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ADDENDUM NUMBER ONE

SUN VALLEY PUBLIC IMPROVEMENT CORPORATION

SPECIAL PROVISIONS BOOKLET

FOR

SUN VALLEY PARKWAY

FROM I-10 TO THE TOWN OF SURPRISE

THIS IS ADDENDUM NUMBER ONE DATED 1 MAY 1987. ALL ADDITIONS ARE SHOWN IN BOLD TYPE, WHILE DELETIONS ARE LINED THROUGH. THIS REPLACES, IN TOTAL, THE ORIGINAL SPECIAL PROVISION BOOKLET. THE ORIGINAL BOOKLET DOES NOT NEED TO BE SUBMITTED WITH THE BID.

SUPPLEMENTARY TO MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS EDITION OF 1979 INCLUDING REVISIONS AND SUPPLEMENTS THERETO FOR THE PERIOD 1980 - 1986

BID SET #

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LEGAL AND PROCEDURAL DOCUMENTS

SECTION 001

INVITATION TO BIDDERS
SUN VALLEY PARKWAY

FROM I-10, APPROXIMATELY 28.45 MILES TO THE TOWN OF SURPRISE

BID OPENING: May 1320, 1987

PROPOSED WORK: The proposed work consists of constructing approximately 28.45 miles of six (6) lane paved highway, box culverts, pipe culverts, removal of existing paving, a bridge across the Beardsley Canal and other miscellaneous work required for the completion of the project.

LOCATION OF THE WORK: This project is located in western Maricopa County, from the Palo Verde interchange on I-10, approximately 28.45 miles east, to the town limits of the Town of Surprise.

SEALED BIDS: Sealed bids for the proposed work will be received by the Sun Valley Public Improvement Corporation, a nonprofit corporation, hereinafter sometimes referred to as the "OWNER", in the Maricopa County Highway Department Conference Room at 3325 West Durango Street, Phoenix, Arizona 85009 until 2:30PM 3:00PM (Mountain Standard time), on May- 20 May 20, 1987 and then publicly read by the Owner. Since time is of the essence, no bid will be received after the time specified for the bid opening. All bids must be submitted on the proposal forms contained in the Special Provisions Booklet. Owner reserves the right to reject any or all bids and to waive any informality in any bid received.

ELIGIBILITY OF BIDDERS: In order to determine if a bidder is entitled to an award preference, all bidders shall submit, as part of their proposal, an affidavit stating whether or not taxes have been paid for two (2) successive years, as provided in Arizona Revised Statutes Section 34-241. The affidavit shall be in the form provided in this Special Provisions Booklet. In the event a competing bidder challenges compliance with the tax provision, the successful bidder will be required to provide proof of compliance.

CONTRACT TIME: The contractor shall complete all work on the project within six hundred (600) calendar days after the date specified in the written Notice to Proceed.

PREBID CONFERENCE: A PREBID CONFERENCE IS SCHEDULED TO BE HELD BY THE OWNER ON APRIL 29, 1987 AT 10:00AM (MST) IN THE MARICOPA COUNTY HIGHWAY DEPARTMENT CONFERENCE ROOM, 3325 WEST DURANGO STREET. IT IS IN THE BEST INTEREST OF PROSPECTIVE BIDDERS TO ATTEND THE PREBID CONFERENCE.

Section 001 - continued

ANY QUESTIONS SHALL BE ADDRESSED IN WRITING TO GREINER ENGINEERING SCIENCES, INC., (THE "ENGINEER".) ANY ANSWERS OR CLARIFICATIONS SHALL BE ADDRESSED TO ALL BIDDERS BY ADDENDUM. UNDER NO CIRCUMSTANCES WILL VERBAL ANSWERS OR CLARIFICATIONS GIVEN TO INDIVIDUAL CONTRACTORS EITHER BEFORE OR AFTER THE PREBID CONFERENCE BE BINDING ON THE OWNER.

The Engineer may be contacted at: 7310 North 16th Street, Suite 160, Phoenix, Arizona 85020, Attention: Erik Collett.

CONTRACT PLANS, SPECIAL PROVISIONS & CONTRACT DOCUMENTS: Plans, Special Provisions and other contract documents may be obtained from the Owner at Maricopa County Highway Department offices, 3325 West Durango Street, Phoenix, Arizona upon payment of \$150.00 by check payable to Collar, Williams and White Engineering, Inc. (the "Design Engineer"). This payment will not be refunded. (See SECTION 002.05 - AVAILABILITY OF ADDITIONAL INFORMATION, in the Special Provisions Booklet, for pertinent information available from others, outside the Contract Documents.)

PROPOSAL GUARANTEE: Each bid must be accompanied by a bond, cashier's check or certified check in the amount of five percent (5%) of the amount bid, made payable to the SUN VALLEY PUBLIC IMPROVEMENT CORPORATION as a guarantee that if the work is awarded to the bidder, he will within fifteen (15) days from the date the Notice of Award has been deposited in the United States mail, enter into the required contract and deliver the required bonds for the faithful performance of the work and payment of labor and materials; otherwise, said check or bond will be forfeited.

ALL BIDS ARE TO BE SEALED AND CLEARLY MARKED ON THE EXTERIOR OF THE ENVELOPE AS FOLLOWS:

BID PROPOSAL
for
SUN VALLEY PARKWAY

SECTION 002 - INFORMATION FOR BIDDERS

SECTION 002.0 - DEFINITIONS: All definitions set forth in Section 101.2 of the Standard Specifications and Section 101.201 of the Special Provisions are applicable to the Special Provisions Booklet.

SECTION 002.00 - PROJECT FINANCING: The financing arrangements for the contract to be entered into for this project differ from methods familiar to bidders.

The contract is to be funded solely with the proceeds of bonds which have been issued by the Sun Valley Public Improvement Corporation. There is available from such proceeds the sum of \$43,300,000 plus a contingency fund of \$2,410,000 for construction of the project. No other monies are committed for contract payment. Therefore, the aggregate of \$45,710,000 is the maximum amount of money available to pay all costs of the project notwithstanding overruns, erroneous quantity estimates or change orders or any other reason which would cause the total contract price to exceed the total amount available for construction of this project. The Sun Valley Public Improvement Corporation has no taxing power and no other guaranteed source of monies to pay the contract price. Maricopa County is neither required nor expected to pay any monies to complete construction. Neither the County, the Corporation, Heron Financial Corporation or Security Pacific National Bank has agreed to advance any monies with respect to the contract. **The Contractor shall acknowledge that no implied contract of any nature shall exist between the County and the Contractor. The Contractor shall be required to waive all rights and remedies at law or in equity to recover from the County the costs of any services or materials furnished in connection with the contract.**

Upon certification of the completion of the work by the Engineer, the project will be integrated into the Maricopa County Road system. Greiner Engineering Sciences, Inc., the Engineer, will act as Maricopa County's authorized representative and will be in charge of inspection, administration of the contract and approval of progress payments.

The contract requires the contractor to timely repair any defects in the work determined by the Engineer to exist. Such obligation shall last for a period of one year after completion of the contract.

All rules pertaining to public bidding, contractor preference and progress payments shall be governed by Arizona law respecting public contracts of the same nature.

SECTION 002.01 - AWARD PREFERENCE: The five percent (5%) preference law, ARS 34-241, will be followed.

SECTION 002.02 - INSPECTION OF SITE WORK: Bidders are required to inspect the site of the work in order to satisfy themselves, by personal examination or by such other means as they may prefer, as to the location of the proposed work, the actual conditions of and at the site of work, access to the site and that no conditions exist which would delay either the start or

Section 002 - continued

timely completion of the project. If, during the course of examination, a bidder finds facts or conditions which appear to him to conflict with the letter or spirit of the contract documents, or the timely starting or completing of the project, or with any other data furnished him, he must promptly notify the Owner and apply to the Owner in writing for additional information and explanation before submitting his bid.

The submission of a proposal by the bidder shall constitute the acknowledgment that, if awarded the contract, he has relied and is relying on his own examination of (a) the site of the work, (b) the access to the site, and (c) all other data, matters, and things requisite to the fulfillment of the work and on his own knowledge of existing services and utilities on and in the vicinity of the site of the work to be constructed under the contract, and not on any representation or warranty of the Owner. No claim for additional compensation will be allowed which is based upon a lack of knowledge of the above items or for delay in the start or timely completion of the work due to site conditions, access, utility relocations or interruptions or for any other reason.

SECTION 002.03 - EXAMINATION OF CONTRACT DOCUMENTS: Each bidder shall thoroughly examine and be familiar with the legal and procedural documents, general conditions, specifications, drawings and addenda (if any). The submission of a proposal shall contain an acknowledgment (upon which the Owner may rely) that the bidder has thoroughly examined and is familiar with the contract documents. The bidder must carefully read this entire booklet and be familiar with its contents. The textual statements contained in the Contractor's Proposal (Section 003) are intended to be legally binding upon the Contractor. The failure or neglect of a bidder to receive or examine any of the contract documents shall in no way relieve him from any obligations with respect to his proposal or to the contract. The filing of this Proposal with the Sun Valley Public Improvement Corporation serves as acknowledgement that the bidder has read and agrees to all conditions and requirements contained herein. No claim for additional compensation will be allowed which is based upon a lack of knowledge of any contract document.

SECTION 002.04 - INTERPRETATION OF CONTRACT DOCUMENTS: No oral interpretations made to any bidder as to the meaning of the contract documents will be binding upon the Owner. Requests for an interpretation shall be made in writing and delivered to the Owner at least ten (10) days before the time announced for opening the proposals. Interpretations by the Owner will be in the form of an addendum to the contract documents, and, when issued, will be sent as promptly as is practical to all parties to whom the contract documents have been issued. All such addenda shall become part of the contract and the ~~Contract~~ **contract** documents.

SECTION 002.05 - AVAILABILITY OF ADDITIONAL INFORMATION: Plotted roadway cross-sections, earthwork computations, mass diagram plots, soils test results and a site plan exhibit which shows locations of potential water sources, borrow sources, an aggregate source and the alignments of two haul roads to the aggregate source are available from Collar, Williams and White

Section 002 - continued

Engineering, Inc. at: 2702 North 44th Street, Suite 205B, Phoenix, Arizona 85008, (602) 957-3350 at a cost of \$150.00. All of the above are available for general informational purposes and are not provided as a part of the Contract Documents. The information so set forth shall not constitute a representation or warranty, ~~expressed-~~ **express** or implied, of any nature whatsoever. Bidders shall make their own investigations and form their own estimates of the site conditions.

SECTION 002.06 - PROPOSAL: Proposals shall be made on the blank forms (Section 003 hereof) prepared by the Owner without removal from the bound contract documents. All proposals shall give the prices proposed, both in writing (or typed) and in figures, shall give all other information requested herein, and shall be signed by the bidder or his authorized representative, with his address. The total bid price proposal to be considered shall consist of the base bid subtotal plus either the Alternate "A" subtotal, ~~or~~ Alternate "B" subtotal, **or Alternate "C" subtotal**. If the proposal is made by an individual, his name, signature and street address must be shown; if made by a partnership, the name and street address of the partnership and the signature of each of the general partners must be shown; if made by a corporation, the proposal shall show the name of the state under the laws of which the corporation is chartered, the name and street address of the corporation, and the title of the person who signs on behalf of the corporation. If the proposal is made by ~~the~~ a corporation, a certified copy of the bylaws or resolution of the board of directors of the corporation shall be furnished showing the authority of the officer signing the proposal to execute contracts on behalf of a corporation.

Bidders shall not make erasures or alterations of any kind, and proposals which contain omissions, erasures or irregularities of any kind may be rejected. No oral, telegraphic or telephonic proposals, addenda or modifications will be considered.

SECTION 002.07 - ADDENDA: Each proposal shall include specific acknowledgment of receipt of all addenda issued during the bidding period. Failure to so acknowledge will result in the proposal being rejected as not responsive. (See the "Contractor's Proposal", Section 003.)

It shall be the responsibility of prospective bidders to determine, prior to submission of a bid, if any addenda have been issued by the Owner. This may be accomplished by calling (602) 468-3612. Any addenda issued, **other than plan sheets**, if not already bound into the Special Provisions, must be included as a part of the Special Provisions. If the bidding schedule is modified by addendum, the entire new bidding schedule is to be used in lieu of the original one in the Special Provisions Booklet.

Bids which do not include appropriate addenda and show appropriate changes to the Bidding Schedule shall be invalid.

Section 002 - continued

SECTION 002.08 - BID PRICES: Prices bid shall include everything necessary for the completion of construction and fulfillment of the contract including but not limited to furnishing all materials, equipment, tools, plant and other facilities and all management, superintendence, insurance, labor and services, except as may be expressly provided otherwise in the contract documents. In the event of a difference between a unit price quoted in words and a unit price quoted in figures for the same quotation, the words shall be deemed to be the amount bid.

SECTION 002.09 - TAXES, PERMITS AND LICENSES: Bid prices shall include all federal, state and local taxes, permits and licensing fees. It shall be the successful bidder's responsibility to obtain and maintain, at his cost, all necessary permits and licenses. Copies of such permits and licenses shall be available at the site for inspection.

Prior to start of construction, the Owner will or will cause others to acquire the following permits and licenses but failure to do so will not relieve the Contractor from the responsibility for the acquisition of all licenses and permits required to complete the project in accordance with the contract documents:

- o A permit to fill as required by Section 404 of the Clean Water Act - U.S. Army Corps. of Engineers.
- o A permit to cross McMicken Dam - Dam Safety Section of the Arizona State Department of Water Resources.
- o A permit to cross the Buckeye Structure No. 1 - Dam Safety Section of the Arizona State Department of Water Resources.
- o A license to construct a ramp (at Sta. 489+10 on the Phase I-B plans) on property owned by Maricopa Municipal Water Conservation District No. 1.

*Rec'd
7/7/87
pending*

The following is a list of permits or licenses which are known to be required and must be applied for and acquired by the Contractor at his cost. This list is not necessarily all the permits or licenses which will be required to complete the project, and the provision of such list shall in no manner relieve the contractor of his obligations to obtain all necessary license and permits.

- ➔ o From the Maricopa- County- Flood Control District of Maricopa County:
 1. Roadway construction over McMicken Dam.
 2. Roadway construction over McMicken Dam pool area.
 3. Contractor marshaling yard or storage yard, if on Flood Control District property.

Section 002 - continued

4. Borrow area, if on Flood Control District property. Application for the ~~above-these~~ licenses and ~~permits~~ may be made by contacting Kay Stevens, Property Manager, or Helen Ortiz, 262-1501.
5. Floodplain Use Permit over any floodplain area (i.e.: McMicken Dam Pool area, Buckeye Structure #1 Pool area; the Hassayampa River, etc.) Contact Doug Plasencia, Chief of Floodplain Management, 262-1501.

- o From the Maricopa County Highway Department:

A permit to work within the County right-of-way (the cost of this permit will be waived).

- o From the Arizona State Commission of Agriculture and Horticulture:

A permit to remove native plants.

- o From the Maricopa County Health Department:

Dust control (earthwork) permit.

- o From the Town of Buckeye:

A license to do business in the Town of Buckeye (note: this project crosses a small portion of the Town of Buckeye, approximately 1.7 miles north of Interstate 10, at Station 92+70+).

SECTION 002.10 - QUALIFICATIONS OF BIDDERS: Each bidder shall be skilled and regularly engaged in the general class or type of work called for under the contract. A statement setting forth his experience shall be submitted by each bidder on the form provided herewith. See Section 003.

It is the intention of the Owner to award a contract to a bidder who furnishes satisfactory evidence that he has the requisite experience and ability and that he has sufficient capital, facilities, and plant to enable him to prosecute the work successfully and properly, and to complete it within the time specified in the contract.

To determine the degree of responsibility to be credited to the bidder, the Owner will weigh any evidence that the bidder has performed satisfactorily other contracts of like nature, comparable difficulty and comparable rates of progress.

SECTION 002.11 - LIST OF SUBCONTRACTORS AND MAJOR MATERIAL SUPPLIERS: Prior to award of contract and within ten (10) calendar days of receiving written request from the Owner, the bidder being considered for award shall submit

Section 002 - continued

to the Owner a letter listing the name and address of each subcontractor and major material supplier to whom the bidder proposes to sublet portions of the work in excess of one-half of one percent of the total amount of his proposal. Promptly after entering into each subcontract, the Contractor shall submit a copy of each subcontract to the Engineer. For the purpose of this paragraph, a subcontractor is defined as one who contracts with the Contractor to furnish materials and labor, or labor only for the performance of work at the site of the work or who will specially fabricate a portion of the work off the site pursuant to detailed drawings in the contract documents. A "major material supplier" is defined as a supplier who supplies materials valued at \$250,000 or more.

SECTION 002.12 - PROPOSAL GUARANTEE (BID BOND): The proposal shall be accompanied by a proposal guarantee duly completed on the form provided herewith by a surety company authorized to carry on business in the State of Arizona for payments to the Owner in the sum of at least 5% of the total amount bid, or alternatively by a certified or cashier's check payable to the Owner in the sum of at least 5% of the total amount bid. The amount payable to the Owner under the proposal guaranty bond, or the certified or cashier's check as the case may be, shall be forfeited to the Owner in case of a failure or neglect of the bidder to furnish, execute and deliver to the Owner the required performance bond, material and labor payment bonds, evidences of insurance and meet all other conditions or furnish all other documents required by the Special Provisions Booklet to be delivered prior to execution of the contract, and to enter into, execute and deliver to the Owner the agreement on the form provided herewith, within fifteen (15) days after the Notice of Award has been deposited in the United States mail. A bid will be considered non-responsive which is accompanied by a proposal guarantee which is conditional as being only applicable to the lesser of (a) five percent (5%) of the total amount bid or (b) the difference between the low bid and that of the next lowest bidder to whom the contract would be awarded in the event that the low bidder failed to enter into a contract in the specified time.

SECTION 002.13 SURETY QUALIFICATIONS: All Bonds, including bid, performance and payment bonds, shall be in the forms prescribed by the Special Provisions Booklet and be executed by such sureties as:

1. Are duly authorized to do business in the state of Arizona.
2. Are rated A+, or better, by A.M. BEST & CO.

All Bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

If the surety on any Bond furnished by the Contractor is declared a bankrupt or becomes insolvent or its right to do business is terminated in Arizona or it ceases to meet the requirements of item 2. above, the Contractor shall within five (5) days after receipt of notice from the Owner or the Engineer, substitute another Bond and surety, both of which shall be acceptable to the Owner.

Section 002 - continued

The forms of Performance and Payment bonds required for this project are set forth in Sections 006 and 007.

SECTION 002.14 - MODIFICATION OF PROPOSAL: Modifications of a price or prices set forth in a proposal already submitted will be considered only if the modification is received prior to the time announced for the opening of proposals. All modifications shall be made in writing, executed and submitted in the same form and manner as the original proposal.

SECTION 002.15 - POSTPONEMENT OF OPENING: The Owner reserves the right to postpone the date and time for opening of proposals at any time prior to 48 hours before the date and time announced in the Invitation to Bidders.

SECTION 002.16 - DISQUALIFICATION OF BIDDER: If there is reason to believe that collusion exists among the bidders, none of the bids of the participants in such collusion will be considered.

SECTION 002.17 - REJECTION OF PROPOSALS: The Owner reserves the right to reject any and all proposals or to withhold the award for any reason the Owner determines.

SECTION 002.18 - AWARD OF CONTRACT: Within thirty (30) days after the time announced for opening proposals, the Owner by action of its Board of Directors will either accept a proposal and award a contract to the lowest responsible bidder or reject all proposals unless the bidder has extended the time for consideration of its proposal. The Owner shall give written notice of the acceptance of a proposal and award of a contract to the bidder whose proposal is accepted. Such notice will be given by mail within fifteen (15) days after acceptance of a proposal. The award of a contract shall obligate the bidder whose proposal is accepted to furnish performance and payment bonds and evidences of insurance and to execute the contract set forth herein.

SECTION 002.19 - RETURN OF PROPOSAL GUARANTEES: Within thirty (30) days after the bids are opened, the Owner will return the bid bonds, cashier's check or certified check accompanying the proposals which are not to be considered further in making the award. All other proposal guarantees will be held until the contract has been fully executed, after which they will be returned to the respective bidder whose proposals they accompanied.

SECTION 002.20 - EXECUTION OF CONTRACT: The contract agreement shall be executed in quintuplicate by the successful bidder and delivered to the Owner, together with the performance and payment bonds, evidences of insurance and all signed certificates and other documents or materials required of the successful bidder herein as a pre-condition to execution of the contract within fifteen (15) days after the Notice of Award has been deposited in the United States mail.

Section 002 - continued

SECTION 002.21 - LIST OF DRAWINGS:

	# of Sheets
Master Cover Sheet Sheet 1 of 1	1
Paving Plans for Sun Valley Parkway Phase IA Sheets 1 of 39 to 39 of 39 39A of 39	39 1
Paving Plans for Sun Valley Parkway Phase IB Sheets 1 of 15 to 15 of 15	15
Paving Plans for Sun Valley Parkway Phase IIA Sheets 1 of 35 to 35 of 35 35A of 35	35 1
Paving Plan for Sun Valley Parkway Phase IIB Sheets 1 of 31 to 31 of 31 Sheet 31 A of 31	31 1
Paving Plans for Sun Valley Parkway Phase III Sheets 1 of 43 to 43 of 43 43A of 43	43 1
Bridge Plans for Beardsley Canal Sheets 1 of 4 to 4 of 4	4

TOTAL SHEETS	171

SECTION 002.22 - CONFLICT WITH STANDARD SPECIFICATIONS: This information **Information** for Bidders is intended to supplement Sections 102 and 103 of the Standard Specifications. In the event of a conflict, however, the provisions of this information- **Information** for Bidders and the forms attached hereto shall govern.

SECTION 003 - CONTRACTOR'S PROPOSAL

SUN VALLEY PUBLIC IMPROVEMENT CORPORATION
C/O MARICOPA COUNTY HIGHWAY DEPARTMENT
3325 WEST DURANGO STREET
PHOENIX, ARIZONA 85009

Ladies and Gentlemen:

The following Proposal is made for constructing the Sun Valley Parkway (pursuant to the Plans, Specifications and Special Provisions Booklet) in the County of Maricopa, State of Arizona. The following Proposal is made on behalf of (Contractor) and no others. Evidence of authority to submit the Proposal is herewith furnished. The Proposal is in all respects fair and is made without collusion on the part of any person, firm, or corporation mentioned above, and no member or employee of the Board of Directors of the Sun Valley Public Improvement Corporation is personally or financially interested, directly or indirectly in the Proposal, or in any purchase or sale of any materials or supplies for the work to which it relates or in any portion of the profits thereof.

The Undersigned certifies that the approved Plans, Uniform Standard Specifications dated 1979, with 1980-1986 Revisions, Special Provisions Booklet, forms of Contract and Payment and Performance Bonds authorized by the Sun Valley Public Improvement Corporation constitute essential parts of this Proposal which have been carefully examined. The site of the work has been personally inspected prior to submission of this proposal.

The Undersigned declares that the extent, amount and nature of the work to be done (including, without limitation, the maximum amount available from proceeds of the bonds to pay for the work) is understood and that at no time will misunderstanding of the Plans, Specifications, Special Provisions, or conditions to be overcome, be plead in any hearing, proceeding or argument before any court, arbitrator or similar body. On the basis of the Plans, Specifications, Special Provisions and the forms of Contract, Payment and Performance Bonds, the Undersigned proposes to furnish all the necessary insurance, machinery, equipment, tools, apparatus, and other means of construction, to do all the work, to provide all labor and to furnish all the materials in the manner specified and to finish the entire project within six hundred (600) calendar days from the date specified for commencement of construction in the Notice to Proceed and to accept, as full compensation therefor, the sum of various products obtained by multiplying each unit price, herein bid for work or materials, by the quantity thereof actually incorporated in the completed project, as determined by the Engineer.

The undersigned certifies and understands that the contract is to be funded solely with the proceeds of bonds which have been issued by the Sun Valley Public Improvement Corporation. There is available from such proceeds the sum of \$43,300,000 plus a contingency fund of \$2,410,000 for construction of the Project. No other monies are committed for contract payment.

Section 003 - continued

Therefore, the aggregate of \$45,710,000 is the maximum amount of money available to pay all costs of the Project notwithstanding overruns, erroneous quantity estimates, change orders or any other reason. The Sun Valley Public Improvement Corporation has no taxing power and no other guaranteed source of monies to pay the contract price. Maricopa County is neither required nor expected to pay any monies to complete construction. Neither the County, the Corporation, Heron Financial Corporation or Security Pacific National Bank has agreed to advance monies with respect to the contract.

The Undersigned understands that, except as provided in SECTION 109.4.1 of the Standard Specifications, the quantities mentioned herein are approximate only and are subject to increase or decrease and the undersigned hereby proposes to perform all quantities of work, as either increased or decreased, in accordance with the provisions of the Specifications, at the unit price bid in the Bidding Schedule.

The Undersigned further proposes to perform all extra work that may be required on the basis provided in the Special Provisions Booklet and to give such work personal attention and to secure economical performance.

The Undersigned further proposes to execute the Contract Agreement and furnish satisfactory Payment and Performance Bonds within fifteen (15) days after the Notice of Award has been deposited in the United States mail, time being of the essence. The Undersigned further proposes to begin the work as specified in the Notice to Proceed and to complete the work within the time limits as specified in the Special Provisions and maintain at all times Payment and Performance Bonds, provided by sureties which meet the qualifications set forth in Section 002 of the Special Provisions Booklet each in a penal amount equal to one hundred percent (100%) of the total amount bid.

A Proposal Guarantee in the form of a bond or cashier's check or certified check in the amount and character named in the Invitation to Bid is enclosed amounting to not less than five percent (5%) of the amount bid, which Proposal Guarantee is submitted as a guarantee of the good faith of the Bidder and that the Bidder will enter into the written contract, as provided, to do the work, if successful in securing the award thereof; and it is hereby agreed that if at any time other than as provided in the Proposal the Undersigned should withdraw this Proposal, or if the Proposal is accepted and there should be failure on the part of the Undersigned to execute the Contract and furnish satisfactory performance and payment bonds and insurance as required herein, the Owner in either of such events, shall be entitled and is hereby given the right to retain the said Proposal Guarantee as liquidated damages without proof of actual loss.

ADDENDA ACKNOWLEDGEMENT: The Undersigned acknowledges receipt of Addenda No-Numbers 1 through _____.

Section 003 - continued

IF BY AN INDIVIDUAL:

(Name)

(Address)

(Date) (Phone)

IF BY A PARTNERSHIP:

(Partnership Name)

(Partnership Address)

By: _____

(Date) (Phone)

****Name and Address of Each Member:**

(Name)

(Address)

**The signature, name and street address of each member of the partnership must be shown. (Attach additional signature sheets as necessary.)

IF BY A CORPORATION:

(Corporate Name)

(Corporation Address)

By: _____

(Date) (Phone)

Title: _____

*Incorporated under the Laws of _____

Names and Address of Officers:

(President)

(Address)

Section 003 - continued

(Secretary)

(Address)

(Treasurer)

(Address)

*The name of the State under the laws of which the Corporation was chartered and the names, titles, and business addresses of the President, Secretary and Treasurer must be shown. If the Corporation is incorporated in Arizona, a copy of the latest annual report filed with the Arizona Corporation Commission must be attached.

Section 003 - continued

CERTIFIED COPY OF RESOLUTION OF
BOARD OF DIRECTORS OF

(Name of Corporation)

RESOLVED that _____, of _____
(Person Authorized to Sign) (Title)
of _____ be authorized to sign and submit the Bid attached
(Name of Corporation)
~~hereto~~-or proposal of this corporation **attached hereto** for the following
project:

Sun Valley Parkway

The foregoing is a true and correct copy of the resolution adopted by
_____ at a meeting of its Board of Directors held on the
(Name of Corporation)
_____ day of _____, 19__.

By _____

Title _____

(SEAL)

(This form must be completed if the Bidder is a corporation.)

Section 003 - continued

Bidder's Qualification Statement

(This statement is required to be submitted with each bid.)

Ladies and Gentlemen:

The undersigned certifies under oath the truth and correctness of all statements and of all answers to questions made hereinafter.

(Note: Attach separate sheets as required; if a partnership, submit a separate statement for each general partner also.)

- 1.0 How many years has your organization been in business as a contractor? _____
- 2.0 How many years has your organization been in business under its present name? _____
- 3.0 If a corporation, answer the following:
 - 3.1 Date of incorporation:
 - 3.2 State of incorporation:
 - 3.3 President's name:
 - 3.4 Vice president's name(s):
 - 3.5 Secretary's or Clerk's name:
 - 3.6 Treasurer's name:
- 4.0 If individual or partnership, answer the following:
 - 4.1 Date of organization:
 - 4.2 Name and address of all partners. (State whether general or limited partnership.):
- 5.0 If other than corporation or partnership, describe organization and name principals:
- 6.0 Do you plan to subcontract any part of this project: _____
- 7.0 Has any construction contract to which you have been a party been terminated by the owner; have you ever terminated work on a project prior to its completion for any reason; has any surety which issued a performance bond on your behalf ever completed the work in its own name or financed such completion on your behalf; has any surety expended any monies in connection with a contract for which they furnished a bond on your behalf? If the answer to any portion of this question is "yes", please furnish details of all such occurrences including name of owner, architect or engineer, and surety, and name and date of project.

Section 003 - continued

- 8.0 Has any officer or partner of your organization ever been an officer or partner of another organization that had any construction contract terminated by the owner; terminated work on a project prior to its completion for any reason; had any surety which issued a performance bond complete the work in its own name or financed such completion; or had any surety expend any monies in connection with a contract for which they furnished a bond? If the answer to any portion of this question is "yes", please furnish the details of all such occurrences including name of owner, architect or engineer, and surety, and name and date of project.
- 9.0 List name of project, owner, architect or engineer, contract amount, date of completion and percent of work with own forces of other projects of the same general nature as this project which your organization has completed.
- 10.0 List name, address and telephone number of a reference for each project listed under Item 9.0, above.
- 11.0 List name and construction experience of the principal individuals of your organization.
- 12.0 List the categories of construction in which your organization is qualified to do business in the State of Arizona.
- 13.0 List name, address and telephone number of an individual who represents each of the following and whom Owner may contact for a financial reference:
- 13.1 A surety:
- 13.2 A bank:
- 13.3 A major material supplier
- 14.0 Dated at _____, this _____ day of _____, 19__.

(Print or Type Name of Bidder)

By _____

Section 003 - continued

(Title)

(Seal, if corporation)

------(Affidavit for Individual)-----

_____, being duly sworn, deposes and says that all of the foregoing qualification information is true, complete, and accurate.

------(Affidavit for Partnership)-----

(Attach additional sheets for affidavits of each partner)

_____ being duly sworn, deposes and says that: he/she is a member of the partnership of _____ and all of the foregoing qualification information is true, complete, and accurate.

------(Affidavit for Corporation)-----

_____ being duly sworn, deposes and says that he/she is _____ of _____ (Full name of Corporation) and that all of the foregoing qualification information is true, complete, and accurate.

------(Acknowledgment)-----

_____ being duly sworn, deposes and says that he/she is _____ of _____ (Name of Bidder) that he/she is duly authorized to make the foregoing affidavit and that he/she makes it on behalf of () himself/herself; () said partnership; () said corporation.

Sworn to before me this _____ day of _____, 19____, in the County of _____, State of _____.

Section 003 - continued

(Notary Public)

My commission expires _____

(Seal)

SECTION 004 - FORM OF PROPOSAL GUARANTEE (BID BOND)

KNOW ALL MEN BY THESE PRESENTS:

THAT _____ hereinafter called Principal,
and _____ hereinafter called the Surety,
are jointly and severally held and firmly bound unto the Sun Valley Public
Improvement Corporation, hereinafter called Owner, in the penal sum of five
percent (5%) of the total amount bid by the Principal for the work, this sum
not to exceed _____ dollars (\$_____)
lawful money of the United States, for the payment whereof unto the said
Owner, both the Principal and the Surety jointly and severally bind them-
selves forever firmly by these presents.

WHEREAS, Principal is herewith submitting a proposal for construction of the
Sun Valley Parkway.

NOW, THEREFORE, the condition of this obligation is such that if Principal
is awarded a contract for the work, and if Principal within that time speci-
fied in the proposal enters into, executes and delivers to Owner a contract
in the form provided herewith, and if Principal within the time specified in
the proposal gives to Owner the performance bond and the payment bond, and
the required certificates of insurance on the forms provided herewith, then
this obligation shall be void. If, however, Principal shall fail or refuse
to furnish, execute and deliver to Owner such documents in the time stated
in the proposal, then Principal and Surety shall forfeit to Owner the penal
sum hereof. All definitions set forth in the proposal are applicable to
this Proposal Guarantee.

IT IS HEREBY FURTHER DECLARED AND AGREED that this obligation shall be
binding upon and inure to the benefit of Principal, Surety and Owner and
their respective heirs, executors, administrators, successors and assigns.

Witness our hands this _____ day of _____, 19__.

AGENCY OF RECORD

AGENCY ADDRESS

Proposal Guarantee
Sheet 1 of 1

PRINCIPAL SEAL
BY: _____

SURETY SEAL
BY: _____

POWER OF ATTORNEY SEAL
BY: _____

SECTION 005 - CONTRACT

This Agreement, made and entered into this ____ day of _____, 1987, by and between _____

hereinafter designated the Contractor, and the SUN VALLEY PUBLIC IMPROVEMENT CORPORATION, an Arizona nonprofit corporation, hereinafter designated the Owner.

WITNESSETH: That the said Contractor, for and in consideration of the sum to be paid him by the said Owner, in the manner and at the time hereinafter provided, and of the other covenants and agreements herein contained, and under the penalties expressed in the bonds provided, hereby agrees as follows:

Article I - Scope of Work: The Contractor shall furnish any and all labor, materials, equipment, transportation, utilities, services and facilities required to perform all work for the construction of the Sun Valley Parkway as described in the plans, specifications and Special Provisions Booklet (a copy of each of said documents has been delivered to the Contractor) and to completely and totally construct the same and install all material and equipment therein for the Owner, in a good and workmanlike and substantial manner to the satisfaction of Greiner Engineering Sciences, Inc. (the "Engineer")-("the Engineer") pursuant to and in conformity with the Plans and Specifications and Special Provisions Booklet, and with such modifications of the same and other documents that may be made by the Engineer or his properly authorized agents, as provided herein.

Article II - Contract Documents: The Call for Bids, Plans, Standard Specifications and Details, all items in the Special Provisions Booklet, Addenda, if any, and Contractor's Proposal, as accepted by the Board of Directors of Owner, Performance Bond, Payment Bond, Certificates of Insurance, and Change Orders, if any, are by this reference made a part of this Contract to the same extent as if set forth herein in full (the "Contract Documents").

Article III - Covenants and Representations: The Contractor covenants and agrees that all covenants, representations and warranties contained in the Special Provisions Booklet, including but not limited to Section 003 therein, shall be considered to have been made again and are true and correct as of the date hereof. Contractor further agrees to promptly notify the Engineer of all accidents and to provide notice to the Engineer of all possible claims promptly after learning of such possible claims.

Article IV - Time of Completion: The Contractor further covenants and agrees at its own cost and expense, to do all work as aforesaid for the construction of said improvements and to completely construct the same and install the material therein, as called for by this Agreement, free and clear of all claims, liens, and charges whatsoever, in the manner and under the conditions specified and within the time, or times, stated in the Special Provisions Booklet.

Section 005 - continued

Upon completion of the work, the Contractor shall certify that (i) all labor, services, materials and supplies used in the construction of the work have been paid; (ii) all costs and expenses incurred in the acquisition and installation of equipment for the work have been paid; and (iii) all costs and expenses of any other facilities necessary in connection with the work have been paid.

Article V - Payments: For and in consideration of the faithful performance of the work herein embraced as set forth in the Contract Documents, which are a part hereof and in accordance with the directions of the Engineer and to his satisfaction, the Owner agrees to pay the said Contractor in the manner set forth in the following paragraphs the amount earned, computed from actual quantities of work performed and accepted or materials furnished at the unit bid price on the Proposal made a part hereof, and to make such payment on a monthly basis as set forth in the following paragraphs, after inspection and acceptance of each portion of the work by the Engineer.

Monthly progress payments shall be made to the Contractor by the 20th day of the month on the basis of the Engineer's estimate of the work performed to the 25th day of the preceding calendar month for payment for such work; however, to insure the proper performance of this contract, the Owner shall retain ten percent of the amount of each payment due under each requisition until final completion and acceptance of all material, equipment and work covered by the contract as evidenced by the certificate of completion. In preparing requisitions, material and equipment delivered on the site to be incorporated in the work may be taken into consideration in the Engineer's determination of the estimated price of work performed.

Ten percent of all estimates shall be retained by the Owner as a guarantee for complete performance of the contract, to be paid to the Contractor within sixty days after filing of the **Engineer's** certificate of completion of the contract. In lieu of the retention, the Owner shall, at the option of the Contractor, accept as a substitute an assignment of time certificates of deposit of banks licensed by this state, securities of or guaranteed by the United States of America, securities of this state, securities of counties, municipalities and school districts within this state or shares of savings and loan institutions authorized to transact business in this state, in an amount equal to ten percent of all estimates which shall be retained by the Owner as a guarantee for complete performance of the contract. In the event the Owner accepts substitute security as described in this paragraph for the ten percent retention, the Contractor shall be entitled to all interest or income earned by such security and such security in lieu of retention shall be returned to the Contractor by the Owner within sixty days after final completion and acceptance of all material, equipment and work covered by the contract if ~~any-contractor-the~~ **Contractor** has furnished the final documentation required herein. In no event shall the Owner accept a time certificate of deposit of a bank or shares of a savings and loan institution in lieu of the retention specified unless accompanied by a signed and acknowledged waiver of the bank or savings and loan association of any right or power to setoff against either the Owner or the Contractor in relationship to the certificates or shares assigned.

Section 005 - continued

Payment is to be made following submission of a requisition prepared by the Engineer to First Interstate Bank of Arizona, N.A. As a condition to payment of the requisition, the Contractor must provide to the Engineer, (i) bills or statements of account for each obligation listed for disbursement pursuant to the requisition, ~~(ii)~~ and a certification executed by an authorized representative of the Contractor that the Contractor has delivered to the Engineer conditional releases of lien from the Contractor and each subcontractor and material supplier (and has exercised its best efforts to obtain such releases from each laborer) who has done work or furnished materials for construction of the portion of the work covered by the requisition and unconditional releases of lien from Contractor and each subcontractor and material supplier (and has exercised its best efforts to obtain such releases from each laborer) who has done work or furnished materials for construction of the portion of the work covered by all previous requisitions. The form of lien releases will be supplied by the Engineer.

Article VI - Maximum Amount: The Contractor certifies and acknowledges that the contract is to be funded solely with the proceeds of bonds heretofore issued by the Owner. There is available from such proceeds the sum of \$43,300,000 plus a contingency fund of \$2,410,000 for construction of the Project. No other monies are committed for contract payment. Therefore, the aggregate of \$45,710,000 is the maximum amount of money available to pay all costs of the Project notwithstanding overruns, erroneous quantity estimates or change orders or any other reason. The Owner has no taxing power and no other guaranteed source of monies to pay the contract price. Maricopa County is neither required nor expected to pay any monies to complete construction. Neither the County, the Corporation, Heron Financial Corporation or Security Pacific National Bank has agreed to advance any monies with respect to the contract. **Contractor hereby acknowledges that no implied contract of any nature shall exist between County and Contractor. Contractor hereby waives all rights and remedies at law or in equity to recover from County the cost of any services or materials furnished in connection with the contract.**

Article VII - Monitors: The Contractor acknowledges that representatives of the Owner, The Adams Group, Inc., Maricopa County, First Interstate Bank of Arizona, N. A., Heron Financial Corporation and Security Pacific National Bank shall have the right to attend project meetings and, after checking in at the Engineer's field office, to enter upon the project site and to examine the work and monitor construction. The term "monitor" shall mean to observe the work, but shall grant no right or authority with respect to construction of the project. Such ~~monitor~~-monitors shall have no authority with respect to actual construction or payment for construction and shall have no liability or responsibility in connection therewith.

Article VIII - Other Obligations; Keeping of Records: The Contractor shall check all materials, equipment and labor entering into the work and shall keep such full and detailed accounts as may be necessary for proper financial management under this contract, and the system shall be satisfactory to the Owner and Engineer. The Owner and Engineer (as well as representatives

Section 005 - continued

of The Adams Group, Inc., Heron Financial Corporation and Security Pacific National Bank) shall be afforded access to and the right to copy and audit all the Contractor's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda and similar data relating to this contract, and the Contractor shall preserve all such records for a period of three (3) years, or for such longer period as may be required by law, after the final payment.

Article IX - Successors and Assigns: Subject to the provisions of Section 108.2 of the Standard Specifications, this contract shall be binding upon the successors and assigns of each party hereto; provided, however, that no successor of the Owner shall be required to advance or pay monies from any source other than the bond proceeds mentioned in Article VI of this contract.

IN WITNESS WHEREOF: Five (5) identical counterparts of this Contract each of which shall for all purposes be deemed an original thereof, have been duly executed by the parties hereinabove named, on the date and year first above written.

The Contractor agrees that this Contract, as awarded, is for the stated work, and understands that payment for the total work will be made on the basis of the indicated amount (s), as bid in the Proposal.

Contractor

By: _____

Date

Title: _____

SUN VALLEY PUBLIC IMPROVEMENT
CORPORATION, an Arizona
nonprofit corporation

By: _____
President, Owner

Date

Section 005 - continued

ATTEST:

Secretary Date

RECOMMENDED BY:

County Engineer Date

APPROVED AS TO FORM this ____ day of _____, 198__.
FRED H. ROSENFELD, special counsel to Maricopa County

CERTIFICATE OF INSURANCE APPROVED THIS ____ day of _____, 198__.
HAL HEAZELTINE, Director, Risk Management

By: _____

BOND NO. _____

SECTION 006 - STATUTORY PERFORMANCE BOND PURSUANT TO TITLE 34
CHAPTER 2, ARTICLE 2 OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the contract amount)

KNOW ALL MEN BY THESE 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 Sun Valley Public Improvement Corporation, an Arizona nonprofit corporation and its successors and assigns (the "Owner"), 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 Sun Valley Public Improvement Corporation, dated the _____ day of _____, 19____, for construction of the Sun Valley Parkway, which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said contract during the original term of said contract and any extension thereof, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived; then the above obligation shall be void, otherwise to remain in full force and effect;

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

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

The surety agrees to give notice to the Owner if said surety hereafter fails to meet any of the following conditions:

Section 006 - continued

1. Remain duly authorized to do business in Arizona.
2. Retain rating of A+ or better, as rated by A.M. BEST & CO..

The Surety agrees that should change orders increase the total aggregate Contract cost, the penal sum of this bond shall likewise increase.

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

Witness our hands this _____ day of _____, 19__.

AGENCY OF RECORD

AGENCY ADDRESS

PRINCIPAL SEAL
BY: _____

SURETY SEAL
BY: _____

POWER OF ATTORNEY SEAL
BY: _____

BOND NO. _____

SECTION 007 - STATUTORY PAYMENT BOND PURSUANT TO TITLE 34
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the contract amount)

KNOW ALL MEN BY THESE PRESENTS:

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

_____ a corporation organized and existing under the laws of the State of _____, with ~~it~~-its principal office in the City of _____, (hereinafter called the Surety), as Surety are held and firmly bound unto the Sun Valley Public Improvement Corporation, an Arizona nonprofit corporation, and its successors and assigns (hereinafter called the Obligees), 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 Obligees, dated the _____ day of _____, 19____, for construction of the Sun Valley Parkway which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall promptly pay all monies due to all persons supplying labor or materials to him or his subcontractors in the prosecution of the work provided for in said contract, then this obligation shall be void, otherwise to remain in full force and effect.

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

The surety agrees to give notice to the Owner if said surety hereafter fails to meet any of the following conditions:

1. Remain duly authorized to do business in Arizona.
2. Retain rating of A+ or better, as rated by A. M. BEST & CO..

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

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

Section 007 - continued

The Surety agrees that should change orders increase the total aggregate Contract cost, the penal sum of this bond shall likewise increase.

Witness our hands this _____ day of _____, 19__.

AGENCY OF RECORD

AGENCY ADDRESS

PRINCIPAL SEAL
BY: _____

SURETY SEAL
BY: _____

POWER OF ATTORNEY SEAL
BY: _____

CERTIFICATE OF INSURANCE

SUN VALLEY PUBLIC IMPROVEMENT CORPORATION

PROJECT TITLE: Sun Valley Parkway

NAME AND ADDRESS OF INSURANCE AGENCY	INSURANCE COMPANIES AFFORDING COVERAGES
NAME OF INSURED Sun Valley Public Improvement Corporation c/o Gaston, Snow, Moya, Bailey, Bowers & Jones 4722 N. 24th St., Suite 400 Phoenix, AZ 85016 ----- Maricopa County Attn: Risk Management 111 S. Third Avenue Phoenix, AZ 85003 (Contractor)	Company Letter A
	Company Letter B
	Company Letter C
	Company Letter D
	Company Letter E
	Company Letter F
	Company Letter G

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE AND ARE IN FORCE AT THIS TIME.

COMPANY LETTER	TYPE OF INSURANCE	FORM	POLICY NUMBER	POLICY EXP. DATE	LIMITS OF LIABILITY IN \$1000 MINIMUM
	<input checked="" type="checkbox"/> COMPREHENSIVE GENERAL LIABILITY FORM <input checked="" type="checkbox"/> PREMISES OPERATIONS <input checked="" type="checkbox"/> CONTRACTUAL <input checked="" type="checkbox"/> BROAD FORM PROPERTY DAMAGE <input checked="" type="checkbox"/> EXPLOSION & COLLAPSE <input checked="" type="checkbox"/> PRODUCTS/COMPLETED <input checked="" type="checkbox"/> OPERATIONS HAZARD <input checked="" type="checkbox"/> UNDERGROUND HAZARD <input checked="" type="checkbox"/> INDEPENDENT CONTRACTORS <input checked="" type="checkbox"/> PERSONAL INJURY	*(see reverse side) 1973 1973 1973 1973 1973 1973 1973 1973			BODILY INJURY per person each occurrence PROPERTY DAMAGE OR BODILY INJURY AND PROPERTY DAMAGE Combined \$10,000/occurrence
	<input checked="" type="checkbox"/> COMPREHENSIVE AUTO LIABILITY & NON-OWNED **				\$10,000/occurrence
	<input type="checkbox"/> EXCESS LIABILITY ***				NECESSARY IF UNDERLYING NOT ABOVE MINIMUM
	<input checked="" type="checkbox"/> WORKERS' COMPENSATION & EMPLOYERS' LIABILITY ****				STATUTORY each occurrence \$10,000
	<input type="checkbox"/> OTHER				

The Town of Buckeye, Maricopa Municipal Water Conservation District #1, Maricopa County Flood Control District, Security Pacific National Bank, Heron Financial Corporation, Greiner Engineering Sciences, Inc., and Collar, Williams and White Engineering, Inc., are added as named insureds. It is agreed that any insurance available to the named insured shall be primary of other sources that may be available. It is further agreed that no policy shall expire, be cancelled or materially changed to affect the coverage available to the named insureds within sixty days without prior written notice to each named insured.

NAME AND ADDRESS OF INSURED
Sun Valley Public Improvement Corporation c/o Gaston, Snow, Moya, Bailey, Bowers & Jones 4722 N. 24th St., Suite 400 Phoenix, AZ 85016
Maricopa County Attn: Risk Management 111 S. Third Avenue Phoenix, AZ 85003
Security Pacific National Bank 4 Bradgate Street London EC2m 7LE England
Heron Financial Corporation 510 West Sixth Street, Suite 917 Los Angeles, CA 90014

Town of Buckeye Maricopa Municipal Water Conservation District #1 Maricopa County Flood Control District Greiner Engineering Sciences, Inc. Collar, Williams and White Engineering, Inc. c/o Maricopa County Attn: Risk Management 111 S. Third Avenue Phoenix, AZ 85003
--

DATE ISSUED _____

AUTHORIZED REPRESENTATIVE

- * 1987 occurrence form, per insurance services office
- ** usual occurrence form
- *** if used, must follow or exceed 1973 primary coverage form
- **** must include employers liability and must have limits totalling \$10,000,000

SECTION 011

PROHIBITION OF DISCRIMINATION IN STATE CONTRACTS NONDISCRIMINATION IN EMPLOYMENT BY GOVERNMENT CONTRACTORS AND SUBCONTRACTORS

During the performance of this contract, the Contractor agrees as follows:

A. The Contractor will not discriminate against any employee or applicant for employment because of race, age, color, religion, sex or national origin. The Contractor will take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, age, color, religion, sex or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, lay-off or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

B. The Contractor will in all solicitations or advertisement for employees placed by or on behalf of the Contractor state that all qualified applicants will receive consideration for employment without regard to race, age, color, religion, sex or national origin.

C. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice to be provided by the agency contracting officer advising the labor union or workers' representative of the Contractor's commitments under this Executive Order and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

D. The Contractor will furnish all information and reports required by the contracting agency and will permit access to his books, records and accounts by the contracting agency and the Civil Rights Division for purposes of investigation to ascertain compliance with such rules, regulations and orders.

E. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations or orders of the Arizona Civil Rights Division said noncompliance will be considered a material breach of the contract and this contract may be cancelled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further government contracts until said Contractor has been found to be in compliance with the provisions of this order and the rules and regulations of the Arizona Civil Rights Division, and such sanctions may be imposed and remedies invoked as provided in Part II of this order, and the rules and regulations of the Arizona Civil Rights Division.

Section 011 - continued

F. The Contractor will include the provisions of paragraphs A through E in every subcontractor purchase order so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect in the subcontract or purchase order as the contracting Agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the Contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the State of Arizona to enter into such litigation to protect the interest of the State of Arizona.

G. Each Contractor having a contract containing the provisions prescribed in this Section shall file and shall cause each of his subcontractors to file compliance reports with the contracting agency or the Civil Rights Division, as may be directed. Compliance reports shall be filed within such times and shall contain such information as the practices, policies, programs and employment policies, programs and employment statistics of the Contractor and each subcontractor and shall be in such form as the Arizona Civil Rights Division may prescribe.

H. Bidders or prospective Contractors or subcontractors shall be required to state whether they have participated in any previous contract subject to the provisions of this order or any preceding similar Executive Order and in that event to submit on behalf of themselves and the proposed subcontractors compliance reports prior to, or as in initial part of negotiation of a contract.

I. Whenever the Contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers or providing or supervising apprenticeship or training for such workers, the compliance report shall include such information from such labor unions or agency practices and policies affecting compliance as the contracting agency or Civil Rights Division may prescribe; provided that, to the extent such information is within the exclusive possession of a labor union or an agency referring workers or providing or supervising apprenticeship or training and such labor union or agency shall refuse to furnish such information to the Contractor, the Contractor shall so certify the contracting agency as part of its compliance report and shall set forth what efforts he has made to obtain such information.

J. The contracting agency or the Civil Rights Division shall require that the bidder or prospective Contractor or subcontractor shall submit as part of his compliance report a statement in writing signed by an authorized officer or agent on behalf of any labor union or any agency referring workers or providing or supervising apprenticeship or other training with which the bidder or prospective Contractor deals with supporting information to the effect that the signer's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin, and that the signer either will affirmatively cooperate in the implementation of the policy and provisions of this order or that it consents and agrees that

Section 011 - continued

recruitment employment and the terms and conditions of employment under the proposed contract shall be in accordance with the purpose and provisions of this order. In the event that the union or the agency shall refuse to execute such a statement, the compliance shall so certify and set forth what efforts have been made to secure such a statement and such additional factual material as the contracting agency or the Civil Rights Division may require.

Part II - Enforcement

A. Each contracting agency shall be primarily responsible for obtaining compliance with the Executive Order with respect to contracts entered into by such agency or its Contractors. All contracting agencies shall comply with the rules of the Civil Rights Division in discharging their primary responsibility for securing compliance with the provisions of contracts and otherwise with the terms of this order and rules and regulations and orders of the Civil Rights Division issued pursuant to this order. They are directed to cooperate with the Civil Rights Division and to furnish the Division such information and assistance as it may require in the performance of the Division's functions under this order. They are further directed to appoint or designate from among the agency personnel compliance officers. It shall be the duty of such officers to first seek compliance with the objective of this order by conference, conciliation, mediation or persuasion.

B. The Civil Rights Division may investigate the employment practices of any government Contractor or subcontractor or initiate such investigation by appropriate contracting agency or determine whether or not the contractual provisions specified in this order have been violated. Such investigations shall be conducted in accordance with the procedures established by the Civil Rights Division and the investigating agencies shall report to the Civil Rights Division any action taken or recommended. The Civil Rights Division may receive and investigate or cause to be investigated complaints by employees or prospective employees of a government Contractor or subcontractor which allege discrimination contrary to the contractual provisions specified in Part I of this order. If the investigation is conducted for the Civil Rights Division by a Contracting Agency, that agency shall report what action has been taken or is recommended with regard to such complaint.

C. The Civil Right Division shall use its best efforts directly and through contracting agencies, other interested state and local agencies, Contractors and all other available instrumentalities to cause any labor union engaged in work under government contracts or any agency referring workers or providing or supervising apprenticeship or training for or in the course of such work to cooperate in the implementation of the purposes of this order.

D. The Civil Rights Division or any agency, officer or employees in the executive branch of the government designated by rule, regulation or order of the Civil Rights Division may hold such hearings, public or private as the Division may deem advisable for compliance, enforcement or educational

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F. The Contractor will include the provisions of paragraphs A through E in every subcontractor purchase order so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect in the subcontract or purchase order as the contracting Agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the Contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the State of Arizona to enter into such litigation to protect the interest of the State of Arizona.

G. Each Contractor having a contract containing the provisions prescribed in this Section shall file and shall cause each of his subcontractors to file compliance reports with the contracting agency or the Civil Rights Division, as may be directed. Compliance reports shall be filed within such times and shall contain such information as the practices, policies, programs and employment policies, programs and employment statistics of the Contractor and each subcontractor and shall be in such form as the Arizona Civil Rights Division may prescribe.

H. Bidders or prospective Contractors or subcontractors shall be required to state whether they have participated in any previous contract subject to the provisions of this order or any preceding similar Executive Order and in that event to submit on behalf of themselves and the proposed subcontractors compliance reports prior to, or as in initial part of negotiation of a contract.

I. Whenever the Contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers or providing or supervising apprenticeship or training for such workers, the compliance report shall include such information from such labor unions or agency practices and policies affecting compliance as the contracting agency or Civil Rights Division may prescribe; provided that, to the extent such information is within the exclusive possession of a labor union or an agency referring workers or providing or supervising apprenticeship or training and such labor union or agency shall refuse to furnish such information to the Contractor, the Contractor shall so certify the contracting agency as part of its compliance report and shall set forth what efforts he has made to obtain such information.

J. The contracting agency or the Civil Rights Division shall require that the bidder or prospective Contractor or subcontractor shall submit as part of his compliance report a statement in writing signed by an authorized officer or agent on behalf of any labor union or any agency referring workers or providing or supervising apprenticeship or other training with which the bidder or prospective Contractor deals with supporting information to the effect that the signer's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin, and that the signer either will affirmatively cooperate in the implementation of the policy and provisions of this order or that it consents and agrees that

Section 011 - continued

recruitment employment and the terms and conditions of employment under the proposed contract shall be in accordance with the purpose and provisions of this order. In the event that the union or the agency shall refuse to execute such a statement, the compliance shall so certify and set forth what efforts have been made to secure such a statement and such additional factual material as the contracting agency or the Civil Rights Division may require.

Part II - Enforcement

A. Each contracting agency shall be primarily responsible for obtaining compliance with the Executive Order with respect to contracts entered into by such agency or its Contractors. All contracting agencies shall comply with the rules of the Civil Rights Division in discharging their primary responsibility for securing compliance with the provisions of contracts and otherwise with the terms of this order and rules and regulations and orders of the Civil Rights Division issued pursuant to this order. They are directed to cooperate with the Civil Rights Division and to furnish the Division such information and assistance as it may require in the performance of the Division's functions under this order. They are further directed to appoint or designate from among the agency personnel compliance officers. It shall be the duty of such officers to first seek compliance with the objective of this order by conference, conciliation, mediation or persuasion.

B. The Civil Rights Division may investigate the employment practices of any government Contractor or subcontractor or initiate such investigation by appropriate contracting agency or determine whether or not the contractual provisions specified in this order have been violated. Such investigations shall be conducted in accordance with the procedures established by the Civil Rights Division and the investigating agencies shall report to the Civil Rights Division any action taken or recommended. The Civil Rights Division may receive and investigate or cause to be investigated complaints by employees or prospective employees of a government Contractor or subcontractor which allege discrimination contrary to the contractual provisions specified in Part I of this order. If the investigation is conducted for the Civil Rights Division by a Contracting Agency, that agency shall report what action has been taken or is recommended with regard to such complaint.

C. The Civil Right Division shall use its best efforts directly and through contracting agencies, other interested state and local agencies, Contractors and all other available instrumentalities to cause any labor union engaged in work under government contracts or any agency referring workers or providing or supervising apprenticeship or training for or in the course of such work to cooperate in the implementation of the purposes of this order.

D. The Civil Rights Division or any agency, officer or employees in the executive branch of the government designated by rule, regulation or order of the Civil Rights Division may hold such hearings, public or private as the Division may deem advisable for compliance, enforcement or educational

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purposes. The Civil Right Division may hold or cause to be held hearings in accordance with rules and regulations issued by the Civil Rights Division prior to imposing, ordering or recommending the imposition of penalties and sanctions under this order.

E. No order for debarment of any Contractor from further government contracts under this order shall be made without affording the Contractor an opportunity for a hearing.

F. Sanctions and Penalties. In accordance with such rules, regulations or orders as the Civil Rights Division may issue or adopt, the Civil Rights Division or the appropriate contracting agency may publish or cause to be published the names of Contractors or unions which it has concluded have complied or have failed to comply with the provisions of this order and with the rules, regulations and orders of the Civil Rights Division.

1. Contracts may be cancelled in whole or in part, terminated, or suspended absolutely, or continuation of contracts may be conditioned upon a program for future compliance approved by the contracting agency or the Civil Rights Division; provided that any contracting agency shall refrain from entering into further contracts, extensions or other modifications of existing contracts with any noncomplying Contractor until such Contractor has established and will carry out personnel and employment policies in compliance with the provisions of this order.

2. Under rules and regulations prescribed by the Civil Rights Division, each contracting agency shall make reasonable efforts within a reasonable time limitation to secure compliance with the contract provisions of this order by methods of conference, conciliation, mediation and persuasion before proceedings shall be instituted under this order or before a contract shall be cancelled or terminated in whole or in part under this order for failure of a Contractor or subcontractor to comply with the contract provisions of this order.

REPORT NO. : EE-R002
 LOCATION : Phoenix, Arizona
 CLIENT : Sun Valley Public Imp Corp

Sun Valley Parkway Project

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
201.010	620.00	ACRE	CLEARING & GRUBBING			
220.001	7300.00	CY	GROUTED RIP-RAP 6" THICK			
220.002	980.00	CY	RIP-RAP 20" THICK			
310.015	253000.00	SY	A.B.C. - 4" (SHOULDERS)			
310.016	1620.00	SY	A.B.C. - 4"			
310.020	524.00	SY	A.B.C. - 6"			
310.030	238.00	SY	A.B.C. - 8"			
321.040	238.00	SY	ASPHALTIC CONCRETE PAVING - 3"			
321.045	1770.00	SY	ASPHALTIC CONCRETE PAVING - 2"			
340.001	266620.00	LF	MOUNTABLE SINGLE CURB			

REPORT NO. : EE-R002
 LOCATION : Phoenix, Arizona
 CLIENT : Sun Valley Public Imp Corp

Sun Valley Parkway Project

* * B I D D I N G S C H E D U L E * *

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
340.002	26750.00	LF	MOUNTABLE CURB AND GUTTER			
340.003	284510.00	LF	RIBBON CURB			
340.004	15630.00	LF	CURB AND GUTTER TYPE 'A' PER A.D.O.T. STD. DWG. C-05.10 H=7"			
340.005	47.00	LF	CURB AND GUTTER TYPE 'G' PER A.D.O.T. STD. DWG. C-05.10			
340.006	10.00	EACH	HANDICAP RAMP PER M.A.G. STD. DET. 231			
340.007	4410.00	SF	CONCRETE DRIVEWAYS			
340.008	3580.00	SF	CONCRETE EQUIPMENT CROSSING MAG STD DET 204			
350.010	21600.00	SY	REMOVE EXISTING PAVEMENT			
350.020	1.00	LS	REMOVE RD.MARKERS & EXISTING SIGNS			
350.030	19.00	EACH	RELOCATE MAILBOXES ON THE R/W LINE			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
350.040	1.00	LS	RELOCATE EXISTING FENCES AND GATES			
350.045	1.00	LS	RELOCATE AND RECONSTRUCT 28LF CATTLE GAURD PH.IB STA.445+92			
350.050	1.00	LS	REMOVE STEEL FENCE POSTS, CHAIN LINK AND SLOPE PROTECTION			
350.055	1.00	LS	REMOVE EXISTING CANAL RAMP AND RECONSTRUCT IN KIND AS SHOWN			
350.060	1.00	LS	REMOVE CONCRETE HEADWALL AND WINGWALL			
350.070	1.00	LS	REMOVE PIPE CULVERTS AND HEADWALLS			
350.080	1.00	LS	REMOVE EXISTING RAILROAD TIE DECOR. HORSESHOE DRIVE			
350.095	1.00	LS	REMOVE AND REPLACE 1 1/4" PVC WATER LINE			
401.000	1.00	LS	TRAFFIC CONTROL			
402.010	100.00	LF	1 INCH PVC (SCHEDULE 40)			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
402.020	6885.00 6685.00	LF	3 INCH PVC (SCHEDULE 40)W/#8 PULL WIRE			
402.030	175.00	LF	BARRICADE PER M.A.G. DET. 130 'TYPE B'			
403.000	152.00	EACH	#5 PULL BOX PER A.D.O.T. STD. DWG. T.S. 1-2			
405.010	37.00	EACH	SURVEY MONUMENT M.A.G. DETAIL 120-2-E			
405.020	47.00	EACH	SURVEY MONUMENT M.A.G. DETAIL 120-2-D			
415.000	4820.00	LF	GUARDRAIL (STEEL POST) TYPE G4(IS) PER ADOT STD DWG C-10.05			
416.000	4.00	EACH	FLARED BRKWY CABLE TRML ASMBL 37.5' PER ADOT STD DET C-10.16			
417.000	4.00	EACH	GUARDRAIL ANCHOR ASM (STL TERM POST)PER ADOT STD DWG C-10.21			
421.000	92250.00	LF	BARBED WIRE GAME FENCE			
422.001	1.00	EACH	DOUBLE GATE 28 FT. TYPE 1 PER A.D.O.T. STD. C-12.10			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
422.002	2.00	EA	SINGLE GATE 14' TYPE 1 PER ADOT STD C-12.20 H=3'			
450.001	112400.00	LF	STRIPE - 4" WHITE BROKEN (90 MIL)			
450.003	296100.00	LF	STRIPE - 8" WHITE SOLID (90 MIL)			
450.004	279000.00	LF	STRIPE - 4" YELLOW SOLID (90 MIL, THERMO PLASTIC)			
450.006	1710.00	LF	CHLORINATED RUBBER YELLOW CURB PAINT			
450.008	6.00	EACH	STRIPE - LEFT TURN ARROW (120 MIL)			
450.020	42.00	EACH	OBJECT MARKER MAG DET 2056			
450.022	13.00	EA	OBJECT MARKER MAG DET 2054			
450.024	47.00	EA	OBJECT MARKER TYPE 2 ADOT STD 4-M-3.02			
450.030	160.00	EACH	RAISED PAVEMENT MARKER (WHITE - REFLECTORIZED) TYPE G			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
450.040	761.00	EACH	RAISED PAVEMENT MARKER (YELLOW - REFLECTORIZED) TYPE H			
460.001	36.00	EA	REGULATORY SIGNS W/G GALVANIZED STEEL POSTS			
460.002	53.00	EA	WARNING SIGNS W/G GALVANIZED STEEL POSTS			
505.001	1.00	LS	6X3 RCBC, ADOT CB-1 L=157' W/ HDWLS., PH. III STA. 312+17			
505.003	1.00	LS	6X3 RCBC, ADOT CB-1 L=135' W/ HDWLS., PH. III STA. 356+13			
505.005	1.00	LS	6X3 RCBC, ADOT CB-1 L=137' W/ HDWLS., PH. IIA STA. 476+88			
505.007	1.00	LS	6X3 RCBC, ADOT CB-1 L=137' W/ HDWLS., PH. IIA STA. 562+08			
505.009	1.00	LS	⁵ 6X ⁴ /RCBC, ADOT CB-1 L=145' W/ HDWLS., PH. IIA STA. 460+55			
505.011	1.00	LS	⁵ 6X ⁴ RCBC, ADOT CB-1 L=152' W/ HDWLS., PH. IIA STA. 549+16			
505.013	1.00	LS	8X3 RCBC, ADOT CB-2 L=137' W/ HDWLS., PH. III STA. 92+80			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
505.015	1.00	LS	8X3 RCBC, ADOT CB-2 L=173' W/ HDWLS., PH. III STA. 172+93			
505.017	1.00	LS	8X3 RCBC, ADOT CB-3 L=169' W/ HDWLS., PH. III STA. 327+07			
505.019	1.00	LS	8X3 RCBC, ADOT CB-1 L=142' W/ HDWLS., PH. IIA STA. 473+68			
505.021	1.00	LS	8X3 RCBC, ADOT CB-3 L=141' W/ HDWLS., PH. IA STA. 146+50			
505.023	1.00	LS	8X3 RCBC, ADOT CB-3 L=214' W/ HDWLS., PH. IA STA. 236+91			
505.025	1.00	LS	8X3 RCBC, ADOT CB-4 L=132' W/ HDWLS., PH. IA STA. 279+17			
505.027	1.00	LS	⁵ 8X4 RCBC, ADOT CB-2 L=144' W/ HDWLS., PH. IIA STA. 430+69			
505.029	1.00	LS	8X4 RCBC, ADOT CB-1 L=175' W/ HDWLS., PH. IIA STA. 443+33			
505.031	1.00	LS	8X4 RCBC, ADOT CB-1 L=134' W/ HDWLS., PH. IIA STA. 446+24			
505.033	1.00	LS	⁵ 8X4 RCBC, ADOT CB-2 L=156' W/ HDWLS., PH. IIA STA. 454+33			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
505.035	1.00	LS	10X3 RCBC, ADOT CB-3 L=135' W/ HDWLS., PH. III STA. 38+82			
505.037	1.00	LS	10X3 RCBC, ADOT CB-3 L=178' W/ HDWLS., PH. III STA. 129+55			
505.039	1.00	LS	10X3 RCBC, ADOT CB-3 L=196' W/ HDWLS., PH. III STA. 136+90			
505.041	1.00	LS	10X3 RCBC, ADOT CB-6 L=146' W/ HDWLS., PH. III STA. 161+67			
505.043	1.00	LS	10X3 RCBC, ADOT CB-4 L=252' W/ HDWLS., PH. III STA. 197+95			
505.045	1.00	LS	10X3 RCBC, ADOT CB-3 L=171' W/ HDWLS., PH. III STA. 225+19			
505.047	1.00	LS	10X3 RCBC, ADOT CB-2 L=155' W/ HDWLS., PH. III STA. 227+85			
505.049	1.00	LS	10X3 RCBC, ADOT CB-2 L=175' W/ HDWLS., PH. III STA. 230+27			
505.051	1.00	LS	10X3 RCBC, ADOT CB-1 L=169' W/ HDWLS., PH. III STA. 243+74			
505.053	1.00	LS	10X3 RCBC, ADOT CB-3 L=181' W/ HDWLS., PH. III STA. 271+21			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
505.055	1.00	LS	10X3 RCBC, ADOT CB-1 L=161' W/ HDWLS., PH. III STA. 289+26			
505.057	1.00	LS	10X3 RCBC, ADOT CB-2 L=144' W/ HDWLS., PH. III STA. 329+27			
505.059	1.00	LS	10X3 RCBC, ADOT CB-4 L=170' W/ HDWLS., PH. III STA. 374+64			
505.061	1.00	LS	10X3 RCBC, ADOT CB-3 L=162' W/ HDWLS., PH. IIA STA. 412+74			
505.063	1.00	LS	10X3 RCBC, ADOT CB-6 L=172' W/ HDWLS., PH. IIA STA. 415+81			
505.065	1.00	LS	10X3 RCBC, ADOT CB-1 L=146' W/ HDWLS., PH. IIA STA. 492+71			
505.067	1.00	LS	10X3 RCBC, ADOT CB-1 L=134' W/ HDWLS., PH. IIA STA. 539+47			
505.069	1.00	LS	10X3 RCBC, ADOT CB-4 L=155' W/ HDWLS., PH. IIA STA. 630+89			
505.071	1.00	LS	10X3 RCBC, ADOT CB-4 L=135' W/ HDWLS., PH. IIA STA. 632+04			
505.073	1.00	LS	10X3 RCBC, ADOT CB-1 L=212' W/ HDWLS., PH. IIA STA. 644+90			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
505.075	1.00	LS	10X3 RCBC, ADOT CB-1 L=134' W/ HDWLS., PH. IIA STA. 665+02			
505.077	1.00	LS	10X3 RCBC, ADOT CB-3 L=136' W/ HDWLS., PH. IIA STA. 676+30			
505.079	1.00	LS	10X3 RCBC, ADOT CB-4 L=142' W/ HDWLS., PH. IIA STA. 683+44			
505.081	1.00	LS	10X3 RCBC, ADOT CB-2 L=156' W/ HDWLS., PH. IIB STA. 825+25			
505.083	1.00	LS	10X3 RCBC, ADOT CB-2 L=136' W/ HDWLS., PH. IIB STA. 839+23			
505.085	1.00	LS	10X3 RCBC, ADOT CB-1 L=140' W/ HDWLS., PH. IA STA. 4+30			
505.087	1.00	LS	10X3 RCBC, ADOT CB-1 L=134' W/ HDWLS., PH. IA STA. 26+06			
505.089	1.00	LS	10X3 RCBC, ADOT CB-2 L=136' W/ HDWLS., PH. IA STA. 38+84 12			
505.091	1.00	LS	10X4 RCBC, ADOT CB-5 L=145' W/ HDWLS., PH. IA STA. 64+87 99 4			
505.093	1.00	LS	10X3 RCBC, ADOT CB-4 L=154' W/ HDWLS., PH. IA STA. 74+15			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
505.095	1.00	LS	10X3 RCBC, ADOT CB-1 L=138' W/ HDWLS., PH. IA STA. 79+21			
505.097	1.00	LS	10X3 RCBC, ADOT CB-4 L=158' W/ HDWLS., PH. IA STA. 84+67			
505.099	1.00	LS	10X3 RCBC, ADOT CB-1 L=133' W/ HDWLS., PH. IA STA. 99+09			
505.101	1.00	LS	10X3 RCBC, ADOT CB-3 L=169' W/ HDWLS., PH. IA STA. 347+26			
505.103	1.00	LS	10X4 RCBC, ADOT CB-6 L=138' W/ HDWLS., PH. III STA. 195+10			
505.105	1.00	LS	10X4 RCBC, ADOT CB-6 L=148' W/ HDWLS., PH. III STA. 266+49			
505.107	1.00	LS	10X4 RCBC, ADOT CB-4 L=136' W/ HDWLS., PH. III STA. 285+00			
505.109	1.00	LS	10X4 RCBC, ADOT CB-3 L=135' W/ HDWLS., PH. III STA. 333+84			
505.111	1.00	LS	10X4 RCBC, ADOT CB-1 L=209' W/ HDWLS., PH. III STA. 337+14			
505.113	1.00	LS	10X4 RCBC, ADOT CB-4 L=139' W/ HDWLS., PH. III STA. 360+44			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
505.115	1.00	LS	10X4 RCBC, ADOT CB-1 L=164' W/ HDWLS., PH. III STA. 386+05 5			
505.117	1.00	LS	10X4 RCBC, ADOT CB-6 L=135' W/ HDWLS., PH. IIA STA. 480+10 5			
505.119	1.00	LS	10X4 RCBC, ADOT CB-6 L=138' W/ HDWLS., PH. IIA STA. 481+03 5			
505.121	1.00	LS	10X4 RCBC, ADOT CB-6 L=166' W/ HDWLS., PH. IIA STA. 482+23			
505.123	1.00	LS	10X4 RCBC, ADOT CB-4 L=133' W/ HDWLS., PH. IIA STA. 512+67 5			
505.125	1.00	LS	10X4 RCBC, ADOT CB-4 L=164' W/ HDWLS., PH. IIA STA. 580+23 5			
505.127	1.00	LS	10X4 RCBC, ADOT CB-4 L=135' W/ HDWLS., PH. IIA STA. 618+24			
505.129	1.00	LS	10X4 RCBC, ADOT CB-3 L=176' W/ HDWLS., PH. IIA STA. 716+98			
505.131	1.00	LS	10X4 RCBC, ADOT CB-3 L=140' W/ HDWLS., PH. IIA STA. 718+02			
505.133	1.00	LS	10X4 RCBC, ADOT CB-3 L=178' W/ HDWLS., PH. IIA STA. 723+58			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
505.135	1.00	LS	10X4 RCBC, ADOT CB-3 L=180' W/ HDWLS., PH. IIA STA. 724+22			
505.137	1.00	LS	10X4 RCBC, ADOT CB-1 L=229' W/ HDWLS., PH. IIB STA. 785+20			
505.139	1.00	LS	10X4 RCBC, ADOT CB-6 L=141' W/ HDWLS., PH. IA STA. 36+92			
505.141	1.00	LS	10X4 RCBC, ADOT CB-4 L=170' W/ HDWLS., PH. IA STA. 254+82			
505.143	1.00	LS	10X4 RCBC, ADOT CB-4 L=147' W/ HDWLS., PH. IA STA. 304+13			
505.145	1.00	LS	10X5 RCBC, ADOT CB-3 L=145' W/ HDWLS., PH. IIA STA. 577+40			
505.147	1.00	LS	10X8 RCBC, ADOT CB-1 L=184' W/ HDWLS., PH. IA STA. 45+39			
505.149	1.00	LS	10X8 RCBC, ADOT CB-1 L=145' W/ HDWLS., PH. IA STA. 116+05			
505.151	1.00	LS	10X8 RCBC, ADOT CB-1 L=149' W/ HDWLS., PH. IA STA. 316+36			
505.153	1.00	LS	10X8 RCBC, ADOT CB-2 L=136' W/ HDWLS., PH. IA STA. 341+76			

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 CLIENT : Sun Valley Public Imp Corp

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
505.155	1.00	LS	10X10 RCBC, ADOT CB-2 L=192' W/ HDWLS., PH. IB STA. 473+08			
505.157	1.00	LS	12X3 RCBC, ADOT CB-5 L=140' W/ HDWLS., PH. IA STA. 67+33			
505.159	1.00	LS	12X4 RCBC, ADOT CB-6 L=137' W/ HDWLS., PH. IA STA. 102+11			
505.161	1.00	LS	12X4 RCBC, ADOT CB-6 L=148' W/ HDWLS., PH. IA STA. 106+89			
505.163	1.00	LS	5 12X4 RCBC, ADOT CB-6 L=137' W/ HDWLS., PH. IIB STA. 849+42			
505.165	1.00	LS	12X4 RCBC, ADOT CB-5 L=135' W/ HDWLS., PH. IA STA. 110+99			
505.167	1.00	LS	12X4 RCBC, ADOT CB-6 L=137' W/ HDWLS., PH. IA STA. 197+74			
505.169	1.00	LS	12X5 RCBC, ADOT CB-6 L=144' W/ HDWLS., PH. IIA STA. 518+50			
505.171	1.00	LS	12X6 RCBC, ADOT CB-3 L=171' W/ HDWLS., PH. IIA STA. 720+05			
505.173	1.00	LS	12X6 RCBC, ADOT CB-3 L=169' W/ HDWLS., PH. IIA STA. 720+70			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
505.175	1.00	LS	12X6 RCBC, ADOT CB-3 L=172' W/ HDWLS., PH. IIA STA. 721+35			
505.177	1.00	LS	12X6 RCBC, ADOT CB-6 L=144' W/ HDWLS., PH. IA STA. 260+98			
505.179	1.00	LS	12X8 RCBC, ADOT CB-6 L=159' W/ HDWLS., PH. IA STA. 207+57			
505.500	1.00	LS	BEARDSLEY BRIDGE - W/O CONCRETE PILES			
505.601	37.00	EACH	SINGLE C. BASIN, TYPE 4 PER ADOT STD C-15.30 W/CONC APRON			
505.602	58.00	EACH	CATCH BASIN IN MEDIAN PER ADOT STD C-15.80 W/CONC. APRON			
505.603	19.00	EACH	DBL CATCH BASIN, TYPE 4 PER ADOT STD C-15.30 W/CONC. APRON			
505.604	12.00	EACH	CATCH BASIN 'TYPE B' PER M.A.G. STD. DET. 531			
505.605	2.00	EACH	CATCH BASIN 'TYPE C' PER M.A.G. STD. DET. 532			
505.701	1.00	LS	RETAINING WALL 120LF, H=6.5' PH. II, STA. 442+00			

REPORT NO. : EE-R002
 LOCATION : Phoenix, Arizona
 CLIENT : Sun Valley Public Imp Corp

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
505.105	1371.00	LF	4'X8' THICK/BOARD CUT-OFF WALL/ST/ENH OF/CONC/1/4" REBAR/ CHANNEL			
505.801	6050.00	SF	CONC. CHANNEL 6" CLASS A CONC.			
505.901	8.00	EA	CONCRETE DROP STRUCTURE			
525.001	43500.00	SY	GUNITE CHANNEL INCLUDING SPILLWAYS			
525.025	47.00	EA	6" THICK GROUTED RIP RAP DROP STRUCTURE CONCRETE/DROP STRUCTURE			
525.060	1.00	LS	4'X8" CONCRETE CUT-OFF WALL, PH. III STA. 107+75			
610.010	1.00	LS	12" DUCTILE IRON PIPE 42 LF W/ FITTINGS			
618.012	803.00	LF	12 INCH CONCRETE PIPE NON-REINFORCED			
618.315	889.00	LF	15 INCH R.G.R.C.P. CLASS 3			
618.318	76.00	LF	18 INCH R.G.R.C.P. CLASS 3			

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* * B I D D I N G S C H E D U L E * *

ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
618.415	6660.00	LF	15 INCH R.G.R.C.P. CLASS 4			
618.418	1157.00 1097.00	LF	18 INCH R.G.R.C.P. CLASS 4			
618.424	1.00	LS	1-24"RGRCP, CL.5 PIPE CUL.W/ HDWLS.L=120' PH.III STA. 38+45			
618.430	1.00	LS	1-30"RGRCP, CL.4 PIPE CUL.W/MAG 545, L=177' PH.III STA.171+20			
618.431	1.00	LS	2 1-30"RGRCP, CL.4 PIPE CUL.W/MAG 545 HDWLS .L=196' PH.III STA.300+31			
618.432	1.00	LS	1-30"RGRCP, CL.4 PIPE CUL.W/MAG 545 HDWLS /L=144' PH.III STA.397+66			
618.436	1.00	LS	1-36"RGRCP, CL.4 PIPE CUL.W/MAG 545, L=153' PH.III STA.350+40			
618.442	1.00	LS	1-42"RGRCP, CL.5 PIPE CUL.W/MAG 545, L=180' PH.III STA.142+50			
618.443	1.00	LS	1-42"RGRCP, CL.5 PIPE CUL.W/MAG 545, L=172' PH.III STA.253+94			
618.444	1.00	LS	1-42"RGRCP, CL.5 PIPE CUL.W/MAG 545, L=173' PH.III STA.292+09			

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 LOCATION : Phoenix, Arizona
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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
618.445	1.00	LS	2-24"RGRCP,CL.4 PIPE CUL.W/MAG 501-1,2 L=38'PH. IB, STA.445+9			
618.446	1.00	LS	3-24"RGRCP,CL.4 PIPE CUL.W/MAG 501-1,2 L=38'PH. IB, STA.445+9			
621.002	1.00	LS	1-24" CSP,W/END SECT., L=146' PH. IIA STA.496+86			
621.004	1.00	LS	1-24" CSP,W/END SECT., L=163' PH. IB STA.379+85			
621.006	1.00	LS	1-30" CSP,W/END SECT., L=146' PH. III STA.326+17			
621.008	1.00	LS	1-30" CSP,W/END SECT., L=143' PH. III STA.398+51			
621.010	1.00	LS	2-36" CSP,W/END SECT., HDWL.,L=271' PH. III STA.316+78			
621.012	1.00	LS	1-36" CSP,W/END SECT., L=221' PH. IB STA.378+96			
621.014	1.00	LS	1-42" CSP,W/END SECT., L=151' PH. III STA.363+05			
621.016	1.00	LS	1-42" CSP,W/END SECT., L=161' PH. III STA.382+81			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
621.018	1.00	LS	1-48" CSP,W/END SECT., L=178' PH. IA STA.357+26			
621.020	1.00	LS	1-60" CSP,W/END SECT., L=174' PH. IB STA.370+82			
621.022	1.00	LS	1-72" CSP,W//END/ SECT. HDWL.,L=198' PH. IA STA.369+17			
622.001	1.00	LS	1-28X20 CSPA,W/END SECT., L=144'PH. IIA STA.552+64			
622.003	1.00	LS	1-28X20 CSPA,W/END SECT., L=186'PH. IIA STA.555+51			
622.005	1.00	LS	1-28X20 CSPA,W/END SECT., L=142'PH. IIA STA.594+88			
622.007	1.00	LS	1-28X20 CSPA,W/END SECT., L=145'PH. IIA STA.614+49			
622.009	1.00	LS	1-28X20 CSPA,W/END SECT., L=172'PH. IIA STA.620+54			
622.011	1.00	LS	2-28X20 CSPA,W//END/ SECT. HDWL.,L=149'PH. IIA STA.624+33			
622.013	1.00	LS	2-28X20 CSPA,W//END/ SECT. HDWL.,L=139'PH. IIA STA.698+15			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
622.015	1.00	LS	2-28X20 CSPA, W/END SECT., HDWL., L=138' PH. IIB STA. 781+52			
622.017	1.00	LS	1-28X20 CSPA, W/END SECT., HDWL., L=147' PH. IA STA. 33+07			
622.019	1.00	LS	2-28X20 CSPA, W/END SECT., HDWL., L=139' PH. IA STA. 282+90			
622.021	1.00	LS	2-28X20 CSPA, W/END SECT., HDWL., L=139' PH. IA STA. 307+78			
622.023	1.00	LS	2-28X20 CSPA, W/END SECT., HDWL., L=137' PH. IA STA. 310+12			
622.025	1.00	LS	2-28X20 CSPA, W/END SECT., HDWL., L=141' PH. IA STA. 312+27			
622.027	1.00	LS	1-28X20 CSPA, W/END SECT., L=147' PH. IA STA. 315+02			
622.029	1.00	LS	1-28X20 CSPA, W/END SECT., L=145' PH. IA STA. 318+88			
622.031	1.00	LS	1-28X20 CSPA, W/END SECT., L=139' PH. IA STA. 324+95			
622.033	1.00	LS	1-28X20 CSPA, W/END SECT., L=138' PH. IB STA. 373+07			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
622.035	1.00	LS	1-28X20 CSPA, W/END SECT., L=136' PH. IB STA. 374+90			
622.037	1.00	LS	2-35X24 CSPA, W/END SECT./L 173 HDWL., L=168' PH. III STA. 404+55			
622.039	1.00	LS	2-35X24 CSPA, W/END SECT./L HDWL., L=164' PH. IIA STA. 424+87			
622.041	1.00	LS	2-35X24 CSPA, W/END SECT./L HDWL., L=142' PH. IIA STA. 437+17			
622.043	1.00	LS	36" CSP 2-35X24 CSPA, W/END SECT./L HDWL., L=148' PH. IIA STA. 463+30			
622.045	1.00	LS	1-35X24 CSPA, W/END SECT., L=186' PH. IIA STA. 490+16			
622.047	1.00	LS	1-35X24 CSPA, W/END SECT., L=158' PH. IIA STA. 550+50			
622.049	1.00	LS	2-35X24 CSPA, W/END SECT./L HDWL., L=135' PH. IIA STA. 611+51			
622.051	1.00	LS	2-35X24 CSPA, W/END SECT./L HDWL., L=147' PH. IIA STA. 627+75			
622.053	1.00	LS	2-35X24 CSPA, W/END SECT./L HDWL., L=147' PH. IIA STA. 639+09			

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 LOCATION : Phoenix, Arizona
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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
622.055	1.00	LS	1 # -35X24 CSPA,W/END SECT., HDWL./L=179' PH. IIA STA.669+88			
622.057	1.00	LS	2-35X24 CSPA,W/END SECT./L=163' PH. IIB STA.775+43			
622.059	1.00	LS	1-35X24 CSPA,W/END SECT., L=147'PH. IA STA. 47+60			
622.061	1.00	LS	1-35X24 CSPA,W/END SECT., L=140'PH. IA STA. 51+76			
622.063	1.00	LS	1-35X24 CSPA,W/END SECT., L=140'PH. IA STA.114+09			
622.065	1.00	LS	1-35X24 CSPA,W/END SECT., L=135'PH. IA STA.129+67			
622.067	1.00	LS	4-35X24 CSPA,W/END SECT./L=161' PH. IA STA.154+43			
622.069	1.00	LS	1-42X29 CSPA,W/END SECT., L=179'PH. IIA STA.499+65			
622.071	1.00	LS	2-42X29 CSPA,W/END SECT./L=205' PH. IIA STA.504+51			
622.073	1.00	LS	1-42X29 CSPA,W/END SECT., L=141'PH. IIA STA.568+19			

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 LOCATION : Phoenix, Arizona
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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
622.075	1.00	LS	1-42X29 CSPA, W/END SECT., L=147' PH. IIA STA. 586+09			
622.077	1.00	LS	2-42X29 CSPA, W/END SECT./I HDWL., L=149' PH. IIA STA. 590+65			
622.079	1.00	LS	1-42X29 CSPA, W/END SECT., L=171' PH. IIA STA. 598+90			
622.081	1.00	LS	3-42X29 CSPA, W/END SECT./I HDWL., L=163' PH. IIA STA. 605+53			
622.083	1.00	LS	1-42X29 CSPA, W/END SECT., L=191' PH. IIA STA. 652+65			
622.085	1.00	LS	2-42X29 CSPA, W/END SECT./I HDWL., L=134' PH. IIA STA. 656+81			
622.087	1.00	LS	2-42X29 CSPA, W/END SECT./I HDWL., L=134' PH. IIA STA. 658+96			
622.089	1.00	LS	2-42X29 CSPA, W/END SECT./I HDWL., L=135' PH. IA STA. 124+23			
622.091	1.00	LS	3-42X29 CSPA, W/END SECT./I HDWL., L=137' PH. IA STA. 136+16			
622.093	1.00	LS	2-42X29 CSPA, W/END SECT./I HDWL., L=144' PH. IA STA. 210+68			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
622.095	1.00	LS	2-42X29 CSPA, W/END SECT./L 135' HDWL., L=135' PH. IA STA. 264+99			
622.097	1.00	LS	1-42X29 CSPA, W/END SECT., L=155' PH. IA STA. 320+57			
622.099	1.00	LS	1-42X29 CSPA, W/END SECT., L=155' PH. IA STA. 322+99			
622.101	1.00	LS	1-42X29 CSPA, W/END SECT., L=177' PH. IA STA. 327+30			
622.103	1.00	LS	1-42X29 CSPA, W/END SECT., L=166' PH. IA STA. 328+91			
622.105	1.00	LS	2-42X29 CSPA, W/END SECT./L HDWL., L=155' PH. IA STA. 349+18			
622.107	1.00	LS	1-42X29 CSPA, W/END SECT., L=166' PH. IB STA. 384+06			
622.109	1.00	LS	1-49X33 CSPA, W/END SECT., L=161' PH. IIA STA. 557+56			
622.111	1.00	LS	2-49X33 CSPA, W/END SECT./L HDWL., L=150' PH. IIA STA. 601+81			
622.113	1.00	LS	3-49X33 CSPA, W/END SECT./L HDWL., L=146' PH. IA STA. 16+19			

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
622.115	1.00	LS	2-49X33 CSPA,W/END SECT./L HDWL., L=223'PH. IA STA. 30+35			
622.117	1.00	LS	1-49X33 CSPA,W/END SECT., L=136'PH. IA STA.336+58			
622.119	1.00	LS	2-49X33 CSPA,W/END SECT./L HDWL., L=169'PH. IA STA.352+92			
622.121	1.00	LS	1-57X38 CSPA,W/END SECT., L=143'PH. IIA STA.525+29			
622.123	1.00	LS	1-57X38 CSPA,W/END SECT., L=155'PH. IIA STA.529+95			
622.125	1.00	LS	1-57X38 CSPA,W/END SECT., L=167'PH. IIA STA.544+13			
622.127	1.00	LS	1-57X38 CSPA,W/END SECT., L=134'PH. IIA STA.690+39			
622.129	1.00	EACH	1-57X38 CSPA,W/END SECT./L HDWL & WGS, L=174'PH. IIB STA.1015+39			
702.400	2330.00	SY	DECOMPOSED GRANITE 4" THICK			
782.000	975.00	LF	BEARDSLEY BRIDGE - CONC. PILES, FURNISH AND DRIVE			

REPORT NO. : EE-R002
 LOCATION : Phoenix, Arizona
 CLIENT : Sun Valley Public Imp Corp

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* * B I D D I N G S C H E D U L E * *

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
900.030	200.00	HRS	2 MAN SURVEY CREW CONTINGENCY ITEM		82.00	16,400.00
900.030	200.00	HRS	3 MAN SURVEY CREW CONTINGENCY ITEM		91.00	18,200.00
900.040	200.00	HRS	4 MAN SURVEY CREW CONTINGENCY ITEM		101.00	20,200.00
				BASE BID SUBTOTAL		

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 CLIENT : Sun Valley Public Imp Corp

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* * B I D D I N G S C H E D U L E * *

ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
<u>ALTERNATE A</u>						
205.010A	1068000.00	CY	ROADWAY EXCAVATION FOR PAVEMENT ALT 'A'			
210.010A	939000.00	CY	BORROW FOR PAVING ALT 'A'			
310.010A	1287400.00	SY	A.B.C. - 4"			
310.080A	997000.00	SY	SELECT MATERIAL - 4"			
310.090A	169500.00	SY	SELECT MATERIAL - 6"			
310.100A	122800.00	SY	SELECT MATERIAL - 7"			
321.050A	1261000.00	SY	ASPHALTIC CONCRETE PAVING - 4"			
321.060A	25100.00	SY	ASPHALTIC CONCRETE PAVING - 6"			
360.010A	18900.00	SY	GEOGRID REINFORCED BASE			
900.010A	1.00	LS	SURVBYING (C.W.W.)	ONE MILLION ONE HUNDRED THOUSAND AND NO/100	1,100,000.00	1,100,000.00

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ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
<u>ALTERNATE A</u>						
900.020A	1.00	LS	SURVEY ADMINISTRATION			

Pavement A Subtotal _____

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* * B I D D I N G S C H E D U L E * *

ITEM NUMBER	QUANTITY	UNIT	DESCRIPTION	UNIT COST IN WRITING	UNIT COST IN FIGURES	AMOUNT
<u>ALTERNATE B</u>						
205.010B	983600.00 983600.00	CY	ROADWAY EXCAVATION FOR PAVEMENT ALT 'B'			
210.010B	1189000.00 1189000.00	CY	BORROW FOR PAVING ALT 'B'			
321.060B	978100.00	SY	ASPHALTIC CONCRETE PAVING - 6 1/2"			
321.070B	169500.00	SY	ASPHALTIC CONCRETE PAVING - 7 1/2"			
321.080B	122800.00	SY	ASPHALTIC CONCRETE PAVING - 8 1/2"			
321.090B	18900.00	SY	ASPHALTIC CONCRETE PAVING - 10"			
900.010B	1.00	LS	SURVEYING (C.W.W.)	ONE MILLION FIFTY THOUSAND AND NO /100	1,050,000.00	1,050,000.00
900.020B	1.00	LS	SURVEY ADMINISTRATION			

Pavement B Subtotal _____

SUMMARY

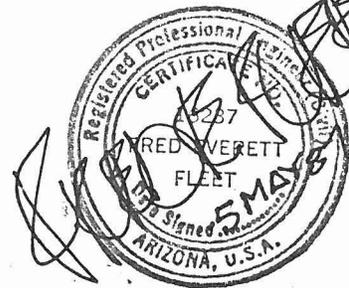
Base Bid Subtotal \$ _____

Pavement Alternate "____"* Subtotal \$ _____

Total Bid \$ _____

*Enter A for Alternate "A", B for Alternate "B", or C for Alternate "C".

SPECIAL PROVISIONS



PART 100 - SPECIAL PROVISIONS

Section

Modifications to Standard Specifications - The Standard Specifications are modified as follows herein. Where any section of the Standard Specifications is supplemented, the remaining provisions of such section shall remain in effect. All supplemental provisions shall be construed as added. Where a portion of any section is amended, deleted or superseded, the provisions of the section not specifically amended, deleted or superseded shall remain in effect.

- 101.201 - Definitions
- 102.5 - Preparation of Proposal
- 102.6 - Subcontractor List
- 103.6 - Contractor's Insurance
- 104.2.6 - Approval of Design Engineer
- 104.2.7 - Increase to Payment and Performance Bonds
- 105.101 - Suggestions to Contractor
- 105.102 - Weekly Site Meetings
- 105.301 - Order of Specification Authority
- 105.4 - Coordination of Plans and Specifications
- 105.6 - Cooperation with Utility Companies
- 105.701 - Cooperation between Contractors
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- 108.401 - CPM Schedule
- 108.501 - Overtime and Shift Work
- 108.701 - Notice of Delays
- 108.702 - Avoidable Delays
- 108.703 - Extension of Time
- 108.704 - Compensation to Owner for Extension of Time
- 108.705 - Preconstruction Conference
- 108.9 - Liquidated Damages
- 109.7(A) - Payment for Bond Issue and Budget Projects
- 109.701 - Payment
- 109.8 - Claims for Additional Compensation
- 109.9 - Claims and Disputes
- 109.10 - Default of Owner

SECTION 101.201 - MODIFICATIONS TO DEFINITIONS AND TERMS:

Agency: The Sun Valley Public Improvement Corporation

Architect: Shall mean the Design Engineer

Award: The formal action of the Board of Directors of the Sun Valley Public Improvement Corporation in accepting a proposal.

Bank: Security Pacific National Bank, N.A., or such other bank as has issued a letter of credit supporting the payment of interest on and principal of the bonds issued by the Contracting Agency, the proceeds of which are used to pay for the construction of the Sun Valley Parkway (the "Bond" "Bonds").

Bond Issue Project: A project financed from bonds issued by the Contracting Agency.

Contracting Agency: The Sun Valley Public Improvement Corporation, the legal entity that has contracted for the performance of the work or for whom the work is being performed.

Critical Item of Work: The item of work which at a given time is critical to the completion of the project on schedule.

Design Engineer: The individual or firm who has accomplished the engineering design services for the project, including his representatives.

Engineer: The Maricopa County Engineer or Greiner Engineering Sciences, Inc., his duly authorized representative acting under contract to Maricopa County as the Independent Engineer.

Force Account Work: Work done on a time and material basis.

Heron: Heron Financial Corporation, A- a Delaware Corporation, for whose account the Bank has issued a letter of credit supporting the Bonds.

Laboratory: The established materials testing laboratory of the Engineer or his duly authorized representative, or other laboratories acceptable to and/or authorized by the Engineer to test materials and work involved in the Contract.

Major Item: Any item of work and/or materials having an original contract value which exceeds \$250,000.

Major Material Supplier: A supplier who supplies materials valued at \$250,000 or more.

Notice of Award: A letter from a person duly authorized by the Contracting Agency, advising the Contractor that he is the successful bidder and that the Board of Directors of the Contracting Agency has accepted his proposal.

Owner: The Sun Valley Public Improvement Corporation acting through its legally constituted officials, officers or agents.

Superintendent of Streets: The person duly appointed by the Board of Supervisors of Maricopa County, as provided by Sections 9-601 and 11-701 of the Arizona Revised Statutes.

Trustee: **First Interstate Bank of Arizona, N.A., the Trustee under the Indenture of Trust, dated as of March 1, 1987, pursuant to which the Bonds were issued.**

Working Day: A calendar day, exclusive of Saturdays, Sundays, and Maricopa County government recognized legal holidays, on which weather and other conditions not under the control of the Contractor will permit construction operations to proceed for the major part of the day with the normal working force engaged in performing the critical item or items of work which would be in progress at that time.

SECTION 102.5 - PREPARATION OF PROPOSAL (ADDITION): The bidder shall submit the entire Special Provisions Booklet intact, with the following documents (included herein unless otherwise stated) completed at the time bids are submitted:

- 1.) AFFIDAVIT BY CONTRACTOR CERTIFYING NO COLLUSION - this must have all blanks filled in and must be notarized.
- 2.) AFFIDAVIT BY CONTRACTOR CERTIFYING PAYMENT (OR NONPAYMENT) OF TAXES - this must have all blanks filled in, must indicate whether taxes have or have not been paid (striking out non-applicable words), and must be notarized.
- 3.) PROPOSAL - applicable portions must be filled in including project number, description, principals' names, titles, dates and phone numbers.
- 4.) BIDDING SCHEDULE - this must include unit costs in written words and in figures. If a discrepancy occurs between the two, the written word unit price shall govern.
- 5.) BID SURETY - every proposal shall be accompanied by a certified check, cashier's check or a bid bond for five (5%) percent of the amount bid.
- 6.) BIDDER'S QUALIFICATION STATEMENT

OTHER FORMS: Execution of the CONTRACT, PERFORMANCE BOND, PAYMENT BOND AND CERTIFICATE OF INSURANCE, is not required for the submission of the bid. They must, however, be executed and delivered by the successful bidder and, where applicable, the surety bond or its agent prior to the contract execution.

SECTION 102.6 - SUBCONTRACTOR LIST: Prior to award of contract and within ten (10) calendar days of receiving written request from the Owner, the bidder being considered for award shall submit to the Owner a letter listing the name and address of each subcontractor and major material supplier to whom the bidder proposed to sublet portions of the work in excess of one-half of one percent of the total amount of his proposal.

SECTION 103.6 - CONTRACTOR'S INSURANCE (ADDITION): Concurrently with the execution of the contract, the successful Contractor shall furnish Sun Valley Public Improvement Corporation a Certificate of Insurance showing the following named insureds:

Sun Valley Public Improvement Corporation
Maricopa County
Maricopa County Flood Control District
Maricopa Municipal Water Conservation District No. 1
Greiner Engineering Sciences, Inc.
Collar, Williams and White Engineering, Inc.
Town of Buckeye
Heron Financial Corporation
Security Pacific National Bank

and the following minimum coverage:

<u>Type</u>	<u>Limits</u>
Comprehensive General - Bodily injury and Property Damage	\$10,000,000 per occurrence
Comprehensive Auto Liability and non-owned	\$10,000,000/occurrence
Worker's Compensation	Statutory \$10,000,000
Employer's Liability	\$10,000,000/occurrence

Primary comprehensive liability coverage must be issued on the 1987 I.S.O. occurrence form and the excess coverage must follow or exceed the 1973 I.S.O. primary form. Such liability coverage must cover activities of all subcontractors. At contract signing the Contractor must deliver an insurance certificate executed by an agent of a company rated A7 or better by A. M. Best & Co.

The Contractor (and his insurance agent) must use the Certificate of Insurance included herewith and maintain such insurance at its expense until the acceptance of the project into the Maricopa County Road system..

The indemnity contained in Section 103.6.2 of the Standard Specifications shall be in favor of all the named insureds listed above.

104.2.6 - APPROVAL OF DESIGN ENGINEER: Any changes in the Plans and Specifications shall also require the written approval of the Design Engineer.

104.2.7 - INCREASES TO PAYMENT AND PERFORMANCE BONDS: The Contractor shall, concurrently with the issuance of any additive change orders, cause the amount of each bond furnished pursuant to this contract to be increased in the amount of and for any additive change order which increases the aggregate cost of all of the work to be performed under this contract.

SECTION 105.101 - SUGGESTIONS TO CONTRACTOR: Any plan or method of work suggested by the Owner or the Engineer to the Contractor but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor; and the Owner and the Engineer shall assume no responsibility therefor and in no way be held liable for any defects in the work which may result from or be caused by use of such plan or method of work.

SECTION 105.102 - WEEKLY SITE MEETINGS: The Engineer will hold weekly meetings on the site at a regular time and place agreed to by the Contractor. The Contractor's project manager is to attend. The primary purpose for the meeting will be to review the schedule submitted for the next two-weeks work, discuss any changes being processed and ensure on-going communication on project related items.

SECTION 105.301 - ORDER OF SPECIFICATION AUTHORITY:

Governing Specifications: The work embraced herein and as shown on the plans for the construction of this project shall be done in accordance with the Maricopa Association of Governments' Uniform Standard Specifications for Public Works Construction dated 1979, together with the 1980 to 1986 revisions thereto, the Maricopa County Highway Department Supplements to the Uniform Standards dated August 3, 1981, October 19, 1981, May 21, 1984, as modified by the plans and this Special Provisions Booklet.

SECTION 105.4 - COORDINATION OF PLANS AND SPECIFICATIONS (SUBSTITUTION): The Contractor shall perform the work in accordance with the plans and specifications and shall not take advantage of any error or omission in the plans and specifications. In the event the Contractor discovers an error or omission, he shall immediately notify the Engineer. The Engineer will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the plans and specifications. If the Contractor fails to notify the Engineer of any errors or omissions which the Contractor discovered or should have discovered through the exercise of reasonable diligence, any additional cost incurred as the result of such errors or omissions shall be borne solely by the Contractor.

SECTION 105.6 - COOPERATION WITH UTILITY COMPANIES (ADDITION): The following names and telephone numbers of people to contact is to assist the Contractor in his cooperation with utility companies impacted by his work. This may not be an exhaustive list, and the failure to include a utility company shall not affect or reduce the Contractor's responsibilities under Section 105.6:

<u>Utility or Agency</u>	<u>Name</u>	<u>Number</u>
Mountain Bell	William Thomas	(602) 842-7720
Southwest Gas	Terry Hughes	(602) 484-5261
Salt River Project	Ben Allindes	(602) 236-5330
	Bill Phillips	(602) 236-2732
Western Area Power Administration	Richard Brown	(702) 293-3230
	Ray Wattson	(602) 261-4554
	Mike Testa	(602) 261-4335
Arizona Public Service	Ernie Cota	(602) 371-6964
AT & T	Vaughn Vincent	(602) 253-2424
U.S. Sprint	Bill Young	(602) 932-0001
	General Information	(800) 521-0570
Garcia Water Company	Mike McKinney	(602) 936-4656
El Paso Natural Gas Company		(602) 438-1675
El Slash Cattle Company	Fred Garcia	(602) 386-6686
Maricopa Water Conservation Water District No. 1	Ed Ecker	(602) 975-2151
Maricopa County Flood Control District	Dick BuiekPerreault	(602) 262-1501
Arizona Department of Transportation	John Lohr	(602) 255-7341
Town of Buckeye	Fred Carpenter	(602) 935-4532
Town of Surprise	Harold Yingling	(602) 977-8369
Arizona State Land Department	Barbara Burg	(602) 255-1704

Notwithstanding anything to the contrary, the Contractor, and not the Contracting Agency, shall have the responsibilities set forth in the first paragraph of Section 105.6 in the Standard Specifications.

SECTION 105.701 - COOPERATION BETWEEN CONTRACTORS: The Contractor's attention is called to the fact that other major road construction contracts will be underway adjacent to and simultaneous with this project. The following is a listing of major projects planned to be underway simultaneously:

- o Interchange at I-10 and Palo Verde Road.

o Bell Road in the Town of Surprise.

The Contractor shall cooperate with any other Contractors working at the interface of adjacent projects and this project. The provisions of Section 105.7 of the Standard Specifications shall apply to Contractors working on adjacent projects as well as Contractors working within the limits of this project.

SECTION 105.8 - CONSTRUCTION SURVEYING LINES AND GRADES (SUBSTITUTION):
(This section is hereby replaced by the following:)

All surveying required for the construction of this project shall be provided by the Contractor ~~who will~~ shall employ the engineering firm of Collar, Williams and White Engineering, Inc., for the performance thereof.

Greiner Engineering Sciences, Inc., will be performing periodic survey checks to assure that surveying provided by the Contractor represents lines and grades established by the plans and specifications.

SECTION 108.401 - CRITICAL PATH METHOD SCHEDULE: Contractor is to submit, for the Engineer's approval, a CPM schedule and anticipated draw schedule for the entire project, at the pre-construction meeting. Time is of the essence of this contract. Resubmittals will be required if the original schedules are not approved for reasons of insufficient detail, lack of technical correctness or any other reason. These schedules are to be updated at the end of each month and submitted to the Engineer prior to the Engineer's processing of the monthly pay estimate. Contractor is to supply a two week look-ahead schedule at each weekly construction meeting.

SECTION 108.501 - OVERTIME AND SHIFT WORK: The contractor will be required to bear the increases in engineering and inspection costs incurred by the Engineer or his representative which occur as a result of operations of the Contractor exceeding eight (8) hours per day, or occurring during Saturdays, Sundays or holidays observed by the AGC and trade unions. Such costs will include but will not necessarily be limited to engineering, inspection, general supervision and other overhead expenses which are directly chargeable to the overtime work. All such charges shall be deducted by the Owner from payments due the Contractor.

SECTION 108.701 - NOTICE OF DELAYS: Whenever the Contractor foresees any delay in the prosecution of the current critical item of work, and in any event immediately upon the occurrence of such a delay which the Contractor regards as unavoidable, he shall notify the Engineer in writing of the probability of the occurrence of such delay and its cause in order that the Engineer may take immediate steps to prevent, if possible, the occurrence or continuance of the delay, or, if this cannot be done, may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the work are to be delayed thereby. IT WILL BE ASSUMED THAT ANY AND ALL DELAYS WHICH HAVE

OCCURRED IN THE PROSECUTION AND COMPLETION OF THE WORK HAVE BEEN AVOIDABLE DELAYS, EXCEPT SUCH DELAYS AS SHALL HAVE BEEN CALLED TO THE ATTENTION OF THE ENGINEER AT THE TIME OF THEIR OCCURRENCE AND FOUND BY HIM TO HAVE BEEN UN-AVOIDABLE.

SECTION 108.702 - AVOIDABLE DELAYS: Avoidable delays in the prosecution or completion of the work shall include all delays which in the Engineer's sole discretion would have been avoided by the exercise of care, prudence, foresight and diligence on the part of the Contractor or his subcontractors. The following shall, without limitation, be considered avoidable delays within the meaning of the contract: 1) Delay in the prosecution of parts of the work which may in themselves be unavoidable but do not necessarily prevent or delay the prosecution of other parts of the work nor the completion of the whole work within the time herein specified; 2) Reasonable loss of time resulting from the necessity of submitted samples of materials and drawings to the Engineer for approval and from making of tests of materials, measurements and inspections; 3) Reasonable interference of other Contractors, including but not limited to, Contractors working on adjacent projects, which do not necessarily prevent the completion of the whole work within the time agreed upon.

SECTION 108.703 - EXTENSION OF TIME: In case the work is not completed in the time specified, including such extensions of time as may have been granted for unavoidable delays, the Contractor will be assessed damages for delay in the manner outlined in Section 108.9. ~~The Owner, however, shall have the right to grant an extension of time for avoidable delay if it is deemed in his best interest to do so. During such extension of time, the Contractor will be charged for engineering and inspections services and other costs as provided in Section 108.704 but will not be assessed damages pursuant to Section 108.9.~~

SECTION 108.704 - COMPENSATION TO OWNER FOR EXTENSION OF TIME: **The Owner, shall have the right to grant an extension of time for avoidable delay if it is deemed in his best interest to do so. During such extension of time, the Contractor will be charged for engineering and inspections services and other costs as provided in Section 108.704 but will not be assessed damages pursuant to Section 108.9.** Compensation to the Owner for extension of time for avoidable delay granted pursuant to Section 108.703 shall be the actual cost to the Owner of engineering, inspection, general supervision, and overhead expenses which are directly chargeable to the work and which accrue during the period of such extension, except that the cost of final inspection and preparation of the final estimate shall not be included.

SECTION 108.705 - PRE-CONSTRUCTION CONFERENCE: The pre-construction conference will be held prior to the commencement of construction, at a place and time designated by the Engineer, with the Contractor's representatives, utility companies and other affected parties. At this meeting the Contractor shall submit the following items which will be the primary subjects of discussion: Project Schedule, initial Traffic Control Plan, and a list of sources for Borrow and Aggregates.

SECTION 108.9 - LIQUIDATED DAMAGES (Substitution for Table 108): The daily rate of liquidated damages to be deducted from any monies due the Contractor as determined in Section 108 shall be in the amount of \$10,000.00 per calendar day. This amount acts as reimbursement to the Owner for his daily cost of inspection, supervision, administration, overhead, cost of interest lost and other costs due to the delay of completion of the contract.

SECTION 109.7(A) - PAYMENT FOR BOND ISSUE AND BUDGET PROJECTS: The first paragraph of Section 109.7(A) is revised as follows:

"(A) Partial payments: No later than the 20th day of each calendar month, the Contractor shall be paid on the basis of an estimate prepared by the Engineer and acknowledged in writing by the Contractor, for work completed and accepted by the Engineer through the 25th day of the preceding calendar month."

SECTION 109.701 - PAYMENT PROCESS: By the fifth of the month, the Engineer will prepare the monthly pay estimate for work completed through the 25th of the preceding month. Copies will be forwarded for review to the Contractor. The Contractor's signature of acknowledgement on the approved pay estimate must be acquired such that it will be submitted to First Interstate Bank by of Arizona, N. A. by the 15th of the month for payment by the 20th of the month.

SECTION 109.8 - CLAIMS FOR ADDITIONAL COMPENSATION: If the Contractor claims that he is entitled to damages or to additional compensation for any reason, he must submit such claims in writing to the Owner (a) before proceeding to execute any work involved except in an emergency endangering life or property, and (b) within forty-eight (48) hours of the occurrence of the event giving rise to such claim, or the Contractor shall be deemed to have waived such claim. Claims for payment due to damages for additional compensation cannot be paid if the aggregate, due to the Contractor, will exceed the total amount available for payment by the Owner.

SECTION 109.9 - CLAIMS AND DISPUTES: The Engineer shall rule on all claims or disputes. During the resolution of any claims or disputes, the Contractor is obligated to proceed with construction at the direction of the Engineer.

SECTION 109.10 - DEFAULT OF OWNER: The Owner shall not be deemed to be in default under this Contract unless: (1) the Contractor has given the Owner written notice of default, describing in reasonable detail the nature of the default; (2) if the claimed default is monetary in nature, the Owner has not cured such default within ninety (90) days of receipt of notice thereof; and (3) if the claimed default is non-monetary in nature, the Owner has not cured such default within ninety (90) days of receipt of notice thereof; provided, however, that if more than ninety (90) days are required to cure such default, then the Owner shall not be deemed to be in default so long as it is diligently proceeding to cure such default.

SECTION 109.11 - INTERPRETATION: Where the Standard Specifications refer to the statutes, codes, ordinances or ~~regulating-regulations~~ the Contracting Agency or Agency, or to a governmental department of the Contracting Agency or Agency, the references shall be deemed to be the County.

SPECIAL PROVISIONS - TECHNICAL



PART 200 - EARTHWORK

Section

- 201.1 - McMicken Dam Crossing
- 201.12 - Power Line Crossing
- 201.13 - Clearing and Grubbing (Fence Maintenance)
- 210.21 - Imported Borrow
- 225.2 - Water Supply and Watering

SECTION 201.10 - MCMICKEN DAM CROSSING: The work under this section shall consist of any and all work related to the clearing, grubbing, site preparation removal of water and foundation preparation at the crossing of the McMicken Dam from Station 474+00 to Station 478+00, Phase I-B.

All existing material including trees, shrubs, brush, plants and fences are to be removed within the limits of construction. Surface water and groundwater shall be removed or diverted as required by the Engineer, to perform the required construction in accordance with the plans and specifications. The Contractor shall build, maintain and operate all necessary diversions or impounding work as needed to protect the construction.

The Contractor shall furnish to the Engineer, in writing, his plan for diverting surface water before the beginning of construction work for which the diversion is required. Acceptance of this plan will not relieve the Contractor of responsibility for completing the work as specified.

All earth fill construction shall conform to Section 211 of the MAG Standard Specifications, including benching.

The natural grade receiving new embankment from the upstream toe of the dam, west to Station 474+00 and the natural grade receiving new embankment from the downstream toe of the dam, east to Station 478+00 shall be processed to a depth of two (2') feet. This may be accomplished by removing the native material to a depth of one (1') foot, adjusting moisture in the subsoil as for embankment construction, and previously removed material can then be replaced under the same conditions relative to moisture and compaction.

The moisture content of loosened fill shall be controlled as specified for the earth fill, and the surface materials of the foundations shall be compacted with the first layer of earth fill as specified for subsequent layers of earth fill.

No separate payment will be made for the above described work.

Compensation for this work will be included in other contract items. Extreme caution shall be taken with all work as described in this section to maintain the structural stability of the existing dam at all times.

Unless otherwise specified, all materials removed in the clearing, grubbing and site preparation will be disposed of per Section 350.

SECTION 201.12 - POWER LINE CROSSINGS: Extreme caution shall be exercised by the Contractor when working in the vicinity of the existing electrical transmission towers and poles which run parallel to and cross the proposed roadways, to protect the footings of the towers, to protect the towers and poles, and to avoid contact with any and all of the existing power lines and access to any and all transmission towers and poles shall be maintained during the course of construction as required by the Salt River Project and/or the Western Area Power Administration.

Any and all work done in the vicinity of any and all overhead power lines shall be done in accordance with the Overhead Power Line Safety Law (Chapter 181, Article 6.4, A.R.S., 40-360.41-45).

SECTION 201.13 - CLEARING AND GRUBBING (FENCE MAINTENANCE): (The following requirements are hereby added.) The Contractor shall, at all times throughout the length of the contract, maintain the integrity of the range fencing system in existence. Temporary fencing and/or temporary cattle guards may be necessary at various locations throughout this project and on various haul roads to maintain the separation of the existing cattle allotments and to protect the cattle from various construction activities. There are several existing cattle guards on the proposed parkway which may be salvaged and revised for the above mentioned purpose.

SECTION 210.21 - IMPORTED BORROW: No sources of BORROW are specified that the Contractor must use on this project. BORROW material used in the upper two feet (2') of the subgrade shall exhibit a Soil Support Value equal to or greater than that of the in-place soil on which the BORROW is placed.

Several potential sources of borrow and an aggregate source may be available in the vicinity for use in constructing this Project. The following list provides summary information on these sources only. Specific questions about each site should be addressed to the designated contact person:

<u>Pit</u>	<u>Approx. Size</u>	<u>Location</u>	<u>Owner</u>	<u>Contact Person</u>
A	160-Ac	NW1/4-Section-17 T2N-R4W Not-available	Burns-International, -Inc. 4520-N.-Central-Ave. Suite-500 Phoenix,-AZ-85012	Tony-Halt 264-4800
B	320 Ac	Portion of Section 16, 17, 20 & 21 T3N R4W	BICT, PB, N&W Partner- ship 4520 N. Central Ave. Suite 500 Phoenix, AZ 85012	Dick Willdan 264-4800
C	180 Ac	Portion of Section 28 T4N, R4W	Burns International, Inc. 4520 N. Central Ave. Suite 500 Phoenix, AZ 85012	Don Miltz 264-5800 264-4800
D&E	60 Ac	Portion of Section 33 T4N, R2W	Burns International, Inc. 4520 N. Central Ave. Suite 500 Phoenix, AZ 85012	Don Miltz 264-4800

Inclusion of these sites as potential borrow or aggregate sources does not imply the quality of the material as meeting the requirements of the Project specifications. The Contractor shall verify that the materials at the site meet the Contract requirements. Specific details about the area, depth limitations for borrow and measurement and payment must be established directly between the Owner of the source and the Contractor shall be responsible for obtaining, at his cost, any and all permits or special use permits which shall be required for the utilization of any and all borrow sources to be used on said project.

SECTION 225.2 - WATER SUPPLY AND WATERING: Potential water sources in the vicinity of the project are being developed by others. Three 22" wells with 16" casings are under construction and one or more of these wells may be made available for use in constructing this project. Legal Access to the well sites will be provided by others. The approximate locations of the new wells are as follows:

	<u>Approximate Locations</u>	<u>Owner</u>
Well #1	NW Corner, SE 1/4, Section 10 T4N, R4W Phoenix, -AZ-85012	Sun Valley Homeowners Association 4520 N. Central Ave. Phoenix, AZ 85012
Well #2	NW Corner, Section 7 T3N, R4W	Sun Valley Homeowners Association 4520 N. Central Ave. Phoenix, AZ 85012
Well #3	SW Corner, Section 7 T2N, R4W	Sun Valley Homeowners Association 4520 N. Central Ave. Phoenix, AZ 85012

The following criteria has been established by the owner of the potential water sources which the Contractor shall use if the wells at the sites referenced above are used in the construction of said Sun Valley Parkway.

1. The Contractor shall furnish, install, operate and maintain pumping units at the well sites agreed upon with the owner and upon completion of the contract shall remove said pumping units and shall restore the well sites to their original condition to the approval of the owner.
2. The water pumped from the well or wells shall be measured with a totalizing meter mounted horizontally in the discharge pipe at each well.
3. The meters shall be read monthly and the quantity of water reported to the owner.

4. The pumps shall be line shaft (turbine pump) type.
5. There shall be a gear head drive at the top of each pump which shall be powered by a diesel engine.
6. There shall be a reinforced concrete slab six (6) feet by six (6) feet by six (6) inches poured around the casing of each well used.
7. The discharge rate (pump capacity in gallons per minute) shall be at the sole discretion of the Contractor.
8. The recommended safe depth to the top of the pump bowls from the top of the well casing at each well is as follows:

Well #1	500 Feet
Well #2	400 Feet
Well #3	400 Feet

9. The steel well casing plate caps which the owner will construct on the tops of the wells when completed shall be retained by the Contractor during the course of construction and shall be rewelded to the top of the well casing at the end of construction to the approval of the owner.
10. The Contractor shall purchase any and all water from the owner at the rate of sixty-five cents (\$0.65) per 1,000 gallons of water as measured by the meters as described in Section 2 above.

PART 300 - STREETS AND RELATED WORK

Section

- 301 - Subgrade Preparation
- 310 - Untreated Base
- 321 - Asphaltic Concrete
- 350 - Removal of Existing Improvement
- 360 - Geogrid Base Reinforcement

SECTION 301 - SUBGRADE PREPARATION: Subgrade Preparation shall also include the preparation of subgrades to the required line and grades for the tapered portions of the project and for those locations where aggregate base courses are to be used for driveway turnouts in accordance with the plans or as directed by the Engineer. Shoulders shall be rolled and compacted to a minimum of 90 percent maximum density.

Direct payment will ~~not~~-NOT made for drainage excavation, structural excavation, waste, haul, overhaul, rolling or for the disposal of waste material.

Any disposal area selected by the Contractor shall be approved by the Engineer prior to its use as such. Disposal of waste in approved areas shall be made in such a manner that natural drainage will not be blocked or diverted unless so directed by the Engineer.

All asphaltic concrete removed shall be disposed of by the Contractor.

All subgrade preparation shall be in accordance with M.A.G. Specification 301 ~~EXCEPT~~-EXCEPT that Section 301 is herein modified due to additional requirements as to pre-wetting and compaction for all of Phase I-A, all of Phase I-B, Phase II-A from Station 652+00 to Station 740+00 and Phase II-B from Sta. 740+00 to Station 817+00 such that, in addition to any and all requirements per M.A.G. Specification 301, the contractor shall perform the following tasks, the costs of which shall not be considered an extra bid item, but shall be included in the Bid Item No. 205.010-A or Bid Item 205.010-B which shall include all compensation and payment for pre-wetting and additional compaction requirements.

The exposed soils should be scarified to a minimum depth of 6 inches and leveled to ensure the surface is free from ruts, hummocks or other uneven features which would tend to prevent uniform compaction by the equipment to be used.

Pre-wetting by means of rain-bird type of irrigation systems will be required to a depth of 3 to 4 feet below existing ground elevations. This pre-wetting should be carried out in both cut and fill areas. Cut areas shall again be re-wetted to a depth of 3 to 4 feet prior to final grading.

Surface soils to receive fill should be precompacted to at least 95% of maximum density as determined in accordance with ASTM D-698 within the upper 2 feet before any fills are placed. The upper 2 feet below finish grades in cut areas should also be compacted to at least 95% of maximum dry density after re-wetting. These recommendations may be waived where cemented or rock material is encountered.

All fill material shall be approved soils, free of vegetable matter, deleterious or foreign material. Oversize material may be used, however, it should only be used in the lower elevations of deep fills. (Fill materials having a diameter greater than 6 inches should not be used in the 2 feet below finish grades.)

Fill material shall be placed in layers, which when compacted shall not exceed 8 inches in thickness. After each layer has been placed, mixed and spread evenly, it shall be compacted to at least 95% of maximum dry density in accordance with ASTM D-698. ~~Supervision-Observation~~ and testing during the site work shall be necessary to properly control fill placement. The Engineer shall be notified prior to filling operations so that ~~supervision~~ **observation** and testing can be provided.

SECTION 310 - UNTREATED BASE: Aggregate Base shall conform to the requirements of Section 702 of the Uniform Standard Specifications and shall be crushed in accordance with Section 702.2. Select material shall be Type A as shown in Table 702 **and crushed in accordance with Section 702.2.**

Payment for untreated base will be made on the basis of the price bid per square yard measured complete in place.

SECTION 310.2 - PLACING: **Alternatively, base material may be watered and/or uniformly blended before distribution to such extent as may be necessary to eliminate any significant segregation.**

SECTION 321 - ASPHALTIC CONCRETE: The bituminous material to be used shall be AC-20 complying with Table 711-1 of the Uniform Standard Specifications as revised in 1986.

In addition to pugmill type mixing plants, Drum Dryer Mixers will be allowed in accordance with Standard Specification 710.9. The moisture content of the bituminous mixture immediately behind the paver shall not exceed three percent (3%).

The proper proportioning of the material at the cold feed shall be determined by the Contractor and approved by the Engineer prior to the production of asphalt concrete. Production shall not commence until calibration tests indicate that an acceptable product can be obtained.

The correct proportions of each aggregate size introduced into the mixer shall be drawn from the storage bins by an approved type of continuous feeder which shall supply the correct amount of aggregate in proportion to the bituminous material and shall be so arranged that the proportion of each aggregate size can be separately adjusted. The continuous feeder for the aggregate may be mechanically or electrically activated.

The plant shall be equipped with a sampling device to take representative composite samples of the cold feed. If tests indicate non-compliance with specifications, operation shall cease until proper corrections have been made.

The production of the plant shall be governed by the rate required to obtain a thorough and uniform mixture of the materials. Mixing shall continue until the uniformity of coating, when tested in accordance with the requirements of AASHTO T 195, is at least 95 percent.

SECTION 321.9 - TACK COAT: Payment for tack coat as required by the engineer shall not be a separate pay item and all cost for tack coat shall be included in the contractor's base bid for Asphaltic Concrete.

SECTION 350 - REMOVAL OF EXISTING IMPROVEMENTS: The work under this item shall consist of the removal and disposal of any obstacle to construction, unless specifically called out on the plans to be removed or relocated by other agencies.

Arrangements for disposal of all waste material shall be the responsibility of the Contractor, except that all reusable road markers shall be returned to the Maricopa County Highway Department.

If a Maricopa County Landfill is selected for disposition of road construction waste and/or debris, a Maricopa County Landfill Use Permit will be required. Application for permit can be made at the Maricopa County Landfill Office, located at 3325 West Durango Street, Phoenix, Arizona 85009 (Telephone No. 269-2661). Charges will be levied on a volume basis for each load delivered to the landfill in accordance with the current fee schedule.

SECTION 350.010 - REMOVE EXISTING PAVEMENT: Existing pavement shown on the plans to be removed shall be removed and disposed of in accordance with the requirements of Section 350 - Removal of Existing Improvements.

Measurement and payment for this item of work will be accomplished at the unit price bid per square yard, whether it occurs within the roadway prism or outside of the roadway prism.

SECTION 350.020 - REMOVE AND SALVAGE ROAD MARKERS AND SIGNS: All road markers and signs shown on the plans to be removed and returned to Maricopa County Highway Department shall be removed in accordance with the requirements of Section 350 - Removal of Existing Improvements. All markers and signs removed shall be stockpiled in a secure place and the Engineer notified of the time and place that the Maricopa County Highway Department can pick them up.

Payment for all work in this item will be paid for as one Lump Sum, complete.

SECTION 350.030 - REMOVE AND RESET EXISTING MAILBOXES: All mailboxes shown on the plans to be relocated shall be reset in accordance with the plans and Section 350 - Removal of Existing Improvements.

Measurement and payment for the work in this item shall be made for each mailbox removed and reset, at the unit price bid, complete in place.

SECTION 350.040 - RELOCATE EXISTING FENCE AND GATE: Existing fence and gates to be relocated as shown on the plans shall be relocated in accordance with Section 350 - Removal of Existing Improvements, as modified by the following:

The fence and gates removed shall be relocated in such a manner as to be in good condition after relocation. If any of the existing materials are damaged, either in the existing state, before removal or prior to final acceptance, they shall be replaced at no additional cost, so as to construct a fully functional facility.

Payment for all work in this item shall be made as one Lump Sum, complete in place.

SECTION 350.050 - REMOVE STEEL POSTS, CHAIN LINK AND SLOPE PROTECTION: All work for this item, shown on the plans, shall be in accordance with the requirements of Section 350 - Removal of Existing Improvements.

Payment for all work in this item shall be made as one Lump Sum, complete.

SECTION 350.060 - REMOVE CONCRETE HEADWALL AND WINGWALL: All work for this item, shown on the plans shall be in accordance with the requirements of Section 350 - Removal of Existing Improvements.

Payment for all work in this item shall be made as one Lump Sum, complete.

SECTION 350.070 - REMOVE PIPE CULVERTS AND HEADWALLS: Work in this item shall include the removal of 40+ linear feet of 30 inch diameter corrugated metal pipe, with headwall, 48 inch diameter concrete pipe and 43 inch diameter corrugated metal pipe, as shown on the plans and in accordance with Section 350 - Removal of Existing Improvements.

Payment for all work in this item shall be made as one Lump Sum, complete.

SECTION 350.080 - REMOVAL OF RAILROAD TIE DECORATION/HORSESHOE DRIVE: The work in this item shall be done as shown on the plans in accordance with Section 350, Removal of Existing Improvements.

Payment for this work shall be made as one Lump Sum, complete.

SECTION 360 - GEOGRID BASE REINFORCEMENT: The base reinforcement material to be used shall be Tensar SS-1 as manufactured by the Tensar Corporation, Morrow, Georgia or an approved equal.

Subgrade soil shall be prepared as indicated on the plans. The Geogrid shall be laid at the proper elevation and alignment as shown on the plans and be oriented such that the roll length runs parallel with the road direction. Geogrid sections shall be overlapped a minimum of 0.6 feet, taking care that geogrid sections do not separate at overlaps during coverage with base material.

Granular fill material shall be placed in lift thicknesses and compacted as directed under Section 310 - Untreated Base. Granular fill material shall be dumped from trucks riding on top of the reinforced base and bladed onto the geogrid in such a manner that the fill material rolls onto the grid ahead of the placing trucks and equipment in a manner which will eliminate any trapped slack.

Tracked construction equipment shall not operate directly upon the geogrid. Rubber tired equipment may pass over the geogrid at slow speeds (less than 10 mph), if the underlying material is capable of supporting the loads without rutting or causing damage to the geogrid. Extreme caution shall be taken to avoid any abrupt braking or turning movements by the dumping and placing equipment which could displace the geogrid material.

Measurement of geogrid **base** reinforcement will be on a square yard basis computed on the total area of geogrid shown on the plans. No payment will be made for the overlapping material.

Payment for geogrid ~~reinforced-base-~~ **base reinforcement** will be made at the unit price bid per square yard, measured complete in place. Such payment will be considered full compensation for all labor, materials (including overlap), equipment and other items necessary and incidental to complete the work.

PART 400 - RIGHT-OF-WAY AND TRAFFIC CONTROL

Section

- 401 - Traffic Control
- 402 - Electrical Conduit
- 403 - Pull Boxes
- 415 - Guardrail
- 416 - Flared Breakaway Cable Terminal
- 417 - Guardrail Anchor Assembly
- 421 - Barbed Wire Game Fence
- 422 - Double Gate
- 450 - Traffic Marking
- 460 - Regulatory Warning and Guide Sign Panels

SECTION 401 - TRAFFIC CONTROL: Traffic control shall conform to the applicable paragraphs of Section 401 of the MAG Uniform Standard Specifications with revisions, the County supplement thereto and these Special Provisions.

The Contractor shall obtain County permits for all work in County Right-of-Way.

The number and kind of barricades, signs, delineators, barriers and all other traffic control devices and the approval of the Contractor's method of application of all traffic control measures, shall not relieve the Contractor of the responsibility for protecting the work, the workmen and the traveling public.

A road closure from I-10 north to McDowell Road is not authorized and two lanes of traffic shall be maintained at all times. This segment of the project shall be signed for construction at each 1 mile and 1/2 mile points. All advance warning construction signs with speed limits shall be mounted on channels. Access shall be maintained to Tonopah-Salome Highway at all times during construction.

The segment north of the McDowell alignment shall be signed closed and maintained closed with sand berms if necessary, until acceptance of the project by the County or the road is officially opened to the public.

The Contractor shall provide and maintain continuous access to all farms, homes and utilities at all times. The Parkway shall be signed closed and maintained closed to public access at other cross trails.

At the intersection of Sun Valley Parkway and Crozier Road extension, the Contractor shall provide and maintain north south access at all times during and after construction. The east west legs of the intersection shall be signed closed and maintained closed with sand berms if necessary.

At the time of the pre-job conference, the Contractor shall submit for approval a detailed traffic control plan to include sequence of construction. The plan shall show all measures to include all warning signs, barricades and sand berms with their placement and spacing.

The Contractor shall provide and maintain all necessary signs, barricades, center-line vertical panels and sand berms until acceptance of the project by the county.

SECTION 402 - ELECTRICAL CONDUIT: The work shall consist of furnishing and installing underground PVC conduit, including excavations, backfill, compaction and landscaping necessary to complete the work at the locations specified on the plans or as directed by the Engineer.

The conduit shall have a minimum cover of 24 inches. All PVC conduit and fittings shall be of the size indicated on the project plans and be Schedule 40, Type 2 and shall be manufactured from high-impact PVC material. Rigid

PVC conduit shall be cut square and trimmed after cutting to remove all rough edges. All connections shall be of the solvent weld type or approved equal. Each run of the conduit which terminates within a pull box shall be capped (not glued) with PVC caps.

Each run of conduit shall be installed containing a continuous run of one No. 8 AWG bare copper wire to be used as a pull wire. The wire shall be at least two (2') feet longer than the run of conduit. Each run of the wire shall be spring coiled and inserted into the conduit so as to be recoverable at a later date. Nylon rope 1/4 inch in size shall be acceptable in lieu of No. AWG bare copper pull wire and the extra length fastened to the inside of the cap.

Conduit will be measured by the linear foot from the center of the pull boxes and the edge of foundations along the runs installed and accepted. Conduit inside pull boxes and foundations will not be measured for payment.

Payment for this work shall be made at the contract unit price bid per lineal foot for the size, type and length as shown on the plans and as specified in the Bidding Schedule, which price shall be full compensation for the item, complete in place, including all labor and materials.

SECTION 403 - PULL BOXES: The work shall consist of furnishing and installing all pull boxes, including excavation, backfill, compaction and landscaping necessary to complete the work at the locations specified on the plans or as directed by the Traffic Engineer or his representative.

Pull box sizes shall be as specified on the project plans and shall comply with the applicable ADOT Standard T.S. 1-1 or T.S. 1-2.

Pull boxes will be measured by the number of units of each type specified, complete in place, in accordance with the project plans and Specifications.

Payment for this item shall be made at the contract unit price bid each for the type and size as shown on the plan and as specified in the Bidding Schedule, which price shall be full compensation for the item complete in place, including all labor and materials to include covers, bolts, nuts, washers and steel grid frames (if required).

SECTION 415 - GUARDRAIL (STEEL POST, ADOT C-10.05); SECTION 416 - FLARED BREAKAWAY CABLE TERMINAL (STEEL POST, ADOT C-10.16; SECTION 417 - GUARDRAIL ANCHOR ASSEMBLY (STEEL POST, ADOT C-10.21): All work in these items shall be in accordance with the plans and Section 905 - Guardrail in the ADOT Standard Specifications for Road and Bridge Construction.

SECTION 421 - BARBED WIRE GAME FENCE: Work in this item shall be as shown on the plans and in accordance with ADOT Standard Drawing No. C-12.10 and per Section 903 - Wire Fence in the ADOT Standard Specification for Road and Bridge Construction.

SECTION 450 - TRAFFIC MARKING: The work under this Section shall consist of installing thermoplastic striping, painting and raised pavement markers in accordance with the striping plans and these Special Provisions.

The striping shall be either white or yellow thermoplastic, as specified on the striping plans, and conform to Section 704 of the Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, 1982 edition, as amended below.

Section 704 shall be amended such that all thermoplastic markings parallel to the edge of the pavement shall be installed 90 mils thick and that all other lines shall be installed 120 mils thick. This includes, stop bars, crosswalks, and arrows. Any other markings will be noted on the plans.

In accordance with the striping plans, it shall be the Contractor's responsibility to properly mark and spot at 50 foot intervals all striping and raised pavement markers. This shall include the marking of pavement arrows. The Contractor shall refer any questions regarding traffic markings to the Engineer.

An inspection by the Engineer shall be required prior to any permanent striping applications. The Contractor shall notify the Engineer that the road is ready for inspection after the layout and spotting of the entire project is completed. The Engineer has three (3) working days to inspect the project and to notify the Contractor of any corrections.

Arrows shall be constructed according to A.D.O.T. Signing and Marking Standard, Drawing No. 4-M-1.16.

The raised reflectorized pavement markers shall be bid as a separate item. These markers shall be 3/4 inch high by four (4") inch square button, white buttons to go with white stripes and yellow buttons to go with yellow stripes, as specified on plans and are to be located at 25' intervals as shown on the plans.

All raised pavement markers shall be secured to the pavement with epoxy, Signal Project No. 220200k00 (tube A and B) or equivalent.

Measurement for all thermoplastic striping shall be by the lineal foot of four inch (4") stripe or eight inch (8") stripe as shown on the plans.

Payment for all work under this Section shall be made at the contract unit prices bid, which prices shall be full compensation for the items, complete in place, including all necessary labor, material and equipment.

SECTION 450.006 - CHLORINATED YELLOW CURB PAINT: The chlorinated yellow curb paint shown on the plans shall be installed fifteen (15) mils thick and comply with SPECIFICATIONS dated June 1983, published by the Striping and Signing Branch of the Arizona Department of Transportation.

The Contractor shall provide paint samples as requested by the Engineer which are to be lab tested for conformance with the requirements of the aforementioned specifications. Sample provision and testing shall be accomplished at the sole expense of the Contractor, and be handled by the Engineer.

Measurement of this item shall be by the lineal foot of curb face painted.

Payment shall be made at the unit price bid, which payment shall be for all labor, equipment and materials necessary for the work complete in place.

SECTION 460 - REGULATORY WARNING AND GUIDE SIGN PANELS: The work under this section shall consist of installing sign panels, delineators, markers and reflective sheeting in accordance with the plans and these special provisions.

SECTION 460.1 - SIGN PANELS: The sign panels shall conform to Section 608 - Sign Panels of the State of Arizona, Department of Transportation Highways Division, Standard Specification for Road and Bridge Construction, Edition of 1982 and 1985 Supplemental Specification. Speed limit signs shall be placed on both sides of the road every 2 miles, warning signs shall be placed on both sides of the road every mile.

SECTION 460.2 - DELINEATORS AND MARKERS: The delineators and markers shall conform to Section 203 - Delineators and Markers of the State of Arizona, Department of Transportation Highways Division, Standard Specification for road and Bridge Construction, Edition of 1982 and 1985 Supplemental Specification.

SECTION 460.3 - REFLECTIVE SHEETING: The reflective sheeting shall conform to Section 100.7 - Reflective Sheeting of the State of Arizona Department of Transportation Highways Division, Standard Specification for Road and Bridge Construction, Edition of 1982 and 1985 Supplemental Specification.

PART 500 - STRUCTURES

Section

505 - Reinforced Concrete Box Culverts and Wingwalls
525.060 - 4'x8" Concrete Cutoff Wall

SECTION 505 - REINFORCED CONCRETE BOX CULVERTS AND WINGWALLS: The work under this item shall consist of constructing cast in place reinforced concrete box culverts (RCBC) and wingwalls of the size and at the locations as shown on the plans in accordance with the Arizona Department of Transportation (ADOT), Highways Division, Structures Section Standard Drawings, dated 1983, as modified by the plans. Concrete shall be Class A per Section 725.

For the non-standard height culverts all other dimensions hold true except the height. For the non-standard length wingwalls all other dimensions hold true except the length.

Contractor is to submit shop drawings stamped by a registered professional engineer for all non-standard structures for the Engineer's approval prior to the start of rebar fabrication.

Steel reinforcement shall conform to Section 727 of the Uniform Standard Specifications and shall be Grade 60.

Grading for drainage upstream or downstream of drainage structures will be as per approved plans and the cost thereof shall be included in the cost of the structure.

Payment for these items shall be made at the contract unit price bid of "LUMP SUM" which price shall be full compensation for the culvert headwalls and wingwalls, complete in place, including all necessary labor, materials and equipment.

The changes in the length of any box culvert less than 5% of the plan length will not be considered a change and the pay item will not be adjusted.

SECTION 505.500 - BEARDSLEY BRIDGE: Work in this item shall be as shown on the plans and in accordance with all applicable M.A.G. specifications.

Payment for this item shall be made at the contract Lump Sum price bid, which shall be full compensation for the item complete in place, excepting the concrete piles which shall be paid for under Item 782, including all necessary labor, materials and equipment.

SECTION 525.060 - 4 FT. X 8 IN. CONCRETE CUT-OFF WALL: All work in this item shall be in accordance with the plans and Section 525 - Pneumatically Placed Mortar.

Payment for all work in this item shall be made as one Lump Sum.

PART 600 - WATER AND SEWER

Section

618 - Reinforced Concrete Pipe Culverts

621 and 622 - Corrugated Steel Pipe, Arches and End-Treatments

SECTION 618 - REINFORCED CONCRETE PIPE CULVERTS: The work under this item shall consist of furnishing and placing pipe culvert of the size and at the locations as called for on the plans.

Where the Plans and Bidding Schedule calls for RGRCP, the Contractor shall furnish Reinforced Concrete Pipe Class III, Class IV, or Class V (Rubber Gasket) conforming to the requirements of Section 735 of the Uniform Standard Specifications.

(The following additions and modifications to the Standards Specification are hereby made:)

The work comprised in these items includes clearing, disposal of debris, excavation, materials, placement and backfilling of culverts and either reinforced concrete headwalls or end sections as shown on the plans.

Pipes of eighteen inch (18") diameter and smaller shall be measured and paid in accordance with Standard Specification SECTION 618.

Each culvert installation of twenty-four inch (24") diameter, or larger will be paid for on a Lump Sum basis at the unit price bid, which payment shall be for the installation complete in-place, including the pipes and any end sections or headwalls shown on the plans.

SECTION 621 - CORRUGATED CONCRETE LINED STEEL PIPE, WITH END-TREATMENTS

SECTION 622 - CORRUGATED STEEL PIPE ARCHES WITH END-TREATMENTS: (The following additions and modifications to the Standards Specifications are hereby made:)

The work comprised in these items includes clearing, disposal of debris, excavation, materials, placement and backfilling of the culverts and either reinforced concrete headwalls or end sections as shown on the plans.

The pipe and coating shall comply with the requirements of AASHTO M 190-80, Bituminous Coated Corrugated Metal Culvert Pipe and Pipe Arches, coated in accordance with Type B-A coating, thereof, or aluminized per AASHTO M 36274-791.

Each culvert installation will be paid for on a Lump Sum basis at the unit price bid, which payment shall be for the installation complete in-place, including the pipes and any end sections or headwalls shown on the plans.

PART 700 - MATERIALS

Section

- 702.2 - Crushed Aggregate**
- 702.4 - Decomposed Granite
- 703.2 - Riprap - Size of Stone
- 710.7 - Batch Mixing

SECTION 702.2 - CRUSHED AGGREGATE:

SECTION 702.2.2 - GRADING: All select materials shall be Type A materials and shall be crushed.

SECTION 702.4 - DECOMPOSED GRANITE: Material for this work shall comply with requirements of Section 702.4 - Decomposed Granite, except as modified below.

The work under this item consists of grading surfaces upon which decomposed granite is to be placed eradicating existing grasses and weeds with an approved herbicide and by mechanical methods, and furnishing, placing and compacting decomposed granite, including any necessary excavation, back-filling, compaction and pre-emergent herbicide in accordance with the details shown on the project plans and these special provisions.

Materials: Decomposed granite shall be free of lumps or balls of clay and shall not contain calcareous coatings, caliche, organic matter or foreign substances. The color shall be tan or gold, or as approved by the Engineer. The exact color will be approved partly on the basis of how well it matches decomposed granite on adjacent projects at each end of this project. All material shall be from a single production source and shall present a uniform appearance. The grading requirements shall be as follows:

Passing Sieve	Percent
1 1/4 inch	100
3/4 inch	40- 75
No. 40	10- 20

All vehicles used for spreading, grading and raking the granite mulch shall have one set of wheels with flotation tires having a minimum width of 18 inches to allow equal compaction to the decomposed granite.

The surfaces upon which the decomposed granite is to be placed shall be graded and compacted to a density of not less than 90 percent of the maximum density.

The areas on which the decomposed granite is to be placed shall be reasonably smooth and firm and all deleterious material and rocks larger than 1 1/4" in diameter shall be removed and disposed.

The decomposed granite shall be evenly distributed over the designated areas. After rough spreading and rough grading of the decomposed granite within the designated areas, the decomposed granite shall be saturated with water at an optimum moisture level. The Engineer will approve the amount of water necessary to aid in the compaction of the granite mulch. The depth of the decomposed granite shall be within a $\pm 1/2$ inch of the depth shown on the

project plans. ~~Where decomposed granite is within the planting pits, the maximum depth shall be one inch.~~ - All areas to receive decomposed granite shall be approved by the Engineer prior to placement of the decomposed granite.

During the final spreading and final grading operations, all surfaces within the decomposed granite areas shall be passed over by the spreading and grading equipment a minimum of two times. All equipment operations for spreading, grading, raking, chemical application, water settling, and any other operations shall be done in a manner that uniformly maximizes the vehicle(s) wheel compaction over all the surface.

The contractor shall apply ~~on~~ an application of an approved pre-emergent herbicide on all decomposed granite areas following placement of the granite. The pre-emergent herbicide shall be applied in the manner recommended by the manufacturer to prevent the further germination of noxious weeds, and shall be 40.4 percent oryzalin liquid and 59.6 percent inert ingredients. The pre-emergent herbicide shall be applied to the decomposed granite areas before the final water settling operation.

The contractor shall notify the Engineer and obtain prior approval for the use of any herbicides for weed eradication. The Contractor shall keep a record of all applications; the type of herbicides used; the rate and method of application; and the date and location of such applications. A copy of this record shall be submitted to the Engineer.

After placing, spreading and grading the decomposed granite, the contractor shall water settle the total thickness of the granite, removing the fine material from the surface. The water settling operation shall be completed at the minimum rate of one-half inch of water.

All erosion within the granite mulch areas shall be corrected by the contractor to maintain the final grade of the decomposed granite as placed under this item.

~~Granite mulch-~~**Decomposed granite** will be measured by the square yard in place as determined by the areas where the granite is placed to the minimum thickness.

Payment will be made at the contract unit price per square yard for the item called for in the Bidding Schedule, which price shall be full compensation for the work complete, as described and specified herein and on the project plans.

Measurement and payment shall be per square yard of accepted material, in place at the unit price bid.

SECTION 703.2 - RIPRAP - SIZE OF STONE: Riprap stone shall be as large as can be conveniently placed in a layer of the required depth. The stones, excepting small stones and spalls used to chink interstices shall be at least three (3") inches in the largest dimension and at least 50 percent of the stones shall be at least six (6") inches in the largest dimension.

SECTION 710.7 - BATCH MIXING: Add the following paragraph to Subsection 710.7.5 Mixing:

If the results obtained indicate that uniform proportioning of the aggregate from the bins or uniform and correct amounts of asphalt are not being delivered, the Engineer shall order that operations cease until proper corrections have been made.

SECTION 782.000 - BEARDSLEY BRIDGE - CONCRETE PILES: The work under this item shall consist of furnishing and driving cast-in-place concrete piles at the locations shown on the plans. All work in this item shall be in accordance with the plans and Section 603 - Piling, in the ADOT Standard Specifications for road and bridge construction.

SECTION 900.100 - CONSTRUCTION STAKES, LINES, GRADES AND EARTHWORK CALCULATIONS:

SECTION 900.1.2: All surveying and earthwork calculations required for the construction of this project shall be provided by the Contractor who will employ the firm of Collar, Williams and White Engineering for the performance thereof.

SECTION 900.1.3: Greiner Engineering Sciences, Inc., will be performing periodic survey checks of surveying provided by the Contractor. These checks will not relieve the Contractor of the responsibility for the accuracy of all survey work.

SECTION 900.1.4 - DESCRIPTION: The work under this section shall consist of furnishing all materials, personnel and equipment necessary to perform all surveying, laying out of haul roads, and verification of the accuracy of all existing control points. Included in this work shall be all calculations required for satisfactory completion of project, in conformance with the plans and these specifications. The work shall include establishing and marking "as-built" elevations on right-of-way markers, bridges, and culverts. The work shall be done under the direction of the Registered Civil Engineer employed by the Contractor. All right-of-way monuments and lines shall be established by the Registered Land Surveyor, employed by the Contractor.

Measurement of all pay quantity items will be the responsibility of the Independent Engineer, except that the Contractor shall perform surveyed cross-sections and earthwork computations for all earthwork items, sealed by his Registered Civil Engineer.

"As-Built" drawings will be compiled and produced by the Contractor and sealed by his Registered Civil Engineer.

SECTION 900.1.5 - MATERIALS, PERSONNEL AND EQUIPMENT: Materials and equipment shall include, but shall not necessarily be limited to, vehicles for transporting personnel and equipment, properly adjusted and accurate survey equipment, straightedges, stakes, flagging, and all other devices necessary for checking, marking, establishing and maintaining lines, grades and layout to perform the work called for in the contract. The Contractor shall furnish competent personnel to perform the survey work and layout.

The Contractor shall furnish all traffic control including flagging for survey staking operations. Traffic control shall be in accordance with the requirements of the Manual on Uniform Traffic Control Devices.

SECTION 900.1.6 - CONSTRUCTION REQUIREMENTS: Prior to beginning any survey operations, the Contractor shall furnish to the Independent Engineer, for his approval, a written outline detailing the method of staking, marking of stakes, grade control for various courses of materials, referencing, structure control, and any other procedures and controls necessary for survey completion.

The Contractor shall provide control points for establishing an accurate construction centerline and will establish bench marks adjacent to this line for the proper layout of the work as described herein. Control points shall be located on centerline at the beginning and ending of the project, and at all points of curve (P.C.), points of tangent (P.T.), and angle points. On long tangents, additional points shall be provided for continuity of line. Each centerline control point provided will be referenced by the Contractor at the approximate right-of-way line. No less than three (3) bench marks will be provided; one at the project beginning, one at the midpoint, and one at the end of the project. Additional bench marks may be provided at other convenient locations, but no more than one additional bench mark will be provided for each 1,000 feet of project length.

On that portion of the project where traffic is being carried through the work zone, pavements shall be marked for traffic centerline delineation before the end of each work shift. Marks shall be nominal 12 inch by 4 inch strips of reflective tape. This tape shall be furnished by the Contractor and applied to the surface at 40 foot intervals. Collar, Williams and White Engineering cost to include labor only.

Any discrepancies in grade, alignment, earthwork quantities, locations or dimension detected by the Contractor shall immediately be brought to the attention of the Independent Engineer. No changes in the project plans will be allowed without the approval of the Architect and the Independent Engineer and the execution of a supplemental agreement to the contract.

The Independent Engineer reserves the right to make inspections and random checks of any portion of the staking and layout work. If, in the Independent Engineer's opinion, the work is not being performed in a manner that will assure proper controls and accuracy, he will order any or all of the staking and layout work redone at no additional cost to the Owner.

If any portion of the Contractor's staking and layout work is ordered redone, resulting in additional rechecking by the Independent Engineer, the Independent Engineer shall be reimbursed for all costs for such additional checking. The amount of such costs will be deducted from the Contractor's monthly estimate.

Inspection of the Contractor's layout by the Independent Engineer and the acceptance of all or any part of it shall not relieve the Contractor of his responsibility to secure the proper dimensions, grades and elevations of the several parts of the work.

After the Contractor has set the control points, the Contractor shall set all stakes including, but not necessarily limited to: centerline stakes, offset stakes; construction limit stakes, reference point stakes, slope stakes, pavement lines, curb lines and grade stakes, roadway drainage, pipe, clearing, guardrail, fence, right-of-way markers, survey monuments and culverts; blue tops for subgrade, subbase and base courses; control points for bridges, abutments, footings, pier caps, bridge seats, bridge beams, girder

profiles and screed elevations; supplemental bench marks and permanent as-built elevation data as well as all other horizontal or vertical controls deemed necessary in the opinion of the Independent Engineer for complete and accurate layout and construction of the work.

Directed changes to the work not considered a part or incidental to the contract by the Independent Engineer shall be reimbursed under Subsection 109 and additional contract time may be considered for any delays.

The Contractor shall be responsible for the proper layout and accuracy of all property markers and right-of-way monuments which are required by the project plans.

The Contractor shall exercise care in the preservation of stakes, references and bench marks and shall reset them when any are damaged, lost, displaced or removed at no cost to the Owner unless specifically approved by the Independent Engineer.

The centerline layout for the final surface course in each direction shall be established by instrument survey by the Contractor and shall serve as marks for permanent traffic centerline striping. Points at 50 foot intervals shall be set where striping will be required or as approved by the Independent Engineer.

SECTION 900.1.7 - METHOD OF MEASUREMENT: Construction surveying and layout will be measured as a Lump Sum item.

~~Two, three and four (2, 3 and 4) person survey party will be measured by the hour to the nearest half-hour, and will be paid only when their use is directed by the Independent Engineer in writing for work included in adjustments to the contract beyond the scope of work included in the contract.~~

Two, three and four (2, 3 and 4) person survey party will be measured by the hour to the nearest half-hour, and will be paid only when their use is directed by the Independent Engineer in writing for work included in adjustments to the contract beyond the scope of work included in the contract.

SECTION 900.1.8 - BASIS OF PAYMENT: Payment for construction survey will be broken into several bid items included in both the base bid and alternatives. It is the intent of the specifications that all cost to the Owner associated with survey including but not limited to management, coordination, restaking and scheduling shall be included in these items, also that the Contractor be totally responsible for all survey work. No additional payment for survey related items will be considered except as may be included in modifications to the contract through change order and paid at the rate established in the contingency items for survey crews.

Pay items for survey shall include:

Item Nos. 900.020A and 900.020B - Survey Administration:

This item shall include all Contractor cost, overhead, and profit for the managing, coordinating, overseeing, restaking and other actions, materials and equipment required to ensure satisfactory performance and completeness of the survey on the total contract work. The total amount of this item shall be paid to the Contractor with none of this amount being due Collar, Williams and White Engineering.

Item Nos. 900.010A and 900.010B - Surveying (Collar, Williams and White Engineering):

These items shall include all survey work associated with the items of work in each alternate and the base bid and shall reflect the additional or lessor amount of staking associated with each alternate. The total amount of these pay items shall be due Collar, Williams and White Engineering with no Contractor overhead, profit or other cost included in the amount.

~~Item Nos. 900.030, 900.040 and 900.050 --- Two, three and four (2, 3 and 4) person survey crews:~~

~~These items are contingency items and are intended to establish rates for extra work directed by the Independent Engineer. They represent actual cost to the Contractor for Collar, Williams and White Engineering services plus five (5%) percent for Contractor overhead, profit and other cost associated with directing the work. No other payment will be considered for survey work in the calculation of extra work payments.~~

Item Nos. 900.030, 900.040 and 900.050 - Two, three and four (2, 3 and 4) person survey crews:

These items are contingency items and are intended to establish rates for extra work directed by the Independent Engineer. They represent actual cost to the Contractor for Collar, Williams and White Engineering services plus five (5%) percent for Contractor overhead, profit and other cost associated with directing the work. No other payment will be considered for survey work in the calculation of extra work payments.

Payment for construction surveying and layout, items included in this section except contingency items, will be by the Lump Sum and will be made as follows:

For each of the first and second months of the contract, a payment in the amount of \$70,000 will be made. The remaining contract amount will be paid on a monthly % complete basis based on actual survey work performed. The Independent Engineer will make the final determination of that percentage.

Ninety-(90%) percent of the remaining contract amount for construction surveying and layout will have been paid when 80 percent of the total contract amount, excluding the items of construction surveying and layout, and mobilization, has been paid. The 90 percent will be paid on a monthly basis prorated on the basis of the Contractor's progress and/or approved by the Engineer.

The remaining portion of the contract amount bid for construction surveying and layout will be paid upon completion and acceptance of the contract work and the release of all other retention to the Contractor.

The item of two, three, and four (2, 3 and 4) person survey party are contingent items and are established for the purpose of compensating the Contractor for additional staking and layout required as a result of extra work ordered in writing by the Independent Engineer.

Payment will be made at the unit price established for the survey party or parties used.

The amount established per hour for a two, three or four (2, 3 or 4) person survey party shall include the cost of all materials, equipment, labor, subsistence and benefits necessary to complete the extra work plus 5% construction cost, overhead and profit. No travel time will be paid at these rates.

Payment for traffic control and flagging required for surveying and layout shall be considered as included in the Lump Sum amount bid for construction surveying and layout **survey administration**.

No payment will be made for the resetting of stakes, references, bench marks, and other survey control unless specifically approved in writing by the Independent Engineer.

SECTION 900.2.0 - SCOPE OF WORK: Collar, Williams and White Engineering shall perform all survey work necessary to complete the construction of the project as shown on the plans and/or described in the specifications and/or modified by minor design changes.

SECTION 900.2.1 - WORK ITEMS: The work shall consist of furnishing all materials, personnel, and equipment necessary to perform the following tasks:

- 1.) Verify bench mark elevations shown on the plans and set temporary bench marks at 1,000 feet (minimum) intervals, prior to construction staking.
- 2.) Establish centerline control and reference points at all section corners, all 1/4 corners, all points of curvature, and all points of tangency or ~~priest~~ on centerline.

- 3.) Stake clearing and/or limits of construction as required.
- 4.) Stake haul road alignment at 100 foot intervals with one (1) stake per station, as required.
- 5.) Stake pregrade at 100 foot intervals or 50 foot where requested by the Independent Engineer:
 - a. For un-superelevated sections:
 1. One stake on centerline.
 2. One offset stake at each edge of the roadway.
 3. All required slope stakes and reference slope stakes.
 4. All required slope stakes and reference slope stakes as required for ditches and channels.
 - b. For superelevated sections and superelevated transitions:
 1. One stake at centerline reading right and left.
 2. One stake at each edge of the roadway.
 3. All required slope stakes and reference slope stakes.
 4. All required slope stakes and reference slope stakes as required for ditches and channels.
- 6.) (a) Survey cross section of actual field conditions as staked in Item No. 5 above and prepare earthwork calculations to be used in determining pay quantities.

 (b) Survey cross sections of borrow pits to determine pay quantity for Item 210.010 as per MAG Specification 205.7.
- 7.) Set horizontal and vertical control for all culverts, box culverts, headwalls, drainage pipes, irrigation pipes, traffic signal conduits, and miscellaneous items as required.
- 8.) Stake all curbs at 25 feet \pm intervals, using a two (2') foot back of curb offset.
- 9.) Set subgrade bluetops at 50 foot intervals. (Four per interval.)
- 10.) Set A.B.C. bluetops at 50 foot intervals. (Four per interval and no bluetops will be furnished for select material.)
- 11.) Set reference points for all survey monuments and "punch" same when installed. (Installation included in other items of work in the contract.)
- 12.) Establish permanent bench mark elevations.
- 13.) Stake right-of-way for fences and limits of construction.

- 14.) Provide necessary survey points for permanent pavement striping at 50 foot intervals or greater as approved by the Engineer.
- 15.) Prepare "as-built" plans for submittal and approval to the Independent Engineer.
- 16.) Perform all other tasks or as is deemed necessary by the Independent Engineer to complete the Contract and permit inspections as required.

In the event Alternate B (full depth asphalt) is selected, Task No. 10 as noted above, shall not be required and the Lump Sum for survey Item No. 900.010B shall be used in the Bidding Schedule.

The above listed tasks will be performed one time only basis for the Contractor by Collar, Williams and White Engineering at the Lump Sum price included for survey Item No. 900.010A, 900.010B or 900.010C in the Bidding Schedule.

Any and all restaking will be performed at the hourly rates as specified herein, which are:

2 man survey crew	\$78.00/hour
3 man survey crew	\$87.00/hour
4 man survey crew	\$96.00/hour

and the contractor shall bear all these costs for which he will reimburse Collar, Williams & White Engineering at the above referenced rates unless said restaking is approved by the Independent Engineer in which case, the Contractor will be reimbursed by the Owner. No travel time will be paid for at these rates.

No restaking or additional staking, as may be requested or required by modifications to the plans, is to be requested or approved by the Contractor, the Independent Engineer and/or Collar, Williams & White Engineering EXCEPT IN WRITING.