way to limit the scope and magnitude and applicability of the insurance provisions.

10.2 INTELLECTUAL PROPERTY

- A. Contractor must pay all royalties and license fees associated with its performance of services.
- B. Contractor must defend any action or proceeding brought against the City based on any claim that the Work, or any part of the Work, or the operation or use of the Work or any part of it, constitutes infringement of any United States patent or

copyright, now or subsequently issued. The City will give prompt written notice to the Contractor of any action or proceeding and will reasonably provide authority, information and assistance in the defense of the action. The Contractor will indemnify and hold harmless the City from and against all damages, expenses, losses, royalties, profits and costs, including but not limited to attorneys' fees and expenses awarded against the City or the Contractor in any action or proceeding. The Contractor agrees to keep the City informed of all developments in the defense of these actions. The City may be represented by; and actively participate through its own counsel in any suit or proceedings if it so desires.

- C. If the City is enjoined from the operation or use of the Work, or any part of the Work, as the result of any patent or copyright suit, claim, or proceeding, the Contractor will at its sole expense take reasonable steps to procure the right to operate or use the Work. If the Contractor cannot procure this right within a reasonable time, the Contractor will promptly, at the Contractor's option and at the Contractor's expense, (i) modify the Work so as to avoid infringement of any patent or copyright or (ii) replace the Work with Work that does not infringe or violate any patent or copyright.
- D. Articles 10.2(B) and 10.2(C) will not be applicable to any suit, claim or proceeding based on infringement or violation of a patent or copyright:
 - 1. Relating solely to a particular process or product of a particular manufacturer specified by the City and not offered or recommended by the Contractor to the City; or
 - 2. Arising from modifications to the Work by the City or its agents after acceptance of the Work.
- E. The obligations stated in this Article 10.3 will constitute the sole Contract between the parties relating to liability for infringement or violation of any patent or copyright.

ARTICLE 11 – GENERAL PROVISIONS

11.0 MARSHALING AREA

Contractor is advised to contact the City of Scottsdale Development Services to determine the requirements for obtaining a permit for marshaling areas it proposes to use. Marshaling areas must be fenced. Contractor will obtain written approval from the property owner for marshaling area use. This approval must contain any requirements, which are a condition of this approval. Marshaling yard requirements according to M.A.G. Subsection 107.6.1 and the City of Scottsdale Supplemental Specifications will apply.

11.1 CONTRACT DOCUMENTS

- A. Contract Documents are as defined in Article 12.
- B. The Contract Documents form the entire Contract between the City and the Contractor. No oral representations or other Contracts have been made by the parties except as specifically stated in the Contract Documents.

- C. In the event of any inconsistency, conflict, or ambiguity between or among the Contract Documents, the Contract Documents will take precedence in the order in which they are listed in the definition of Contract Documents in Article 12. As to drawings and plans, given dimensions will take precedence over scaled measurements, and large scale plans over small-scale plans. Contract specifications will take precedence over contract plans.
- D. The Contract Documents are intended to permit the parties to complete the Work and all obligations required by the Contract Documents within the times and prices agreed upon for each Job Order. The Contract Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards.
- E. This Contract, the Plans, Standard Specifications and Details, Special Provisions, Performance Bond, Payment Bond, Certificates of Insurance, and Job Order Adjustments (if any) are by reference made a part of this Contract to the same extent as if set forth in full.
- F. Work Product
 - 1. All Work products (electronically or manually generated) including but not limited to: cost estimates, studies, design analyses, original mylar drawings, Computer Aided Drafting and Design (CADD) file diskettes, and other related documents which are prepared or procured in the performance of this Contract (collectively referred to as documents) are to be and remain the property of the City and are to be delivered to the City before the final payment is made to the Contractor. In the event these documents are altered, modified or adapted without the written consent of the Contractor or the Subconsultants, which consent the Contractor or the Subconsultants will not unreasonably withhold, the City agrees to hold the Contractor and the Subconsultants harmless to the extent permitted by law from the legal liability arising out of the City's alteration, modification or adoption of the documents.
 - 2. The copyrights, patents, trade secrets or other intellectual property rights associated with the ideas, concepts, techniques, inventions, processes or works of authorship developed, created by the Contractor, its Subconsultants or personnel, during the course of performing this Contract or arising out of the Project will belong to the Contractor.

11.2 MODIFICATIONS

The Contract Documents may not be changed, altered, or amended in any way except in writing, signed by a duly authorized representative of each party.

11.3 TIME IS OF THE ESSENCE

The City and Contractor mutually agree that time is of the essence with respect to the dates and times stated in the Contract Documents.

11.4 MUTUAL OBLIGATIONS

The City and Contractor commit at all times to cooperate fully with each other, and proceed on the basis of trust and good faith, to permit each party to realize the benefits afforded under the Contract Documents.

11.5 COOPERATION AND FURTHER DOCUMENTATION

The Contractor agrees to provide the City any other duly executed documents as will be reasonably requested by the City to implement the intent of the Contract Documents.

11.6 ASSIGNMENT

Neither Contractor nor the City will, without the written consent of the other, assign, transfer or sublet any portion of this Contract or part of the Work or the obligations required by the Contract Documents.

11.7 FORCE MAJEURE

Neither party will be responsible for delays or failures in performance resulting from acts beyond their control. These acts include, but are not limited to, acts of God, riots, acts of war, acts of terrorism, epidemics, governmental regulations imposed after the fact, fire, communication line failures, or power failures.

11.8 FUNDS APPROPRIATION

If the City Council does not appropriate funds to continue this Contract and pay for charges, the City may terminate this Contract at the end of the current fiscal period. The City agrees to give written notice to the Contractor at least 30 days before the end of its current fiscal period and will pay the Contractor for all approved charges incurred through the end of the period.

11.9 CONSTRUCTION METHODS

If the City provides the Contractor with a written order to provide adequate maintenance of traffic, clean-up, dust control or to correct deficiencies or damage resulting from abnormal weather conditions, and the Contractor fails to comply in the time frame specified, the City may have Work accomplished by other sources at the Contractor's expense.

11.10 UTILITY RELOCATIONS FOR CONSTRUCTION METHODS

If any utility is relocated or rebuilt to accommodate Contractor's construction methods and available equipment, the expense will be borne by Contractor and will be replaced to the original location before completion of the Job Order at the request of the City's Project Coordinator at the Contractor's sole expense.

11.11 DAMAGED UTILITIES DURING CONSTRUCTION

Any utilities damaged during construction will be replaced at the Contractor's expense

as per the requirements of the M.A.G. Standard Specifications.

11.12 SUCCESSORSHIP

The Contractor and City intend that the provisions of the Contract Documents are binding upon the parties, their employees, agents, heirs, successors and assigns.

11.13 CONFLICT IN LANGUAGE

All services performed will conform to all applicable City of Scottsdale codes, ordinances and requirements as outlined in the Contract Documents. If there is a conflict in interpretation between provisions in this Contract and those in exhibits, the provisions in this Contract will prevail.

11.14 THIRD PARTY BENEFICIARY

Nothing under the Contract Documents will be construed to give any rights or benefits in the Contract Documents to anyone other than the City and the Contractor, and all duties and responsibilities undertaken in accordance with the Contract Documents will be for the sole and exclusive benefit of the City and the Contractor and not for the benefit of any other party.

11.15 GOVERNING LAW

The Contract and all Contract Documents will be considered to be made under, and will be construed in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions. Any action to enforce any provision of this Contract or to obtain any remedy with respect to this Contract will be brought in the Superior Court, Maricopa County, Arizona. Such action must be filed, tried and remain in this Court for any and all proceedings. For this purpose, each party expressly and irrevocably consents to the jurisdiction and venue of this Court, and Contractor hereby waives its right to have such action removed to Federal District Court.

11.16 SEVERABILITY

If any provision of the Contract Documents or the application to any person or circumstance is invalid, illegal or unenforceable to any extent, the remainder of the Contract Documents and the application of the Contract will not be affected and will be enforceable to the fullest extent permitted by law. In accordance with the provisions of ARS § 41-194.01, should the Attorney General give notice to the City that any provisions of the Contract violates state law or the Arizona Constitution, or that it may violate a state statute or the Arizona Constitution, and the Attorney General submits the offending provision to the Arizona Supreme Court, the offending provision(s) shall be immediately severed and struck from the Contract and the City and the Contractor shall, within 10 days after such notice, negotiate in good faith to resolve any issues related to the severed provision(s).

11.17 LEGAL REQUIREMENTS

Contractor will perform all Contract Services in accordance with all Legal Requirements and will provide all notices applicable to the Contract Services as required by the Legal

Requirements.

11.18 INDEPENDENT CONTRACTOR

Contractor is and will be an independent contractor. Any provisions in the Contract Documents that may appear to give the City the right to direct the Contractor as to the details of accomplishing the Work or to exercise a measure of control over the Work means that the Contractor will follow the wishes of the City as to the results of the Work only. These results will comply with all applicable laws and ordinances.

11.19 CITY'S RIGHT OF CANCELLATION

All parties to this Contract acknowledge that this Contract is subject to cancellation by the City of Scottsdale in accordance with the provisions of Section 38-511, Arizona Revised Statutes.

11.20 SURVIVAL

All warranties, representations and indemnifications by the Contractor will survive the completion or termination of this Contract.

11.21 COVENANT AGAINST CONTINGENT FEES

Contractor warrants that no person has been employed or retained to solicit or secure this Contract upon any Contract or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the City Council, or any employee of the City of Scottsdale has any interest, financially, or otherwise, in the firm. For breach or violation of this warrant, the City of Scottsdale will have the right to annul this Contract without liability, or at its discretion to deduct from the Contract Price or consideration, the full amount of any commission, percentage, brokerage, or contingent fee.

11.22 NO WAIVER

The failure of either party to enforce any of the provisions of the Contract Documents or to require performance of the other party of any of its provisions will not be construed to be a waiver of those provisions, nor will it affect the validity of the Contract Documents or any part of the Contract Documents, or the right of either party to enforce each and every provision.

11.23 HEADINGS

The headings used in this Contract, or any other Contract Documents, are for ease of reference only and will not in any way be construed to limit or alter the meaning of any provision.

11.24 COOPERATIVE USE OF CONTRACT

In addition to the City of Scottsdale, this Contract may be extended for use by other municipalities, government agencies, and governing bodies, including the Arizona Board of Regents, and political subdivisions of this State. Any such usage by other entities must be in accord with the ordinances, charter, and/or rules and regulations of the

respective entity and the approval of the Contractor.

11.25 NOTICE

Whenever the Contract Documents require that notice be provided to the other party, notice will be considered to have been validly given (i) if delivered in person to the individual intended to receive the notice, (ii) 3 days after the date of the postmark of deposit by first class United States mail, registered or certified mail, postage prepaid to the address indicated below. Notice by electronic mail or facsimile will not be considered notice.

To City:	Dave Lipinski City Engineer 7447 E. Indian School Road, Suite 205 Scottsdale, Arizona 85251
To JOC Contractor:	Daniel Spitz, PE, AVS Achen-Gardner Construction 550 South 79th Street Chandler, AZ 85226

11.26 EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this Contract the Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and the rules, regulations and relevant orders of the Federal government's Affirmative Action guidelines to ensure that employees or applicants applying for employment will not be discriminated against because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will include the terms of this provision in all contracts and subcontracts for Work performed under this Contract, including supervision and oversight. The JOC will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. 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 JOC agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.

The JOC will, in all solicitations or advertisements for employees placed by or on behalf of the JOC, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

11.26.1 No Preferential Treatment or Discrimination: In accordance with the provisions of Article II, Section 36 of the Arizona Constitution, the City will not grant preferential treatment to or discriminate against any individual or group on the basis of race, sex, color, ethnicity or national origin.

11.27 ADDITIONAL CITY RIGHTS REGARDING SECURITY INQUIRIES

In addition to the foregoing, the City reserves the right to: (1) have an employee/prospective employee of the Contractor be required to provide fingerprints and execute any other documentation as may be necessary to obtain criminal justice information pursuant to A.R.S. § 41-1750(G)(4); (2) act on newly acquired information whether or not that information should have been previously discovered; (3) unilaterally change its standards and criteria relative to the acceptability of the Contractor's employees or prospective employees; and, (4) object, at any time and for any reason, to an employee of the Contractor performing Work (including supervision and oversight) under this Contract.

- A. Provisions Applicable to all Contractor Contracts and Subcontracts. The Contractor will include the terms of this provision for employee background and security checks and screening in all contracts and subcontracts for Work performed under this Contract, including supervision and oversight.
- B. Materiality of Security Inquiry Provisions. The Security Inquiry provisions of this Contract, as stated above, are material to the City's entry into this Contract and any breach by the Contractor may, at the City's sole option and unfettered discretion, be considered to be a breach of contract of sufficient magnitude to terminate this Contract. Termination will subject the Contractor to liability for its breach of contract.

11.28 HAZARDOUS MATERIALS

- A. Hazardous Materials. Upon discovery of hazardous materials Contractor will comply with all applicable laws/ordinances and regulations and take all appropriate health and safety precautions.
- B. Unless included in the Work, if the Contractor encounters onsite, or as material to be incorporated in the Work, any material which it reasonably believes to contain asbestos, polychlorinated biphenyl (PCB), or other hazardous substances or materials regulated by public health laws, it will immediately stop work and report the condition to the City.
- C. If the material is found to contain asbestos, PCB or other hazardous substances or materials regulated by public health laws, Contractor will not resume work in the affected area until the material has been abated or rendered harmless. Contractor and the City may agree, in writing, to continue work in non-affected areas onsite.
- D. An extension of Contract Time may be granted in accordance with Article 5.
- E. Contractor will comply with all applicable laws/ordinances and regulations and take all appropriate health and safety precautions upon discovery.
- F. Despite the provisions of this Article 11.27, the City is not responsible for Hazardous Conditions introduced to the Site by Contractor, Subcontractors or anyone for whose acts they may be liable. Contractor will indemnify, defend and hold harmless the City and the City's officers, directors, employees and agents from and against all claims, losses, damages, liabilities and expenses, including

attorneys' fees and expenses, arising out of or resulting from those Hazardous Conditions introduced to the Site by the Contractor, Subcontractors or anyone for whose acts they may be liable.

11.29 TRAFFIC CONTROL

- A. Complete street closures will not be permitted unless specified in the Special Provisions or approved by the City. The timing and sequence of street closures will be approved by the Traffic Engineering Director (or designee) at least 14 days before the closure. This approval is necessary to provide coordination with other roadway projects and special events.
- B. Adequate barricades and lighted warning signs must be installed and maintained by the Job Order Contactor throughout the duration of the Project. All traffic control must be in accordance with the City of Scottsdale Traffic Control Manual or as required by the approved barricade plan unless otherwise specified in the Special Provisions.
- C. Contractor will submit a construction schedule and a barricade plan to the City Traffic Engineering Director (or designee) for approval or modification at least 72 hours before construction is initiated, and must wait to commence construction until the plan is signed as accepted by the City Traffic Engineering Director (or designee).
- D. Contractor will comply with all provisions of the City of Scottsdale Traffic Barricade Manual and any other traffic control provisions as may be provided in the technical specifications or in the approved barricade plan.

11.30 MATERIAL SOURCE

No material source has been designated by the City for use under this Contract. MAG Specification, Section 106 will apply as will ADOT Standard Specifications 1982, Section 106.1, 106.2, 106.7 & 106.8, which outline controls and Section 1001-1, -2, & -4 concerning approval of Contractor-Furnished Source and supplemental Contracts in regards to environmental analysis and the liability for materials testing costs.

Contractor and Subcontractor furnished material sources situated in the 100-year flood plain of any stream or watercourse will not be allowed if located within 1.0 mile upstream and 2.0 miles downstream of any highway structure or surfaced roadway crossing.

A Contractor and Subcontractor-furnished source will be defined as a material source, which is neither an A.D.O.T. furnished source nor a commercial source, as defined in this Contract.

A commercial source will be defined as a material source in which the owner or producer has been for at least 1-year regularly engaged during regular business hours on a regular basis in the processing and selling of sand, rock, ready mixed Portland cement concrete, asphaltic concrete and other similar products normally produced and sold to all parties. The company must have an Arizona retail sales tax license.

The location of any new material source or existing non-commercial material source

proposed for use under this Contract must be reviewed by the appropriate agency having flood plain management jurisdiction over the area of proposed source location. The Contractor and Subcontractor will obtain a letter from the agency addressed to the Contract Administrator certifying that the proposed source location conforms to the required conditions and the applicable Standard Specifications. The Contractor will familiarize himself with the nature and extent of the Contract Documents, work to be performed, all local conditions, and federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.

11.31 FAMILIARIZATION WITH APPLICABLE LAWS

Contractor will familiarize himself with the nature and extent of the Contract Documents, work to be performed, all local conditions, and federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.

11.32 NATIVE PLANTS

Contractor will take whatever steps, procedures or means necessary to remove, move, displace and save all native plants within the contract work area in accordance with the City of Scottsdale's Ordinance No. 1438, Native Plants, and all applicable state and county statutes, ordinances, codes and other policy requirements and recognized methods, procedures, techniques and equipment for protection, salvage, and handling of all plants to be moved from the construction area. This is not a pay item unless specified upon the Schedule of Bid Items.

11.33 ENDANGERED HARDWOODS

Any construction, building addition or alteration project which is financed by monies of this state or its political subdivisions will not use endangered tropical hardwood unless an exemption is granted by the Director of the State of Arizona, Department of Administration.

11.34 HOURS OF WORK

- A. All building construction and associated work will be restricted to the applicable summer or winter hours. Construction activity will include any work requiring the use of manually operated or power assisted tools or equipment and vehicles used to excavate, erect or deliver materials associated with construction. Summer hours begin April 1 and end on October 31. No work may begin before 6:00 a.m. or continue after 7:00 p.m., Monday through Friday. No work will begin on Saturday or Sunday before 7:00 a.m. or continue after 7:00 p.m. Sunday work may be conducted only if the Contractor demonstrates, in writing to the building official, justifiable cause for the Sunday work.
- B. Winter hours begin November 1 and end on March 31. No work will begin before 7:00 a.m. or continue after 5:00 p.m., Monday through Friday. No work may begin on Saturday or Sunday before 8:00 a.m. or continue after 5:00 p.m. Sunday work may be conducted only if the Contractor demonstrates, in writing to the building official, justifiable cause for the Sunday work.

- C. The City may establish other times of work as necessary based on the geographical location of the jobsite in relation to surrounding occupancies, buildings and structures.
- D. Contractor must submit a written request to the Building Official for a variance from the required work hours at least 7 days before the date for which the variance is desired. Variances will not be granted for more than 30 days at a time. A new application must be made for each additional variance. The Contractor must notify adjacent property owners of the intended work and the duration of the requested variance. Proof of notification must be presented to the building official before the variance can be granted.
 - 1. The application for the variance must demonstrate justifiable cause why the work must be done outside the prescribed time period (e.g. pouring concrete during "summer hours"). A variance will not be granted based solely on convenience or for work that can be completed during daytime construction hours.
 - 2. The application for a variance must state the construction permit number, the address of the work, type of work, time period of the work, and the duration of the variance.

11.35 COMPLIANCE WITH FEDERAL LAWS

The 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 Contractor agrees to comply with these laws in performing this Contract and to permit the City to verify compliance. The Contractor will also comply with A.R.S. §34-301, "Employment of Aliens on Public Works Prohibited," and A.R.S. §34-302, "Residence Requirements for Employees," as amended. The Contractor will include the terms of this provision in all contracts and subcontracts for Work performed under this Contract, including supervision and oversight.

Under the provisions of A.R.S. §41-4401, the Contractor warrants to the City that the Contractor and all its Subcontractors will comply with all Federal Immigration laws and regulations that relate to their employees and that the Contractor and all its Subcontractors now comply with the E-Verify Program under A.R.S. §23-214(A).

A breach of this warranty by Contractor or any of its Subcontractors will be considered a material breach of this Contract and may subject Contractor or Subcontractor to penalties up to and including termination of this Contract or any subcontract.

The City retains the legal right to inspect the papers of any employee of the Contractor or any Subcontractor who works on this Contract to ensure that the Contractor or any Subcontractor is complying with the warranty given above.

The City may conduct random verification of the employment records of the Contractor and any of its Subcontractors to ensure compliance with this warranty. The Contractor agrees to indemnify, defend and hold the City harmless for, from and against all losses and liabilities arising from any and all violations of these statutes.

The City will not consider Contractor or any of its Subcontractors in material breach of this Contract if Contractor and its Subcontractors establish that they have complied with the employment verification provisions prescribed by 8 USCA §1324(a) and (b) of the Federal Immigration and Nationality Act and the E-Verify requirements prescribed by A.R.S. §23-214(A). The "E-Verify Program" means the employment verification pilot program as jointly administered by the United States Department of Homeland Security and the Social Security Administration or any of its successor programs.

The provisions of this Article must be included in any contract 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. The Contractor will take appropriate steps to assure that all Subcontractors comply with the requirements of the E-Verify Program. The Contractor's failure to assure compliance by all its Subcontractors with the E-Verify Program may be considered a material breach of this Contract by the City.

A. Compliance with Americans with Disabilities Act

Contractor acknowledges that, in accordance with the Americans with Disabilities Act (ADA), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. Contractor will provide the services specified in this Contract in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. Contractor agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under this Agreement and further agrees that any violation of this prohibition on the part of Contractor, its employees, agents or assigns will constitute a material breach of this Contract.

11.36 DATA CONFIDENTIALITY

- A. As used in this Contract, data means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by or obtained by the Contractor in the performance of this Contract.
- B. All data, including originals, images, and reproductions, prepared by, obtained by, or transmitted to the Contractor in connection with Contractor's performance of this Contract is confidential and proprietary information belonging to the City.
- C. Contractor will not divulge data to any third party without first obtaining the written consent of the City. Contractor will not use the data for any purposes except to perform the services required under this Contract. These prohibitions will not apply to the following data provided Contractor has first given the required notice to the City:

1. Data, which was known to Contractor before its performance under this

Contract unless the data was acquired in connection with the Work performed for the City;

2. Data which was acquired by Contractor in its performance under this Contract and which was disclosed to Contractor by a third party, who to the best of Contractor's knowledge and belief, had the legal right to make disclosures and Contractor is not otherwise required to hold the data in confidence; or
 3. Data, which is required to be disclosed by virtue of law, regulation, or court order to which Contractor is subject.
- D. In the event that Contractor is required or requested to disclose data to a third party, or any other information to which Contractor became privy as a result of any other contract with the City, Contractor will first notify the City as required in this Article of the request or demand for the data. Contractor will give the City sufficient facts so that the City can be given an opportunity to first give its consent or take any action the City may consider appropriate to protect the data or other information from disclosure.
- E. Unless prohibited by law, within 10 days after completion of services for a third party on real or personal property owned or leased by the City, Contractor will promptly deliver, as stated in this Article, a copy of all data to the City. All data will continue to be subject to the confidentiality requirements of this Contract.
- F. Contractor assumes all liability for maintaining the confidentiality of the data in its possession and agrees to compensate the City if any of the provisions of this Article are violated by Contractor, its employees, agents or Subconsultants. Solely for the purposes of seeking injunctive relief, a breach of this Article shall be considered to cause irreparable harm that justifies injunctive relief in court.

11.37 CONFLICT OF INTEREST

- A. To evaluate and avoid potential conflicts of interest, Contractor will provide written notice to the City, as stated in this Article, of any work or services performed by Contractor for third parties that may involve or be associated with any real property or personal property owned or leased by the City. The notice will be given 7 business days before commencement of the Project by the Contractor for a third party, or 7 business days before an adverse action as defined below. Written notice and disclosure will be sent to the City Senior Representative identified in Article 7.4.
- B. Actions that are considered to be adverse to the City under this Contract include but are not limited to:
1. Using data as defined in this Contract acquired in connection with this Contract to assist a third party in pursuing administrative or judicial action against the City; and
 2. Using data to produce income for the Contractor or its employees independently of performing the services under this Contract, without first

obtaining the written consent of the City.

- C. Contractor represents that except for those persons, entities and projects identified to the City, the services to be performed by the Contractor under this Contract are not expected to create an interest with any person, entity, or third party project that is or may be adverse to the interests of the City.
- D. Contractor's failure to provide a written notice and disclosure of the information stated in this Article on Conflicts of Interest will constitute a material breach of this Contract.

11.38 LOSS AND DAMAGES

All loss or damage arising out of the nature of the Work to be done or from the action of the elements, or from any unforeseen circumstances, in the prosecution of the same, or from any unusual obstructions or difficulties which may be encountered in or during the prosecution of the Work, or from any casualty whatsoever of every description, will be sustained and borne by the Contractor at its own cost and expense.

11.39 EXISTING TRAFFIC AND STREET SIGNS AND TRAFFIC SIGNAL EQUIPMENT

Contractor shall use due care when excavating at or near intersections where traffic signal underground conduit is located. Contractor shall notify the Transportation Maintenance Traffic Signal Division (480.312.5620) 48 hours in advance of any work at the intersections. Contractor will be responsible for the installation and maintenance of temporary overhead traffic signal cable as specified by the Traffic Engineering Director when underground conduit is to be severed by excavations at the intersection. The Transportation Maintenance Manager will have all underground traffic conduit located and will provide the necessary City Technicians to assist the Contractor in identifying wiring phases and direction of conduit runs upon 24 hours notice from the Contractor and at least 1 day before the Contractor's scheduled wiring and installation of temporary cables. Contractor will be responsible for the wiring and connection of all temporary cable within the pull boxes and terminal compartments. The Transportation Maintenance Manager will provide a City technician to assist Contractor with connecting field wiring within the traffic signal control cabinet. Contractor will provide, at its expense an off-duty uniformed Police Officer to direct traffic while the traffic signal is turned off and the wiring is transferred. Contractor will be responsible as specified by the Traffic Engineering Manager for the repair and restoration of all traffic signal overhead and underground items that have been damaged or modified. The City does not permit the splicing of Magnetic Detector Loops.

11.40 CERTIFICATION OF USE OF BENCHMARKS

In compliance with the City's Design Standards & Policies Manual (DS&PM), Sections 9-1.1 and 9-1.301, it is the City's intent that Contractor must use both horizontal and vertical benchmarks with City of Scottsdale published values for any survey on all public works projects. These published values are available for public use at the following website: <http://www.scottsdaleaz.gov/design>. AT LEAST 1 HORIZONTAL AND 1 VERTICAL BENCHMARK MUST MATCH THE NORTHING, EASTING OR ELEVATION

VALUES PUBLISHED ON THE CITY'S WEBSITE. Contractor must sign and submit with this Contract, the Certificate of Use attached and by reference made a part of this Contract.

11.41 TAXES AND INDEMNIFICATION

The fee listed in this Contract includes any and all taxes applicable to the activities under this Contract. The City will have no obligation to pay additional amounts for taxes of any type. Contractor and all Subcontractors shall pay all Federal, state and local taxes applicable to its operation and any persons employed by the JOC, except as may be otherwise provided in this Contract. Contractor shall, and require all Subcontractors to hold the City harmless from any responsibility for taxes, damages and interest, if applicable, contributions required under Federal, and/or state and local laws and regulations and any other costs including transaction privilege taxes, unemployment compensation insurance, Social Security and Worker's Compensation.

11.42 NO BOYCOTT OF ISRAEL

Unless otherwise prohibited by law, by submitting a quote/proposal/bid and/or entering into a contract with the City, the vendor/company certifies that they are not currently engaged in and agrees for the duration of the Contract to not engage in a boycott of Israel as defined in A.R.S. § 35-393.

ARTICLE 12 – DEFINITIONS

"Adjustment" means a written order signed by an authorized representative of the City and the Contractor and which approves changes in the scope of the Work in the Job Order; in the total compensation or time allowed for completion of the Job Order, or modifications to other contract terms.

"Allowance" means an agreed amount by the City and the Contractor for items which may be required to complete the scope of work.

"As-built Document" – "As-built in construction is equivalent to "as-is." Drawings deemed "as-built" are final drawings that include all changes made during the actual construction process. These drawings represent the actual existing constructed conditions as opposed to designs or a proposed condition. The As-built Documents should be per Arizona Revised Statute 32-152.

"Blueline or Blackline Prints" – Prints that allows comparison of document versions to show what has been revised.

"Change Order" means a written order signed by an authorized representative of the City and which approves changes in the total compensation or time allowed for completion of services consistent with S.R.C. Sec. 2-200.

"City" means the City of Scottsdale, Arizona, an Arizona municipal corporation. Regulatory activities handled by the City of Scottsdale Development Services, Planning and Fire Departments or any other City department are not subject to the responsibilities of the City under this Contract.

"City's Representative" means the person designated in Subdivision 7.4(A) (2).

"City's Senior Representative" means the person designated in Subdivision 7.4(A) (1).

"Construction Coordinator" means a City employee who coordinates the daily construction activities with the contractor, and with their inspection staff that performs quality control inspections, enforces project plans and specifications and adopted City codes and ordinances.

"Construction Documents" means the plans, specifications and drawings prepared by the Design Professional after correcting for permit review requirements and incorporating addenda and approved Job Order Adjustments.

"Construction Fee" means the Contractor's home office overhead and profit, whether at the Contractor's principal or branch offices. This includes the home office costs and any limitations or exclusions that may be included in the General Conditions for the construction phase.

"Contract" or "Job Order Contract" means this fully executed Contract between the City and the Contractor.

"Contract Administrator" means the person designated in Article 7.4.

"Contract Documents" means the following items and documents in descending order of precedence executed by the City and the Contractor: (1) Change Orders; (2) Job Order Adjustments; (3) Contract Modifications; (4) this Contract including all exhibits and attachments; (5) Contractor's Proposal (if any); (6) Contractor Statement of Qualifications.

"Contract Modification" means a specific written concurrence between the City and the Contractor for changes to this Contract.

"Contract Price" means the amount or amounts stated in Article 4 subject to any Contract Adjustments.

"Contract Services" means the services required by the Contract Documents.

"Contract Time(s)" means the time stated in Article 3, subject to Job Order Adjustments or extensions as permitted by this Contract.

"Contractor" is the contractor selected by the City to provide or procure construction services as detailed in this Job Order Contract.

"Contractor Payment Request" means the City form used by the Contractor to request progress payments for Job Orders in accordance with Article 6.

"Contractor's Representative" means the person described in Article 7.4(B) (2).

"Contractor's Senior Representative" means the person described in Article 7.4(B) (1).

"Day(s)" means calendar days unless otherwise specifically noted in the Contract Documents.

"Delay" means an unanticipated event or interference with the progress of a critical path work activity being performed at the time that causes the completion date of the project to be extended. Delays may be caused by the City, the Contractor, third parties or Force Majeure events. Delays

may be excusable, compensable, non-compensable or concurrent.

"Delay, Compensable" means delay that results from the City's actions or inactions that entitle the Contractor to both a time extension and delay damages.

"Delay, Concurrent" means 2 or more delays, within the same timeframe, both of which would independently impact the project's critical path. If one delay is caused by the City and the other by the Contractor, the Contractor will generally be entitled to an excusable, non-compensable time extension, to the degree the delays may "overlap."

"Delay, Excusable" means an unforeseeable delay caused by an event beyond the control and without the fault or negligence of the Contractor (including its Suppliers and Subcontractors). Excusable delays may be compensable or non-compensable, depending upon whether the terms of the contract or the law allows recovery of delay costs. Unless otherwise shown, it will generally be presumed that these delays are non-compensable.

"Delay, Non-Excusable" means a delay within the control of the Contractor, its suppliers and subcontractors, or a delay resulting from a risk taken by the Contractor under the terms of the Contract. The Contractor will not be due any time extension or delay damages, and may be responsible for paying to the City, actual or liquidated damages for the delay.

"Deliverables" means the work products prepared by the Contractor in performing the scope of work described in this Contract. Some of the major deliverables to be prepared and provided by the Contractor may include, but are not limited to: Construction Management Plan, Project Schedule, Schedule of Values, alternative system evaluations, procurement strategies and plans, cost estimates, construction market surveys, cash flow projections, Subcontractor procurement plan, Subcontractor Contracts, Subcontractor bid packages, Supplier Contracts, and others as indicated in this Contract or required by the Project Team.

"Design Professional" means a qualified, licensed design professional who furnishes design or construction administration services.

"Differing Site Conditions" comply with M.A.G. Standard Specifications, Subsection 102.4.

"Duration of the Work" means the number of Days from a Job Order Notice to Proceed to Substantial Completion.

"Field Order" means a written field directive prepared and signed by the City, directing a change in work that may or may not include an adjustment in contract price or contract time.

"Final Acceptance" means the completion of a Job Order as prescribed in Article 3.4.

"Informational Submittals" – Submittals are required (common with construction projects) for the architect and engineer to verify that the correct products and quantities will be installed on a project.

"Job Order" or "Project" means a specific scope of Contract Services done pursuant to an individual Job Order and includes a specific written Contract between the City and the Contractor for a Job Order including a Scope of Work, a Job Order Price, a Duration of the Work and any special conditions that may apply to be performed under this Contract. The Job Order includes the plans, technical specifications, special provisions and the Contractor's proposal either by

reference or inclusion.

"Job Order Price" means the amount negotiated between the Contractor and the City that includes costs, overhead, bonding, insurance, profit and other costs as agreed to and calculated on the Unit Prices, Cost-coefficient and Special Items as prescribed in Article 4.

"Job Order Time" means the time from the Job Order Notice-to-Proceed to Substantial Completion. The approved Job Order Time will be made part of this Contract by executing an individual Job Order for that specific Project.

"Legal Requirements" means all applicable federal, state and local laws, codes, ordinances, rules, regulations, orders and decrees of any government or quasi-government entity having jurisdiction over a Project or Site, the practices involved in a Project or Site, or any Work.

"Liquidated Damages" means an amount the Contractor will pay in compliance with Article 3.5.

"Must" and "will" as used in this Contract are mandatory.

"Notice to Proceed," (NTP) means a written notice given by the City to the Contractor fixing the date on which the Contractor will start to perform the Contractor's obligations under that individual Job Order.

"Owner Agent," "City's Agent" or "Owner Representative" see "City's Senior Representative."

"Payment Request" means a monthly progress payment request that is based on a monthly estimate of the dollar value of the Work completed.

"Product Data" means illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

"Professional Certification" – Professional certification is a designation which indicates that a person is qualified to perform a job or task. Professional certification can be trade certification or professional designation.

"Project Record Documents" means the documents created pursuant to Article 1.9.

"Project Record Drawing Prints" – Set of current design drawings used by construction contractor for reference during construction. These drawings are typically marked up during the construction process, and are used to develop the subsequent "as-built" drawings.

"Punch List" means those minor items of Work to be completed before Final Acceptance which do not prevent the Project from being used for the purpose for which it is intended and which will not prevent the issuance of a Certificate of Occupancy.

"Samples" means physical examples, which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

"Schedule of Values (SOV)" means the Document specified in the construction phase, which divides the Contract Price into pay items, such that the sum of all pay items equals the Contract Price for the construction phase Work, or for any portion of the Work having a separate specified

Contract Price. The SOV may or may not be output from the Progress Schedule depending on whether the Progress Schedule is cost-loaded or not.

"Shop Drawings" means drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

"Site" means the land or premises on which a Job Order is located generally described as (insert address). The Contractor will require all subcontractors to include the street address of the Job Order in their contracts.

"Specifications" means those sections of the Contract Documents for the construction phase consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain applicable administrative details.

"Subcontractor" or "Sub consultant" means any person or entity retained by the Contractor as an independent contractor to perform a portion of the Contract Services and must include material men and suppliers. All Subcontractors must be selected in accordance with the selection plan stated in Article 1.13.

"Substantial Completion" means when the Work, or when an agreed upon portion of the Work is sufficiently complete so that the City can occupy and use the Project or a portion of it for its intended purposes. This may include, but is not limited to: (1) approval by the City Fire Marshall and local authorities (Certificate of Occupancy); (2) issuance of elevator permit; (3) demonstration to the City that all systems are in place, functional, and displayed to the City or its representative; (4) installation of all materials and equipment; (5) City review and acceptance of all systems; (6) City review and acceptance of draft O&M manuals and record documents; (7) City operation and maintenance training completed; (8) HVAC test and balance completed [provide minimum 30 days before projected substantial completion]; (9) completed landscaping and site work; and (10) final cleaning.

"Supplier" means a manufacturer, fabricator, supplier, distributor, material man or vendor having a direct contract with the Contractor or any Subcontractor to furnish materials or equipment to be incorporated in the construction phase work by the Contractor or any Subcontractor.

"Work" means the entire completed construction or the various separately identifiable parts of the construction, required to be furnished during the construction phase. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials, resources and equipment into the construction, and performing or furnishing services and documents as required by the Contract Documents for the construction phase.

CITY OF SCOTTSDALE, ARIZONA

CONTRACT NO. 2020-059-COS

CONTRACT

This Contract has been properly executed by the parties above named, on the date and year written above, to be retained by the City Clerk.

Contractor agrees that this Contract, as awarded, is for the stated Work and understands that payment for the Work will be made on the basis of the indicated amount, per the terms and conditions of this Contract.

CITY OF SCOTTSDALE, an
Arizona municipal corporation

By: _____

W.J. "Jim" Lane, Mayor

CONTRACTOR:

ACHEN-GARDNER CONSTRUCTION, L.L.C.,
an Arizona limited liability company

By: _____

Robert Pierce, President

Title: _____

(Corporate Seal)

ATTEST:

Carolyn Jagger, City Clerk

RECOMMENDED:

Dave Lipinski, City Engineer

Katherine Callaway
Risk Management Director

APPROVED AS TO FORM:

Sherry R. Scott, City Attorney

By: Eric Anderson, Senior Assistant City Attorney

EXHIBIT A

**STATUTORY PERFORMANCE BOND
PURSUANT TO TITLE 34, CHAPTER 6,
OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Contract Amount)**

KNOW ALL MEN BY THESE PRESENTS:

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

WHEREAS, the Principal has entered into a certain written contract with the City of Scottsdale, dated the _____ day of _____, 2020, for Bid No. (bid number), Project No. (project number), (project name), which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW THEREFORE, the condition of this obligation is such, that if the Principal faithfully performs and fulfills all of the undertakings, covenants, terms, conditions and Contracts of the contract during the original term of the contract and any extension of the contract, with or without notice to the surety, and during the life of any guaranty required under the contract, and also performs and fulfills all of the undertakings, covenants, terms, conditions and Contracts of all duly authorized modifications of the contract that may hereafter be made, notice of which modifications to the surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED HOWEVER, that this Bond is executed pursuant to the provisions of Title 34, Chapter 6, Arizona Revised Statutes, and all liabilities on this Bond will be determined in accordance with the provisions of Title 34, Chapter 6, Arizona Revised Statutes, to the extent as if it were copied at length in this Contract. The prevailing party in a suit on this bond will recover as part of the judgment reasonable attorney fees that may be fixed by a Judge of the Court. The performance under this bond is limited to the construction to be performed under the contract and does not include any design services, preconstruction services, financial services, maintenance services, operations services or any other related services included in the contract.

WITNESS our hands the _____ day of _____, 2020.

PRINCIPAL

BY:

SURETY (SEAL)

AGENCY OF RECORD

AGENCY ADDRESS

EXHIBIT B

STATUTORY PAYMENT BOND

PURSUANT TO TITLE 34, CHAPTER 6,
OF THE ARIZONA REVISED STATUTES

(Penalty of this bond must be 100% of the Contract Amount)

KNOW ALL MEN BY THESE PRESENTS:

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

WHEREAS, the Principal has entered into a certain written contract with the City of Scottsdale dated the _____ day of _____, 2020, for Bid No. (bid number), Project No. (project number), (project name), which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

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

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Title 34, Chapter 6, of the Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 6, Arizona Revised Statutes, to the same extent as if they were copied at length in this Contract.

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

WITNESS our hands the _____ day of _____, 2020.

PRINCIPAL

BY:

SURETY (SEAL)

AGENCY OF RECORD

AGENCY ADDRESS

EXHIBIT C

City of Scottsdale Published Benchmarks

CERTIFICATE OF USE

Contract Name:
CONTRACT NO.:

PROJECT NO.:

To the City of Scottsdale:

In compliance with the City of Scottsdale's Design Standards & Policies Manual (DS&PM), Sections 9-1.1 and 9-1.301, it is the City's intent that the _____ must use both horizontal and vertical benchmarks with City of Scottsdale published values for any survey on all public works projects. Those published values are available for public use at the following City website: <http://eservices.scottsdaleaz.gov/landsurvey/>. AT LEAST 1 HORIZONTAL AND 1 VERTICAL BENCHMARK MUST MATCH THE NORTHING, EASTING OR ELEVATION VALUES PUBLISHED ON THE CITY OF SCOTTSDALE'S WEBSITE.

Having read and understood Sections 9-1.1 and 9-1.301 of the DS&PM, and as a Land Surveyor registered in the State of Arizona, I certify that we will be using the following City of Scottsdale horizontal and vertical datum to perform the topographic survey for the above named contract and project. These benchmarks will be **shown** on the cover sheet of the design and construction plans.

Benchmark No. 1:

Horizontal datum:

Vertical datum:

GPS Point: _____

GPS Point: _____

N: _____

Elevation: _____

E: _____

Benchmark No. 2:

Horizontal datum:

Vertical datum:

GPS Point: _____

GPS Point: _____

N: _____

Elevation: _____

E: _____

Certified By: _____

(Seal in Area Below)

Print Name: _____

Title: _____

RESOLUTION NO. 11747

A RESOLUTION OF THE COUNCIL OF THE CITY OF SCOTTSDALE, MARICOPA COUNTY, ARIZONA, AUTHORIZING CONSTRUCTION SERVICES JOB ORDER CONTRACT (JOC) NO. 2020-059-COS WITH ACHEN-GARDNER CONSTRUCTION, L.L.C., JOB ORDER CONTRACT (JOC) NO. 2020-060-COS WITH B&F CONTRACTING, INC., JOB ORDER CONTRACT (JOC) NO. 2020-061-COS WITH GARNEY COMPANIES, INC., AND JOB ORDER CONTRACT (JOC) NO. 2020-062-COS WITH MARKHAM CONTRACTING CO., INC. FOR WATER RESOURCES UNDERGROUND INFRASTRUCTURE SERVICES.

WHEREAS, the City desires services to perform water resources underground infrastructure construction projects at various citywide locations; and

WHEREAS, Achen-Gardner Construction, L.L.C., B&F Contracting, Inc., Garney Companies, Inc. and Markham Contracting Co., Inc. are qualified to render the services desired by the City for citywide water resources underground infrastructure services;

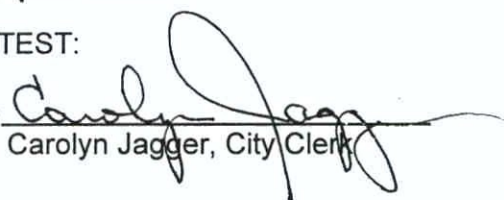
BE IT RESOLVED by the Council of the City of Scottsdale as follows:

Section 1. The Mayor of the City of Scottsdale is authorized and directed to execute Construction Services Job Order Contract (JOC) No. 2020-059-COS with Achen-Gardner Construction, L.L.C., Job Order Contract (JOC) No. 2020-060-COS with B&F Contracting, Inc., Job Order Contract (JOC) No. 2020-061-COS with Garney Companies, Inc. and Job Order Contract (JOC) No. 2020-062-COS with Markham Contracting Co., Inc. for citywide water resources infrastructure services in an amount not to exceed \$10 million per contract for the initial two year term of each contract.

PASSED AND ADOPTED by the Council of the City of Scottsdale this 7th day of April, 2020.

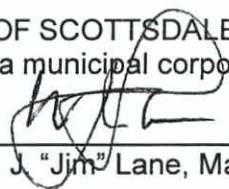
ATTEST:

By:


Carolyn Jagger, City Clerk

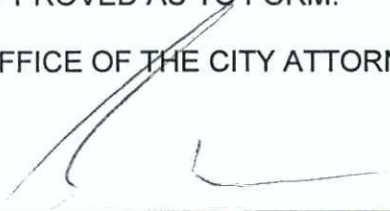
CITY OF SCOTTSDALE, an
Arizona municipal corporation

By:


W. J. "Jim" Lane, Mayor

APPROVED AS TO FORM:

OFFICE OF THE CITY ATTORNEY


Sherry R. Scott, City Attorney

By: Eric C. Anderson, Senior Assistant City Attorney

EXHIBIT B

**LINKING AGREEMENT
FOR COOPERATIVE PURCHASE**

ACHEN-GARDNER CONSTRUCTION, LLC

SEWER REHABILITATION

SCOPE OF WORK

Town of Paradise Valley Engineering Department



SEWER REHABILITATION: 7 LOCATIONS FOR PIPE REPAIR

Project Specifications

June 2021

Prepared by:



2310 West Mission Lane, Suite 4

Phoenix, Arizona 85021

602-906-1901



Michael D. Heaton

Revised 2021-06-04 Supersedes
Previous Version

TABLE OF CONTENTS

SUMMARY OF WORK -----	§01110-1
SUBMITTALS-----	§01330-1
PHOTOGRAPHS AND VIDEO RECORDING -----	§01380-1
TRAFFIC CONTROL -----	§02100-1
DIVERSION OF SEWAGE FLOW AND DEWATERING-----	§02145-1
SEWER CLEANING -----	§02760-1
CCTV INSPECTION OF SANITARY SEWERS -----	§02761-1
CIPP LINING OF EXISTING SEWERS-----	§02767-1

APPENDIX

Pipe Lining Segments Exhibit

SECTION 01110

SUMMARY OF WORK

Part 1– GENERAL

1.1 LOCATION AND DESCRIPTION OF WORK

- A. Segments of Paradise Valley sewer lines from Task Orders 09-17 to be rehabilitated Are shown in the table below:

Asset ID	Location	Material	Diameter	Length	Issues	Recommendations	Remarks
14700	Folkman Ranch Estates, west of Scottsdale Rd	DIP	8	280	Corrosion	CIPP lining	MSA at 8'
14776	Camelback Country Club Estates, west of Scottsdale Rd	VCP	8	282	Hole in pipe	Spot repair	39' from upstream 48226
14855	Sunnyvale Rd east of 66th Pl	PVC/DIP	12	324	Corrosion	CIPP lining	207' DIP
6378	Road Runner Rd east of Desert Vista Rd	VCP	8	200	Hole in pipe	Spot repair	52' from downstream 45296
14863	70th St north of Fantol Dr	PVC/DIP	8	139	Hole in DIP	CIPP lining	12' DIP in middle
14326	Mockingbird Ln east of Tatum Blvd	VCP	8	418	Hole in pipe	Spot repair	Bad Break-in Tap
14359	East Mockingbird Lane, East of North Mockingbird Lane	VCP	8		Hole in pipe @ Tap	Spot repair	Bad Break-in Tap, 36 ft east of MH 47973

- B. Major work to be performed under this contract include, but are not limited to the following:

1. CCTV video recording of pre and post rehabilitation activities.
2. Sewer pipeline cleaning of 8-inch pipe and 12-inch pipe as described in the table shown in Section 1.1 A.
3. Rehabilitate of 8-inch pipe and 12-inch pipe as described in the table shown in Section 1.1 A. Rehabilitation includes CIPP lining and CIPP Spot Repairs
4. Reinstate all service laterals and install Service Lateral Connection (SLC) sealing systems which are commonly referred to as “top hat” sealing. Service lateral connections may be a combination of tees or wyes of varying angles and could be in line connections or saddles. Top hats shall be installed at each connection.
5. Provide all pumping, piping, power, noise, and odor control as necessary to bypass flows around the rehabilitation work and dewater the pipe to be rehabilitated. **No “plug & pump” (via Hydrovac truck)** or similar methodology is acceptable for pipe dewatering.
6. Remove all construction material, equipment, and debris remaining on the job site as a result of construction operations, render the job site in a neat and orderly condition and restore the construction site to pre-existing conditions.

7. Provide traffic control during construction.
8. CONTRACTOR to provide all materials, equipment, and labor necessary to perform the work contained within the contract documents, including, but not limited to, lighting, odor control, personnel facilities, bypass pumping, and safety and health equipment.
9. Excavation is not anticipated; however, the CONTRACTOR shall locate and verify the location of all pipelines, and utilities prior to conducting any excavation work.
10. Excavation is not anticipated; however, the CONTRACTOR is required to contact Blue Stake, at 602-263-1100, at least two (2) working days prior to start of any excavation work at project site.

1.2 QUALITY ASSURANCE

The CONTRACTOR is solely responsible for maintaining the quality assurance of his work during the length of the project. The CONTRACTOR is responsible for any costs associated with corrective measures required to replace or repair items not meeting the quality standards specified by the Town of Paradise Valley.

The Work shall conform to all the requirements and recommendations of the Special Provisions and the following:

A. Occupational Safety and Health Administration (OSHA)

The CONTRACTOR shall carry out his operations in strict accordance with all applicable OSHA Standards. Particular attention is drawn to those safety requirements involving work entry into confined spaces. It shall be the CONTRACTOR's responsibility to familiarize himself and his employees with OSHA Standards and regulations pertaining to all aspects of the work.

B. Environmental Protection Agency (EPA)

C. Arizona Department of Environmental Quality (ADEQ)

D. Maricopa County Environmental Services Department (MCESD)

E. Standard Specifications and Details

1. Uniform Standard Specifications for Public Works Construction by Maricopa Association of Governments (MAG)

2. Any supplements to the MAG Uniform Standards by the Town of Paradise Valley

Where there is a conflict between the MAG Standard Specifications and these Special Provisions, the provisions of these Special Provisions shall govern.

F. TESTING

The CONTRACTOR shall be responsible to pay for independent third party laboratory testing for CIPP as specified in the Special Provisions. Laboratory selected shall be subject to approval by the ENGINEER.

1.3 WORK BY PARADISE VALLEY

PARADISE VALLEY will perform the following work:

- A. PARADISE VALLEY operating personnel will be responsible for operating the existing sewers and facilities throughout the execution of this Contract. All contact between the PARADISE VALLEY operational personnel and the CONTRACTOR on all matters shall be through the ENGINEER or PARADISE VALLEY's designated representative(s).
- B. The project pipelines were inspected using closed-circuit television (CCTV) by ENGINEER and documented by their inspection videos and log sheets. This information will be made available to the CONTRACTOR if requested.

1.4 CONTRACTOR'S USE OF PREMISES

- A. Coordinate use of the premises, for his storage and the operations of his workmen, with PARADISE VALLEY, ENGINEER and utility service companies.
- B. The full use of the premises for storage, the operations of workmen and for all other construction activities will not be available to CONTRACTOR. The CONTRACTOR must operate entirely within the space allowed to him.
- C. Sole responsibility for obtaining and paying all costs in connection with any additional work area, storage sites, access to the site or temporary right-of-way which may be required for proper completion of the Work, belongs to CONTRACTOR.
- D. It shall be understood that responsibility for protection and safe-keeping of equipment and materials on or near the site will be

entirely that of CONTRACTOR and that no claim shall be made against PARADISE VALLEY or his authorized representatives by reason of any act. It shall be further understood that should any occasion arise necessitating access to the sites occupied by these stored materials or equipment, the ENGINEER shall direct CONTRACTOR owning or responsible for the stored materials and equipment to immediately move the same. No materials or equipment may be placed upon the property of PARADISE VALLEY, other than in the designated areas as shown on the contract documents, or as described in the specifications, unless the ENGINEER has agreed to the location contemplated by CONTRACTOR to be used for storage. All stored materials shall be labeled according to the appropriate contractor or subcontractor with the manufacturer's label as well. Appropriate material safety data sheets (e.g., MSDS) shall be provided.

- E. Required to share use of the premises with other contractors whose services PARADISE VALLEY has obtained or will obtain for construction of other facilities on the site.
- F. CONTRACTOR shall in no way interfere with the operation of existing sewers and pipelines, except as specified herein and shall exercise every precaution to ensure that debris and material from its operation does not enter the sewer. Any debris or blockage entering the sewer as a result of the CONTRACTOR's work shall be immediately removed at the CONTRACTOR's expense. Proposed methods for construction in and around the existing facilities shall be included as part of the construction progress schedule.

1.5 EASEMENTS AND RIGHTS-OF-WAY

- A. All construction shall be confined within the existing right-of-way limits indicated on the Plans. Use due care in placing construction tools, equipment, excavated materials, and pipeline materials and supplies in order to avoid damage to property and interference with traffic. Do not enter any private property outside the designated right-of-way without written permission from the ENGINEER and the owner of the property. Any private property or rights-of-way owned by other than PARADISE VALLEY, which CONTRACTOR wishes to utilize during the performance of the Work, shall be provided by CONTRACTOR.

1.6 NOTICES TO OWNERS AND AUTHORITIES OF PROPERTIES ADJACENT TO THE WORK

- A. Notify owners of adjacent properties and utilities when prosecution of the Work may affect them.
- B. When it is necessary to temporarily obstruct access to property, or when any utility service connection must be interrupted, give notices sufficiently in advance to enable the affected persons to provide for their needs. Conform notices to any applicable local ordinance and, whether delivered orally or in writing, include appropriate information concerning the interruption and instructions on how to limit inconvenience caused thereby.
- C. Utilities and other concerned agencies shall be notified at least 48 hours prior to cutting or closing streets or other traffic areas or excavating near underground utilities or pole lines.

Part 2 – PRODUCTS

NOT USED

Part 3 – EXECUTION

NOT USED

+ + END OF SECTION + +

SECTION 01330

SUBMITTALS

Part 1 – GENERAL

1.1 DESCRIPTION

- A. Submittals covered by this section include manufacturers' information, shop drawings, test procedures, test results, samples, requests for substitutions, requests for information, and miscellaneous work-related submittals. The CONTRACTOR shall furnish all submittals as specifically required in the contract documents to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the contract documents.
- B. The term "Shop Drawings" as used herein shall be understood to include detailed design calculations, fabrication and installation drawings, lists, graphs, test data, operating instructions, and other items which shall include, but are not necessarily limited to:
 - 1. Drawings and catalog information and cuts.
 - 2. Specifications, parts list, suggested spare parts lists, and equipment drawings.
 - 3. Mechanical, electrical, electronic equipment and system.
 - 4. Applicable certifications.
 - 5. Anchor bolt templates, mounting instructions and mounting design calculations as required.
 - 6. Other technical, installation, and maintenance data as applicable.
 - 7. Unloading and handling methods and storage requirements.
 - 8. Note, highlight, and explain proposed changes to the Contract Documents.
 - 9. Drawings showing CONTRACTOR field verifications illustrating all field dimensions. Field verify all dimensions and existing materials shown on the Plans. Any modifications required shall be at CONTRACTOR'S expense.
 - 10. Piping and conduit details.

- C. The term "Request for Information" shall be understood when any of the following are required:
1. An interpretation of the Specifications.
 2. Additional details.
 3. Information not shown on the Plans or in the Special Provisions.
 4. Clarifications of discrepancies.
- D. Shop Drawing Submittal Schedule: CONTRACTOR, within 14 days after the Notice to Proceed, shall prepare and submit to the ENGINEER a comprehensive Submittal Schedule. Identify on his Submittal Schedule all the submittal items required by the Contract Documents governing his Work. Indicate, for each submittal item on his Submittal Schedule the following:
1. The date by which that item will be submitted to the ENGINEER.
 2. Whether the submittal is for a substitute or "equal" item. Complete submittal for all substitute or "equal" items shall be made to the ENGINEER, in accordance with the Contract requirements. Identification by the CONTRACTOR of substitute or "equal" items does not relieve CONTRACTOR of his responsibility to furnish equipment and materials that meet all the requirements of the Contract Documents. Items of manufacturers' equipment listed with CONTRACTOR'S Bid Proposal shall not be replaced with any substitute or "equal" items as part of this Submittal Schedule process. Procedure for substitutions is specified under the General Conditions.
 3. Whether the submittal is for "review and comment" or "for information only".
 4. The date by which response is required.
 5. Identify submittal(s) for which long review periods are anticipated.
 6. The date by which the material or equipment must be on site in order not to delay the progress of the Work.

1.2 CONTRACTOR RESPONSIBILITIES

- A. Responsibility belongs to CONTRACTOR to review submittals made by his suppliers and subcontractors before transmitting them to the ENGINEER to assure proper coordination of the Work and to determine that each submittal is in accordance with CONTRACTOR'S desires and that there is sufficient information about materials and equipment for ENGINEER to determine compliance with the Contract Documents. Incomplete or inadequate submittals will be returned for revision without review.
- B. Submittal documents shall be clearly edited to indicate only those items, models, or series of equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated.
- C. The CONTRACTOR shall ensure that there is no conflict with other submittals and notify the ENGINEER in each case where his submittal may affect the work of another contractor or PARADISE VALLEY.
- D. The CONTRACTOR shall coordinate submittals so that work will not be delayed. The CONTRACTOR shall coordinate and schedule different categories of submittals, so that one will not be delayed for lack of coordination with another. No extension of time will be allowed because of failure to properly schedule submittals.
- E. The CONTRACTOR may authorize in writing a material or equipment supplier to deal directly with the ENGINEER or with PARADISE VALLEY regarding a submittal. These dealings shall be limited to contract interpretations to clarify and expedite the work.
- F. The CONTRACTOR shall consider the nature and complexity of each submittal item and shall allow ample time for review, revision or correction. Submittal will normally be returned to CONTRACTOR within ten (10) calendar days following receipt of the submittal. Complex submittals, for example, Instrumentation and Control Systems, Variable Frequency Drives and other such submittals may require additional review time.
- G. Furnish required submittals with complete information and accuracy in order to achieve required approval of an item within one submittal.

1.3 PROCEDURE

- A. Submit all Shop Drawings to the ENGINEER electronically in PDF format.

- B. A letter of transmittal shall accompany each submittal. If data for more than one Section of the Special Provisions is submitted, a separate transmittal letter shall accompany the data submitted for each Section.
- C. All letters of transmittal shall be submitted electronically in PDF format.
- D. At the beginning of each letter of transmittal, provide a reference heading indicating the following:
 - 1. Owner's Name
 - 2. Project Name
 - 3. Contract No.
 - 4. Transmittal No.
 - 5. Section No.
 - 6. Total Number of Pages
 - 7. Date
 - 8. Item/Description
 - 9. Submitted by:
- E. If a Shop Drawing deviates from the requirements of the Contract Documents, specifically note each variation in the letter of transmittal.
- F. All Shop Drawings submitted for approval shall have a title block with complete identifying information satisfactory to ENGINEER.
 - 1. All Shop Drawings submitted shall bear the approval and signature of CONTRACTOR as evidence that they have been reviewed and verified to the completeness of the submittal by CONTRACTOR. Submittal without this stamp of approval will not be reviewed by ENGINEER and will be returned to CONTRACTOR.
- G. In order to identify and track all submittals as separate and unique items, utilize the submittal identification numbering system as follows:

1. The Submittal Number shall be a separate and unique number correlating to each individual submittal that is required to be tracked as a separate and unique item. The Submittal Number shall be a two-part, seven-character, alpha/numeric number assigned by CONTRACTOR in the following manner:
 - a. The first part of the Submittal Number shall consist of five characters that pertain to the applicable Specification Section number.
 - b. The second part of the Submittal Number shall consist of two digits (numbers 01 to 99) to number each separate and unique submittal submitted under each Specification Section.
 - c. A dash shall separate the two parts of the Submittal Number.
 - d. A typical Submittal Number for the third Working Drawing submitted under Section 02531, Manholes, would be 02531-03.
 2. The Review Cycle shall be a single digit number indicating the initial submission or resubmission of the same submittal. For example:
 - 1 = First (initial) submission
 - 2 = Second submission (first resubmission)
 - 3 = Third submission (second resubmission)
 - a. An example of the typical submittal identification numbers for the first submission of the third submittal submitted under Section 02531, Manholes is 02531-03.1
- H. After ENGINEER completes his review, Shop Drawings will be affixed with a stamp and marked with one of the following notations:
1. Approved.
 2. Approved as Noted.
 3. Approved as Noted, Confirm
 4. Approved as Noted, Resubmit.
 5. Not Approved.

6. Comments Attached.

- I. If a submittal is acceptable, it will be marked "Approved" or "Approved as Noted". One electronic PDF copy of the submittal will be returned to CONTRACTOR.
- J. Upon return of a submittal marked "Approved" or "Approved as Noted", CONTRACTOR may order, ship or fabricate the materials included on the submittal, provided it is in accordance with the corrections indicated.
- K. If a Shop Drawing marked "Approved as Noted" has extensive corrections or corrections affecting other Shop Drawings or Work, ENGINEER may require that CONTRACTOR make the corrections indicated thereon and resubmit the Shop Drawings for record purposes. Such Shop Drawings will have the notation, "Approved as Noted / Resubmit." The corrected Shop Drawing shall be a pre-condition for payment for the work item of the Shop Drawing.
- L. If a submittal is unacceptable, an electronic copy will be returned to CONTRACTOR with "Not Approved". The "Not Approved" notation is used to indicate material or equipment that is not acceptable. Upon return of a submittal so marked, repeat the initial approval procedure utilizing acceptable material or equipment.
- M. Any related Work performed, or equipment installed without an "Approved" or "Approved as Noted" Shop Drawing will be at the sole responsibility of CONTRACTOR.
- N. Shop Drawings shall be submitted well in advance of the need for the material or equipment for construction and with ample allowance for the time required to make delivery of material or equipment after data covering such is approved. Assume the risk for all materials or equipment which are fabricated or delivered prior to the approval of Shop Drawings. Materials or equipment will not be included in periodic progress payments until approval thereof has been obtained in the specified manner.
- O. ENGINEER will review and process all submittals promptly; a reasonable time shall be allowed for this, for the Shop Drawings being revised and resubmitted, and for time required to return the approved Shop Drawings to CONTRACTOR.
- P. The ENGINEER will implement, if requested by CONTRACTOR, one special Shop Drawing Review Meeting. The purpose of the meeting is to expedite Shop Drawing reviews for the equipment and materials

required for the first document of the Work. Requirements of this Section will not be waived, but could be expedited.

1.4 MEASUREMENT AND PAYMENT

No measurement or payment for this item. Preparation and submission of submittals shall be considered incidental to the Work.

Part 2 – PRODUCTS

NOT USED

Part 3 – EXECUTION

NOT USED

+ + END OF SECTION + +

SECTION 01380

PHOTOGRAPHS AND VIDEO RECORDING

Part 1 – GENERAL

1.1 DESCRIPTION

This section specifies photographs and video recordings to be provided by the CONTRACTOR before and after construction, where construction is anticipated. The photographs and color audio-video DVDs are intended for use as indisputable evidence in ascertaining the extent of any damage which may occur as a result of the CONTRACTOR'S operations and are for the protection of the CONTRACTOR and the OWNER, and will be a means of determining whether and to what extent damage, resulting from the CONTRACTOR'S operations, occurred during the Work.

1.2 QUALITY ASSURANCE

The photographs and video shall be a clear with adequate lighting and without obstructions that impede visibility.

1.3 SUBMITTALS

The CONTRACTOR shall submit the following:

- One (1) DVD of site examination and recording with audio commentary.
- Photographs used for site examination

1.4 MEASUREMENT AND PAYMENT

MEASUREMENT AND PAYMENT: No payment for photographs and video recording. The CONTRACTOR shall pay the costs for specified photography, video recordings and prints. Parties requiring additional photography or prints will pay photographer directly.

Part 2 – PRODUCTS

2.1 PHOTOGRAPHS

Photographs shall be color JPEG or TIFF digital format (minimum 10-megapixel resolution) and shall indicate with the photo the date, name of work, and location where the photograph was taken. One copy of each on digital media, shall be delivered to the Engineer within ten (10) days following the photo date. The photographer shall be qualified and

equipped to photograph either interior or exterior exposures, with lenses ranging from wide angle to telephoto.

2.2 VIDEO

Video shall be MPG digital video (minimum 0.8-megapixel resolution) playable by standard Windows Media Player installations. Media shall be DVD and shall indicate on the DVD and cover the date, name of contract, and the location where the video was recorded. The video should contain an audio track, which narrates the progression through the site. Two (2) copies of each DVD shall be delivered to the ENGINEER within ten (10) working days.

CONTRACTOR shall maintain a copy of site examination documentation for the duration of the work.

Part 3 – EXECUTION

3.1 CONSTRUCTION PHOTOGRAPHY

- A. Photographs shall be provided during construction to show all utility crossings, installation of bypass piping, excavation of access pits, installation of lining system in pipes, and items of special interest upon the request of the Engineer.
- B. Photographs shall be taken on the cutoff date for each scheduled application for payment.

3.2 VIDEO

- A. Prior to CIPP installation, CONTRACTOR shall provide video recording taken of all areas where the CONTRACTOR will be working for the entire project, including all staging, storing, working, parking and excavation areas.
- B. After completion of construction and restoration, video recording shall be taken from the same points in the same direction as the preconstruction examination within seven (7) days after the acceptance of the project by the Owner. Final payment will not be made to the CONTRACTOR until the Owner receives copies of the video, which reflect the final conditions.

3.3 RECORDING

- A. After the Contract is awarded and before starting the work, the CONTRACTOR shall make a thorough examination of all the existing structures, vegetation, and general condition of the work site. Examination of the existing condition of the work site shall be made

by the CONTRACTOR and shall be recorded using photographs and video recording as described in this section.

- B. After the post-restoration video and photographs are taken, a copy will be provided to the Engineer. The Engineer will ascertain the extent of any damage, and will determine whether improvements, damaged or removed during construction, have been returned to specified or original condition.

+ + END OF SECTION + +

SECTION 02100

TRAFFIC CONTROL

Part 1

1.1 DESCRIPTION

All traffic affected by this construction shall be regulated in accordance with these Special Provisions and the City of Phoenix -Traffic Barricade Manual, latest edition and the City of Phoenix in the Traffic Barricade Manual with references to the Town of Paradise Valley Town Engineer for interpretation. and. The following traffic restrictions are minimum requirements throughout the construction period. All traffic restrictions listed herein are to supplement the Traffic Control Manual and are not intended to delete any part of the manual. All reference in the "Traffic Barricade Manual" to "arterial" and/or "collector" streets shall mean "arterial and/or major arterial" streets and are referred to as "major" streets in the following sections.

1.2 REFERENCES

City of Phoenix -Traffic Barricade Manual, latest edition.

1.3 QUALITY ASSURANCE

- A. The CONTRACTOR is solely responsible for maintaining the quality assurance of his work during the length of the project. The CONTRACTOR is responsible for any costs associated with corrective measures required to replace or repair items not meeting the quality standards specified by PARADISE VALLEY and MAG.
- B. Traffic control during construction shall be provided in accordance with the requirements of the City of Phoenix -Traffic Barricade Manual, latest edition and the project plans, and as stated herein.

1.4 SUBMITTALS

TRAFFIC CONTROL PLANS

The CONTRACTOR shall submit a traffic control plan for approval, showing placement of all traffic control devices, including all conflicting signs to be covered/removed or relocated, or other features that may conflict with the placement of temporary signage for each work location.

The CONTRACTOR shall submit the traffic control plan to PARADISE VALLEY for review and approval at least seven (7) working days before

the pre-construction conference. The traffic control plan shall include flashing arrow boards, barricades and signs, and shall address how local access to adjacent properties will be handled in accordance with the special provisions herein. Any changes to the traffic control plan during construction shall be submitted to TOWN OF PARADISE VALLEY for approval at least seventy-two (72) hours before implementation.

1.5 TRAFFIC REGULATIONS

The following streets shall be considered major streets in PARADISE VALLEY:

- Shae Boulevard, Mountain View Road, Lincoln Drive, McDonald Drive, Tatum Boulevard, and 68th Street.

1.6 SPECIAL TRAFFIC REGULATIONS

A. RIGHT-OF-WAY PERMIT

1. Town of Paradise Valley

The CONTRACTOR shall coordinate with the Town of Paradise Valley to obtain a written permit in advance for any construction that requires the reduction, closure, and/or detour of any street/sidewalk affected by the construction of this project within Paradise Valley.

B. MAJOR, COLLECTOR, AND LOCAL STREETS ON THIS PROJECT

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

A travel lane shall be defined as ten (10) feet of roadway with a safe motor vehicle operating speed of twenty-five (25) miles per hour.

The following major, collector, and minor streets on this project can be reduced when construction requires as follows:

1. Major Streets

Major streets can be restricted to two lanes (one in each direction) with left turn lanes open at signalized intersections from 7:00p.m. to 6:00a.m. weeknights, and from 7:00p.m. Friday to 6:00a.m. Monday on weekends.

Major streets can be restricted to four lanes (two in each direction) with left turn lanes open at signalized intersections

from 8:30a.m. to 4:00p.m. weekdays, and other times determined necessary as directed by the ENGINEER.

2. Collector Streets

Collector streets (with two-way left and bike lanes) can be reduced to three lanes (two lanes peak directional) with left-turn lanes open at signalized intersections.

3. Minor Collector Streets

Minor collector streets can be restricted to two lanes (one in each direction).

4. Minor Streets

It is PARADISE VALLEY's desire to maintain one lane of traffic in each direction on minor streets whenever possible. Should it become imperative for the CONTRACTOR to close off a portion of any minor street or reduce the travel way to a single lane, the CONTRACTOR must obtain approval from PARADISE VALLEY twenty four (24) hours prior to implementing a traffic control change. The CONTRACTOR must provide all the necessary signs to detour traffic and/or flagmen to control traffic for a single lane. The maximum amount of time that the street may be closed is from 9:00 a.m. until 4:00 p.m. Local streets can be closed in quarter mile segments.

C. MAJOR INTERSECTION WORK

All major intersection work will be required to be performed on weekends, (when permitted) and/or on extended weekends.

No two adjacent major signalized intersections shall be restricted at the same time.

Type of traffic restrictions for this work will be as directed by PARADISE VALLEY during this time period.

Intersection area shall be defined as all of the area within the right of way of intersecting streets, plus two-hundred fifty (250) feet beyond the center of the intersected streets on all legs of the intersection.

D. VARIABLE MESSAGE BOARDS

If required by PARADISE VALLEY, Variable Message Boards shall be provided on this project, 24 hours per day, from at least 14 days

prior to any roadway restrictions until all roadway traffic restrictions are removed.

E. POLICE OFFICER REQUIREMENTS

The CONTRACTOR shall be required to provide a uniformed off-duty police officer to assist with traffic control whenever traffic in any one direction is restricted to one lane at a signalized major intersection or at other locations if it should become necessary in the opinion of the ENGINEER and as required by PARADISE VALLEY. During construction, activities that do not restrict a major signalized intersection, police officer assisted traffic control is not required. If the CONTRACTOR chooses to use a police officer at other locations during peak traffic hours or to assist with his other traffic control operations, the cost shall be included in the lump sum for "Traffic Control" and not paid out of the lump sum bid for "Off Duty Law Enforcement Officer." The CONTRACTOR must provide evidence of workmen's compensation coverage before any officer will be permitted to work.

Measurement for the uniformed off duty law enforcement officer will be made based on the hours worked by the officer for traffic control at signalized major intersections or as approved by the ENGINEER or as required by Paradise Valley.

Payment for the off duty law enforcement officer will be made from the contract lump sum price bid for OFF DUTY LAW ENFORCEMENT OFFICER and shall include withholding for Federal, State, FICA, Medicare, Workmen's Compensation insurance and any payroll administrative costs.

F. SIGNALIZED INTERSECTION REQUIREMENTS

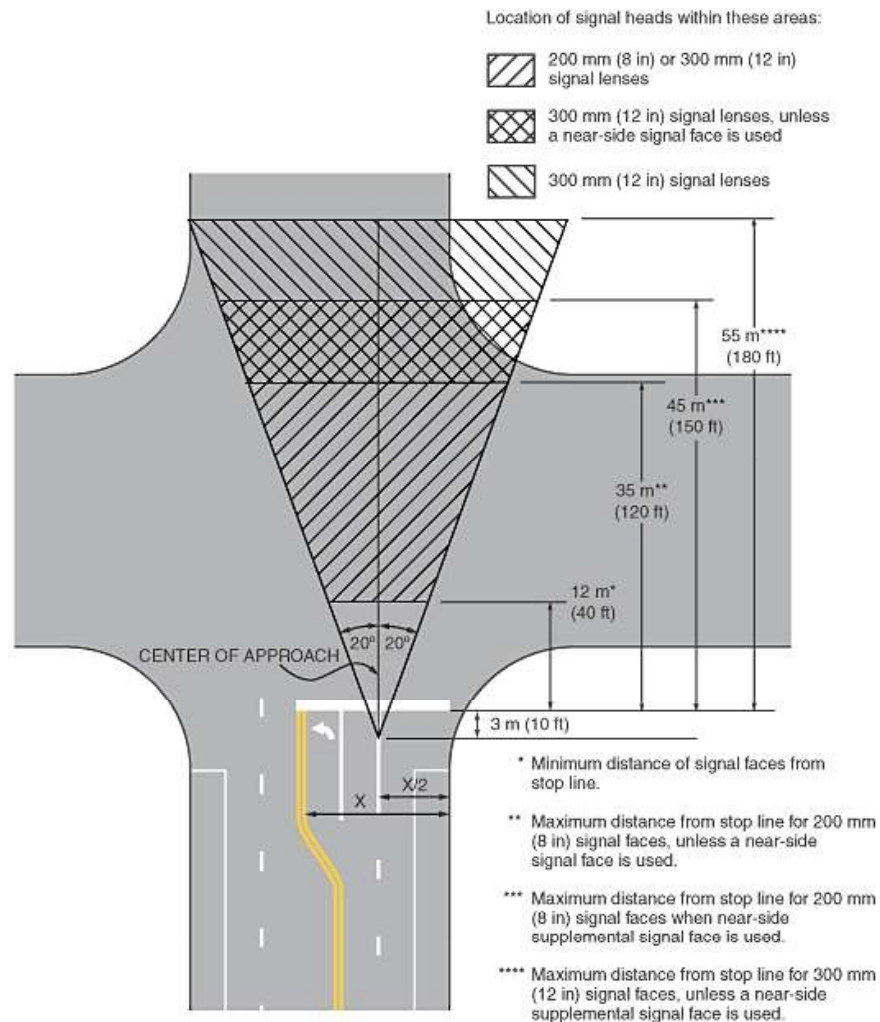
When left turns are prohibited at signalized intersections with left-turn arrow indications or when working in vicinity of a signalized intersection, the project inspector shall notify the Town at least 72 hours in advance to make arrangements for arrow indications to be turned off or to coordinate signals being affected by the construction.

The project inspector shall provide PARADISE VALLEY a written schedule indicating days, times and specific locations where left turns will be prohibited or where signals will be interrupted.

When the work has been completed the inspector shall immediately notify PARADISE VALLEY so they can reactivate the left-turn arrow.

G. TRAFFIC HEAD VISIBILITY REQUIREMENTS

The CONTRACTOR shall maintain a “40-degree Cone-of-Vision” at all intersections, for full view of the intended traffic. If during construction, traffic will be positioned in such a manner that the driver cannot see a minimum of two (2) traffic signal head indications within 20-degrees either side of straight ahead (40-degree Cone-of-Vision), immediately contact PARADISE VALLEY prior to the start of any work. See Figure below.



Note: This figure illustrates the horizontal location of signal faces.

H. LOCAL ACCESS REQUIREMENTS

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

I. BUSINESS ACCESS REQUIREMENTS

Access shall always be maintained to adjacent businesses during their hours of operation. Access may be maintained by such measures as constructing driveways in half sections, or by providing bridging over new concrete. Properties having more than one point of access shall not have more than one access restricted for more than fourteen (14) calendar days at any given time. Access to adjacent driveways shall be provided during all non-working hours. Any business restrictions shall be coordinated with the affected business in writing at least fourteen (14) days prior to imposing restrictions.

J. PEDESTRIAN ACCESS REQUIREMENTS

The CONTRACTOR shall ensure that all sidewalks on this project remain in compliance with all the issues outlined by the American Disabilities Act of 1990. All pedestrian-walking areas, whether paved or unpaved, shall always be maintained open and safely usable. Such measures as backfilling or ramping at a 12:1 slope to existing sidewalks or providing alternate sidewalk areas adjacent to existing sidewalks may be used. In high pedestrian use areas, the ENGINEER may request temporary hard-surface walkways, and/or covered pedestrian walkways to be installed at no additional cost to PARADISE VALLEY.

K. FRONTAGE ROAD ACCESS REQUIREMENTS

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

L. RECREATIONAL TRAIL CROSSING

The CONTRACTOR shall maintain ALL trail/street crossings safely open at all times, and shall maintain all special trail signs required.

M. ACCESS ROAD REQUIREMENTS

Access and maintenance roads shall remain open at all times.

N. COORDINATION WITH OTHER AGENCY PROJECTS

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

O. SPECIAL SIGN REQUIREMENTS

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

P. BUS STOPS

The CONTRACTOR shall maintain all existing bus stop locations on this project in a safe manner, or provide alternate bus stop locations and related directional signage as required by the ENGINEER.

Q. FLAGGING OF TRAFFIC

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

R. TEMPORARY TRAFFIC CONTROL ZONE AND SAFETY

At the time of the Pre-Construction conference, the CONTRACTOR shall designate an employee, other than the Project Superintendent, who is knowledgeable in the principles and methods of proper traffic control and safety. This employee is to be available on the project site, during all periods/phases of construction to coordinate and maintain safe, acceptable, and effective temporary barricading whenever the construction affects traffic. This individual shall be authorized to receive and fulfill instructions from the ENGINEER and

shall supervise and direct traffic control. Instructions and information given by the ENGINEER to this individual shall be considered as having been given to the CONTRACTOR.

Failure to maintain temporary traffic control devices in accordance with the approved project plans and specifications shall result in suspension of the work and/or Civil Sanctions until deficiencies are corrected to the satisfaction of the ENGINEER.

S. SAFETY FENCING REQUIREMENT FOR TRENCHES AND EXCAVATIONS

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

The CONTRACTOR shall provide for the safety and welfare of the general public by adequately fencing all excavations and trenches that are permitted by the ENGINEER to remain open when construction is not in progress.

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

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

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

1.7 SEQUENCE OF CONSTRUCTION

The project shall follow a phasing approved by the Town of Paradise Valley. All lanes shall be maintained on a paved surface at all times

during construction. This may be accomplished by using existing, new, or temporary asphalt pavement. Trenches shall be completely backfilled and either paved with temporary asphalt pavement, or covered with metal plating as necessary to comply with this requirement and the "Special Traffic Regulations".

1.8 WORK HOURS

A. REGULAR WORKING HOURS

Hours shall be defined as one 8-1/2 hour shift per day, Monday through Friday, exclusive of Town observed holidays.

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

The CONTRACTOR shall not schedule any overtime work which requires inspection, survey, or material testing without written permission from PARADISE VALLEY's Construction Manager two (2) working days before the proposed overtime work.

B. UNSCHEDULED OVERTIME

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

C. EMERGENCY OVERTIME

Emergency overtime is defined as work required for a situation that is not within the CONTRACTOR's control. With PARADISE VALLEY approval, the CONTRACTOR shall be permitted to work overtime without being responsible for paying PARADISE VALLEY's costs.

1.9 MEASUREMENT AND PAYMENT

- A. DEFINITION: Full compensation for all labor, material, and equipment required to safely divert traffic around all work associated with this Work. The development, submission, and implementation of traffic control plans shall be included. Traffic control shall meet all

regulatory requirements and shall be as specified in the traffic control plan.

- B. MEASUREMENT AND PAYMENT: Measurement of Traffic Control shall be reimbursed for the not to exceed amount per the bid price and based on submitted receipts.

Part 2 – PRODUCTS

NOT USED

Part 3 – EXECUTION

NOT USED

+ + END OF SECTION + +

SECTION 02145

DIVERSION OF SEWAGE FLOW AND DEWATERING

Part 1 – GENERAL

1.1 DESCRIPTION

A. SCOPE

This section describes the requirements for temporary bypassing and dewatering of sewers during internal television inspection (CCTV), cleaning operations, rehabilitation, post inspection, and reconnection of service laterals prior the rehabilitated pipeline returning to service. Temporary diversion of sewage flows is a key aspect of this project and includes the maintenance of service to the customer connections and/or making alternative arrangements for customers.

Under no circumstances can flow diversion take the form of “plug and pump”, hydro vac methodology for any pipeline segment of the project. The CONTRACTOR must use above ground, temporary bypass piping and pumps in order to dewater pipe segments.

The CONTRACTOR is made aware that sewer rehabilitation may occur during the monsoon months with severe thunderstorms and possible flash flooding events. Adverse weather conditions may impact the capacity of the bypassing system. The CONTRACTOR shall be prepared for these weather conditions and alter procedures accordingly.

B. EXPERIENCE

CONTRACTOR shall utilize staff and/or a subcontractor that has been directly responsible for completion of a pipe rehabilitation project that required the bypass pumping of sewage flows.

1.2 QUALITY ASSURANCE

The CONTRACTOR is solely responsible for maintaining the quality assurance of his work during the length of the project. The contractor is responsible for any costs associated with corrective measures required to replace or repair items not meeting the quality standards specified by PARADISE VALLEY.

- A. BYPASS DESIGN: The actual design of the bypass arrangement shall be prepared by the CONTRACTOR, and shall be submitted to the ENGINEER to determine conformance to project objectives. Means and methods of accomplishing the bypassing, within the stipulations

outlined in this section, shall be the responsibility of the CONTRACTOR.

- B. PRESSURE TESTING: The CONTRACTOR shall have the entire bypassing system in place and successfully pressure tested at 1.5 times the maximum operating pressure of the system before bypassing any sewage.

1.3 SUBMITTALS

Prior to beginning of work on the project, 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.

1. Drawings indicating the scheme and location of temporary sewer plugs and bypass discharge lines. The drawings shall also show the method and location for discharging the bypass lines.
2. Capacities of pumps, prime movers, and standby equipment.
3. Design calculations proving adequacy of the system and selected equipment
4. Standby power source.
5. Staffing plan.
6. Show suction and discharge points with elevations and stationing on the design plans.
7. Proposed noise control and exhaust control plans for pumping equipment.
8. Proposed plan for disruption of sewer service laterals.
9. Bypass piping inspection plan.
10. Odor control plan.

1.4 JOB CONDITIONS

A. AVAILABLE FLOW DATA

Flow data for the project sewer line is not available. The CONTRACTOR shall determine these flows. Any additional monitoring or gathering of flow data to properly size the bypass system is the responsibility of the CONTRACTOR. The CONTRACTOR shall include

considerations for increased flows due to rainfall events, fluctuations of peak flows due to holidays, civic events, etc., equipment failure risks, etc., and provide adequate reserve capacity and redundancy to maintain sewer flows within the sewer pipe upstream and downstream of the bypass.

The CONTRACTOR is responsible for obtaining current flow condition information at the time of construction. PARADISE VALLEY is not responsible for any deviations in quantity of sewage flow at any time during the construction period. Higher flows may be encountered depending on weather and other upstream conditions.

B. SERVICE OR COLLECTOR LINES

Sanitary sewers to be bypassed include service lines connected to adjacent users or collector pipes at manholes. The known service lines or collectors have been shown on the construction drawings; however, the CONTRACTOR shall verify the locations of these lines and any other service lines not shown on the drawings. **Residents and business shall be notified of the lining operations and the potential impacts on their sewer service.**

1.5 MEASUREMENT AND PAYMENT

- A. DEFINITION: Full compensation for all labor, material, equipment, and monitoring required to temporarily bypass wastewater flows around the rehabilitation and/or replacement work and/or dewater pipelines in preparation for cleaning and rehabilitation or replacement. Bypass shall include standby pumps and piping. Also includes installation, maintenance and removal of bypass pumps and bypass pipes, noise suppression, odor control, plugging of sewers, cleaning/vacuuming, excavation and backfill of any required trenches, steel plating, sawcut, removal and repair or replacement of asphalt and concrete pavement, removal and repair or replacement of concrete curb, gutter and sidewalk, construction of suction and discharge structures to facilitate bypass pumping, landscape restoration, and all other incidentals necessary to complete the work in conformance with Plans and Specifications.
- B. MEASUREMENT: Measurement of Diversion of Sewage Flow and Dewatering shall be on a lump sum basis. Intermediate measurements for payment shall be made by the ENGINEER on a percentage of project completed basis.
- C. PAYMENT: Payment for Diversion of Sewage Flow and Dewatering shall be per the price bid on a lump sum basis. Intermediate payments for this work shall be made on a percentage of work completed basis.

Part 2 – PRODUCTS

2.1 MATERIALS

- A. CONTRACTOR shall provide temporary pumps, conduits, and other equipment to bypass sewer flow around the CONTRACTOR's work area as required. CONTRACTOR shall furnish all necessary labor and supervision to set up and operate the pumping and bypass system. Critical grade sound attenuated pumps shall be provided for the bypass pumping as required unless otherwise approved – see Section 3.6 Noise Control. Sound measurements shall be made in accordance with American National Standard S.13-1971. Pumps and bypass lines shall be of adequate capacity and size to handle the required capacity. The bypass system shall be designed to normally maintain the wastewater flow below the top of the pipe without surcharging.
- B. The CONTRACTOR shall maintain on site, sufficient equipment and materials to ensure continuous and successful operation of the bypass and dewatering systems. The standby pumps shall be installed and fully operational at all times including all pumps, equipment and piping being in-place. 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 of system hardware to ensure immediate repair or modification of any part of the system as necessary. Piping shall be leak free.
- C. For bypassing systems with a required capacity equal to or less than 2 MGD and piping lengths greater than 1,000 feet, and for systems with required capacity greater than 2 MGD, the CONTRACTOR shall provide multiple bypass lines to convey 150% of the maximum anticipated flow (as determined by the CONTRACTOR). Redundant lines should be fully connected in the bypass system to allow the system to be switched over quickly in the event of a leak. In all cases, redundant standby pump(s) shall be on site and operational at all times in case of primary pump failure.
- D. All pumps, generators, and other equipment shall be placed in spill containment impound or on a new plastic tarp to provide containment and protect against sewage spills, or the spill of gasoline, oil, and hydraulic fluid spills.

Part 3 – EXECUTION

The CONTRACTOR shall notify the ENGINEER a minimum of 48 hours prior to shutting down of a pipeline and start of bypassing.

3.1 SERVICE LINES

Every effort shall be made by the CONTRACTOR to insure that sewer service to customers is maintained during the course of the work. When disruptions are necessary, service to laterals shall be disrupted for a period of no more than eight hours. Laterals within residential areas shall only be disrupted during the period of 8:00 a.m. to 5:00 p.m. Monday through Friday. Laterals within business areas shall be addressed on a case by case basis. The CONTRACTOR shall provide a public information representative when he visits customers to discuss bypass pumping of services or making alternative arrangements with the customer for service outages. No matter what arrangement is made, the CONTRACTOR must cooperate with the ENGINEER to provide PARADISE VALLEY documentation that all affected users have been contacted and arrangements made for disruption or alternate accommodations. This documentation must be submitted prior to the start of work on the section of sewer line affected.

3.2 PUBLIC NOTIFICATIONS

The CONTRACTOR shall notify the ENGINEER and PARADISE VALLEY of any planned service interruptions at least two weeks prior to the event. The CONTRACTOR shall retain the services of a local Public Involvement firm to perform notification of the work to the public. At a minimum, the first notification shall be a minimum of 5 days before the interruption of service. Much greater advance notice may be required if an alternate to pumping the customer's service is proposed by the CONTRACTOR. The second notification shall be 24 hours prior to the interruption of service. Notification shall be made door to door with printed handouts or door hangers. The information provided shall include, at a minimum, the reason for the interruption, the time period of the interruption, and a local 24-hour telephone hotline number for project information.

3.3 MONITORING

The bypassing system shall not be shut down between shifts, on holidays or weekends, or during work stoppages without written permission from the ENGINEER. The bypass system will have an attendant around the clock whose only duty is to maintain the bypass pumping system until the bypassing of that specific pipeline is no longer required.

The CONTRACTOR shall inspect the entire bypass pumping system for leaks or spills on an hourly basis. The CONTRACTOR shall also create an inspection log and shall enter the time of inspection and the condition of the piping and the name of the inspector into the log for review by the ENGINEER.

3.4 PUBLIC AND PRIVATE ACCESS

The CONTRACTOR shall maintain public and private access along project routes. Bypass lines shall be protected from damage due to traffic and shall not impede pedestrian or vehicular traffic routes unless otherwise allowed by approved traffic control plans. Bypass lines shall be buried at street crossings and business entrances unless otherwise approved by the ENGINEER. Temporary steel plating with milled edges may be used with approval for buried lines. Ramps protecting bypass lines shall be a minimum level of protection at accesses to private residences unless otherwise approved by the ENGINEER.

CONTRACTOR shall maintain pedestrian traffic and comply with ADA regulations for access to all residential and commercial property unless written approval is otherwise obtained from the property owner allowing for reduced access.

3.5 DISCHARGE

In areas where flows are bypassed, all bypass flows shall be discharged as approved by the ENGINEER. No bypassing to the ground surface, receiving waters, storm drains, or bypassing which results in soil or groundwater contamination or any potential health hazards shall be permitted. In addition, no backups and overflows onto private property shall be permitted.

3.6 NOISE CONTROL

The CONTRACTOR shall perform all work in compliance with OSHA standards and in no case will noise levels be permitted which would interfere with the work of PARADISE VALLEY or others.

The CONTRACTOR shall utilize sound attenuated bypass pumps with a maximum decibel rating of 70 dB @ 50 feet. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without previously mentioned muffler.

Noisy portable equipment, such as generators or compressors, shall be located as far away from sensitive noise receptor areas as practicable. (Sensitive noise receptors are defined as occupied buildings with windows or doors facing the site). Noise barriers shall be constructed around noisy stationary construction equipment such as compressors or generators that have to be utilized at locations near (within 100 feet of) sensitive noise receptors as defined above. Idling equipment not actively utilized for extended periods of time shall be shutoff.

3.7 DAMAGES

The CONTRACTOR shall repair, without cost to PARADISE VALLEY, any damage that may result from his negligence, inadequate or improper installation, maintenance, and operation of bypassing system, including mechanical or electrical failures.

3.8 ODOR CONTROL

The CONTRACTOR shall employ methods and procedures that mitigate the generation and discharge of objectionable odors to the surface environment at all times.

If odor complaints arise, the CONTRACTOR shall add ferric chloride to the wastewater flow upstream of bypass pumping operations to reduce odor. The CONTRACTOR shall make his own determination of flow characteristic for required dosing.

The CONTRACTOR shall add the ferric chloride from a location upstream that will allow 10 to 15 minutes reaction time before the flow enters the work area. The chemical dosing shall reduce odors generated from the wastewater stream to a level acceptable to PARADISE VALLEY. If this is not accomplished by adding the ferric chloride only, an additional control may be required. If odors are still unacceptable after addition of ferric chloride, the CONTRACTOR may also add hydrogen peroxide. The CONTRACTOR shall add hydrogen peroxide downstream to the flow that has been dosed with ferric chloride. The Hydrogen peroxide shall be added to allow a 5-minute reaction time before flow enters the work area. Any dosage combination of the two chemicals may be used to ensure continuous control of odors acceptable to PARADISE VALLEY.

3.9 SANITARY SEWER OVERFLOWS

The CONTRACTOR shall take any and all precautions necessary to prevent backups and overflows on private property from blocked laterals during all sewer rehabilitation work. Special arrangements or supplemental bypasses may be required for some property owners.

CONTRACTOR is responsible for immediate and proper cleanup should any spill occur, regardless of amount.

3.10 TERMINATION OF BYPASS

Bypass operations shall not be terminated until approvals are obtained from the ENGINEER for:

1. CIPP Liner

2. End Seals
3. Point Repairs
4. Service Reconnections

+ + END OF SECTION + +

SECTION 02760

SEWER CLEANING

Part 1 – GENERAL

1.1 DESCRIPTION

A. SCOPE

This section specifies the requirements for cleaning for the sewers prior to CCTV inspection, ENGINEER's inspection, and rehabilitation activities.

B. REQUIREMENTS

The work to be done under this Contract consists of furnishing all labor and equipment to remove the accumulated sediments and clean the sewers and sewer structures as shown on DRAWINGS and specified herein.

The CONTRACTOR shall remove existing sediment, debris, pipe supports, roots, scale, encrustations, and grease accumulations from the sewers and sewer structures to be inspected, rehabilitated, repaired, or abandoned. The CONTRACTOR shall adequately prepare the surfaces for installation of liner or coating system or repair grout. All materials dislodged during cleaning shall be removed from the work area and carried to an approved disposal site.

Cleaning of the sewer is required prior to CCTV inspection of the sewer to view current line conditions.

1.2 QUALITY ASSURANCE

The CONTRACTOR is solely responsible for maintaining the quality assurance of his work during the length of the project. The contractor is responsible for any costs associated with corrective measures required to replace or repair items not meeting the quality standards specified by PARADISE VALLEY.

1.3 SUBMITTALS

A letter identifying the methods the contractor plans to employ to remove sediment, debris, grease, scale, encrustations, and roots throughout the sewer to be lined and in the sewer structures to be repaired or coated shall be submitted to ENGINEER. The letter shall include a detailed explanation of the cleaning process and a schedule of activities, references where the CONTRACTOR has used the identified cleaning

method successfully in the past and a list of the actions he plans to take to mitigate impact to the public during the cleaning operation.

1.4 MEASUREMENT AND PAYMENT

- A. DEFINITION: Full compensation for cleaning of existing pipelines prior to rehabilitation as shown on the Plans and included in the Special Provisions. Work includes, but is not limited to: cleaning of pipelines scheduled for rehabilitation in accordance with these Special Provisions and as required by rehabilitation manufacturer requirements; removal of accumulated sediment, debris, roots, scale, encrustations, and grease from the existing sewer pipeline and sewer structures, disposal of material removed from the pipeline resulting from the cleaning process; disposal off-site of materials removed from the pipeline in accordance with all state and federal regulations; all safety and support equipment required to complete the work.
- B. MEASUREMENT AND PAYMENT: Payment of Pipeline Cleaning shall be per unit bid per linear foot for completed segments between consecutive manholes.

Part 2 – MATERIALS

2.1 CHEMICAL ADDITIVES

No chemicals shall be used without written approval of the ENGINEER. In no case shall any chemical additive be used which might be considered hazardous, or might be considered detrimental to organisms or equipment of a wastewater treatment plant, or detrimental to old or new pipe materials.

2.2 PRODUCT DATA

Copies of all disposal receipts shall be provided.

Part 3 – EXECUTION

3.1 GENERAL

The CONTRACTOR shall at all times conduct its work so as to prevent any blockage and minimize surcharging in the sewer manholes and connecting sewer pipelines. Damage to existing facilities as a result of the CONTRACTOR's work shall be promptly repaired in kind at the CONTRACTOR's expense.

3.2 SEWER BYPASSING AND DEWATERING

The sewer flow shall be bypassed during the cleaning of the sewers as specified in Section 02145, Diversion of Sewage Flow and Dewatering.

3.3 CLEANING OF EXISTING SEWER

Cleaning shall remove all sediment, rocks, debris, roots, grease accumulations and obstructions from the sewer and sewer structures to be lined, coated, repaired, rehabilitated or abandoned. Cleaning of the sewer shall remove all grease, scale, and encrustation so that no foreign intrusion shall cause imperfections in the lining (e.g., bumps, folds, dimples).

Any sediment or debris from cleaning operations larger than U.S. #8 sieve shall not be deposited downstream in the sewer main. Sedimentation deposited downstream, as determined by the ENGINEER, shall be removed at no cost to PARADISE VALLEY. The CONTRACTOR shall be thoroughly familiar with all phases of sewer cleaning to ensure the completion of this Contract without causing a health hazard or damage to the sewage system, public and private properties.

The CONTRACTOR shall clean the pipe to ensure proper installation of the sewer liner and the structures to ensure proper installation of coating system and repair work. The CONTRACTOR shall clean all exposed rebar to remove all areas of corrosion down to solid steel.

3.4 CLEANING OF NEW PIPE AND FITTINGS

The interior of all pipe and fittings shall be thoroughly cleaned before installation and shall be kept clean until the work has been accepted. All joint contact surfaces shall be kept clean until the joint is completed. Foreign material shall be kept out of the pipe during installation. No debris, tools, clothing, or other foreign objects shall be placed in the pipe.

3.5 DISPOSAL OF SEDIMENTS

The CONTRACTOR shall be responsible for transporting and disposing, including all disposal fees, of any sediments and material removed from the sewer or structures.

All sediment and debris removed from the sewer shall be disposed off-site in a lawful manner. Hauling containers shall be watertight. On-site stockpiling of removed material will not be permitted.

The CONTRACTOR is responsible for obtaining all necessary permits, fees, and approval from all regulatory agencies required to perform the work, including transport of sediments. Off-site disposal of all material removed from the sewer shall be the CONTRACTOR's responsibility.

+ + END OF SECTION + +

SECTION 02761

CCTV INSPECTION OF SANITARY SEWERS

Part 1– GENERAL

1.1 DESCRIPTION

This specification defines the requirements for internal television inspection of existing sewer pipe before and after rehabilitation.

The CONTRACTOR shall inspect the sewer pipe 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. A television inspection shall be performed after cleaning of the sewer as specified in Section 02760, Sewer and Sewer Structure Cleaning. The rehabilitated sewer will be CCTV inspected again in the same direction as the previous inspection after the lining of the sewer has been completed to ensure proper installation. The CONTRACTOR shall be responsible for properly inspecting the pipe.

1.2 QUALITY ASSURANCE

CONTRACTOR'S Qualifications: The CONTRACTOR shall have a minimum of three (3) years of experience in such work necessary to successfully meet this specification and provide references for five (5) sewer inspection projects involving remote CCTV pan and tilt inspection.

The CONTRACTOR shall have all operators who are successfully trained and certified through the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP). The CONTRACTOR shall provide copies of the PACP certificated for the operator and project references.

A. PRE-REHABILITATION

CCTV shall be reviewed by the ENGINEER for any obstructions or defects that would prohibit proper installation of the liner.

The pre-rehabilitation CCTV inspection shall be approved by the ENGINEER prior to installation of the liner or start of pipe bursting rehabilitation activities. If not done to the ENGINEER's satisfaction, the pipe shall be re-inspected at no additional cost to PARADISE VALLEY.

B. POST REHABILITATION

The ENGINEER will review video recordings and logs to ensure compliance with the requirements listed in this specification and contract documents. If the sewer line is determined not to be adequately cleaned, as required in this section, it shall be re-cleaned and CCTV inspected by the CONTRACTOR at no additional cost to PARADISE VALLEY.

If any portion of the liner/pipe is determined not acceptable, the liner/pipe shall be repaired or replaced, whichever the ENGINEER deems appropriate, and re-inspected by CCTV, at no additional cost to PARADISE VALLEY.

1.3 SUBMITTALS

- A. The following submittals shall be provided by the CONTRACTOR for review.
1. CONTRACTOR reference projects per 02761-1.2.
 2. Operator PACP certificate and reference projects per 02761-1.2.
 3. Manufacturer's product literature for video equipment to be used.
 4. Digital media copy of the finished video recordings/photographs showing the existing sewer pipelines after cleaning and the sewer pipelines after liner installation, shall be submitted to the ENGINEER. The ENGINEER will review the recordings, not for accuracy of content, but to make sure that the required information is provided and the recording is of acceptable quality. If the ENGINEER determines that the video recording is defective or not of adequate quality, the CONTRACTOR shall CCTV inspect again at the CONTRACTOR's expense.

1.4 MEASUREMENT AND PAYMENT

No separate measurement or payment for this item. CCTV shall be incidental to the Work. Additional CCTV inspections required after the initial inspection, due to the failure of the initial inspection, shall be paid for by the CONTRACTOR.

Part 2 – PRODUCTS

2.1 MATERIALS

A. TELEVISION INSPECTION CAMERA(S)

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. VIDEO DVD

Video recordings of all sewer line inspections shall be made on high-quality color digital media (DVD, USB, or external hard drive. The audio portion of the composite videotape shall be sufficiently free from electrical interference and background noise to provide complete intelligibility of the oral report.

C. FOOTAGE COUNTER

A footage counter device, which measures the distance traveled by the camera in the sewer, shall be accurate to plus or minus 2 feet in 1,000 feet.

D. VIDEO TITLING

Video equipment shall include genlocking capabilities to the extent that computer generated data (i.e., footage, date, size, address and location, etc.) as determined by PARADISE VALLEY can be overlaid onto video, and both indicated on the television monitor and permanently recorded on the inspection video.

E. FLOW IN SEWERS

During CCTV inspections, and continuously until completion of liner installation and inspection, the CONTRACTOR shall provide temporary dry conditions in the sewer pipelines. The bypassing requirements are provided in Section 02145, Diversion of Sewage Flow and Dewatering.

Part 3 – EXECUTION

3.1 INSPECTION METHODS

A. VERBAL COMMENTARY (CCTV)

The CONTRACTOR shall record on the audio track of the video inspection recording narrative of the location, direction of survey, upstream and downstream control points, date, and time of the inspection.

B. ACCESS

The ENGINEER shall have access to observe the 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.

C. INSPECTION RATE

The camera (CCTV) shall be propelled through the sewer in either direction, but all inspections at each location shall be in the same direction. Maximum rate of travel shall be 30 feet per minute when recording.

D. IMAGE PERSPECTIVE

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 view of the pipe interior. Points of interest shall also be video recorded and shall include, but not be limited to, defects, encrustations, mineral deposits, debris, sediment, any location determined not to be clean or part of a proper liner installation, or defects in the liner (including, but not limited to bumps, folds, tears, dimples, etc.).

E. SEWER IDENTIFICATION

All inspection documentation shall include the sewer location.

+ + END OF SECTION + +

SECTION 02767

CIPP LINING OF EXISTING SEWERS

Part 1 – GENERAL

1.1 DESCRIPTION

A. SCOPE

This section specifies a cured-in-place pipe (CIPP) liner for the rehabilitation of sanitary sewer pipe as indicated on the Plans. The CIPP liner is a flexible tube composed of either fiberglass or felt. The tube is impregnated with a thermosetting resin. The liner is placed inside a deteriorated sewer pipe by either inversion or insertion. The liner is then cured via exposure to ultraviolet light, hot water, or steam. The finished product is a continuous watertight liner from manhole to manhole, tight fitting to the host pipe, and smooth interior surface.

The CONTRACTOR is made aware that the lining of the sewers may occur during the summer months with temperatures exceeding 115 degrees F and severe thunderstorms. The CONTRACTOR shall be prepared for these weather conditions and alter installation procedures accordingly.

1.2 REFERENCES

This section contains references to the following documents. They are a part of this section as specified and modified.

Reference	Title
ASTM D543	Test Method for Resistance of Plastics to Chemical Reagents
ASTM D638	Test Method for Tensile Properties of Plastics
ASTM D790	Standard Practice for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM D883	Definitions and Terms Relating to Plastics
ASTM D1600	Abbreviations, Acronyms, and Codes for Terms Relating to Plastics
ASTM D2990	Standard Test Method for Tensile, Compressive and Flexural Creep

	and Creep-Rupture of Plastics
ASTM D3567	Standard Practice for Determining Dimensions of "Fiberglass" (Glass-Fiber-Reinforced Thermosetting Resin) Pipe and Fittings
ASTM D5813	Standard Specification for Cured-in-Place Thermosetting Resin Sewer Piping Systems
ASTM F412	Definitions of Terms relating to Plastic Piping Systems
ASTM F216	Rehabilitation of Existing Pipelines and Conduits by Inversion and Curing of a Resin-Impregnated Tube
ASTM F1216	Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Inversion and Curing of a Resin Impregnated Tube
ASTM F1743	Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe (CIPP)
ASTM F2019	Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Pulled in Place Installation of Glass Reinforced Plastic (GRP) Cured-in-Place Thermosetting Resin Pipe (CIPP)
DIN EN 761	Plastic piping systems – Glass-reinforced thermosetting plastics (GRP) pipes – Determination of the creep factor under dry conditions

1.3 QUALITY ASSURANCE

A. CIPP LINER SAMPLES

1. **SAMPLE PREPARATION:** The CONTRACTOR shall prepare samples of the installed CIPP liner for subsequent testing of its physical properties. Samples for felt tube that is water or steam cured shall be prepared and tested using the flat plate sampling method in accordance with the procedures in Section 8 of ASTM F1216 or ASTM F1743, or Section 7 of ASTM F2019, as is applicable. For fiberglass tube that is UV light cured, restrained samples shall be taken at the manholes.
2. **SAMPLE LABELING:** The CONTRACTOR shall individually label the sample(s) with permanent ink with the following information:
 - a. Date and Time the sample was removed and bagged
 - b. Sample Location
 - c. Liner Length, Diameter, and Thickness
 - d. Resin

- e. Catalyst or Hardener
 - f. Installation Method (inversion or pull-in-place)
 - g. Curing Process (hot water, steam, or UV)
2. CHAIN OF CUSTODY: The CONTRACTOR shall prepare a chain of custody form for the CIPP sample(s). The chain of custody shall be prepared by the CONTRACTOR and submitted to the ENGINEER, with the following documentation:
- a. Project Name
 - b. Project Number
 - c. Contractor Name and person responsible for collecting samples
 - d. Sample Number (incorporate manhole number or location where the sample was cured)
 - e. Date and Time the sample was removed and bagged
 - f. Location of Curing (downtube, silencer, outlet chamber, etc.)
 - g. Type of restraint used

The signed chain of custody form shall be presented to the ENGINEER, who will independently verify that the sample is the correct sample and has been properly bagged and labeled for shipment. The ENGINEER will sign the chain of custody form and sample so attesting. A copy of the delivery manifest and chain of custody form will be given to the ENGINEER after all signatures are affixed and the sample is ready for shipment.

3. PARADISE VALLEY reserves the right to collect random core samples of the installed liner.
4. SAMPLE TESTING. The cured sample shall be tested by an independent third party testing laboratory, as recommended by the CIPP liner manufacturer and approved by the ENGINEER, for the following properties:
- a. The flexural (bending) properties of the cured resin shall have minimum initial test values as given in Table 1 of ASTM F1216, ASTM F1743, or ASTM F2019, whichever is applicable

- b. 50-year Flexural Creep Modulus in accordance with ASTM D2990 at 10,000 hours or equal test as approved by the ENGINEER. If approved 10,000 hour tests are not available, CONTRACTOR shall use a minimum 50% reduction (50% retention) of Flexural Modulus of Elasticity (per ASTM F1216, ASTM F1743, or ASTM F2019 whichever is applicable) for all formula calculations.
 - c. Wall thickness per ASTM D3567. The minimum wall thickness shall be determined at a minimum of three locations on a cut section of the CIPP sample using a method of measurement accurate to the nearest 0.005 inch. Thickness measurements do not take in to account the outer or inner foil layers.
- 5. SAMPLING FREQUENCY: Sampling shall be performed for each truckload of shipped CIPP. For example: one sample from each CIPP delivery.

B. VIDEO INSPECTION

The ENGINEER shall inspect the CIPP after installation, which shall include end seals and service reconnection. The inspection will be performed and recorded using closed circuit television equipment in accordance with Section 02761, CCTV Inspection of Sanitary Sewers. If defects or voids exist, the CONTRACTOR shall repair or replace that section of the pipe at no additional cost to PARADISE VALLEY. Methods of repair shall be proposed by the CONTRACTOR and submitted to the ENGINEER for review.

C. LAYER INSPECTION

The layers of the cured fiberglass CIPP sample shall be uniformly bonded. It shall not be possible to separate any two layers with a probe so that the layers separate cleanly. If separation of the layers occurs during inspection of the field samples, then new samples will be cut from the manhole and inspected. Any reoccurrence may cause rejection of the work.

D. CIPP LINER HANDLING

The CONTRACTOR shall be responsible for the delivery, storage, handling, and installation of all materials for CIPP in accordance with the written manufacturer's requirements and recommendations.

CONTRACTOR shall exercise adequate care during transportation, handling, and installation to ensure the CIPP material is not torn, cut, exposed to direct sunlight, otherwise damaged, or result in any public safety hazard. If any part or parts of the CIPP materials becomes torn, cut, or otherwise damaged before or during insertion, it shall be repaired or replaced in accordance with the manufacturer's recommendations and approval by the ENGINEER before proceeding further; and at the CONTRACTOR's expense.

E. WARRANTY

The CONTRACTOR shall warrant the completed work against defect in workmanship and material for a period of one year from the date of final acceptance. The ENGINEER, while not acting as quality control agent for the CONTRACTOR, shall be allowed to view and document any portion of this contract, including but not limited to, verifying type and quantities of resin used at any point during this work.

Testing for chemical resistance shall be performed on previously prepared sample of the finished product, proposed for this project. A certified affidavit, signed by an officer of the company, shall be provided stating that the resin the tests apply to and the resin submitted for this project are the same.

Finished and cured CIPP liner properties specified in Part 2 shall be tested as specified. Previous test data will not be acceptable.

1.4 SUBMITTALS

- A. Certification showing the CONTRACTOR is currently licensed by the appropriate licensor to perform CIPP installation and curing. Certification shall be given to the ENGINEER before any materials are delivered to the job site.
- B. A certified affidavit, signed by an officer of the company, shall be provided stating that the CONTRACTOR'S on-site Field Superintendent has received proper training by the manufacturer for the steam, hot water and/or ultraviolet CIPP liner installation methods and procedures, as applicable. Certification shall be given to the ENGINEER before any materials are delivered to the job site.
- C. The type of tube material, resin and catalyst/hardener to be used. Certification stating CIPP tube has been manufactured in accordance with ASTM F1216, ASTM F1743, or ASTM F2019, as applicable, and resin is, suitable for its intended use.

- D. Prior to insertion, the CONTRACTOR shall provide data on the maximum allowable stresses, maximum pulling force (if pull-in-place method is used), and maximum elongation of the tube.
- E. Shop drawings which detail short and long term properties (providing all supporting test data) of all component materials and construction and recommendations for material storage and temperature control, CIPP liner handling, insertion, curing, trimming and finishing.
- F. Materials, methods, and equipment to be used for end seals and to reinstate connecting sewers.
- G. Structural design calculations for each CIPP liner segment (manhole to manhole) for fully deteriorated pipe condition to include size, the recommended thicknesses, field measurements, and assumptions used as the basis for calculations which demonstrate that the liner has been properly sized to avoid the creation of wrinkles or folds. All calculations shall be signed and sealed by a Registered Civil Engineer in the state of Arizona and submitted in duplicate to the ENGINEER at least 10 working days prior to the start of work.
- H. Detailed method for addressing CIPP sampling requirements including location and size of each sample, method of removal, method of liner repair.
- I. CCTV Inspection reports as specified in Section 02767, Article 3.1, Preparatory Procedures.
- J. The CONTRACTOR shall provide a delivery manifest for each liner with the following information:
 - 1. The inversion (or installation) location where the liner will be installed.
 - 2. Provide the manhole numbers for either end of the inversion.
 - 3. If the CONTRACTOR has assigned an inversion number provide that number as well.
 - 4. Liner diameter, length and thickness.
- K. CIPP manufacturer's recommended installation procedures, including resin manufacturer's curing requirements.
- L. Manhole connection details.
- M. Third party laboratory test results of required testing.

- N. Material safety data sheets for all hazardous chemicals used or expected to be on-site. At a minimum, sheets for the resin, catalyst, cleaners, and repair agents should be submitted.
- O. Written warranties as required herein.

1.5 CONTRACTOR QUALIFICATIONS

- A. The licensed CONTRACTOR, or Subcontractor, shall have CIPP lining experience on sanitary sewers of similar size to this project and as defined herein. The CONTRACTOR shall submit the attached CONTRACTOR Qualification Form. The minimum qualifying CONTRACTOR experience for this project is 3 or more projects totaling a minimum of 20,000 feet of CIPP liner successfully installed in sewers within the past 5 years. This experience shall be for projects completed within the United States with the same CIPP liner and resin combination proposed for this project. CONTRACTOR shall provide project lengths, diameters, date of installation, owner name and telephone number, CIPP liner manufacturer and resin type on the Qualification Form. References may be checked.
- B. The CONTRACTOR shall provide a full time project Superintendent for the project. The Superintendent shall meet all the same qualifications called out above for the CONTRACTOR. The CONTRACTOR shall submit the attached Superintendent Qualification Form six (6) working days after bid opening. All requested information must be provided. References may be checked.
- C. The CONTRACTOR shall have a local storage yard for the equipment to be used for the CIPP lining process during the duration of the construction.
- D. The CONTRACTOR shall also be experienced in the necessary crafts and completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.
- E. When requested by PARADISE VALLEY, the CONTRACTOR shall submit evidence acceptable to PARADISE VALLEY, such as a certified copy of a license or agreement, that it has the authority from the patent owner to use and/or install patented equipment and materials.
- F. The CONTRACTOR agrees to defend, indemnify and hold harmless PARADISE VALLEY and ENGINEER against all claims, suits and actions brought because of any person or property arising out of

patent infringement by the CONTRACTOR or his employees, agents, suppliers or any tier of subcontractors involved in the work.

- G. CONTRACTOR shall be fully responsible for the design of the CIPP (liner) and shall save and hold harmless PARADISE VALLEY and ENGINEER from any and all costs or damages directly or indirectly related to the structural design of the CIPP.

1.6 MEASUREMENT AND PAYMENT

- A. DEFINITION: Full compensation for all labor, material, equipment and all required safety and support, liner installation, liner curing, re-opening of service taps, end seals, sampling, post-rehabilitation (after liner installation) cleaning and CCTV inspection.
- B. MEASUREMENT AND PAYMENT: Payment for furnishing and installing the CIPP liner will be per the unit price bid per lineal foot per nominal diameter specified. Payment shall be made only for acceptable liner installed. Final acceptance of each lined segment from manhole to manhole is contingent on the approval of post-rehabilitation video inspection and testing results. No proportional payment shall be made for liner on site, but not yet installed, or installed unsatisfactorily.

PARADISE VALLEY will review all invoices to confirm that a request for a progress payment has the required delivery manifest and the chain of custody form on file. Progress payments will not be paid without prior verification of the documentation.

Final payment will not be made until test results are received. The CONTRACTOR shall be responsible for any deviation from the specified physical properties and those evaluated through testing. Failure to meet the specified physical properties will result in the CIPP liner being considered defective work which will be handled in accordance with MAG Section 106, Control of Materials.

Part 2– PRODUCTS

2.1 GENERAL

- A. All materials provided by the CONTRACTOR for use in the CIPP installation process shall be equal to or exceed the requirements of Section 5 in ASTM F1216, ASTM F1743, or ASTM F2019, as is applicable.
- B. CONTRACTOR shall be responsible for control of all material and process variables to provide a finished CIPP possessing the

minimum properties specified in ASTM F1216, ASTM F1743 or ASTM F2019, as is applicable and supplemented herein.

2.2 CIPP TUBE

A. TYPES OF FABRIC TUBING

1. **GLASS REINFORCED PLASTIC (GRP):** The GRP tube shall consist of a seamless, spirally wound fiberglass that is flexible and has strain values (expandable) up to ten (10) percent. The tube will not have a longitudinal seam, including a stitched seam, stitch-free-weld or bond, or stitch-free overlap. The tube shall be constructed to withstand installation pressures and have sufficient strength to bridge missing pipe.
2. **FELT:** The Felt tube shall consist of one or more layers of absorbent, flexible felt fabric. The layers may be woven or non-woven materials or combination thereof, capable of carrying resin, withstand installation pressures, sufficient strength to bridge missing pipe, and hold up under curing temperatures. The seams of the tube must be leak free and stronger than the non-seamed felt.

B. CHEMICAL RESISTANCE

The chemical resistance tests should be completed in accordance with Test Method D543. Exposure should be for a minimum of one month at 73.4 degrees F. During this period, the CIPP test specimens should lose no more than 20 percent of their initial flexural strength and flexural modulus when tested in accordance with Section 8 of ASTM F1216 or ASTM F1743 or Section 6 of ASTM F2019, whichever is applicable, when subjected to the following solutions:

Chemical Solution	FELT TUBE Concentration [percent]	GRP TUBE Concentration [percent]
Tap Water (pH 6-9)	100	n/a
Nitric Acid	5	1
Phosphoric Acid	10	n/a
Sulfuric Acid	10	5
Gasoline	100	100

Vegetable Oil	100	100
Detergent	0.1	0.1
Soap	0.1	0.1

The CONTRACTOR shall be responsible for all costs associated with the chemical resistance tests.

Proof of meeting these requirements shall be provided to the engineer for approval at least seven (7) days prior to commencement of work.

C. PHYSICAL APPEARANCE

The tube shall be free from defects, such as, tears, holes, cuts, foreign materials, blisters, cracks, and other surface defects. The tube shall be homogenous across the entire wall thickness. No dry or unsaturated layers shall be evident.

2.3 RESINS

A. GENERAL

Resins shall be tinted for visibility and provide positive indication of adequate liner wet-out. Resins should be appropriate for conditions encountered in a sanitary sewer environment. Resins should withstand the corrosive effect of residential, commercial, and industrial effluents, liquids, and/or gases common to sewers. Resins should be resistant to abrasion caused by solids, grit, aggregate, and/or sand.

B. TYPES OF RESIN

1. INVERSION METHOD: a general purpose, unsaturated, styrene-based thermoset resin and catalyst system or an epoxy resin and hardener that is compatible with the inversion process,
2. PULL-IN-PLACE METHOD: an isophthalic based polyester, or vinyl ester thermoset resin and catalyst or an epoxy resin and hardener that is compatible with pull-in-place installation.

C. STRUCTURAL PROPERTIES

The structural properties of the cured resin shall have minimum initial test values as given in Table 1 of ASTM F1216, ASTM F1743, or ASTM F2019, whichever is applicable, (and supplemented below in

the table below). Properties for these or any other enhanced resins shall be substantiated with test data.

Test Property	Test Method	FELT TUBE Minimum Value [psi]	GRP TUBE Minimum Value [psi]
Flexural strength	ASTM D790	4,500	6,500
Flexural modulus	ASTM D790	300,000	725,000
50-year flexural creep modulus	ASTM D2990	150,000	

2.4 DIMENSIONS

- A. **LENGTH:** CONTRACTOR shall make allowances in determining the tube length for stretch during installation and shrinkage during curing. The minimum length shall be that which continuously spans the distance from the center of the inlet manhole to the center of the outlet manhole. The CONTRACTOR shall verify the lengths in the field before the tube is cut and impregnated. Individual installation runs may include one or more manhole-to-manhole sections as approved by the ENGINEER and will only be allowed when no more than 20 lateral services are interrupted at one time. Installation of the liner shall be through existing or new manholes. Excavation for liner insertion shall not be permitted except to replace the manhole cones, if necessary and/or required. The maximum inversion installation shall be 660 linear feet without prior approval from the ENGINEER.
- B. **DIAMETER:** CONTRACTOR shall make allowances in determining the tube circumference for stretch during installation and shrinkage during curing. The tube shall be sized such that when installed it will tightly fit the internal circumference of the original pipe. The diameter of the existing pipes may be larger than the nominal inside diameter. It is the CONTRACTOR's responsibility to determine the required diameter of the liner.
- C. **THICKNESS:** The nominal wall thickness shall be at least the calculated design thickness, or the minimum specified, and may be up to 15 percent greater except where felt layers overlap, in which case it may be in excess of this value. The wall thickness of the felt tube shall be ordered to the next standard 1.5 mm incremental thickness above the minimum calculated design thickness. Unless otherwise specified to provide for excess resin migration, the gap thickness of the wetting-out equipment shall be sized to allow an excess of 5 to 10 percent resin to pass during impregnation.

1. Fiberglass: the impregnated tube shall have a thickness that when compressed at installation pressures and cured will meet or exceed the design thickness in accordance with ASTM F1216, Appendix XI. The minimum allowable wall thickness for fiberglass CIPP is 2.8mm.

2.5 MANUFACTURER

A. CIPP LINER COMPOSITION

1. GRP LINER: The fiberglass tube shall be saturated with the appropriate resin using a resin bath to allow for the lowest possible amount of air entrapment. Vacuum-suction impregnation methods are not allowed due to the introduction of air using this method. The liner will then be formed into a spirally wound shape for the purpose of being seamless in its cured state. An inner film and outer film material will be added that are both impervious to airborne styrene. The outer film will also have UV blocking characteristics. The inner membrane will be removed after the curing process is complete.
2. FELT LINER: The felt tube shall have an inner film and outer film to prevent resin migration and contamination. The inner film and outer film must both be styrene gas barriers.

- B. **MANUFACTURERS:** All impregnation or “wet-out” of the tube must be done at an EPA-regulated, quality-controlled facility. Approved CIPP liner manufacturers are Insituform Technologies, Inliner Technologies, Spiniello Companies, Applied Felts, Inc., Reline America Inc., or equal.

2.6 DESIGN CRITERIA

- A. The liner shall be designed for a “fully deteriorated” pipe condition in accordance with the procedures of ASTM F1216, Appendix XI and these special provisions. All material properties used in design calculations shall be long-term (time-corrected) values. The CONTRACTOR shall be familiar with the existing site conditions when preparing the liner design.
- B. CONTRACTOR shall prepare design calculations for approval prior to performing the lining work. The submitted design calculations shall provide the following information as a minimum:

Project Number No. X through No. XX

Manhole to Manhole designation QS-XXX-MHXXXX to

QS-XXX-MHXXXX

Pipe Nominal Diameter (inches)

Minimum Liner thickness (inches)

Proposed Liner Thickness (inches)

The CONTRACTOR shall note that the actual level of deterioration may vary within any given section of sewer.

C. The following parameters shall be assumed for the liner design:

1. Fully deteriorated host pipe
2. Safety factor of 2.0
3. Modulus of soil reaction, E'S = 1,500 psi (fully deteriorated)
4. Unit weight of soil = 140 pcf
5. The minimum ovality for straight runs shall be 5.0 percent
6. AASHTO H20 traffic loads
7. AREMA E-80 railroad loads
8. Head of groundwater of 5 feet above top of pipe
9. Minimum 50-year service life

D. External Buckling Design: Where the CIPP is designed as a stand-alone pipe in a fully deteriorated condition, acceptable third-party testing and verification of design analysis techniques (ASTM F 1216, Section XI.2.2) shall be submitted by each manufacturer and/or CIPP product. This testing requirement can be accomplished with soil box testing.

2.7 CIPP TERMINATION POINTS

A. The CONTRACTOR shall provide shop drawings for approval detailing the proposed CIPP liner terminations.

Part 3 – EXECUTION

3.1 PREPARATORY PROCEDURES

A. TRAFFIC CONTROL

Traffic control devices and plan as specified in Section 02100, Traffic Control.

B. SEWER CLEANING

Prior to CIPP tube installation, the CONTRACTOR shall clean the existing sewer in accordance with Section 02760, Sewer and Sewer Structure Cleaning. The CONTRACTOR shall clear the existing sewer of obstructions such as solids or collapsed pipe that will prevent or hinder CIPP liner installation.

C. ODOR CONTROL

At the project site prior to bypassing sewage flow, the CONTRACTOR shall provide odor control measures.

D. SEWER BYPASSING AND DEWATERING

The CONTRACTOR shall be responsible for bypassing flow around his work and dewatering of sewer lines in accordance with the requirements of Section 02145, Diversion of Sewage Flow and Dewatering.

E. CCTV INSPECTION

Experienced personnel training in locating breaks, obstacles, and service connections by visual inspection shall perform inspection of the sewer main. The interior of the sewer shall be carefully inspected in accordance with Section 02761, CCTV Inspection of Sanitary Sewers, to determine the location of conditions, which may prevent proper installation of CIPP. Contractor shall furnish television inspection report material to the ENGINEER.

F. MEASUREMENT

The existing sewer lines may be larger than their nominal size due to corrosion; especially if pipe material is concrete. It is the CONTRACTOR's responsibility to measure the actual inside diameter at different locations of the existing sewer to determine the appropriate size of CIPP liner to use.

G. POINT REPAIRS

Sections of the existing host pipe that have shifted, dropped, or severely deteriorated, shall be ground down, grouted, or otherwise repaired to provide a smooth continuous surface for the CIPP installation that will not reduce the cross-sectional area of the interior of the relined pipe or reduce wall thickness to less than the minimum

specified thickness. CONTRACTOR shall clear existing sewer of obstructions such as solids or collapsed pipe that will prevent CIPP installation using point repairs, or replace sections of pipe as specified in Section 02950, Pipeline Point Repair, or as authorized by the ENGINEER.

H. MANHOLE PROTECTION

The CONTRACTOR shall protect the manholes to withstand forces generated by equipment, water or air pressure used while inserting the tube.

I. PUBLIC NOTIFICATION

The CONTRACTOR shall notify those affected by the work per Section 2145, Article 3.2, Public Notifications.

3.2 INSTALLATION PROCEDURES

A. GENERAL

All procedures performed by the CONTRACTOR in the CIPP installation shall be equal to or exceed the requirements of Section 7 of ASTM F1216, Section 7 in ASTM F1743, or Section 6 in ASTM F2019, as is applicable.

The CONTRACTOR shall designate the location where the CIPP felt tube would be impregnated with resin ("wet-out"). Locations shall be subject to approval by the ENGINEER and applicable local agencies. The CONTRACTOR shall allow the ENGINEER to inspect the materials and "wet-out" procedure.

If the "wet-out" location is not at the project site, the impregnated CIPP tube shall be transported to site under controlled environmental conditions. Transport vehicles shall include a tamper-resistant, sealed temperature-recording device which records the temperature of the liner at all times after leaving the wet-out site. The CONTRACTOR shall decide when to transport the impregnated CIPP tube to site and when to commence insertion with respect to weather conditions.

CONTRACTOR is responsible for obtaining construction/fire hydrant meters PARADISE VALLEY and for paying all applicable deposit fees and water usage fees.

The CONTRACTOR shall ensure that the pressure inside of the CIPP tube exceeds the pressure due to groundwater if present.

The exterior of the manufactured tube shall be marked along its length at regular intervals not to exceed five (5) feet. These marks shall be used as a gauge to measure elongation during insertion. Should the overall elongation of a reach exceed five percent (5%) of the overall length for fabric tube and two percent (2%) for GRP tube, the liner tube shall be rejected and replaced.

B. INSTALLATION PROCESS

CIPP installations will not be undertaken in weather conditions that could jeopardize the installation of the CIPP, or be detrimental to the long-term performance of the CIPP. All equipment, labor, and materials required to complete the work must be ready on-site before installation begins. The felt CIPP liner will be installed by the inversion tube method or the pull/winch method. The fiberglass CIPP liner will be installed winching or pull-in-place method.

1. **INVERSION METHOD:** The tube shall be impregnated with a liquid thermosetting resin and lowered into the manhole through an inversion tube. The inversion tube will then be filled with water or air where the weight of the water or air pressure will push the tube through the damaged pipe inside out, while pressing the resin impregnated side firmly against the inside walls of the damaged pipe. The smooth coated side of the liner shall become the new interior surface of the pipe.
2. **INSERTION/WINCHING METHOD:** The bottom half of the sewer pipe throughout the section to be lined shall be covered with a polyethylene foil or other suitable material to facilitate threading of the liner and reduce the risk of damage to the liner material. The tube liner shall be formed with a polyurethane coating on its interior surface. Rollers shall be installed in the upstream and downstream manholes to guide the liner into and out of the host pipe and to guard against chafing of the crowns at the entry and exit from the winch cable. The resin impregnated tube liner shall be lowered into the manhole. The tube shall then be pulled into position within the existing pipe with the aid of a power winch that is equipped with a device to monitor the force and prevent excessive tension. Should the pulling force exceed the manufacturer's recommendations, the tube shall be rejected and replaced. In addition, the tube liner shall use a sliding foil on the bottom one-third of the existing conduit during winching.

The CONTRACTOR shall cap each end of the liner and use liner restraints in the manholes. The CONTRACTOR shall introduce water or air into the liner to inflate the liner until it has a tight fit against the

inner walls of the host pipe producing dimples at lateral and side connections and flared ends at manholes. All hoses/pipes used for introducing water or air shall be ramped during the installation and curing process to allow for the ease of vehicular and pedestrian traffic. All hoses/pipes shall be color-coded for identification to prevent the use of hoses/pipes used for water conveyance are not used for wastewater conveyance or vice versa.

C. CURING

The curing process shall follow a step cure or similar approach recommended by the manufacturer and approved by the ENGINEER, and shall be held at the top step for an adequate length of time as determined by the liner manufacturer to ensure that the design physical properties are attained.

Felt tubing may be cured using either circulated hot water or steam per ASTM F1216 or ASTM F1743. Glass reinforced plastic (GRP) may be cured using either steam or ultraviolet light per ASTM F2019.

1. HOT WATER CURING

- a. CONTRACTOR shall use a flexible and impermeable calibration hose to inflate the tube. The calibration hose may or may not remain in the complete installation. Any dry tube or inflation hose material that enters the existing pipe that has not been previously vacuum impregnated with resin under controlled conditions cannot be included in the structural wall of the CIPP. The nominal thickness of this material shall be deducted from the field sample thickness measured in order to verify that the minimum specified wall thickness is achieved. Hose material remaining in the installation shall be compatible with the resin system used, shall bond permanently with the tube, and shall be translucent to facilitate post installation inspection. Hose materials which are to be removed after curing, shall be of non-bondable material. After the tube is inserted through the pipe section, the CONTRACTOR shall heat the water by circulating it through a boiler, where the hot water will cause the resin to cure.
- b. The CONTRACTOR shall monitor the temperature of the tube liner during curing by remote temperature sensors placed at the interface of the existing pipe and the CIPP. A minimum of two temperature sensors shall be installed, one at either end of the length being lined. The curing process shall not be terminated until the temperature

sensor readings indicate that a satisfactory cure has been completed. Any extended cure times shall not adversely affect the properties of the CIPP lining material.

- c. Circulation water shall cool down to at least 100 degrees Fahrenheit for 1 hour before releasing the hydrostatic head.
- d. The rate of temperature rise and fall during heating and cooling shall not exceed 2 degrees F per minute.
- e. The water shall be evacuated from the pipe at a controlled rate to prevent negative pressure in the pipe. The water shall not be released until the water is at an ambient air temperature.

2. STEAM CURING

- a. Steam source and air compressors are used to circulate the steam/air mixture through the pipe at a temperature recommended by the manufacturer causing the resin to harden.
- b. The CONTRACTOR shall monitor the temperature of the tube liner during curing by remote temperature sensors placed at the interface of the existing pipe and the CIPP. A minimum of two temperature sensors shall be installed, one at either end of the length being lined. The curing process shall not be terminated until the temperature sensor readings indicate that a satisfactory cure has been completed. Any extended cure times shall not adversely affect the properties of the CIPP lining material.
- c. The temperature of the air shall cool down to at least 140 degrees F for 1 hour before releasing air pressure.
- d. The outlet hose shall be equipped with a pressure regulating valve, temperature gauge, and pressures gauge.

3. ULTRAVIOLET CURING.

- a. During the curing process, infrared sensors will record the curing parameters using a computer and database that are tamper proof. The curing parameters shall be controlled as determined by the manufacturers' quality protocol. The curing data shall consist of the following:

- 1) Curing speed
 - 2) Light source working and wattage
 - 3) Inner air pressure
 - 4) Exothermic temperature
 - 5) Date and time
 - 6) Length of liner
- b. The ultraviolet curing apparatus shall operate between 200 to 400-nm ranges.
 - c. The ultraviolet curing apparatus shall be pulled through the liner at a speed recommended by the manufacturer while a constant air pressure maintains inflation and pressing of the liner material tightly against the inner walls of the host pipe.

3.3 FINISHED PRODUCT

The finished CIPP shall be continuous over the entire length of an installation run, manhole to manhole. The wall color of the interior CIPP surface after installation shall be a light reflective color so that a clear detailed examination with a closed circuit television (CCTV) equipment may be made.

A. DEFECTS

Any defects or non-conforming work as determined by the ENGINEER shall be corrected at the CONTRACTOR'S expense.

1. UNDER THICKNESS LINER: A minimum wall thickness at any point shall not be less than 90% of the design thickness, or the product will be considered unacceptable. An under thickness liner may be brought into compliance by either:
 - a. Removal and replacement of the undersized liner, or
 - b. Install a second liner with full wall thickness as stated on the liner design submittal after acceptable surface preparation of the undersized liner interior. This option will be considered by PARADISE VALLEY on a case by case basis. PARADISE VALLEY will consider the loss of flow capacity and this option may be refused for that reason. The addition of a thin liner that makes up the difference of

the under sizing is not an acceptable remedy because the structural properties are not additive if they are not cured simultaneously.

2. FLEXURAL TESTING FAILURE

In the event of a failure of the flexural strength, flexural modulus or flexural creep tests, another flat plate sample shall be tested. Should the second sample fail, the liner shall be brought to compliance by either:

- a. Removal and replacement of the undersized liner, or
- b. Install a second liner with full wall thickness as stated on the liner design submittal after acceptable surface preparation of the undersized liner interior. This option will be considered by PARADISE VALLEY on a case by case basis. PARADISE VALLEY will consider the loss of flow capacity and this option may be refused for that reason. The addition of a thin liner that makes up the difference of the under sizing is not an acceptable remedy because the structural properties are not additive if they are not cured simultaneously.

3. WRINKLES

- a. Circumferential wrinkles in the bottom half of the finished liner pipe which exceeds three (3) percent of the nominal diameter in height are unacceptable and shall be removed or repaired by the CONTRACTOR. Methods of repair shall be proposed by the CONTRACTOR and submitted to the ENGINEER for approval.
- b. Circumferential or longitudinal wrinkles in the finished liner pipe which reduce the hydraulic capacity of the pipe (wrinkles which exceed five (5) percent of the nominal pipe diameter) are unacceptable and shall be removed or repaired by the CONTRACTOR. Methods of repair shall be proposed by the CONTRACTOR and submitted to the ENGINEER for approval.
- c. Wrinkles in the finished liner pipe that reduce the structural stability of the pipe are unacceptable. If a void between the wrinkle and the pipe exists, the CONTRACTOR shall repair or replace that section of the pipe. Methods of repair shall be proposed by the

CONTRACTOR and submitted to the ENGINEER for approval.

- d. Wrinkles in the finished CIPP that reduce the structural integrity of the CIPP are unacceptable. CONTRACTOR shall repair or replace that section of the pipe. Methods of repair shall be proposed by the CONTRACTOR and submitted to the ENGINEER for approval.
4. OTHER DEFECTS: Other defects such as foreign inclusions, dry spots, pinholes, delamination, or wrinkling beyond the specification allowances, determined by the ENGINEER as affecting the integrity or strength of the CIPP, or as adversely affecting the hydraulic capacity of the CIPP, shall be repaired or replaced at the CONTRACTORS' expense. Methods of repair shall be proposed by the CONTRACTOR and submitted to the ENGINEER for approval.

B. GRP CIPP LINER

1. INNERFILM: The inner film of the fiberglass CIPP liner should be removed and discarded to provide optimal quality of the final product.
2. FLUSHING: Flushing of the UV cured fiberglass liner (to reduce styrene residual) is not required provided third party testing results document styrene residual levels (without flushing) are within acceptable defined levels.

C. CIPP TERMINATION POINTS (END SEALS)

1. End seals shall be not be installed until the CIPP pipe has relaxed for a minimum period of 24 hours.
2. The CIPP shall make a tight seal at the manhole opening with no annular gaps. The liner shall be cut neat and trimmed.
3. The CONTRACTOR shall secure the connections between the CIPP and the connection liner end seals. The securing materials shall adequately bond with the host CIPP pipe per CIPP manufacturer's specifications and shall be significantly different in color from the liner.
4. The CONTRACTOR shall furnish and apply epoxy resin to CIPP liner end seal at all upstream and downstream ends of the CIPP liner to form a watertight seal.

D. SERVICE RECONNECTIONS

1. After the curing is complete, existing lateral service connections shall be re-established. The cut liner shall have no jagged edges and shall be sanded smooth.
2. The CONTRACTOR shall install a Service Later Connection sealing system, or top hat, or other approved sealing application as approved by the ENGINEER and CITY, at each service connection.
3. Reinstate service laterals using only remote internal methods (prior to CIPP acceptance).
4. Where the CIPP liner does not create dimples at the service connections or in other ways indicate the locations, the exact location shall be determined from the internal inspection data. It shall be the CONTRACTOR's responsibility to accurately locate and reinstate all service connections after the CIPP installation and curing has been completed. All service connections shall be reinstated to a minimum of 95% of the original opening, centered on the lateral opening.
5. Any misplaced cuts made by the remote internal method while reinstating service laterals will be repaired using approved materials and a remote internal method at no additional cost to PARADISE VALLEY.

3.4 LIQUID WASTE DISPOSAL

The CONTRACTOR shall obtain the ENGINEER'S written approval prior to the disposal of the water and/or condensate from the curing process into the sanitary sewage system.

3.5 CLEANUP

Following inspection, the CONTRACTOR shall clean up the entire project area. The CONTRACTOR shall dispose of all excess material and debris not incorporated into the permanent installation off-site.

+ + END OF SECTION +

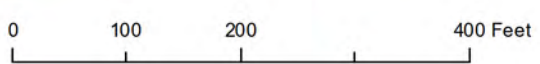
APPENDIX

Pipe Segment Exhibits

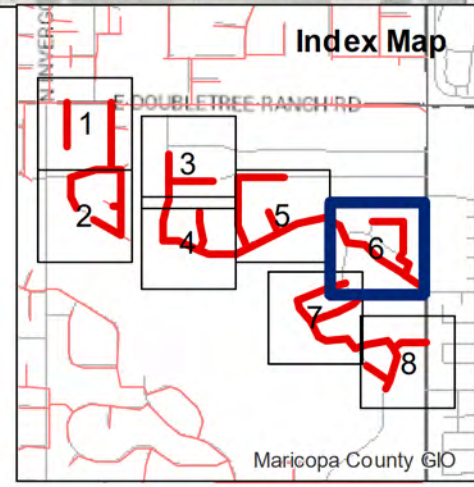


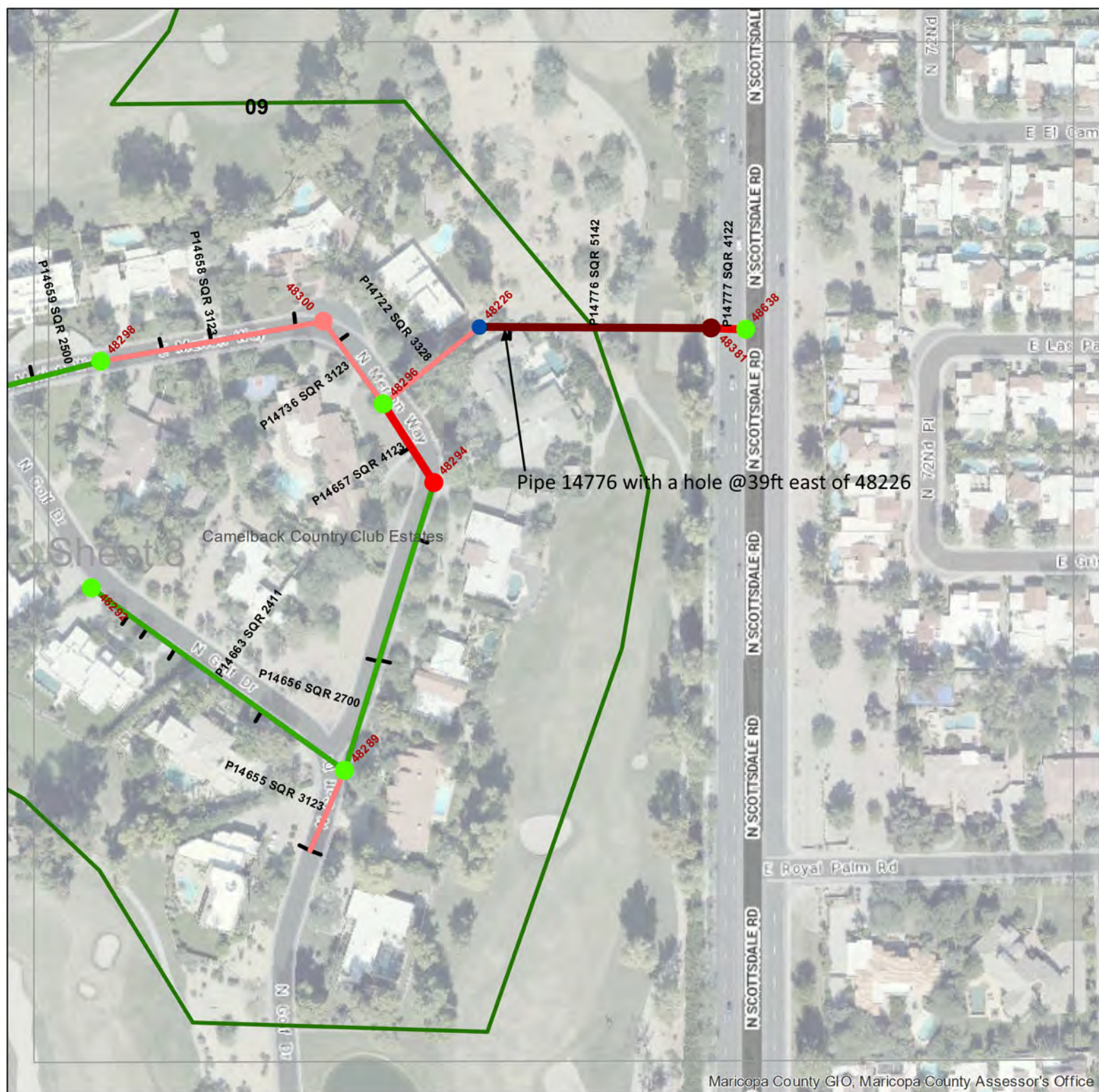
Town of Paradise Valley Sewer Assessment - Pipe/Manhole Rating

Pipe Structural Peak	Manhole Structural Peak	
— 1	● 1	— Taps
— 2	● 2	● Task Order Manholes
— 3	● 3	— Task Order Pipes
— 4	● 4	○ PV Sewer Manholes
— 5	● 5	— PV Sewer Pipes
		 HOAs



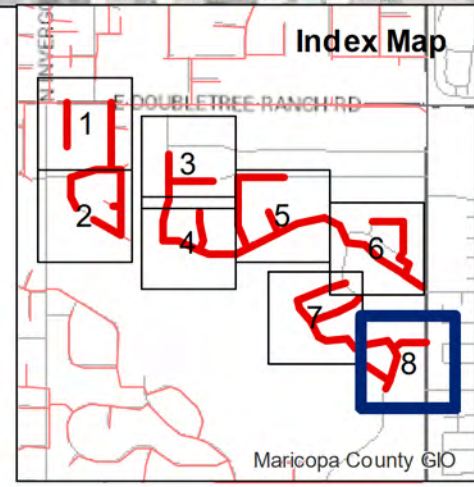
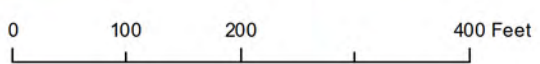
Task Order 09 Sheet 6





Town of Paradise Valley Sewer Assessment - Pipe/Manhole Rating

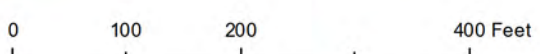
Pipe Structural Peak	Manhole Structural Peak	
1	1	Taps
2	2	Task Order Manholes
3	3	Task Order Pipes
4	4	PV Sewer Manholes
5	5	PV Sewer Pipes
		HOAs



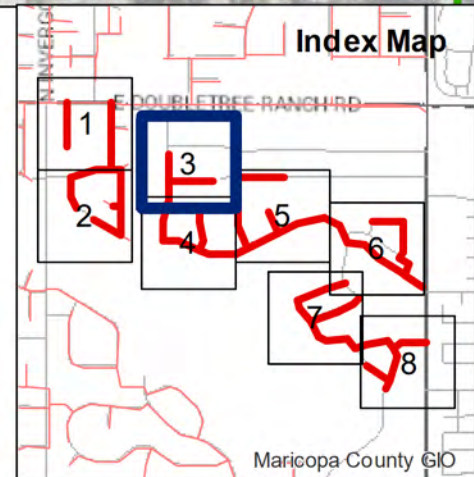


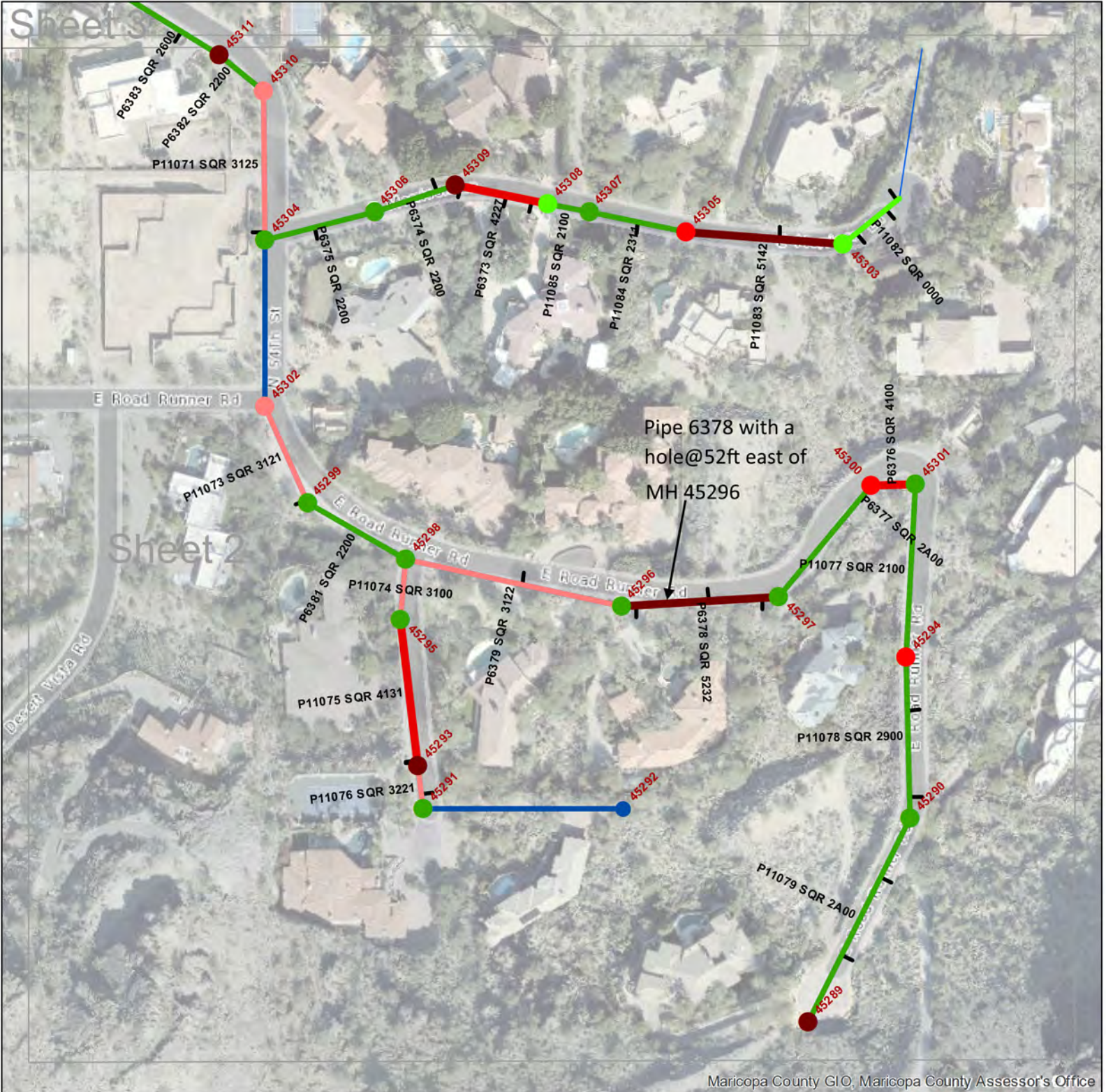
Town of Paradise Valley Sewer Assessment - Pipe/Manhole Rating

Pipe Structural Peak	Manhole Structural Peak	
— 1	● 1	— Taps
— 2	● 2	● Task Order Manholes
— 3	● 3	— Task Order Pipes
— 4	● 4	○ PV Sewer Manholes
— 5	● 5	— PV Sewer Pipes
		 HOAs



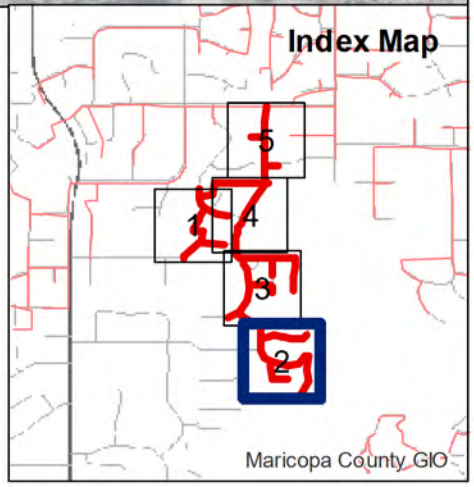
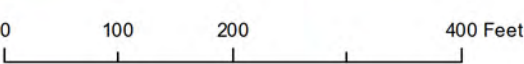
Task Order 09 Sheet 3

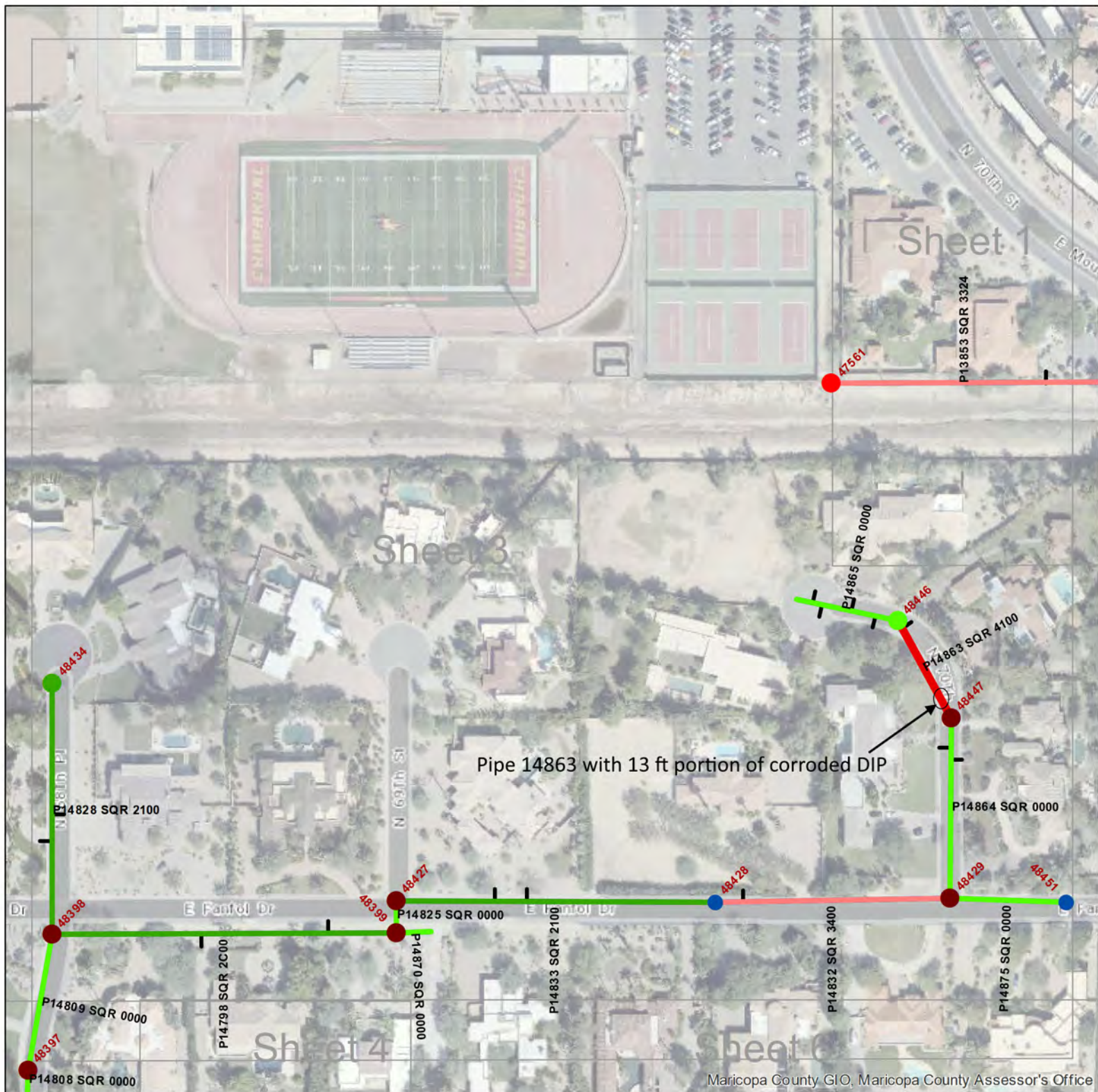




Town of Paradise Valley Sewer Assessment - Pipe/Manhole Rating

Pipe Structural Peak	Manhole Structural Peak	
— 1	● 1	— Taps
— 2	● 2	● Task Order Manholes
— 3	● 3	— Task Order Pipes
— 4	● 4	○ PV Sewer Manholes
— 5	● 5	— PV Sewer Pipes
		 HOAs



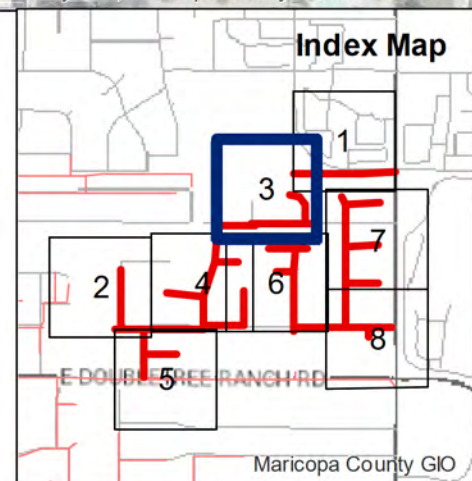


Town of Paradise Valley Sewer Assessment - Pipe/Manhole Rating

Pipe Structural Peak	Manhole Structural Peak	
1	1	Taps
2	2	Task Order Manholes
3	3	Task Order Pipes
4	4	PV Sewer Manholes
5	5	PV Sewer Pipes
		HOAs

0 100 200 400 Feet

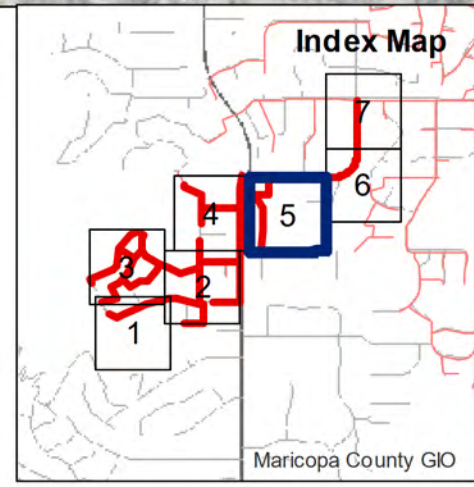
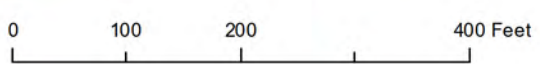
Task Order 10 Sheet 3





Town of Paradise Valley Sewer Assessment - Pipe/Manhole Rating

Pipe Structural Peak	Manhole Structural Peak	
1	1	Taps
2	2	Task Order Manholes
3	3	Task Order Pipes
4	4	PV Sewer Manholes
5	5	PV Sewer Pipes
		HOAs





Town Paradise Valley Sewer Assessment

- Task Order Manholes
- Task Order Pipes
- PV Sewer Manholes
- PV Sewer Pipes
- HOAs

Task Order 13 Sheet 3

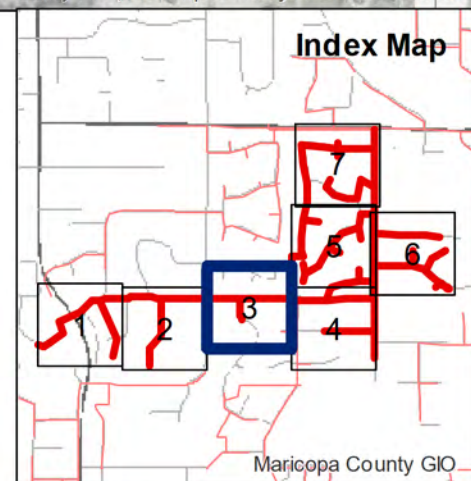


EXHIBIT B-1

**LINKING AGREEMENT
FOR COOPERATIVE PURCHASE**

ACHEN-GARDNER CONSTRUCTION, LLC

SEWER REHABILITATION

PRICING



June 4, 2021

Town of Paradise Valley
Mr. Paul Mood, P.E.
Town Engineer
6401 E. Lincoln Drive
Paradise Valley, AZ 85253

RE: VARIOUS LOCATIONS – SEWER REHABILITATION / CIPP LINING
GROUP 5

**SUBJECT: PROPOSAL –GROUP 5 SEWER SEGMENTS REHABILITATION
ACHEN-GARDNER PROJECT NUMBER 3743107**

Dear Mr. Mood:

Below please find Achen-Gardner Construction, LLC's ("Achen-Gardner") Proposal for the sewer line rehabilitation/lining at various locations in the Town of Paradise Valley. These locations are defined in attached Exhibit A.

The price for this Scope of Work: \$ 303,168.56 (Attached Exhibits A and B)

This Proposal is based on the following scope, clarifications, and assumptions:

- 1) The following scope of activities are included in our Proposal:
 - a. Mobilization
 - b. General Conditions are included in the pay item prices: Superintendent, Project Manager/Engineer, toilet, construction water, small tools, SWPPP, sweeping, end of project clean-up, dump fees.
 - c. Perform a quick, pre-installation video and sweep (light clean with jetter) of each segment.
 - d. Map laterals
 - i. Achen-Gardner shall notify residents connected to the affected sewer segments.
 - ii. Achen-Gardner shall monitor flows and bypass operations to ensure flows properly bypass the affected segment and laterals and deposit into the designated bypass destination.
 - e. UV line the designated pipe segments calculations and specifications for CIPP lining shall be submitted separately as a material submittal for approval.
 - f. Reinstate each lateral. A total of 4 laterals are known and included in this Proposal.
 - g. Perform a post-video of each lined segment
 - h. Point repairs for those segments noted as such.
- 2) Lead time for liner is 3 to 4 weeks and will be procured upon submittal approval and approval of Proposal by Council.
- 3) This Proposal is based on the pre-repair videos made and furnished by PEC of the various sewer segments, site locations, maps, and descriptions furnished to Achen-Gardner by the Town and PEC, site walks performed by Achen-Gardner and the Town, email communications approval for bypass/flow management/pumping/dumping scope (attached Exhibit C).
- 4) Should any additional scope, revisions to this scope, or unknowns arise they shall be approached as a change order to this Proposal and executed only upon written agreement between Achen-Gardner Construction and the Town of Paradise Valley.
- 5) Reinstatement of laterals is included in the rehabilitation Pay Items 41, 43, and 45.

- 6) Achen-Gardner assumes existing sewer lines are no deeper than 12 feet (10 feet average) and is proposing Reline America 3.5 mm liner in accordance with these calculations.
- 7) Point repairs in asphalt include the asphalt replacement/patch back.
- 8) Point repairs shall be repaired by removing and replacing the damaged area of pipe.
- 9) Top Hats or lateral seals shall be paid from the applicable Pay Item 50.
- 10) Pay Item 60: By-pass Pumping/Flow Management scope included in this proposal consists of the following as agreed to among Achen-Gardner, the Town, and the City of Scottsdale (see attached Exhibit C):
 - a. Flow Management for Pipe Segment 14700: Plug the 8" downstream side of manhole 48316 in Cabillo Circle, allowing the manhole to fill to a level where it would be pumped into a truck, transported, delivered and disposed into an existing manhole at 7135 E Oakmount Dr. Plug the downstream manhole 48234 E Cabillo Dr. allowing the manhole to fill to a level where it would be pumped using a submersible pump and lay flat hose around the west side of the house discharging into manhole 48317 at the intersection of E Cabillo Drive and E Cabillo Circle. Suction would take place at MH 48316 into a truck, transported, delivered and disposed of into an existing manhole at 7135 E Oakmount Dr. Plugs will be removed after each shift allowing lines to run freely.
 - b. Flow Management for pipe segments 14776, 14855, 6378, 14863, 14326, and 14395: By-pass based utilizing a submersible trash pump upstream of the work area and use of a lay flat hose around work area discharging to nearest downstream manhole.
- 11) "No Fee" Right-of-Way Permit to be provided by Town.
- 12) This Proposal is to be included in the Contract Agreement.
- 13) Quantities are approximate and based on information provided as stated in the above bullets. Final payment shall be based on actual field measurements.
- 14) One mobilization is included.
- 15) Traffic Control Plans shall be submitted by Achen-Gardner to the Town and approved by the Town prior to Achen-Gardner mobilizing.
- 16) In the event Contingency is utilized/authorized, it shall be invoiced based on T&M with back-up invoices.
- 17) Project Contingency to be utilized as authorized by the Town and as agreed upon between the Town and Achen-Gardner Construction, LLC.
- 18) Project duration will be 3 to 4 weeks depending on length of days worked. This will vary depending on the activities in progress each day.

Upon execution of the JOA, the materials will be ordered and the work scheduled. Should you have any questions and/or comments, please feel free to contact me at (602) 376-0356 or e-mail chall@achen.com.

Sincerely;

ACHEN-GARDNER CONSTRUCTION, LLC



Christie Hall, Project Manager

Attachments:

EXHIBIT A: Schedule of Values

EXHIBIT B: Schedule of Pre-construction Services

EXHIBIT C: Flow Management Approach



EXHIBIT A - SCHEDULE OF VALUES
PARADISE VALLEY SEWER REHABILITATION
CIPP LINING & REHAB GROUP 5 SEGMENTS
JUNE 04, 2021

ITEM / SEGMENT #	DESCRIPTION	QUANTITY	UM	UNIT PRICE	TOTAL
TOWN OF PARADISE VALLEY - GROUP 4 SEWER REHAB					
10	MOBILIZATION	1.000	LS	\$19,820.35	\$19,820.35
20	TRAFFIC CONTROL ALLOWANCE	1.000	AL	\$10,000.00	\$10,000.00
30	MATERIAL TESTING ALLOWANCE	1.000	AL	\$2,000.00	\$2,000.00
40	SURVEY OF EASEMENTS	1.000	AL	\$1,500.00	\$1,500.00
41	SEGMENT 14700 8" CIPP LINING	280.000	LF	\$126.11	\$35,310.80
42	SEGMENT 14776 8" POINT REPAIR (GOLF COURSE	1.000	EA	\$6,040.18	\$6,040.18
43	SEGMENT 14855 12" CIPP LINING W/3-4" TAPS	324.000	LF	\$193.76	\$62,778.24
44	SEGMENT 6378 8" POINT REPAIR (GATED COMMUNITY) IN ASPHALT	1.000	EA	\$10,043.55	\$10,043.55
45	SEGMENT 14863 8" CIPP LINING W/1-4" TAP	139.000	LF	\$163.18	\$22,682.02
46	SEGMENT 14326 8" POINT REPAIR (ASPHALT & CURB)	1.000	EA	\$12,858.58	\$12,858.58
47	SEGMENT 14359 8" POINT REPAIR VCP W/1-4" TAP IN ASPHALT	1.000	EA	\$11,442.01	\$11,442.01
50	TOP HAT REINSTATEMENT	4.000	EA	\$3,367.84	\$13,471.36
60	BY-PASS PUMPING/FLOW MANAGEMENT	1.000	LS	\$22,283.28	\$22,283.28
70	CHAIN FLAIL	1.000	AL	\$10,000.00	\$10,000.00
80	PRE-CONSTRUCTION SERVICES (SEE ATTACHED EXHIBIT B)	1.000	LS	\$12,679.76	\$12,679.76
90	PROJECT CONTINGENCY	1.000	AL	\$5,000.00	\$5,000.00
	RUNNING TOTAL #1 - PROJECT PAY ITEMS				\$257,910.13
140	CONTRACTOR'S FEE 7.5% OH + 1.5% PROFIT		9%		\$23,211.91
	RUNNING TOTAL #2 - RUNNING TOTAL #1 + FEE				\$281,122.04
150	GENERAL LIABILITY, AUTO INSURANCE, ETC. 1.5% OF RUNNING TOTAL #2		1.5%		\$4,216.83
160	BOND (.5%)		0.5%		\$1,426.69
	RUNNING TOTAL #3 - RUNNING TOTAL #2 + INSURANCE + BOND				\$286,765.57
170	SALES TAXES (5.72%)		5.72%		\$16,402.99
	PROJECT TOTAL - RUNNING TOTAL #3 + SALES TAXES				\$303,168.56

EXHIBIT B
SCHEDULE OF PRECONSTRUCTION SERVICES

ACHEN-GARDNER CONSTRUCTION, LLC
550 S. 79th STREET
CHANDLER, AZ 85226



PAY ITEM	DESCRIPTION	QUANTITY	UM	UNIT PRICE	TOTAL
01	PROJECT SUPERINTENDENT (CHRIS DUNN - FLOW MANAGEMENT/MONITORING)	12.00	HR	125.20	1,502.40
02	PROJECT SUPERINTENDENT (TIM WINBURNE - FIELD INVESTIGATION, SCOPING, PIPE ACCESS)	24.00	HR	127.20	3,052.80
03	PROJECT SUPERINTENDENT (TINO TARANGO - SCOPING SITE WALK, ACCESS INVESTIGATION)	12.00	HR	125.50	1,506.00
04	SENIOR ESTIMATOR (MIKE CRUSE - SITE WALKS SCOPING, ACCESS, BYPASS, MH LOCATIONS)	40.00	HR	127.40	5,096.00
05	PROJECT ENGINEER (CASEY PEERY - ASSIST WITH SCOPE AND FLOW MANAGEMENT)	3.50	HR	92.16	322.56
06	FLOW MONITOR	10.00	DAY	120.00	1,200.00
					0.00
	PRE-CONSTRUCTION SERVICES				12,679.76

SCOPE

Pre-construction services included multiple site walk meetings to investigate manhole locations, access, and condition of manholes/pipe, determine scope, monitor sewer flows in two pipe segments Dig up to find one manhole and provide access.

Christie Hall

From: Mike Cruse
Sent: Friday, June 4, 2021 7:49 AM
To: Christie Hall
Subject: FW: PV Sewer Rehab Asset 14700
Attachments: image001.jpg

Christie,

Paul's comments

Ok to pump and dump into trucks

MIKE CRUSE
Sr. Estimator
Main: 480.940.1300 | Cell: 480.436.9167 | Direct: 480.403.9447 | Email: mcruse@achen.com

ACHEN-GARDNER CONSTRUCTION
100% EMPLOYEE OWNED
550 South 79th Street | Chandler, AZ 85226
2425 West Wave Hill Court | Tucson, AZ 85705 achen.com | facebook | twitter | linkedin | instagram | youtube

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-----Original Message-----

From: Paul Mood [mailto:pmood@paradisevalleyaz.gov]
Sent: Friday, May 28, 2021 9:32 AM
To: Mike Cruse <MCruse@achen.com>
Subject: Re: PV Sewer Rehab Asset 14700

I spoke with Bill Willson at the city of Scottsdale and they would be fine with pumping and dumping into another manhole nearby.

Paul Mood

Sent from my iPhone

On May 28, 2021, at 7:49 AM, Paul Mood <pmood@paradisevalleyaz.gov> wrote:

OK

From: Mike Cruse <MCruse@achen.com>
Sent: Friday, May 28, 2021 7:29 AM

To: Paul Mood <pmood@paradisevalleyaz.gov>

Subject: RE: PV Sewer Rehab Asset 14700

EXTERNAL

Paul,
Will 9 work for you?

MIKE CRUSE

Sr. Estimator

Main: 480.940.1300 | Cell: 480.436.9167 | Direct: 480.403.9447 | Email: mcruse@achen.com
<mailto:mcruse@achen.com>

ACHEN-GARDNER CONSTRUCTION

100% EMPLOYEE OWNED

550 South 79th Street | Chandler, AZ 85226

2425 West Wave Hill Court | Tucson, AZ 85705 achen.com<<http://www.achen.com/>> |

facebook<<http://www.facebook.com/achengardner>> | twitter<<http://twitter.com/achengardner>> |

linkedin<<http://www.linkedin.com/company/achen-gardner-construction-llc>> |

instagram<<https://www.instagram.com/achengardner/>> | youtube<<http://www.youtube.com/user/AchenGardner>>

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From: Paul Mood [mailto:pmood@paradisevalleyaz.gov]

Sent: Thursday, May 27, 2021 6:02 PM

To: Mike Cruse <MCruse@achen.com<mailto:MCruse@achen.com>>

Subject: RE: PV Sewer Rehab Asset 14700

Mike,

Are you able to call me tomorrow to go over this one. My cell number is 480-650-4499.

Thanks,

Paul Mood, P.E.

Town Engineer

Engineering Department

6401 E. Lincoln Drive

Paradise Valley, AZ 85253

O – 480-348-3573

C – 480-650-4499

pmood@paradisevalleyaz.gov<mailto:pmood@paradisevalleyaz.gov>

From: Mike Cruse <MCruse@achen.com<mailto:MCruse@achen.com>>

Sent: Thursday, May 27, 2021 10:16 AM

To: Paul Mood <pmood@paradisevalleyaz.gov<mailto:pmood@paradisevalleyaz.gov>>; Timothy Winburne <twinburne@achen.com<mailto:twinburne@achen.com>>; Heaton, Michael <mheaton@pec.us.com<mailto:mheaton@pec.us.com>>; Christie Hall <chall@achen.com<mailto:chall@achen.com>>
Cc: David Diekman <DDiekman@paradisevalleyaz.gov<mailto:DDiekman@paradisevalleyaz.gov>>
Subject: RE: PV Sewer Rehab Asset 14700

EXTERNAL

Paul,
Let me know what you think.

A) Plug the 8" downstream side of manhole 48316 in Cabillo Circle. Locate and uncover existing manhole 48234 in lawn area to discharge into..
B) Plug the upstream 8" line running NW in manhole 48235 Suction manhole will be from manhole 48234 discharge OPTION #1 into manhole shown on quarter section in Scottsdale Road as NF will require the burying HDPE in Scottsdale Road , or the OPTION #2 discharge into metering manhole to the south shown on the attached quarter sections.

MIKE CRUSE
Sr. Estimator
Main: 480.940.1300 | Cell: 480.436.9167 | Direct: 480.403.9447 | Email: mcruse@achen.com
<mailto:mcruse@achen.com>

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2425 West Wave Hill Court | Tucson, AZ 85705 achen.com<http://www.achen.com/> |
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linkedin<http://www.linkedin.com/company/achen-gardner-construction-llc> |
instagram<https://www.instagram.com/achengardner/> | youtube<http://www.youtube.com/user/AchenGardner>

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From: Paul Mood [mailto:pmood@paradisevalleyaz.gov]
Sent: Thursday, May 27, 2021 8:46 AM
To: Mike Cruse <MCruse@achen.com<mailto:MCruse@achen.com>>; Timothy Winburne <twinburne@achen.com<mailto:twinburne@achen.com>>; Heaton, Michael <mheaton@pec.us.com<mailto:mheaton@pec.us.com>>; Christie Hall <chall@achen.com<mailto:chall@achen.com>>
Cc: David Diekman <DDiekman@paradisevalleyaz.gov<mailto:DDiekman@paradisevalleyaz.gov>>
Subject: RE: PV Sewer Rehab

The bypass pumping option is preferred.

Plugging, monitoring and pumping resulted in sewer backing up into a home and extensive damage when another contractor did a sewer repair previously. There was a \$2 million claim that the contractor had to resolve.

Paul Mood

From: Mike Cruse <MCruse@achen.com<mailto:MCruse@achen.com>>
Sent: Thursday, May 27, 2021 7:59 AM
To: Paul Mood <pmood@paradisevalleyaz.gov<mailto:pmood@paradisevalleyaz.gov>>; Timothy Winburne <twinburne@achen.com<mailto:twinburne@achen.com>>; Heaton, Michael <mheaton@pec.us.com<mailto:mheaton@pec.us.com>>; Christie Hall <chall@achen.com<mailto:chall@achen.com>>
Cc: David Diekman <DDiekman@paradisevalleyaz.gov<mailto:DDiekman@paradisevalleyaz.gov>>
Subject: RE: PV Sewer Rehab

EXTERNAL

Paul,
Can you review our thoughts to manage the flows for segment 14700?

10 Hour Days

A) Plug the 8" downstream side of manhole 48316 in Cabillo Circle, allowing the manhole to fill to a level where it would be pumped into a truck, transported, delivered and disposed into an existing manhole at 7135 E Oakmount Dr.

B) Plug the downstream manhole just south of E Cabillo Circle on E Cabillo Dr. allowing the manhole to fill to a level where it would be pumped into a truck, transported, delivered and disposed into an existing manhole at 7135 E Oakmount Dr.

Plugs will be removed after each shift allowing lines to run freely.

C) It is anticipated, minimal flows will be generated from the 6 homes located between manholes 48235 and 48324 in E Cabillo Dr. We will monitor flows for the 6 home and if necessary By-pass will be by utilizing a submersible trash pump upstream of the work area and use of a lay flat hose around work area discharging to nearest manhole, 48316 in the cul-de-sak.

MIKE CRUSE

Sr. Estimator

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<mailto:mcruse@achen.com>

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From: Paul Mood [mailto:pmood@paradisevalleyaz.gov]
Sent: Wednesday, May 26, 2021 3:44 PM

To: Mike Cruse <MCruse@achen.com<mailto:MCruse@achen.com>>; Timothy Winburne <twinburne@achen.com<mailto:twinburne@achen.com>>; Heaton, Michael <mheaton@pec.us.com<mailto:mheaton@pec.us.com>>; Christie Hall <chall@achen.com<mailto:chall@achen.com>>
Cc: David Diekman <DDiekman@paradisevalleyaz.gov<mailto:DDiekman@paradisevalleyaz.gov>>
Subject: RE: PV Sewer Rehab

Mike,

I sent the sewer bypass and pump and haul options to Scottsdale for their review.

Paul Mood

From: Mike Cruse <MCruse@achen.com<mailto:MCruse@achen.com>>
Sent: Wednesday, May 26, 2021 3:30 PM
To: Paul Mood <pmood@paradisevalleyaz.gov<mailto:pmood@paradisevalleyaz.gov>>; Timothy Winburne <twinburne@achen.com<mailto:twinburne@achen.com>>; Heaton, Michael <mheaton@pec.us.com<mailto:mheaton@pec.us.com>>; Christie Hall <chall@achen.com<mailto:chall@achen.com>>
Cc: David Diekman <DDiekman@paradisevalleyaz.gov<mailto:DDiekman@paradisevalleyaz.gov>>
Subject: RE: PV Sewer Rehab

EXTERNAL

Paul,
We've reached out the golf course and let them know what we need as far as access issues go. Asset ID 14776 They are reviewing documents we sent them and are waiting on them to set up a site visit. We will reach out to them again to confirm a date & time.

The homeowner at 7171 E Cabillo Circle will need to be notified we will need to have access in the existing manhole buried under 6"-10" granite in their back yard next to fence on north side of the property.

We installed and monitored water flows for 5 days on segment 11966 on Mountain View and Scottsdale Road. The line will need to be by-passed for us to perform our scope, this would entail setting up a by-pass pump operation requiring 2- 4" pumps, 1200' +/- HDPE pipe, burying pipe across 3 lanes SB Scottsdale road, discharging into a manhole, in the median, about 450' south of the intersection.

2nd option would be to pump into trucks using manhole 47563 upstream of manhole 47517 for our suction location. Can you provide me with a location where we can transport deliver and dump in close proximity if we can go with this alternate?

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instagram<<https://www.instagram.com/achengardner/>> | youtube<<http://www.youtube.com/user/AchenGardner>>

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From: Paul Mood [mailto:pmood@paradisevalleyaz.gov]
Sent: Tuesday, May 25, 2021 8:57 AM
To: Mike Cruse <MCruse@achen.com<mailto:MCruse@achen.com>>; Timothy Winburne <twinburne@achen.com<mailto:twinburne@achen.com>>; Heaton, Michael <mheaton@pec.us.com<mailto:mheaton@pec.us.com>>; Christie Hall <chall@achen.com<mailto:chall@achen.com>>
Cc: David Diekman <DDiekman@paradisevalleyaz.gov<mailto:DDiekman@paradisevalleyaz.gov>>
Subject: RE: PV Sewer Rehab

Mike,

Are there any access issues onto properties that still need to be worked out?

Paul Mood

From: Mike Cruse <MCruse@achen.com<mailto:MCruse@achen.com>>
Sent: Tuesday, May 25, 2021 7:36 AM
To: Paul Mood <pmood@paradisevalleyaz.gov<mailto:pmood@paradisevalleyaz.gov>>; Timothy Winburne <twinburne@achen.com<mailto:twinburne@achen.com>>; Heaton, Michael <mheaton@pec.us.com<mailto:mheaton@pec.us.com>>; Christie Hall <chall@achen.com<mailto:chall@achen.com>>
Cc: Ken Bunes <Ken.Bunes@pro-pipe.com<mailto:Ken.Bunes@pro-pipe.com>>; Ryan Robinson <Ryan.Robinson@pro-pipe.com<mailto:Ryan.Robinson@pro-pipe.com>>; Ying Xu <yxu@pec.us.com<mailto:yxu@pec.us.com>>; David Diekman <DDiekman@paradisevalleyaz.gov<mailto:DDiekman@paradisevalleyaz.gov>>
Subject: RE: PV Sewer Rehab

EXTERNAL

Paul,
We still need a video for asset 14700

MIKE CRUSE
Sr. Estimator
Main: 480.940.1300 | Cell: 480.436.9167 | Direct: 480.403.9447 | Email: mcruse@achen.com
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Reline America Liner Wall Thickness Design Analysis Report - ASTM

Date:	Friday, June 04, 2021
Calculations made by:	Geoff Tucker
Calculations reviewed by:	
Project Name:	Town of Paradise Valley Group 5
Project Location:	Various

SEGMENT DESIGNATION

14700	14855	14863
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DESIGN INFORMATION SUMMARY

Condition of Host Pipe		FD	FD	FD
Inside Diameter of Host Pipe (in)	D	8	12	8
Ovality of Host Pipe (%)	q	2.0	2.0	2.0
Liner Type to be Used		Alphaliner 500	Alphaliner 500	Alphaliner 500
Flexural Modulus of Elasticity of CIPP, initial (psi)	E	1,370,000	1,370,000	1,370,000
Creep Retention Factor (%)	C _r	73	73	73
Flexural Modulus of Elasticity of CIPP, long-term (psi)	E _L	1,000,100	1,000,100	1,000,100
Flexural Strength of CIPP, Initial (psi)	σ _i	26,000	26,000	26,000
Tensile Strength of CIPP, Initial (psi)	σ _T	21,000	21,000	21,000
Design Safety Factor	N	2	2	2
Unit Weight of Soil (pcf)	γ _s	120	120	120
Depth of Cover (ft)	H	8.0	8.0	8.0
Estimated Constrained Soil Modulus	M _s	1,000	1,000	1,000
Height of Groundwater (ft)	H _w	0.0	0.0	0.0
Surface Live Loading Condition		Highway	Highway	Highway
Pavement Type		Flexible	Flexible	Flexible

WALL THICKNESS CALCULATIONS SUMMARY

Partially Deteriorated Gravity Pipe Condition:

Minimum Thickness Required, Hydrostatic Buckling (in)	Eq. X1.1	0.03	0.05	0.03
Minimum Thickness Required, Ovality Check (in)	Eq. X1.2	0.01	0.01	0.01

Fully Deteriorated Gravity Pipe Condition:

Minimum Thickness Required, Lusser's Buckling Equation (in)	Eq. X1.3	0.06	0.09	0.06
Minimum Thickness Required, Pipe Stiffness (in)	Eq. X1.4	0.07	0.11	0.07

CIPP WALL THICKNESS DESIGN SUMMARY

Minimum CIPP Thickness Calculated (in)	t _{min}	0.07	0.11	0.07
Minimum CIPP Thickness Calculated (mm)	(mm)	1.90	2.85	1.90
Vertical Soil Load Assumption on Top of Pipe		Full Height	Full Height	Full Height

EXHIBIT C
LINKING AGREEMENT
FOR COOPERATIVE PURCHASE
ACHEN-GARDNER CONSTRUCTION, LLC
SEWER REHABILITATION

SPECIFIC REQUIREMENTS/OPTIONS OF TOWN

Notices: All notices required under the Linking Agreement shall be sent to:

Town Engineer
Town of Paradise Valley
6401 E. Lincoln Drive
Paradise Valley, Arizona 85253
Attn: Paul Mood

With mandatory copy to:

Town Attorney
Town of Paradise Valley
6401 E. Lincoln Drive
Paradise Valley, Arizona 85253