

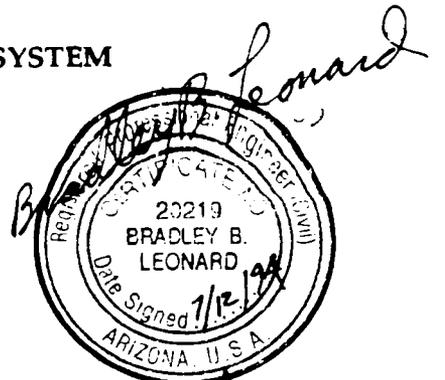
CONSTRUCTION SPECIFICATIONS

FOR

FCD CONTRACT NO. 94-20
BEARDSLEY ROAD REGIONAL DRAINAGE SYSTEM
(PHASE I)

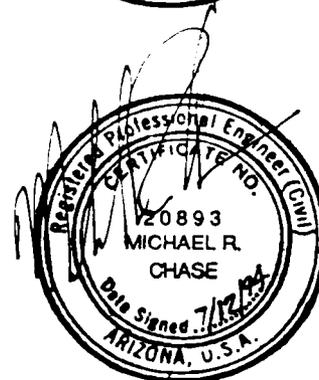
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Prepared for

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Recommended By: Edward A. Raleigh Date: 7/12/94
Edward A. Raleigh, P.E., Chief
Engineering Division

Issued for Public Bidding By: D. E. Sagramoso Date: 7-12-94
D. E. Sagramoso, P.E.
Interim Chief Engineer and General Manager

PART 100

SUPPLEMENTARY TO MARICOPA ASSOCIATION OF GOVERNMENTS
UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS
CONSTRUCTION EDITION OF 1992 AND REVISIONS AND SUPPLEMENTS
THERE TO.

DIVISION II TO DIVISION X
SUPPLEMENTARY TO ARIZONA DEPARTMENT OF TRANSPORTATION,
HIGHWAYS DIVISION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE
CONSTRUCTION, EDITION OF 1990.

ATTENTION

ALL PROSPECTIVE BIDDERS

A.R.S. Sec. 34-201 now requires that construction bid proposals be accompanied by a certified check, cashier's check or surety bond for **ten percent (10%)** of the total amount of the bid.

All bonds must be executed solely by a surety company or companies holding a Certificate of Authority to transact surety business in Arizona, issued by the Director of the (State) Department of Insurance.

Bonds (bid, payment and performance) executed by an individual surety or sureties are not in compliance with the Arizona Revised Statutes.

Bids received containing bid bonds not in compliance with the Arizona Revised Statutes will be considered as being non-responsive. The use of District-supplied bond forms is required.

Please submit your bids accordingly.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD CONTRACT 94-20

BEARDSLEY ROAD REGIONAL DRAINAGE SYSTEM (PHASE I)

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**FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
INVITATION FOR BID**

BID OPENING DATE: August 18, 1994

LOCATION:

This project is located in the City of Phoenix on the north side of Beardsley Road from 21st Avenue to 7th Avenue (Part A) and between 43rd Avenue and Scatter Wash along the north frontage road of the Agua Fria Loop 101 Freeway (Part B).

PROPOSED WORK:

The Part A proposed work consists of installation of storm drain pipe, storm drainage channels, detention basins, box culverts, sanitary sewerlines, waterlines, improvements to a bus maintenance facility parking lot, and a three-span reinforced concrete slab bridge and other incidental work.

The Part B proposed work consists of drainage excavation, embankment, grading, furnishing and placing concrete channel lining, furnishing and placing aggregate base, asphaltic concrete pavement, concrete curb and gutter and concrete sidewalk; construction of new bridges; and other incidental work.

BIDS:

SEALED BIDS for the proposed work will be received by the Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona 85009 until 2:00 p.m. (Phoenix time) on the above date and then publicly opened and read at 2801 West Durango Street, Phoenix, Arizona 85009. All bids are to be marked in accordance with Section 102.9 of the MAG Uniform Standard Specifications and addressed to the Chief Engineer and General Manager, Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona 85009. No bids will be received after the time specified for bid opening. All bids must be submitted on proposal forms furnished by the Flood Control District and included in the Proposal Pamphlet. The Board of Directors reserves the right to reject any and all bids and to waive any informality in any bid received.

ELIGIBILITY OF CONTRACTOR:

It is the policy of Flood Control District of Maricopa County to endeavor to ensure in every way possible that minority and women-owned business enterprises have every opportunity to participate in providing professional services, purchased goods, and contractual services without being discriminated against on the grounds of race, religion, sex, age, disability or national origin.

The bidder shall be required to certify that it has the appropriate "A" Contractor's license in the State of Arizona to perform the before-mentioned type of work. Certification shall be on the form provided herein.

The bidder may be required to furnish an affidavit as evidence of previous satisfactory performance in the above-mentioned type of work.

CONTRACT TIME:

All work on this Contract is to be completed within three hundred sixty (360) calendar days after date of Notice to Proceed.

MBE/WBE PARTICIPATION:

For this contract, a goal of ten (10%) percent MBE /WBE is established for Minority/ Women-Owned Business Enterprises. Instructions and required forms are included in the Minority and Women-Owned Business Enterprise Program Contracting Requirements section. The Maricopa County Minority and Women-Owned Business Enterprise Program, effective January 1, 1992, is incorporated by reference.

PRE-BID CONFERENCE:

A Pre-bid conference will be held on August 3, 1994 at 1:00 p.m. in the Flood Control District Adobe Conference Room, 2801 West Durango Street, Phoenix, Arizona 85009. It is in the best interest of prospective bidders to attend the Pre-bid Conference.

Questions or items for clarification may be addressed to the Chief, Contracting Branch, in writing, at least ten (10) days prior to bid opening date. Where appropriate, any answers or clarifications affecting the cost may be addressed to all bidders in an addendum. Verbal interpretations, unless specifically addressed by addendum, shall not be binding nor have any legal effect.

PROJECT PLANS, SPECIAL PROVISIONS AND CONTRACT DOCUMENTS:

Plans and Construction Specifications may be obtained from Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona 85009 upon payment of \$55.00 by check, payable to the FLOOD CONTROL DISTRICT of MARICOPA COUNTY. This payment will not be refunded. Mail orders for project documents must include an additional \$7.50 for first class U.S. postage and handling. The total will not be refunded. Regardless of circumstances, we cannot guarantee mail delivery. Each bid must be accompanied by a Bid Bond, cashier's or certified check or postal money Order equal to 10 percent (10%) of the bid, made payable to the FLOOD CONTROL DISTRICT OF MARICOPA COUNTY as a guarantee that if the work is awarded to the bidder, the bidder will within ten (10) days of receipt of the Proposal Acceptance, enter into proper contract and bond condition for the faithful performance of the work, otherwise, said amount may be forfeited to the said BOARD OF DIRECTORS as liquidated damages.

PRINCIPLE ITEMS AND APPROXIMATE QUANTITIES

PART A

QUANTITY	UNIT	DESCRIPTION
1	LS	Clearing and Grubbing
805,292	CY	Drainage Excavation
4,783	LF	Pipe, Reinforced Concrete
1,868	LF	Reinforced Concrete Box Culvert
542	LF	Pipe, Ductile Iron
2,811	LF	Pipe, Vitrified Clay
11,416	SF	Retaining Wall
1	LS	Maintenance Protection of Traffic
1	LS	Bridge Structures
1	LS	Construction Survey and Layout

PRINCIPLE ITEMS AND APPROXIMATE QUANTITIES

PART B

QUANTITY	UNIT	DESCRIPTION
5,350	CY	Drainage Excavation
9,786	SY	Concrete Channel Lining
1	LS	41st Avenue Bridge
1	LS	Private Drive Bridge

PROPOSAL

TO THE BOARD OF DIRECTORS
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
PHOENIX, ARIZONA

Gentlemen:

The following Proposal is made for construction the Beardsley Road Regional Drainage System, FCD 94-20, in the County of Maricopa, State of Arizona.

The following Proposal is made on behalf of

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 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 in which it relates, or in any portion of the profits thereof.

The Undersigned certifies that the approved Plans, Supplementary General Conditions, Special Provisions, Forms of Contract, Bonds, and Sureties authorized by the Board of Directors and constituting essential parts of this Proposal, have been carefully examined and also that the site of the work has been personally inspected.

The Undersigned declares that the amount and nature of the work to be done is understood and that at no time will misunderstanding of the Plans, Construction Specifications, Special Provisions, Supplementary General Conditions, or conditions to be overcome, be pled. On the basis of the Plans, Construction Specifications, Special Provisions, Supplementary General Conditions, the Forms of Contract, Bonds, and Sureties proposed for use, the Undersigned proposes to furnish all the necessary machinery, equipment, tools, apparatus, and other means of construction, to do all the work and to furnish all the materials in the manner specified and to finish the entire project within the time hereinafter proposed and to accept, as full compensation therefore, the sum of various products obtained by multiplying each unit price, herein bid for the work or materials, by the quantity thereof actually incorporated in the complete project, as determined by the Engineer or Architect.

The Undersigned understands that the quantities mentioned herein are approximate only and are subject to increase or decrease and hereby proposes to perform all quantities of work, as either increased or decreased, in accordance with the provisions of the Specifications, 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 Specifications and to give such work personal attention and to secure economical performance.

The Undersigned further proposes to execute the Contract Agreement and furnish satisfactory Bonds and Sureties within ten (10) days of receipt of Notice of Proposal acceptance, **TIME BEING OF THE ESSENCE**. The Undersigned further proposes to begin work as specified in the Contract attached hereto, and to complete the work within **three hundred sixty (360) calendar days** from the effective date specified in the Notice to Proceed, and maintain at all times a Payment and Performance Bond, approved by the Board of Directors, each in an amount equal to one hundred percent of the contract amount. This Bond shall serve not only to guarantee the completion of the work on the part of the Undersigned, but also to guarantee the excellence of both workmanship and material and the payment of all obligations incurred, said Bonds and Sureties to be in full force and effect until the work is finally accepted and the provisions of the Plans, Specifications, and Special Provisions fulfilled.

A Proposal Guaranty in the amount and character named in the Invitation to Bid is enclosed amounting to not less than ten (10) percent of the total bid, which Proposal Guaranty is submitted as a guaranty of the good faith of the Bidder and the Bidder will enter into 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 requirements and conditions the Undersigned should withdraw its Proposal, if the Proposal is accepted and there should be failure on the part of the Undersigned to execute the Contract and furnish satisfactory Bonds and Sureties as herein provided, the Flood Control District of Maricopa County in either of such events, shall be entitled and is hereby given the right to retain the said Proposal Guaranty as liquidated damages.

The Undersigned acknowledges receipt of the following addenda, attached these to the bid package, and has included their provisions in the proposal:

Addendum No. _____	Dated _____

The Undersigned has enclosed the required bid security to this Proposal.

BIDDING SCHEDULE

PROJECT : Beardsley Road Regional Drainage System (Phase I)

CONTRACT: FCD 94-20

1	ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QUANTITY	UNIT COST NUMBERS	EXTENDED AMOUNT
2		PART A- Drainage & Utilities				
3	2010001	Clearing & Grubbing	L SUM	1		
4	202XXXX	Removal of Structures and Obstructions	L SUM	1		
5	2020021	Removal of Curb & Gutter	LF	663		
6	2020029	Removal of Asphalt Concrete Pavement	SQ. YD.	788		
7	2030401	Drainage Excavation	CU. YD.	805,292		
8	2030501	Structural Excavation	CU. YD.	22,657		
9	2030506	Structural Backfill	CU. YD.	8,607		
10	20308XX	Erosion Control	L SUM	1		
11	2050001	Grading Roadway for Pavement	SQ. YD.	8,158		
12	2070001	Dust Palliative	M GAL	7,500		
13	4060009	Asphalt Concrete (Miscellaneous Paving)	TON	1,774		
14	4061021	Pavement Cut & Replace (C-7.06)	SQ. YD.	5,243		
15	5011022	Pipe, Reinforced Concrete, Class II, 24"	LF	108		
16	5011044	Pipe, Reinforced Concrete, Class IV, 36"	LF	1,080		
17	5011050	Pipe, Reinforced Concrete, Class V, 42"	LF	1,322		

BIDDING SCHEDULE

PROJECT : Beardsley Road Regional Drainage System (Phase I)

CONTRACT: FCD 94-20

1	ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QUANTITY	UNIT COST NUMBERS	EXTENDED AMOUNT
2	5011055	Pipe, Reinforced Concrete, Class V, 48"	LF	1,628		
3	5011057	Pipe, Reinforced Concrete, Class II, 54"	LF	64		
4	5011060	Pipe, Reinforced Concrete, Class V, 54"	LF	219		
5	5011070	Pipe, Reinforced Concrete, Class V, 66"	LF	302		
6	5030070	Catch Basin (C-15.30, Type 4)	EA	18		
7	5050032	Manhole (C-18.10) (No. 3) (For Pipes over 36")	EA	10		
8	6010002	Structural Concrete (Class S) (F'c = 3,000)	CU. YD.	3,463		
9	6016088	Headwall (36")	EA	1		
10	6016089	Headwall (54")	EA	2		
11	6017105	RCBC 12'x6'	LF	136		
12	6017106	RCBC 12'x8'	LF	1,732		
13	60171XX	RCBC Transition	EA	1		
14	6050002	Reinforcing Steel	LB	363,906		
15	6050003	Reinforcing Steel (Welded Wire Fabric)	LB	3,963		
16	7010001	Maintenance & Protection of Traffic	L SUM	1		
17	7010006	Furnish & Install Traffic Control Devices	L SUM	1		

BIDDING SCHEDULE

PROJECT : Beardsley Road Regional Drainage System (Phase I)

CONTRACT: FCD 94-20

1	ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QUANTITY	UNIT COST NUMBERS	EXTENDED AMOUNT
2	7010010	Temporary Concrete Barrier (New Installation)	L.FT.	2,080		
3	7041501	Pavement Markings	L SUM	1		
4	7310511	Mast Arm (10')	EA	4		
5	7310832	Relocate Existing Light Poles	EA	5		
6	7320050	Electrical Coduit (2") (PVC)	L.FT.	71		
7	7320070	Electrical Coduit (3") (PVC)	L.FT.	46		
8	7320130	Electrical Coduit (2") (Rigid Metal)	L FT.	81		
9	7320150	Electrical Coduit (3") (Rigid Metal)	L.FT.	33		
10	7320410	Pull Box (NO.5)	EA	1		
11	7320420	Pull Box (NO.7)	EA	2		
12	7320421	Pull Box (NO.7) (W/Ext.)	EA	1		
13	7320650	Remove and Salvage Traffic Signals	L SUM	1		
14	7330030	Traffic Signal Face (Type C)	EA	6		
15	7330060	Traffic Signal Face (Type F)	EA	7		
16	7330210	Traffic Signal Face (Man/Hand)	EA	8		
17	7330220	Pedestrian Push Button	EA	8		

BIDDING SCHEDULE

PROJECT : Beardsley Road Regional Drainage System (Phase I)

CONTRACT: FCD 94-20

1	ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QUANTITY	UNIT COST NUMBERS	EXTENDED AMOUNT
2	7330310	Conductors	L SUM	1		
3	7340103	Control Cabinet (Type IV) (W/Service Enclosure)	EA	1		
4	7340266	Controller (MPS-T-C)	EA	1		
5	7340305	Control Cabinet Foundation (Type IV)	EA	1		
6	7360030	Luminaire (Horizontal Mount) (HPS 250 Watt)	EA	4		
7	7370100	Maintain Traffic Signals and Lighting Systems	L SUM	1		
8	7370202	Temporary Traffic Signals (Construction Phase 6)	L SUM	1		
9	7370203	Temporary Traffic Signals (Construction Phase 7)	L SUM	1		
10	7370400	Electrical Service	L SUM	1		
11	7370455	MisllaneousElectrical (Traffic Signal Span Wire Assembly)	L SUM	1		
12	8080404	Pipe (Vitrified Clay) (8")	LF	91		
13	8080405	Pipe (Vitrified Clay) (12")	LF	50		
14	8080406	Pipe (Vitrified Clay) (15")	LF	1,332		
15	8080407	Pipe (Vitrified Clay) (18")	LF	1,338		
16	8080642	Valve Box Frame and Cover , Type A-1	EA	4		
17	8080643	Valve Box Frame and Cover , Type B	EA	3		

BIDDING SCHEDULE

PROJECT : Beardsley Road Regional Drainage System (Phase I)

CONTRACT: FCD 94-20

1	ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QUANTITY	UNIT COST NUMBERS	EXTENDED AMOUNT
2	8080655	Relocate Fire Hydrant	EA	1		
3	8081024	Pipe, Steel cylinder, Reinforced Conc (24")	LF	360		
4	8081417	Pipe, Ductile Iron (6") (Class 52)	LF	174		
5	8081424	Pipe, Ductile Iron (8") (Class 52)	LF	13		
6	8081431	Pipe, Ductile Iron (10") (Class 52)	LF	237		
7	8081438	Pipe, Ductile Iron (12") (Class 52)	LF	153		
8	8082845	Manhole (C-22.25) (48"Dia)	EA	12		
9	9010001	Mobilization	L SUM	1		
10	9020026	Chain Link Fence	LF	9,540		
11	9080088	Concrete Curb & Gutter (Type D, C-5.10)	LF	1,376		
12	9080201	Concrete Sidewalk (C-5.20)	SQ. FT.	2,460		
13	9110011	Right-of-Way Marker (C-21.10)	EA	39		
14	9120004	Shotcrete (3")	SQ. YD.	2,024		
15	9130001	Riprap (Dumped)	CU. YD	378		
16	9140130	Noise Barrier Wall (B-30.20)	SQ.FT.	7,085		
17	9140155	Retaining Wall	SQ. FT.	11,416		

BIDDING SCHEDULE

PROJECT : Beardsley Road Regional Drainage System (Phase I)

CONTRACT: FCD 94-20

1	ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QUANTITY	UNIT COST NUMBERS	EXTENDED AMOUNT
2	9240170	Contractor Quality Control	L SUM	1		
3	9250001	Construction Survey & Layout	L SUM	1		
4						
5		PART A-DRAINAGE & UTILITIES SUBTOTAL				
6						
7		PART A- Access Bridge				
8	2030501A	Structural Excavation	CU. YD.	40		
9	2030506A	Structural Backfill	CU. YD.	10		
10	6010003A	Structural Concrete (Class S) (F'c)=3,500 Psi)	CU.YD.	6		
11	6010005A	Structural Concrete (Class S) (F'c)=4,500 Psi)	CU.YD.	137		
12	6011001A	Bridge Approach Slab	SQ.YD.	114		
13	6015301A	Concrete Bridge Barrier	LF	138		
14	6050002A	Reinforcing Steel	LB	33,800		
15	6090030A	Drilled Shaft Foundation (30")	LF	72		
16	6090042A	Drilled Shaft Foundation (42")	LF	36		
17	9010001A	Mobilization (Max 3% of Total)	L SUM	1		

BIDDING SCHEDULE

PROJECT : Beardsley Road Regional Drainage System (Phase I)

CONTRACT: FCD 94-20

1	ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QUANTITY	UNIT COST NUMBERS	EXTENDED AMOUNT
2	9240170A	Contractor Quality Control	L SUM	1		
3	9250001A	Construction Survey & Layout	L SUM	1		
4	9999903A	Lump Sum Structure (Total)*	L SUM	1		
5		* The lump sum total for this item shall equal the sum				
6		of the amounts for the preceeding items.				
7						
8						
9						
10						
11		PART A-Bus Maintenance Facility				
12	2020021B	Removal of Curb & Gutter	LF	663		
13	2020029B	Removal of Asphalt Concrete Pavement	SQ. YD.	788		
14	202XXXXB	Removal of Miscellaneous Concrete	L SUM	1		
15	2050001B	Grading Roadway for Pavement	SQ. YD.	3,007		
16	3030022B	Aggregate Base (Class 2)	CU. YD.	30		
17	4010101B	Prime Coat	TON	5		

BIDDING SCHEDULE

PROJECT : Beardsley Road Regional Drainage System (Phase I)

CONTRACT: FCD 94-20

1	ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QUANTITY	UNIT COST NUMBERS	EXTENDED AMOUNT
2	4040040B	Asphalt Cement (AC-40)	TON	42		
3	4040111B	Bituminous Tack Coat	TON	8		
4	4040116B	Apply Bituminous Tack Coat	HOUR	13		
5	4060004B	Asphaltic Concrete (1/2" Mix)	TON	273		
6	4060006B	Asphaltic Concrete (3/4" Mix)	TON	538		
7	4060024B	Mineral Admixture (For 1/2" Mix)	TON	5		
8	4060026B	Mineral Admixture (For 3/4" Mix)	TON	10		
9	5011022B	Pipe, Reinforced Concrete, Class II, 24"	LF	42		
10	5030070B	Catch Basin (C-15.30, Type 4)	EA	1		
11	7041501B	Pavement Markings	L SUM	1		
12	7310832B	Relocate Existing Light Poles	EA	4		
13	8080655B	Relocate Fire Hydrant	EA	1		
14	9010001B	Mobilization (Maximum 3% of Total)	L SUM	1		
15	9020014B	Chain Link Fence, Type1 (72") (Temp. in Use)	LF	554		
16	9020129B	Chain Link Fence Gate, Type2 (Double 14')(Temp. in Use)	EA	2		
17	9030043B	Relocate Gate	EA	1		

BIDDING SCHEDULE

PROJECT : Beardsley Road Regional Drainage System (Phase I)

CONTRACT: FCD 94-20

1	ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QUANTITY	UNIT COST NUMBERS	EXTENDED AMOUNT
2	903XXXXB	Install Razor Wire & Pipe	LF	128		
3	903XXXXB	Reconstruct Razor Wire & Pipe	LF	488		
4	9080088B	Concrete Curb & Gutter (Type D, C-5.10)	LF	804		
5	9140130B	Noise Barrier Wall (B-30.20)	SQ.FT.	7,085		
6	9240170B	Contractor Quality Control	L SUM	1		
7	9250001B	Construction Survey & Layout	L SUM	1		
8	99999XXB	Lump Sum Bus Maintenance Facility (Total)*	L SUM	1		
9		* The lump sum total for this item shall equal the sum of the amounts for the preceeding items.				
10						
11		PART A - DRAINAGE & UTILITIES				
12		PART A - ACCESS BRIDGE				
13		PART A - BUS MAINTENANCE FACILITY				
14						
15						
16		PART A - TOTAL				
17						

Beardsley Road Regional Drainage System BID SCHEDULE

SHEET 16 OF 45
DATE 5/27/94

Project No. 101L MA 024 H3635 01C / RAM-600-1-539

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	PART B - ROADWAY/CHANNEL				
2	2020001 Removal of Structures & Obstructions	L.Sum.	1		
3	2020021 Removal of Concrete Curb and Gutter	L.Ft.	75		
4	2020025 Removal of Concrete Sidewalks, Driveways and Slabs	Sq.Ft.	300		
5	2020029 Removal of Asphaltic Concrete Pavement	Sq. Yd.	667		
6	2030401 Drainage Excavation	Cu. Yd.	5350		
7	2070001 Dust Palliative	M.Gal.	207		
8	3030022 Aggregate Base, Class 2	Cu. Yd.	95		
9	4060022 Asphaltic Concrete (MAG C-3/4 Mix)	Ton	87		
10	9010001 Mobilization	L.Sum	1		
11	9050001 Guard Rail W-Beam Single Face	L.FT.	2125		
12	9050031 Guard Rail Breakaway Cable Terminal	Each	2		
13	9050036 Guard Rail Anchor Assembly	Each	2		
14					
15					
16					
17					

Beardsley Road Regional Drainage System BID SCHEDULE

SHEET 17 OF 45
DATE 5/27/94

Project No. 101L MA 024 H3635 01C / RAM-600-1-539

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	9050102 Construct Breakaway Cable Terminal from Salvage	Each	1		
2	9080106 Concrete Curb & Gutter, Type A (MAG Det.220)	L.Ft.	225		
3	9080251 Concrete Sidewalk (Phoenix Det. P-1230)	Sq.Ft.	521		
4	9201006 Concrete Channel Lining (6")	Sq. Yd.	9786		
5	9240170 Contractor Quality Control	L.Sum	1		
6	9250001 Construction Surveying and Layout	L.Sum	1		
7	PART B - ROADWAY/CHANNEL SUBTOTAL				
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					

Beardsley Road Regional Drainage System BID SCHEDULE

SHEET 18 OF 45
DATE 5/27/94

Project No. 101L MA 024 H3635 01C / RAM-600-1-539

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	PART B - 41 st AVENUE BRIDGE				
2	2030501 Structural Excavation	Cu. Yd.	135		
3	2030506 Structural Backfill	Cu. Yd.	99		
4	6010002 Structural Concrete (Class S)(F'c=3,000)	Cu. Yd.	152		
5	6012028 Precast, Prestressed Concrete Bridge Member(48x12 Slab)	Each	11		
6	6015203 Bearing (1/2" x 1' Neoprene Strip)	Each	2		
7	6050002 Reinforcing Steel	Lb.	12936		
8	9010001 Mobilization	L. Sum	1		
9	9240170 Contractor Quality Control	L. Sum	1		
10	9250001 Construction Surveying and Layout	L. Sum	1		
11					
12	9999903 LUMP SUM STRUCTURE (TOTAL OF PRECEEDING	L. Sum			
13	STRUCTURE ITEMS)				
14					
15					
16					
17					

Beardsley Road Regional Drainage System BID SCHEDULE

SHEET 19 OF 45
DATE 5/27/94

Project No. 101L MA 024 H3635 01C / RAM-600-1-539

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	PART B - PRIVATE DRIVE BRIDGE				
2	2030501 Structural Excavation	Cu.Yd.	121		
3	2030506 Structural Backfill	Cu.Yd.	43		
4	6010002 Structural Concrete (Class S)(F'c=3,000)	Cu.Yd.	114		
5	6012028 Precast, Prestressed Concrete Bridge Member(48x12 Slab)	Each	7		
6	6015203 Bearing (1/2" x 1' Neoprene Strip)	Each	2		
7	6050002 Reinforcing Steel	Lb.	11205		
8	9010001 Mobilization	L.Sum	1		
9	9240170 Contractor Quality Control	L.Sum	1		
10	9250001 Construction Surveying and Layout	L.Sum	1		
11					
12	9999906 LUMP SUM STRUCTURE (TOTAL OF PRECEEDING	L.Sum			
13	STRUCTURE ITEMS)				
14					
15					
16					
17					

Beardsley Road Regional Drainage System BID SCHEDULE

SHEET 20 OF 45
 DATE 5/27/94

Project No. 101L MA 024 H3635 01C / RAM-600-1-539

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	PART B - 41st AVENUE BRIDGE	L.Sum			
2	PART B - PRIVATE DRIVE BRIDGE	L.Sum			
3	PART B - ROADWAY/CHANNEL SUBTOTAL				
4	PART B - TOTAL				
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					

BIDDING SCHEDULE

PROJECT : Beardsley Road Regional Drainage System (Phase I)

CONTRACT: FCD 94-20

1	ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QUANTITY	UNIT COST NUMBERS	EXTENDED AMOUNT
2						
3		PROJECT TOTAL (PART A)				
4		PROJECT TOTAL (PART B)				
5						
6		GRAND PROJECT TOTAL				
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						

IF BY AN INDIVIDUAL:

_____	_____
(NAME - TITLE)	(ADDRESS)
_____	_____
DATE	(PHONE)

IF BY A FIRM OR PARTNERSHIP:

_____	_____
(FIRM NAME)	(FIRM
ADDRESS)	
BY: _____	_____
(NAME - TITLE)	(PHONE)

DATE: _____

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

_____	_____
_____	_____
_____	_____
_____	_____

**** The name and post office address of each member of the firm or partnership must be shown.**

IF BY A CORPORATION:

_____	_____
(CORPORATE NAME)	(CORPORATION ADDRESS)
BY: _____	_____
	(PHONE)
TITLE: _____	
DATE: _____	

*** Incorporated under the Laws of the State of Arizona
Names and Addresses of Officers:**

_____	_____
(PRESIDENT)	(ADDRESS)
_____	_____
(SECRETARY)	(ADDRESS)
_____	_____
(TREASURER)	(ADDRESS)

*** The name of the State under which the laws of the Corporation was chartered and names, title, and business address of the President, Secretary, and Treasurer must be shown.**

SUBCONTRACTOR LISTING

As required in Section 102.6 of the Supplementary General Conditions, the following is a listing of Subcontractors and material suppliers that are to be used in the event the undersigned should enter into contract with the Owner. No change in the subcontractors and material suppliers listed will be made without prior written approval of the Owner.

(Signature) _____

SURETY BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, (hereinafter called the Principal), and the _____, a corporation duly organized under the laws of the State of _____, as Surety, (hereinafter called the Surety), are held and firmly bound unto the Flood Control District of Maricopa County as Obligee, in the sum of ten percent (10%) of the total amount of the bid of Principal, submitted by him to the Flood Control District of Maricopa County, for the work described below, for the payment of which sum, well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, and administrators, successors and assigns, jointly and severally, firmly by these presents, and in conformance with the Arizona Revised Statutes.

WHEREAS, the said Principal is herewith submitting its proposal for FCD 94-20, Beardsley Road Regional Drainage System, Phase I.

NOW, THEREFORE, if the Flood Control District of Maricopa County shall accept the proposal of the Principal and the Principal shall enter into a contract with the Flood Control District of Maricopa County in accordance with the terms of the proposal and give the Bonds and Certificates of Insurance as specified in the Standard Specifications with good and sufficient Surety for the faithful performance of the contract and for the prompt payment of labor and material furnished in the prosecution of the contract, or in the event of the failure of the Principal to enter into the contract and give such Bond and Certificates of Insurance, if the Principal pays to the Flood Control District of Maricopa County the difference not to exceed the penalty of the bond between the amount specified in the proposal and such larger amount for which the Flood Control District of Maricopa County may in good faith contract with another party to perform the work covered by the proposal then this obligation is void. Otherwise it remains in full force and effect, provided, however, that this bond is executed pursuant to the provisions of Section 34-201, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of the section to the extent as if it were copied at length herein.

Signed and sealed this ____ day of _____, A.D., 1994.

AGENCY OF RECORD, STATE OF ARIZONA

PRINCIPAL

AGENCY ADDRESS

BY: _____

TITLE:

SURETY

BY: _____

TITLE

BOND NUMBER _____

ATTACH SURETY POWER OF ATTORNEY

CERTIFICATION OF LICENSE

Pursuant to A.R.S. Sec. 32-1169, I hereby state that I hold a current contractor's license, duly issued by the office of the Registrar of Contractors for the State of Arizona, said license has not been revoked, that the license number is: _____ that my privilege license number (as required by A.R.S. Sec. 42-1305) is: _____; and that, if any exemption to the above licensing requirements is claimed;

(1) The basis for the claimed exemption is: _____

and;

(2) The names(s) and license number(s) of any general, mechanical, electrical, or plumbing contractor(s) to be employed on the work are:

IT IS UNDERSTOOD THAT THE FILING OF AN APPLICATION CONTAINING FALSE OR INCORRECT INFORMATION CONCERNING AN APPLICANT'S CONTRACTOR'S LICENSE OR PRIVILEGE LICENSE WITH THE INTENT TO VOID SUCH LICENSING REQUIREMENTS IS UNSWORN FALSIFICATION PUNISHABLE ACCORDING TO A.R.S. SEC. 13-2704.

DATE: _____ SIGNATURE OF LICENSEE: _____

COMPANY: _____

**MINORITY AND WOMEN-OWNED BUSINESS ENTERPRISE PROGRAM
CONSTRUCTION CONTRACTING REQUIREMENTS**

A. The following conditions will apply in the calculation of the percentage attainment:

1. All MBE/WBE firms used in attainment of the goal must be certified with the Maricopa County Minority Business Office (MBO). The MBO is located at 100 West Clarendon, Suite 1420, Phoenix, Arizona 85013, telephone 506-8653. In addition, only those firms certified prior to the bid opening will be considered in the attainment of the goal.
2. **Prime contractor subcontracts to MBE or WBE:**
The MBE/WBE amount to be applied to the goal will be based on that portion (dollar value) of the contract that the MBE/WBE performs. For example, if a prime contractor subcontracts work amounting to \$100,000 of a contract for which the total project cost is \$1,000,000, the MBE/WBE participation will be credited as 10 percent.
3. **Prime Minority Contractor:**
An MBE/WBE prime contractor will be credited with the MBE/WBE participation for that portion of the contract which they themselves perform plus that portions subcontracted to other MBE/WBE firms. For example, if an MBE/WBE prime contractor proposes to perform 50 percent of a project quoted at \$1,000,000 and subcontracts 25 percent to an MBE firm and 25 percent to a non-MBE/WBE firm, MBE/WBE participation will be credited as 75 Percent, or \$750,000.
4. **Minority-Non-Minority Joint Venture:**
A joint venture consisting of MBE/WBE participation and non-MBE/WBE business enterprises, functioning as a prime contractor, will be credited with minority participation on the basis of the percentage of profit accruing to the MBE/WBE firm. For example, if a MBE/WBE and non-MBE/WBE joint venture proposes to perform 50 percent of a \$1,000,000 project and 50 percent of the joint venture profits (\$500,000) are to accrue to the MBE/WBE partner in the joint venture, MBE/WBE participation will be credited at 25 percent or \$250,000.
5. **Lower Tier Non-MBE/WBE Participation:**
MBE/WBE subcontractors proposing to further subcontract to non-MBE/WBE contractors shall not have that portion of subcontracting activity considered when determining the percentage of MBE/WBE participation.
6. **MBE/WBE Suppliers:**
Any MBE/WBE supplier that performs a commercially useful function, manufactures or substantially alters the material or product it supplies will have that portion of activity considered when determining the percentage of MBE/WBE participation.

7. MBE/WBE Trucking:
Credit for trucking by MBEs or WBEs will be the amount to be paid when the MBE or WBE trucker will perform the trucking with his/her trucks, tractors, and employees or when a MBE or WBE trucking broker has signed agreements with MBE and WBE truckers.

B. Required forms:

Two Affidavits are included as part of this section. The first form, the "MBE/WBE Assurances Affidavit", must be completed and submitted with the bid-- FAILURE TO DO SO SHALL BE CAUSE FOR REJECTION OF THE BID.

A SAMPLE of the "Actual MBE/WBE Participation Affidavit", that must be completed and returned by the first and second bidders to the Minority Business Office by 4:00 p.m. on the seventh calendar day after bid opening, if M/WBE goals have been established, is provided for information purposes. A copy of the sample or the sample form itself may also be used. The affidavit will list the MBE/WBE participation by MBE/WBE firm name and the relative dollar value of the MBE/WBE contract. The information in this affidavit is binding on the contractor, to the extent that any amounts may be increased and not decreased, and that if any listed MBE/WBE's are unable to enter into a subcontract with contractor, the contractor must provide a written report to the Procurement Officer, through the Owner's representative in accordance with instructions provided elsewhere in this document.

C. Good Faith Efforts:

Bids which fail to meet MBE or WBE minimum goals at levels which equal or exceed established goals may be considered nonresponsive unless good faith efforts can be determined. Only MBE and WBE firms certified by Maricopa County prior to the bid submittal date, and which will perform a commercially useful function will be counted toward meeting the participation goals. Any portion of the work that a proposed MBE or WBE firm will subcontract to other than a certified firm, regardless of tier, will not be counted toward the applicable goals.

The apparent first and second low bidders who do not fulfill the established MBE and WBE goals must demonstrate, through detailed and comprehensive documentation, that "good faith" efforts have been made to solicit, assist and utilize MBE and WBE firms to meet participation goals.

The County Minority Business Office (MBO) will assist prime contractors in identifying possible qualified and interested MBE and WBE subcontractors to meet designated MBE and WBE goals. **A M/WBE listing will be furnished with the bidding documents**, which contractors must utilize in identifying M/WBE firms. It will be the responsibility of the prime contractors to obtain the MBE and WBE firms necessary to meet the MBE and WBE goals.

FAILURE TO CONTACT THE MBO FOR ASSISTANCE IN COMPLYING WITH THESE GOALS MAY RESULT IN NOT HAVING IMPLEMENTED "GOOD FAITH" EFFORTS. Contact may be in writing, by telephone, or in person. If by phone or in person, name of MBO person spoken to should be obtained and written within the "CONTRACTOR CERTIFICATE OF GOOD FAITH" SUBMITTAL FORM (supplied if a contract has M/WBE goals).

(The Minority Business Office is located at 100 W. Clarendon, Suite 1420, Phoenix, Arizona 85013. Telephone number is 506-8653).

FAILURE TO IMPLEMENT "GOOD FAITH" EFFORTS IN ACCORDANCE WITH THE MARICOPA COUNTY MINORITY BUSINESS ENTERPRISE PROGRAM TO THE SATISFACTION OF MARICOPA COUNTY MAY RESULT IN THE REJECTION OF THE BID.

If information submitted by a prime contractor indicates that established MBE and WBE goals have not been met, the contractor must be required to provide sufficient documentation to demonstrate that he/she has complied with MBE and WBE requirements or good faith efforts. Good faith efforts will be determined by both quality and intensity of these efforts. Documentation provided to the Minority Business Office (MBO) must include:

1. The date bidder requested assistance in writing, in person, or by telephone from the MBO. The bidder should request assistance from the MBO office in order for a determination to be made. **As Maricopa County M/WBE listings are updated frequently, bidders shall contact the MBO to ensure that they have the most recent edition.**
2. Names, addresses and telephone numbers; and dates of notification of Maricopa County certified MBEs and WBEs solicited by direct mail for this project; and dates and methods used for follow up of initial solicitations to determine with certainty whether MBEs or WBEs were interested in subcontracting. (SEE FOLLOWING NOTE)
3. Items of work for which bidder requested subbids, proposals or materials to be supplied by MBEs and WBEs; information furnished to interested MBEs and WBEs such as specifications and requirements of the work; plans; and any breakdown of items of work into economically feasible units to facilitate MBE and WBE participation.
4. Names of MBEs and WBEs who submitted bids for any of the work indicated above and were not accepted by the prime contractor. An explanation of why MBEs or WBEs contacted will not be awarded subcontracts. If price was the reason for rejection of the bid, the price bid of rejected MBEs or WBEs and price bid of the selected subcontractor shall be submitted. Since utilization of available MBEs and WBEs is the program objective, price differences will not automatically be considered as cause for a prime contractor's rejection of MBE and WBE bids.
5. Documentation of written notices or telephone calls to a reasonable number of M/WBEs soliciting their participation in sufficient time to allow M/WBEs to participate effectively. All M/WBEs listed on the Maricopa

County Certification list which provide applicable goods and services for subject procurement/project should be contacted.

NOTE: THE ABOVE GOOD FAITH EFFORTS MUST HAVE BEEN CONDUCTED DURING THE BIDDING PERIOD AND PRIOR TO THE BID OPENING WITH SUBSTANTIAL TIME IN ORDER TO ALLOW FOR A RESPONSE FROM POTENTIAL M/WBE SUBCONTRACTORS. ORIGINAL CONTACT BY A PRIME CONTRACTOR JUST PRIOR TO OR ON THE BID OPENING WILL NOT BE CONSTRUED AS HAVING PROVIDED SUFFICIENT RESPONSE TIME FOR SUBMISSION OF SUBCONTRACT BIDS.

The following efforts can also be utilized in demonstrating "Good Faith" in soliciting M/WBE participation.

1. A description of the efforts made to assist MBEs and WBEs whose bids were rejected to be more competitive in their subcontracting bids. These efforts could include assistance in meeting bonding or insurance requirements.
2. Names and dates of advertisement of each newspaper, trade paper, and minority focus paper in which a request for MBE and WBE participation for this project was placed by the bidder.

Contractors are encouraged to seek M/WBEs in the same geographical area in which the work is to be performed or goods provided. If the bidder cannot meet the established goals using M/WBEs from the geographical area, the bidder should expand its search to a reasonable wider geographical area.

The MBO will make the final decision as to whether good faith efforts were met, based on the information submitted.

D. Appeal Process for Bid Award:

If the Owner is considering award of a contract to a bidder other than the low bidder because of failure to meet MBE and WBE participation goals or good faith efforts, the low bidder will be notified and given an opportunity to protest the decision. This protest will be made in accordance with the Maricopa County Procurement Code, Article 9, MCI-905, which is incorporated by reference.

E. Contract Compliance:

Failure of any bidder, contractor or subcontractor to comply with any of the requirements of the Maricopa County Minority and Women-Owned Business Program shall be a material breach of contract. During the term of an awarded contract, the prime contractor shall:

1. Fulfill the MBE and WBE participation commitments submitted with their bid;
2. Continue to make every effort to utilize MBEs and WBEs;
3. Require that their subcontractors make every effort to utilize MBEs and WBEs;

4. Maintain records necessary for monitoring their compliance with provisions contained in the M/WBE Program.

The primary responsibility for assuring contractor's compliance with these M/WBE contract requirements after award rests with the Owner's designated representative. The Owner's designated representative should ascertain that no one other than the approved MBE or WBE contractors or subcontractors are performing the work, and that MBE and WBE subcontractor substitutes have been approved in advance. The prime contractor shall not perform any MBE or WBE contract work items without prior approval by the Owner's Procurement Officer, through the Owner's designated representative.

The Owner's Procurement Officer shall advise the Minority Business Office immediately of any circumstances where a contractor appears to be in violation of the MBE and WBE contract requirements. An investigation will be held by the MBO and a recommendation for corrective action shall be forwarded to the Owner's Procurement Officer. Intentional noncompliance with the MBE and WBE requirements may result in withholding funds on the items already completed, in termination of the contract, and/or formal debarment from future contracts. The Maricopa County Minority Business Office (MBO) reserves the right to inspect all records of the contractor, MBEs and WBEs concerning this project.

The MBO will conduct MBE and WBE compliance reviews on a regular basis.

F. Substitution of Subcontractors:

The prime contractor shall request approval to replace an approved MBE or WBE subcontractor that is unable or unwilling to perform successfully on a contract with another MBE or WBE. This failure does not remove the contractor's responsibility for meeting the MBE and WBE participation goals on the contract. A written request for substitution must be made to the Owner's Procurement Officer, through the designated Owner's representative, of the Procurement Agency. The substitute MBE or WBE, obtained to perform an equal or greater dollar value of work, must be approved by the Owner's Procurement Officer, through the designated Owner's representative, prior to beginning of any work by the substitute MBE or WBE. The request for substitution must include, but is not limited to the following:

1. Reason for substitution.
2. Name, address, and telephone number of the approved MBE or WBE.
3. Name, address and telephone number of the MBE or WBE substitute.
4. Item, numbers, description of work and the proposed MBE and/or WBE dollar amount.
5. Good faith effort documentation if the substitute subcontractor is not an MBE or WBE.

G. Requests for Pay:

Each Request for Pay must be accompanied by a Maricopa County Minority/Women-Owned Business Enterprise Program "MBE/WBE PARTICIPATION REPORT" in the form as provided by the Flood Control District of Maricopa County.

The final pay request shall include a listing of total contract MBE/WBE participation. Line numbers and a description of actual work performed shall also be included. If, at the time of contract completion, the MBE and WBE commitments are not actually attained, the report is to provide an explanation of failure to comply. These reports shall be submitted within thirty (30) days of contract completion, PRIOR TO RELEASE OF ANY REMAINING CONTRACT RETENTION.

CONTRACTOR CERTIFICATE OF GOOD FAITH*

The intent of this certification is to document the good faith efforts implemented by the apparent low bidder in soliciting and utilizing M/WBE firms to meet the established M/WBE goals for County contracts. This certificate will assist Maricopa County in determining whether the apparent low bidder has implemented "good faith" efforts in accordance with the Maricopa County Minority Business Program. The burden of proof rests with the apparent low bidder.

(NOTE: Prior to filling out this certificate it is important that contractors review the "good faith" efforts requirements in the M/WBE section of the project specification booklet.)

Failure to implement "good faith" efforts to the satisfaction of Maricopa County will result in rejection of the proposal.

I, _____, do hereby acknowledge that I am the _____ of _____ who has been identified as the selected contractor on Flood Control District Project/Contract FCD No. 94-20.

Provide a brief summary of why the established M/WBE goal for this project has not been met. (Attach additional sheets if necessary.)

I hereby certify that I have made comprehensive "good faith" efforts to solicit and utilize County certified M/WBEs to meet the established M/WBE goal of this project as demonstrated by my responses to the following questions:

A. IDENTIFYING SUBCONTRACTOR WORK ITEMS

Contractors are encouraged to select portions of work to be subcontracted in a manner which will increase the likelihood of meeting the established M/WBE goal for the project. In selecting work to be performed, contractors will consider, where appropriate, breaking down the project into economically feasible units to facilitate M/WBE participation. Contractors are reminded that only M/WBE certified by the County can be used as participants towards meeting the project goals. A County M/WBE Certification listing will be provided to all contractors interested in submitting bids for projects. This listing is the only authorized source from which to select M/WBEs for project participation. Current copies of this listing may be obtained by calling the Minority Business Office at (602) 506-4068.

1. Which portions of the contract proposal, in terms of the nature of the work were selected to be subcontracted to M/WBE firms?

B. NOTIFYING M/WBE FIRMS OF CONTRACTING OPPORTUNITIES

1. Solicitations by mail/fax must be made to all M/WBE firms identified on the M/WBE Certification Listing that perform the type of work which is proposed for subcontracting. Following this initial solicitation, at least one follow-up telephone call must be made to any of the M/WBE firms who have not responded to the mailing.

2. In the spaces provided below, indicate which firms received written notification of work items to be subcontracted. In the appropriate space, also indicate when the M/WBE firms received subsequent telephone solicitations. Please attach additional sheets so that all firms contacted are listed and attach photo copies of all written/fax solicitations to M/WBEs to this documentation.

M/WBE Firm Contacted Date	Name	Date	Tel. No.
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3. Were the services of the County Minority Business Office used to assist the contractor in the recruitment of M/WBEs or to assist in solving other problems?

Yes _____ No _____

Contact was made by _____ telephone _____ written correspondence

Date contacted _____ Staff person contacted _____

C. PROVIDING M/WBEs WITH ASSISTANCE

1. Explain any efforts undertaken to provide M/WBEs with information regarding project plans, specifications and requirements of the project:

2. Describe any efforts initiated to provide special assistance to M/WBE firms interested in participating in this project:

3. Describe any efforts undertaken to assist M/WBE firms in obtaining bonding, lines of credit, or insurance required by the County for this project:

4. Was solicitation for M/WBEs advertised in local papers, ethnic periodicals, or trade journals? If YES, please list the name of the periodical and dates advertised.

D. SOLICITING QUOTES FROM M/WBE FIRMS

Contractors must solicit quotes in good faith with interested M/WBE firms. Quotes and bids from interested M/WBEs must not be rejected by bidders without sound justification based upon a thorough investigation of the capabilities of the M/WBE firms.

1. Indicate in the space provided below, which M/WBE firms submitted quotes on the project proposal. Also provide a brief explanation of why any of these M/WBE quotes were rejected. If price was a determining factor, provide documentation showing the non-minority quotes. Please attach additional sheets if necessary.

Name of M/WBE Firm Explanation for rejecting quote

* To be included in contract documents or those procurements which have M/WBE contract goals.

**FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
MINORITY/WOMEN-OWNED BUSINESS ENTERPRISE PROGRAM
MBE/WBE ASSURANCES AFFIDAVIT**

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS AFFIDAVIT WITH THE BID PROPOSAL SHALL BE CAUSE FOR REJECTION OF THE BID.

The undersigned, fully cognizant of the Flood Control District of Maricopa County MBE/WBE Program requirements and of the goal established, hereby certifies that in the preparation of this bid,

(the entity submitting the bid)

(CHECK ONE)

- Will meet the established goal for participation by Minority/Women-Owned Business Enterprises.
- Will provide the necessary documentation to Minority Business Office to establish that a good faith effort was made.

The first and second low bidders will specify their MBE/WBE participation on the Actual Participation Affidavit or provide documentation of their good faith efforts not later than 4:00 p.m., the seventh calendar day following the bid opening. If participation is "None", the Affidavit will be completed and returned with "None" so stated therein, together with the documentation of bidder's good faith efforts to obtain the participation. This documentation will be reviewed by the MBO to determine whether in fact a comprehensive "good faith" effort has been implemented. The required affidavit shall be obtained by the apparent first and second low bidders from the Minority Business Office, 100 West Clarendon, Suite 1420, Phoenix, Arizona 85013, Telephone 506-8653, following the bid opening and verbal notification from the Procurement Officer of the Procurement Agency; a SAMPLE affidavit form for reference purposes follows.

Name of Firm

Signature

Title

STATE OF ARIZONA)
)ss.
County of Maricopa)

Subscribed and sworn to before me this _____ day of _____, 199__

BY: _____

Notary Public

My Commission Expires: _____

**FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
 MINORITY/WOMEN OWNED BUSINESS ENTERPRISE PROGRAM
 ACTUAL MBE/WBE PARTICIPATION AFFIDAVIT
 (NOTE: COMPLETED AFFIDAVIT MUST BE SUBMITTED WITHIN SEVEN CALENDAR DAYS
 FOLLOWING THE BID OPENING).**

 Name of Contractor

Project/Contract Number FCD 94-20
 Contract M/WBE Goal: 10 %

Total Amount of Contract _____

 Contact Person

 Street No.

 City State Zip

<u>Minority/Women Owned Firm</u>	<u>Principal</u>	<u>Address</u>	<u>Type of Work</u>	<u>Proposed Contract Percentage</u>
----------------------------------	------------------	----------------	---------------------	-------------------------------------

TOTAL (Dollars/Percentage) _____

The undersigned has entered into a formal agreement with the MBE/WBE consultants, subcontractors /suppliers listed above, in the execution of this contract with Maricopa County.

SAMPLE

 Signature

 Title

 Date

STATE OF ARIZONA)
) as
 County of Maricopa)

Subscribed and sworn to before me this _____ day of _____ by _____
 Notary Public

My commission Expires: _____

**MARICOPA COUNTY
MINORITY/WOMEN-OWNED BUSINESS ENTERPRISES PROGRAM**

**MBE/WBE PARTICIPATION REPORT
(To be attached with Request for Pay)**

Date: _____
Contractor: _____
Contact Person: _____
Address: _____
Telephone: _____

Project: Beardsley Road Regional Drainage System
Contract Number: FCD 94-20
For Pay Period of: _____

Subcontractor: _____
Person to Contact: _____
Address: _____
Telephone Number: _____

Type of Firm: _____
Class of Work: _____

Subcontract Amount: _____
Amount Earned _____
(Commission) This Period: _____

Total Earned by This Subcontractor: _____
Total MBE/WBE Contract Goal, %: 10 Percent (10%)
Total Cumulative MBE/WBE _____

Participation on This Contract, %: _____
MBE/WBE subcontract payment made _____
during this reporting period (yes or no): _____

cc: Minority Business Office
3003 North Central Avenue
Phoenix, Arizona 85012

CONTRACT AGREEMENT

THIS AGREEMENT, made and entered into this ___ day of _____, 1994 by and between FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, hereinafter called the OWNER, acting by and through its BOARD OF DIRECTORS, and _____, hereinafter called the CONTRACTOR.

WITNESSTH: That the said CONTRACTOR, for and in the consideration of the sum of _____ to be paid to him by the OWNER, in the manner and at the times hereinafter provided, and of the other covenants and agreements herein contained, hereby agrees for himself, heirs, executors, administrators, successors, and assigns as follows:

ARTICLE I - SCOPE OF WORK: The CONTRACTOR shall construct, and complete in a workmanlike and substantial manner and to the satisfaction of the Interim Chief Engineer and General Manager, a project for the Flood Control District of Maricopa County, designated as FCD Contract 94-20, and furnish at its own cost and expense all necessary machinery, equipment, tools, apparatus, materials, and labor to complete the work in the most substantial and workmanlike manner according to the Plans and Construction Specifications on file with the Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona, and such modifications of the same and other directions that may be made by the Flood Control District of Maricopa County as provided herein.

ARTICLE II - CONTRACT DOCUMENTS: The Construction Specifications (Invitation to Bid, Plans, Standard Specifications and Details, Supplementary General Conditions, Special Provisions, Addenda, if any, Proposal, Affidavits, Performance Bond, Payment Bond, Certificates of Insurance, and Change Orders, if any), are by this reference made a part of this Contract and shall have the same effect as though all of the same were fully inserted herein.

ARTICLE III - TIME OF COMPLETION: The CONTRACTOR further covenants and agrees at its own proper 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 within the time, or times, stated in the proposal pamphlet.

ARTICLE IV - 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 OWNER, through its Engineer and to its satisfaction, the OWNER agrees to pay the said CONTRACTOR 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 in accordance with the requirements of A.R.S. Sec. 34-221, as amended. The CONTRACTOR agrees to discharge its obligations and make payments to its subcontractors and suppliers in accordance with A.R.S. Sec. 34-221.

ARTICLE V - TERMINATION: The OWNER hereby gives notice that pursuant to A.R.S. Sec. 38-511(A) this contract may be canceled without penalty or further obligation

within three years after execution if any person significantly involved in initiation, negotiation, securing, drafting or creating a contract on behalf of the OWNER is, at any time while the contract or any extension of the contract is in effect, an employer agent of any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract. Cancellation under this section shall be effective when written notice from the Chief Engineer and General Manager of the OWNER is received by all of the parties to the contract. In addition, the OWNER may recoup any fee for commission paid or due to any person significantly involved in initiation, negotiation, securing, drafting or creating the contract on behalf of the OWNER from any other party to the contract arising as a result of the contract.

ARTICLE VI - NEGOTIATION CLAUSE: Recovery of damages related to expenses incurred by the CONTRACTOR for a delay for which the OWNER is responsible, which is unreasonable under the circumstances and which was not within the contemplation of the parties to the contract, shall be negotiated between the CONTRACTOR and the OWNER. This provision shall be construed so as to give full effect to any provision in the contract which requires notice of delays, provides for arbitration or other procedure for settlement or provides for liquidated damages.

ARTICLE VII - COMPLIANCE WITH LAWS: The CONTRACTOR is required to comply with all Federal, State and local ordinances and regulation. The CONTRACTOR's signature on this contract certifies compliance with the provisions of the I-9 requirements of the Immigration Reform Control Act of 1986 for all personnel that the CONTRACTOR and any subcontractors employ to complete this project. It is understood that the OWNER shall conduct itself in accordance with the provisions of the Maricopa County Procurement Code.

ARTICLE VIII - MBE/WBE PROGRAM: The Flood Control District of Maricopa County will endeavor to ensure in every way possible that minority and women-owned business enterprises shall have every opportunity to participate in providing professional services, purchased goods, and contractual services to the Flood Control District of Maricopa County without being discriminated against on the grounds of race, religion, sex, age, disability, or national origin. The Maricopa County Minority Business Program implemented January 1, 1992, is incorporated by reference.

ARTICLE IX - ANTI-DISCRIMINATION PROVISION: The CONTRACTOR agrees not to discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, or disability and further agrees not to engage in any unlawful employment practices. The CONTRACTOR further agrees to insert the foregoing provision in all subcontracts hereunder.

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 herein above named, on the date and year first above written.

COUNTY
PARTY OF THE FIRST PART

FLOOD CONTROL DISTRICT OF MARICOPA

PARTY OF THE SECOND PART

BY: _____
Printed Name

BY: _____

CHAIRMAN, BOARD OF DIRECTORS

BY: _____
Signature

DATE: _____

Title _____

ATTEST:

DATE: _____

Clerk of the Board

Tax Identification Number

RECOMMENDED BY:

INTERIM CHIEF ENGINEER AND GENERAL MANAGER
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

DATE: _____

LEGAL REVIEW

Approved as to form and within the powers and authority granted under the laws of the State of Arizona to the Flood Control District of Maricopa County.

BY: _____
GENERAL COUNSEL, FLOOD CONTROL
DISTRICT OF MARICOPA COUNTY

DATE: _____

**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 its principal office in the City of _____ (hereinafter called the Surety), as Surety, are held and firmly bound unto the Flood Control District of Maricopa County, in the County of Maricopa, State of Arizona (hereinafter called the Obligee), in the amount of _____ dollars (\$_____), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with Flood Control District of Maricopa County, dated the ____ day of _____, 1994 for FCD Contract 94-20 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 the Principal or the Principal's subcontractors in the prosecution of the work provided for in the contract, this obligation is void. Otherwise it remains in full force and effect.

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

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

Witness our hands this ____ day of _____, 1994.

PRINCIPAL SEAL

BY: _____

TITLE: _____

AGENCY OF RECORD, STATE OF ARIZONA

AGENCY ADDRESS

SURETY SEAL

BY: _____

TITLE: _____

BOND NUMBER. _____

ATTACH SURETY POWER OF ATTORNEY

**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 Flood Control District of Maricopa County, in the County of Maricopa, State of Arizona, in the amount of _____ dollars (\$ _____), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with Flood Control District of Maricopa County, dated the ____ day of _____, 1994, for FCD Contract 94-20, 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 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 of the court.

Witness our hands this _____ day of _____, 1994

PRINCIPAL SEAL

BY: _____

TITLE: _____

AGENCY OF RECORD, STATE OF ARIZONA

AGENCY ADDRESS

BOND NUMBER. _____

ATTACH SURETY POWER OF ATTORNEY

SURETY SEAL

BY: _____

TITLE: _____

BY: _____

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

CERTIFICATE OF INSURANCE

CONTRACT FCD 94-20

PROJECT TITLE Beardsley Road Regional Drainage System

NAME AND ADDRESS OF INSURANCE AGENCY	INSURANCE COMPANIES AFFORDING COVERAGES
	Company Letter A
	Company Letter B
NAME AND ADDRESS OF INSURED	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	POLICY NUMBER	EXPIRATION DATE	LIMITS OF LIABILITY IN \$1,000 MINIMUM each occurrence	
	COMMERCIAL GENERAL <input checked="" type="checkbox"/> 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 OPERATIONS HAZARD <input checked="" type="checkbox"/> UNDERGROUND HAZARD <input checked="" type="checkbox"/> INDEPENDENT CONTRACTORS <input checked="" type="checkbox"/> PERSONAL INJURY			BODILY INJURY per person PROPERTY DAMAGE each occurrence	\$5,000 Combined Single Limit
	COMPREHENSIVE AUTO <input checked="" type="checkbox"/> LIABILITY & NON-OWNED			SAME AS ABOVE	
	<input type="checkbox"/> EXCESS LIABILITY			NECESSARY IF UNDERLYING NOT ABOVE MINIMUM	
	<input checked="" type="checkbox"/> WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY			STATUTORY each accident	\$100
	<input type="checkbox"/> ENGINEERS PROFESSIONAL LIABILITY			EACH CLAIM AND ANNUAL AGGREGATE	
	<input checked="" type="checkbox"/> OTHER <u>In addition to the Flood Control District, add the City of Phoenix, Maricopa County, and the Arizona Department of Transportation, as additional insureds.</u>				

Except for Professional Liability Insurance and Workers' Compensation Insurance, the Flood Control District of Maricopa County is added as an additional insured in respect to liability arising in any manner out of the performance of any contract entered into between the insured and the Flood Control District or liability arising out of any services provided or duty performed by any party as required by statute, law, purchase order, or otherwise required, with the exception of liability for loss or damage resulting from the sole negligence of Flood Control District, its agents, employees, or indemnitees. 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 effect the coverage available to the District without thirty (30) days written notice to the District. THIS CERTIFICATE IS NOT VALID UNLESS COUNTERSIGNED BY AN AUTHORIZED REPRESENTATIVE OF THE INSURANCE COMPANY

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
 2801 West Durango Street
 Phoenix, Arizona 85009

DATE ISSUED _____

AUTHORIZED REPRESENTATIVE _____

It is further agreed that:

The Contractor hereby agrees to indemnify and save harmless the FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, Maricopa County, the City of Phoenix, and Arizona Department of Transportation, or any of their departments, agencies, officers or employees, from and against all loss, expense, damage or claim of any nature whatsoever which is caused by any activity, condition or event arising out of the performance or nonperformance of any of the provisions of this Agreement, with the exception of liability for loss resulting from the sole negligence of the Flood Control District, its agents, employees, or indemnities.

The Flood Control District of Maricopa County, Maricopa County, the City of Phoenix and Arizona Department of Transportation shall in all instances be indemnified against all liability, losses and damages of any nature for or on account of any injuries to or death of persons or damages to or destruction of property arising out of or in any way connected with the performance or nonperformance of this Agreement, except such injury or damage as shall have been occasioned by the sole negligence of the Flood Control District of Maricopa County, Maricopa County, the City of Phoenix, and Arizona Department of Transportation.

The above cost of damages incurred by the Flood Control District of Maricopa County, Maricopa County, the City of Phoenix, and Arizona Department of Transportation or any of their departments, agencies, officers or employees, or others aforesaid shall include in the event of an action, court costs, expenses for litigation and reasonable attorney's fees.

Firm

Date

Principal

Title

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

SUPPLEMENTARY GENERAL CONDITIONS
FCD CONTRACT 94-20

ARIZONA PROJECT 101L MA 024 H 3635 01 C
RAM 600-1-539

The following Supplementary General Conditions are required by the Flood Control District of Maricopa County:

SPECIFICATIONS:

Except as otherwise amended herein and the Special Provisions, the construction of this project, shall be performed in accordance with applicable requirements of the following separate documents:

Part 100

Maricopa Association of Governments, Uniform Standard Specifications for Public Works Construction, latest revision.

Division II through X (Sections 201 through 1014)

Arizona Department of Transportation, Highways Division, Standard Specifications for Road and Bridge Construction, Edition of 1990,

Arizona Department of Transportation, Highways Division, Standard Drawings, listed in the project plans and defined hereinafter,

Manual on Uniform Traffic Control Devices for Streets and Highways, 1988, and Amendments; Drainage Design Manual for Maricopa County, Arizona, Volume III, Erosion Control; and City of Phoenix, Traffic Barricade Manual, Street Transportation Department, January 1989.

PRECEDENCE OF CONTRACT DOCUMENTS

In case of a discrepancy or conflict, Project Plans will govern over the ADOT Standard Specifications, MAG Standard Specifications and Drawings. The Supplementary General Conditions and Construction Special Provisions will govern over the applicable Standard Specifications and Drawings and the Project Plans. Change Orders will govern over the Supplementary General Conditions, Construction Special Provisions, applicable Standard Specifications and Drawings, and Project Plans.

ADDITIONS AND REVISIONS TO STANDARD SPECIFICATIONS:

Subsection 101.2 - Definitions and Terms:

1. Change the definition of the phrase "Board of Supervisors" to being the Board of Directors acting under the authority of the laws of the State of Arizona and in their capacity of the Board of Directors of the Flood Control District of Maricopa County.

2. Change the definition of the phrase "Budget Project" to being a project financed by funds set aside in the annual budget or otherwise approved by the Flood Control District of Maricopa County Board of Directors.
3. Add to the definition of the phrase "Contract Documents", the phrase "Supplementary General Conditions".
4. Change the definition of the term "Engineer" to being the person appointed by the Flood Control District of Maricopa County Board of Directors to the office of Chief Engineer and General Manager of the Flood Control District of Maricopa County acting directly or through its authorized representative, the Chief of the Flood Control District of Maricopa County Construction and Operations Division.
5. Change the definition for the phrase "Notice of Award" to a letter from the Flood Control District of Maricopa County advising Contractor that it is the successful bidder and the Flood Control District of Maricopa County has accepted its proposal.
6. Change the definition of the term "Owner" to the Flood Control District of Maricopa County, acting through its legally constituted officials, officers, or employees.
7. Add the definition for Maricopa County Minority Business Office (MBO); the office responsible for administering the Maricopa County Minority and Women Owned Business Enterprise Program.
8. Add the definition for the Maricopa County Minority and Women Owned Business Enterprise Program as being the Program adopted by the Board of Supervisors effective January 1, 1992.
9. Add the definition of the term the "Department" to being the Arizona Department of Transportation, Highways Division.

Subsection 102.4 - Examination of Plans, Special Provisions and Site Information: Add the following:

Projects requiring materials, excavation, or site investigation may have additional information available concerning the material investigations of the project site and adjacent projects. This information, when available and applicable, may be examined in the Office of the Assistant State Engineer, Materials Section, 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740. This information will not be attached to the contract documents. Copies of available information may be purchased by prospective bidders.

Subsection 102.5 - Preparation of Proposal: Add the following:
Proposals, including the Bidding Schedule, must be legibly written in ink or typed.

It shall be the responsibility of prospective bidders to determine, prior to submission of a bid, if any addenda have been issued by the Flood Control District. This may be accomplished by calling 602-506-1501. Any addendum issued, if not already bound into the Special Provisions, must be attached and included as part of the Specifications and any quantities on the Bidding Schedule

requiring change shall be adjusted to the new figure by pen and ink. **Bids which do not have appropriate addenda attached and show appropriate changes to the Bidding Schedule, and receipt of addenda acknowledged in the Proposal shall be invalid.**

The bidder's Arizona State Contractor's License number and the classification under which it proposes to perform the work shall be shown on the proposal. **An A General Engineering License is required for this contract.** The two lowest bidders may be required to provide certification of prior satisfactory completion for similar construction and to furnish a copy of their license and the renewal certificate.

Subsection 102.6 - Subcontractors' List: Add the following:

A list of subcontractors to be employed on the project shall be submitted with the bid, on the form provided in the Proposal. No change of the subcontractors named therein will be made unless first approved in writing by Owner.

Subsection 102.7 - Irregular Proposals: Add the following :

(F) If bidder fails to complete and submit the Maricopa County Minority and Women-Owned Business Enterprises Assurances Affidavit, the bid will be considered nonresponsive and rejected.

(G) If bidder fails to acknowledge AND attach any addendum issued, if addendum is not already bound into the Specifications, the bid will be considered nonresponsive and rejected.

(H) If bidder fails to utilize Owner's bond forms, the bid will be considered nonresponsive and rejected.

(I) If bidder fails to return the entire specifications document, the bid will be considered nonresponsive and rejected.

Subsection 103.6 - Contractor's Insurance: Add the following:

A statement from bidder's insurance carrier shall be included in the proposal certifying that it will furnish the specified kind and amounts of insurance to the bidder if it is awarded the contract. As required by law, the statement will be from an insurance carrier or carriers authorized to do business in the State of Arizona, or countersigned by an agent of the carrier authorized to do business in the State of Arizona. Concurrently with the execution of the contract, Contractor shall furnish a Certificate of Insurance using the included Certificate or one of equal wording, that names the additional insureds as set out in the Certificate. The Certificate shall also name the additional insureds as Certificate Holders. The types of insurance and the limits of liability shall be as indicated on the included form.

Subsection 103.6.1(D) - Contractor's Insurance: Add the following:
Include additional insureds as indicated on the included Certificate of Insurance.

Subsection 103.6.2 - Indemnification of the Contracting Agency Against Liability: Add the following: Additionally, Contractor shall execute the Indemnification on Page 30 of 30 of the Contract Documents.

Subsection 104.1 - Work to be Done: Add the following sentence to 104.1.1:

All water for construction purposes, drinking water, lighting, temporary electric power, heat and telephone service shall be arranged and provided for as per requirements of the work by Contractor at his expense.

SECTION 105 CONTROL OF WORK is modified to add:

POWER LINES:

The project is interlaced with a network of underground and overhead power lines. All work at or in close proximity to said lines shall be work performed in accordance with all Federal, State, and local laws and regulations, including but not limited to:

- A. Arizona law regarding "Underground Facilities" (A.R.S. 40-360.21, .22, .24, .26 and .28).
- B. Arizona law regarding "High Voltage Power Lines and Safety Restrictions" (A.R.S. 40-360.41 - .45).
- C. The Occupational Safety and Health Administration.
- D. The National Electric Safety Code.
- E. In the event that pole bracing or deenergization of power lines is required, the costs for this work shall be borne by the contractor. The contractor shall contact Lois Winkler at APS, phone 602/371-6837, at least two weeks prior to the start of construction to make the necessary arrangements.

105.1 - Authority of Engineer: Add the following:

105.1.1 - Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to subsections 105.3.1 and 106.4. Engineer will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized without Engineer's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any "or-equal" or substitute. Engineer will record time required by Engineer and Engineer's Consultants in evaluating substitutes proposed or submitted by Contractor pursuant to subparagraphs 105.3.1 and 106.4(B) and in making changes in the Contract Documents (or in the provisions of any other direct contract with Owner for work on the project) occasioned thereby. Whether or not Engineer accepts a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer and Engineer's Consultants for evaluating each such proposed substitute item.

105.3 - Conformity with Plans and Specifications: Add the following :

105.3.1 - Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence or procedure of construction is shown or indicated and expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence or procedure of construction acceptable to Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent

to that expressly called for by the Contract Documents. The procedure for review by Engineer will be similar to that provided in subparagraph 106.4(B).

Subsection 105.6 - Cooperation with Utilities: Add the following:

An attempt has been made to determine the location of all underground utilities and drainage pipes, culverts, and structures; however, it shall be Contractor's responsibility to cooperate with the pertinent utility companies so that any obstructing utility installation(s) may be adjusted. Should Contractor's operations result in damage to any utility the location of which has been brought to its attention, he shall assume full responsibility for such damage. Contractor shall contact Arizona Blue Stake (telephone number 263-1100) a minimum of two (2) working days before beginning any underground work. In addition, Blue Stake notification(s) shall be maintained on a current basis.

The following phone numbers should put Contractor in contact with the proper personnel:

Flood Control District.....	506-1501
US West Communications.....	395-2550
Location Staking (A.P.S. , U.S. West, S.R.P.).....	263-1100
Maricopa County Department of Transportation.....	506-8600
Southwest Gas Corporation.....	484-5649
Arizona Public Service.....	371-6837
Dimension Cable	352-5860
City of Phoenix	261-8229

Subsection 105.8 - Construction Stakes, Lines, and Grades: Add the following:

- A. Engineer will furnish the project survey control line together with a Bench Mark which the construction contractor will use to set line and grade for all construction. All other surveying required for the project shall be the contractor's responsibility. Engineer will not set any construction stakes.
- B. Before any construction work is started, Engineer shall perform all base surveys and cross sections of existing conditions that may be required as a basis for quantity determination.

Subsection 106.1 - Source of Materials and Quality: Add the following:

Select Material, Aggregate Base, Mineral Aggregate, concrete, steel products and pipe shall be obtained from commercial sources. Contractor shall pay all royalties, or any other charges or expenses, incurred in connection with the securing and hauling of the material. Contractor will be required to furnish Engineer with a list of its proposed commercial sources prior to use, and shall present certificates stating that the material produced from any commercial sources is in accordance with the Uniform Standard Specifications and these Supplementary General Conditions.

Whenever water is required on the project as part of either a process or a product, it shall be free of contaminants which, in the judgment of the Engineer, constitute a health hazard to those individuals employed on the project and to the general public.

Untreated effluent shall not be utilized in any aspect of the work.

Subsection 106.2 - Samples and Tests of Materials: is revised to read:

(A) District Quality Acceptance:

All materials will be inspected, tested and approved by the Engineer prior to incorporation in the work. Any work in which materials not previously approved are used shall be performed at the contractor's risk and may be considered as unauthorized and unacceptable and not subject to the payment provisions of the contract.

Materials will be sampled and tested by a qualified representative of the District unless otherwise specified in the contract documents. Copies of all test results will be furnished to the contractor's representative at the contractor's request.

Whenever a reference is made in the specifications to an Arizona Test Method, it shall mean the test method in effect on the day the advertisement for bids for the work is dated.

Whenever a reference is made in the specifications to a Federal Specification, or to a specification or test designation of the American Society for Testing and Materials, or any other recognized national organization, it shall mean the year of adoption or latest revision of the specification or test designation in effect on the day the advertisement for bids for the work is dated.

(B) Contractor Quality Control:

(1) General:

The contractor is responsible for quality control measures necessary to provide acceptable quality in the production, handling, and placement of all materials. The specifications may require specific quality control measures for certain materials. When so specified, the contractor shall provide all the personnel, equipment, supplies, and facilities necessary to obtain samples and perform the tests listed in the applicable section.

At the preconstruction conference, the contractor shall designate a qualified employee as Quality Control Manager to be responsible for implementing, monitoring and, as necessary, adjusting the processes to assure acceptable quality. The Quality Control Manager shall be a full time employee of the contractor, and shall be on the project site during all construction activities. Also at the preconstruction conference, the contractor shall be prepared to discuss his understanding of the quality control responsibilities for the specified materials.

The contractor shall prepare and submit a written narrative to the Engineer describing the processes the contractor, subcontractors, and suppliers will employ in the production, handling and placement of the specified materials. The written narrative shall be submitted one week prior to the start of production of the applicable materials.

When requested by the contractor, the Engineer will engage in testing of materials for the purpose of correlating the contractor's test results to those of the Engineer's acceptance laboratory.

(2) Quality Control Laboratory:

The laboratory or laboratories shall meet the requirements of the Department's "System for the Evaluation of Testing Laboratories." These requirements may be obtained from the Materials Section, 1221 North 21st Avenue, Phoenix, Arizona 85009.

The Engineer shall promptly advise the contractor in writing of any noted deficiencies concerning the laboratory facility, equipment, supplies, or testing personnel and procedures.

(3) Quality Testing Supervisor:

The contractor shall designate a Quality Testing Supervisor to be responsible for supervising sampling and testing in accordance with the test requirements specified for the applicable section. The Quality Testing Supervisor shall be an employee of the contractor or a consultant engaged by the contractor. The contractor's Quality Testing Supervisor may be responsible for sampling and testing for one or more projects if that person can be at the job site within 24 hours of being notified of a problem.

The Quality Testing Supervisor shall be an individual meeting one of the following requirements:

(a) Professional Engineer registered in Arizona with one year of experience acceptable to the Engineer.

(b) Engineer-In-Training certified by the State of Arizona with two years of experience acceptable to the Engineer.

(c) An individual with three years of highway experience acceptable to the Department, and with a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology, or Construction.

(d) Construction Materials Technician certified at Level III by NICET.

(e) Highway Materials Technician certified at Level III by NICET.

(f) A NICET certified Engineering Technician in Civil Engineering Technology with five years of highway materials testing experience acceptable to the Department.

(g) An individual with eight years of highway materials testing and construction experience acceptable to the Engineer.

(4) Technician Qualification:

The Quality Testing Technician performing the actual sampling and testing shall meet one of the following criteria:

(a) Construction Materials Technician certified at Level II or higher by NICET in appropriate subfield.

(b) Those listed under (3)(a) through (3)(f) above, meeting the criteria for Quality Testing Supervisor, if they have a demonstrated proficiency in performing the appropriate test(s).

(c) Construction Materials Technician trainee under direct observation of an individual listed in (4)(a) or (4)(b) above. The number of trainees shall not exceed one-third of the total number of Quality Control Technicians on the project.

(5) Records:

The contractor shall maintain complete testing records and make them available to the Engineer for review and copies as requested.

Linear control charts shall be maintained by the contractor. Control charts shall be posted in a location satisfactory to the Engineer and shall be kept up to date at all times. As a minimum, the control charts shall identify the project number, the contract item number, the test number, each test parameter, the upper and/or lower specification limit applicable to each test parameter, and the contractor's test results. The contractor shall use the control charts as part of a process control system for identifying production and equipment problems and for identifying potential pay factor reductions before they occur.

(6) Weekly Quality Control Reports:

The Contractor shall submit Weekly Quality control Reports to the Engineer. The weekly reports shall state the type of work performed during the report period, and other process control measures taken to assure quality. Results of all tests, corrective action, retests, and linear control charts shall be attached to the weekly report. The report period shall end at midnight of each Friday, and the report shall be submitted to the Engineer no later than 5:00 p.m. of the following Wednesday.

(C) Certificates:

(1) General:

The contractor shall submit to the Engineer an original or copy of either a Certificate of Compliance or a Certificate of Analysis, as required, prior to the use of any materials or manufactured assemblies for which these specifications or the special provisions require that such a certificate be furnished.

The Engineer may permit the use of certain materials or manufactured assemblies prior to, or without, sampling and testing if accompanied by a Certificate of Compliance or Certificate of Analysis, as herein specified. Materials or manufactured assemblies for which a certificate is furnished may be sampled and tested at any time, and, if found not in conformity with the requirements of the plans and the specifications, will be subject to rejection, whether in place or not.

Certificates shall comply with the requirements specified herein and of the Materials Testing Manual.

(2) Certificate of Compliance:

A Certificate of Compliance shall contain the following information:

- (a) A description of the material supplied.
- (b) Quantity of material represented by the certificate.
- (c) Means of material identification, such as label, lot number, or marking.
- (d) Statement that the material complies in all respects with the requirements of the cited specifications. Certificates shall state compliance to the specific cited specifications, such as AASHTO M-194, ASTM A-588; or specific table or section of the Arizona Department of Transportation Standard Specifications or Special Provisions. Certificates may cite both, if applicable.
- (e) The name, title, and signature of a person having legal authority to bind the manufacturer or the supplier of the material. The date of the signature shall also be given. The name and address of the manufacturer or supplier of the material shall be shown on the certificate. A copy or facsimile reproduction (FAX) will be acceptable. However, the original certificate shall be made available upon request. The person signing the certificates shall be in one of the following categories:
 - a. An officer of a corporation.
 - b. A partner in a business partnership or an owner.
 - c. A general manager.
 - d. Any person having been given the authority in writing by one of the three listed above. The manufacturer or supplier may submit a list of those who are authorized to sign certificates. This list shall be submitted under the name, title, and signature of one of the first three listed above. This list will be kept on file for subsequent certificates received on that project.

Each of the first four items specified above shall be completed prior to the signing as defined in item five. No certificate will be accepted that has been altered, added to, or changed in any way after the authorized signature has been affixed to the original certificate. However, notations of a clarifying nature, such as project number, contractor, or quantity shipped are acceptable, provided the basic requirements of the certificate are not affected.

(3) Certificate of Analysis:

A Certificate of Analysis shall include all the information required in a Certificate of Compliance and, in addition, shall include the results of all tests required by the specifications.

Subsection 106.4 - Trade Names and Substitutions: Replace with the following:

Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function and quantity required. Unless the specification or description contains or is followed by words reading that no like, equivalent or "or-equal" item or no substitution is permitted, other items of material or equipment of other Suppliers may be accepted by Engineer under the following circumstances:

A) "Or-Equal": If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for acceptance of proposed substitute items.

B) Substitute Items: If in Engineer's sole discretion an item does not qualify as an "or-equal" item under subparagraph 106.4 (A), it will be considered a proposed substitute item. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. The procedure for review by Engineer will include the following and may be supplemented in the Special Provisions and as Engineer may decide is appropriate under the circumstances. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor. If Contractor wishes to furnish or use a substitute item of material or equipment, Contractor shall first make written application to Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified and be suited to the same use as that specified. The application will state the extent, if any, to which the evaluation and acceptance of the proposed substitute will prejudice contractor's achievement of completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for work on the project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by Engineer in evaluating the proposed substitute. Engineer may require Contractor to furnish additional data about the proposed substitute.

C) Contractor's Expense: All data to be provided by Contractor in support of any proposed "or-equal" or substitute item will be at Contractor's expense.

Subsection 106.7 - Unacceptable Materials: Add the following:

The contractor shall be responsible for the disposal of all items removed during construction. These shall include, but not be limited to, pipe, earthwork spoil, trash, asphalt or concrete pavements, curb and gutter, fencing, or any other items of a non-permanent nature.

Subsection 107.1 - Laws to be Observed: Add the following Paragraph (G):

(G) Contractor shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor Regulations (29 CFR Part 5). Contractor shall also comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, including CFR Parts 35 and 36.

Subsection 107.2 - Permits of the Standard Specifications: Replace with the following:

Contractor shall obtain all permits and licenses, pay all charges, fees, taxes, and provide all notices necessary and incidental to the due and lawful prosecution of the work.

A permit or permits may be required for hauling materials over City of Phoenix streets. Permits may be obtained from the City of Phoenix, at 262-6551. In applying for a permit the contractor may be required to submit a Haul Plan addressing the following issues.

- o Preferred haul routes and alternatives
- o A detailed plan for traffic control along the haul site
- o Method of dust control along the haul site
- o Number of trucks and hours of operation
- o Anticipated duration of the hauling activities
- o Method of cleaning up haul routes (may require street-legal sweeper)

This list is not considered as all-inclusive, but is intended to provide a summary of key points to be considered. The contractor shall familiarize himself with the requirements of the City of Phoenix in preparing his bid. The contractor is further advised that the City of Phoenix retains ultimate authority to approve or not approve a Haul Permit, impose additional restrictions, curtail hauling at certain times and require the use of specific routes.

Applications for haul permit(s) shall be made directly to the City of Phoenix with a copy of the approved permit delivered to the Engineer prior to commencement of haul operations.

Subsection 107.2 - Permits: Add the following:

107.2.1 - NPDES Permit Requirements:

- A. This project is subject to the National Pollutant Discharge Elimination System (NPDES) Stormwater requirements for construction sites under the Environmental Protection Agency (EPA) General Permit for Arizona. Under provisions of that permit, the contractor shall be designated as permittee, and shall take all necessary measures to assure compliance with the NPDES General Permit for Arizona as well as all other applicable Federal, State and local laws, ordinances, statutes, rules and regulations pertaining to stormwater discharge. As the permittee, the contractor is responsible for preparing, in a manner acceptable to the EPA, all documents required by this regulation, including but not necessarily limited to:

1. Stormwater Pollution Prevention Plan (SWPPP) for the project, including certification of compliance form. Contractor shall be required to develop, implement, update and revise the SWPPP, as necessary, in order to assure compliance with the EPA permit requirements. The SWPPP shall be retained on the project site at all times during construction.
 2. Notice of Intent (NOI) to assure compliance with the NPDES General Permit for Arizona, including certification of signatures.
 3. Notice of Termination (NOT) of coverage under NPDES General Permit for Arizona.
- B. Preliminary copies of the NOI and the SWPPP shall be submitted to Owner during the preconstruction meeting and shall be subject to review by Owner prior to implementation.
- C. Contractor shall submit the completed and duly signed NOI forms no later than forty-eight (48) hours prior to the initial start of construction on the project to the following agencies:

EPA Stormwater Notice of Intent
P.O. Box 1215
Newington, VA 22122

A copy of the completed NOI form shall be submitted to the following:

Stormwater Coordinator
Arizona Department of Environmental Quality
P.O. Box 600
Phoenix, AZ 85001-0600

Failure by the contractor (or subcontractors of any tier) to submit NOI's within the mandated time frame shall result in delay of the construction start date, and no claim for extension of time will be granted for such delay. A copy of the completed NOI shall be posted at the construction site.

- D. Inspections of all stormwater pollution control devices on the project shall be performed by Contractor on a monthly basis and following each rainfall of 0.50 inches or more in a 24-hour period at the project site as required under provisions of the NPDES General Permit for Arizona. Contractor shall prepare reports on such inspections and retain the reports for a period of three years following the completion of the project. Inspection reports shall be submitted monthly to Owner along with progress payment requests. Additionally, contractor shall maintain all stormwater pollution control devices on the project in proper working order, which shall include cleaning and/or repair during the duration of the project.
- E. Contractor warrants that its employees and subcontractors of any tier and their employees shall at all times comply with all applicable laws, ordinances, statutes, rules and regulations set forth by all federal, state and local governments and the Environmental

Protection Agency in connection with NPDES Permitting requirements and laws and regulations pertaining to air, groundwater and surface water quality.

Fines and penalties imposed by the EPA against Owner or the contractor, for contractor's failure to comply with any of the requirements of NPDES General Permit of Arizona, shall be borne by the contractor.

- F. Upon project completion, acceptance and demobilization, contractor shall submit its completed, duly executed NOT form to the EPA, with a copy to the Arizona Department of Environmental Quality (and the appropriate municipality), at the address listed in Section (B) above, thereby terminating all NPDES permit coverage for the project. Contractor shall then surrender to Owner copies of the SWPPP, inspection information and all other documents prepared and maintained by the contractor in compliance of the NPDES General Permit. Contractor shall retain the originals of such documents for a period of three (3) years following the completion of the project.
- G. There will not be a bid item for obtaining permits. All costs shall be considered incidental to the job and included in Item 9010001.
- H. Copies of all required forms and guidance for preparing the SWPPP are available in the "Drainage Design Manual for Maricopa County, Volume III Erosion Control". The manual is available at the Flood Control District, 2801 West Durango, Phoenix, Arizona 85009.

Subsection 107.5 - Safety, Health and Sanitation Provisions: Add the following:
The entire construction site shall be considered a "Hard Hat Area" and all personnel in the area will be required to wear a hard hat.

Subsection 107.5.3 - Compliance with the Arizona Communication Standard: Add the following:

Owner will provide Contractor with Material Safety Data Sheets (MSDS) for any products known to exist on the site that are deemed health hazards. Contractor will provide a copy of Owner-provided MSDS to all subcontractors.

Contractor will provide Owner and all subcontractors with MSDS for any products that have or are deemed health hazards that will be brought onto the site or created on the site by either Contractor or by any subcontractors.

Contractor will provide Owner with a statement certifying that all personnel (Contractor and subcontractor) employed by Contractor or by a subcontractor on the job site have received the required Hazard Communication Standard training.

Subsection 107.10 - Contractor's Responsibility for Work: Add the following:
Contractor is advised that the work will be subject to flows of water of varying amounts. Owner assumes no responsibility for notifying Contractor of any anticipated flows, nor any damages incurred by Contractor to its equipment or to any of the Contractor's work as a result of any flows of water.

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Subsection 108.1 - Notice to Proceed: Delete Paragraph (A) and replace with the following:
(A) Contractor shall commence work within seven (7) calendar days after the date of the Notice to Proceed and complete all work within three hundred sixty (360) calendar days beginning the day following the effective date specified in the Notice to Proceed.

Subsection 108.2 - Subletting of Contract: Add the following:
For this project, Contractor shall perform, with its own organization, work amounting to 50 percent or more of the total contract cost.

Subsection 108.4 - Contractor's Construction Schedule: Delete in its entirety and replace with the following:
Contractor shall submit a proposed work progress schedule to Engineer for review before starting work. Weekly updates shall be submitted to Owner's Inspector at the weekly coordination meeting.

Subsection 108.5 - Limitation of Operations: Add the following:
Should Contractor elect to perform any work after regular working hours, on weekends, or legal holidays, with or without written approval of Engineer, any charges incurred by Owner for inspection of the work, surveys or tests of materials will be deducted from monies due or to become due to Contractor.

Subsection 108.9 - Failure to Complete on Time: Add the following:
The actual cost per calendar day incurred by Owner for Consultant Administrative and Inspection Services on this project will be added to the daily charges as indicated by TABLE 108, LIQUIDATED DAMAGES, and will be deducted from monies due or to become due to Contractor for each and every calendar day that work shall remain incomplete after the time specified for the completion of the work in the proposal, or as adjusted by Engineer. Nothing contained in this provision shall prohibit Owner from deducting from monies due or to become due to Contractor for any other costs incurred by Owner directly attributable to the delay in completing this contract.

SECTION 109 - MEASUREMENTS AND PAYMENTS:

Delete this section and substitute, in its entirety, **SECTION 109 - MEASUREMENT AND PAYMENT** of the Arizona Department of Transportation, Highways Division, Standard Specifications for Road and Bridge Construction, Edition of 1990.

Subsection 109.2 - Scope of Payment: Add the following:
In addition to the contained provisions, the work under this section shall consist of preparatory work and operations, including but not limited to, the movement of personnel, equipment, supplies and incidentals to the project site; the establishment of all offices, buildings and other facilities necessary for work on the project, and for all other work operations that must be performed and costs incurred prior to beginning work on the various items on the project site.

109.04 (A) (3) **Equipment:** the third sentence of the first paragraph of the Standard Specifications is hereby deleted:

109.04 (A) (3) Equipment: of the Standard Specifications is modified to add:

Following is a rate adjustment factor table to be utilized with the Blue Book rates in adjusting rates, based on year of manufacture, for equipment used on force account work.

RATE ADJUSTMENT FACTOR TABLE

<u>Year of Manufacture</u>	<u>Adjustment Factor</u>
1993 and later	1.000
1992	0.991
1991	0.980
1990	0.966
1989	0.950
1988	0.935
1987	0.926
1986	0.922
1985	0.916
1984 or earlier	0.912

109.04 (A) (3) (a) Rental Rates (Without Operators): the first paragraph on page 92 of the Standard Specifications is revised to read:

The Blue book regional adjustment factor will be 0.95 for all types of equipment.

109.04 (A) (3) (a) Rental Rates (Without Operators): of the Standard Specifications is modified to add:

Overhead and profit will be allowed in an amount equal to four percent of the total of the equipment costs, after application of the yearly and regional factors, and the operating costs.

Subsection 109.06 - Partial Payments: Delete the last sentence of the first paragraph and add the following:

(C) Contractor's partial pay estimates will be initially processed by Owner's Construction and Operations Division on a Tuesday, Tuesdays being the only day Contractor may submit a pay estimate.

109.10 Lump Sum Payment for Structures: of the Standard Specifications is modified to add:

The District will compensate the contractor for construction of the each of the following structures or group of structures on the basis of a lump sum amount:

- (A) Structure No. 2404 (Private Access Bridge)
- (B) Bus Maintenance Facility
- (C) 41st Avenue Bridge

(D) Private Drive Bridge

Measurement and payment for the work will be made in accordance with the requirements of LUMP SUM PAYMENT FOR STRUCTURES under SECTION 109 - MEASUREMENT AND PAYMENT.

109.10 (B) Adjustments Due to Quantity Variations: is revised to read:

For all items of work, other than the structural concrete, structural steel, reinforcing steel, structural excavation and structural backfill, no adjustment to the Bidding Schedule's quantities, unit prices, extended amounts, and resulting lump sum amount will be made following the award of contract because of any errors or omissions made either by the District in its calculations of quantities or by the contractor in his/her calculations.

Adjustments in the Bidding Schedule quantities for structural concrete, structural steel, reinforcing steel, structural excavation, and structure backfill may be initiated by the contractor of the Engineer if evidence indicates that the required quantity varies by an amount greater than five (5%) percent of the Bidding Schedule quantity. The contractor shall advise the Engineer in writing, submitting such evidence and requesting an adjustment of the quantities. The Engineer will determine the amount of adjustment, if any. The quantity upon which payment will be based will be the Bidding Schedule quantity plus or minus only that portion of the adjustment that exceeds five (5%) percent of the Bidding Schedule quantity. No adjustment to contract time will be allowed due to lump sum structure quantity variations.

109.10 (C) Adjustments Due to Revisions Ordered By The Engineer: the last paragraph of the Standard Specifications is revised to read:

If the revisions affect work for which no Bidding Schedule item has been established, payment for this work will be made in accordance with the requirements of Subsection 104.2.

109.10 (D) Payment: the second sentence of the third paragraph of the Standard Specifications is revised to read:

At least 5 days prior to the closing date scheduled for monthly progress payments, the contractor shall furnish the Engineer an estimate of the quantity of each item of work shown in the Bidding Schedule for which the contractor expects to be compensated.

ADDITIONS AND REVISIONS TO THE STANDARD SPECIFICATIONS:

STANDARD SPECIFICATIONS ERRATA:

The following changes shall be made to cover errors in the text of the Standard Specifications:

Page 91:

109.04 (A) (3) - **Equipment:** the phone number in the fourth sentence of the first paragraph is revised to read (800) 669-3282.

Page 94:

109.06 **Partial Payments:** the last sentence of the first paragraph of the Standard Specifications is hereby deleted:

Page 99:

201-3.01 **Clearing and Grubbing:** the fourth paragraph of the Standard Specifications is revised to read:

In embankment areas, where the subgrade is five or more feet above the natural ground line, all trees, stumps and roots shall be cut off not more than one foot above the natural ground or shall be completely removed where a structure is to be constructed, piles are to be placed or driven or where unsuitable material is to be removed.

Page 108:

203-3.03 (A) **General:** the second sentence of the first paragraph of the Standard Specifications is revised to read:

When Portland Cement Concrete Pavement or Asphaltic Concrete Pavement are to be placed directly on the subgrade, the finished surface shall not vary by more than 0.02 foot above or 0.04 foot below the established grade.

Page 119:

203-5.04 (A) **Structural Excavation:** the last paragraph of the Standard Specifications is revised to read:

No measurement for payment will be made for structural excavation when structures are to be supported on piles or drilled shafts in new embankment sections.

Page 122:

203-10.03 (A) **Placement:** the second sentence of the first paragraph of the Standard Specifications is revised to read:

When Portland Cement Concrete Pavement or Asphaltic Concrete Pavement are to be placed directly on the subgrade, the finished surface shall not vary by more than 0.02 foot above or 0.04 foot below the established grade.

Page 127:

205-3.04 **Compacting and Finishing:** the second sentence of the second paragraph of the Standard Specifications is revised to read:

The finished surface of the subgrade shall not vary by more than 0.04 of a foot above or below the grade established by the Engineer except when Portland Cement Concrete Pavement or Asphaltic Concrete Pavement are to be placed directly on the subgrade, the finished surface shall not vary by more than 0.02 foot above or 0.04 foot below the established grade.

Page 197:

404-1 **Description:** the second paragraph of the Standard Specifications is revised to read:

The kind of bituminous treatment may consist of one or a combination of the following:

- Prime Coat
- Tack Coat
- Fog Coat
- Chip Seal Coat

Page 224:

406-10.03 **Proportioning:** the fourth sentence of the third paragraph of the Standard Specifications is revised to read:

The mixing device shall be designed such that the mixture of aggregate and admixture is moved in a near horizontal direction by the mixing paddles without the aid of conveyor belts for a distance of at least three feet.

Page 242:

SECTION 407 - **ASPHALTIC CONCRETE FRICTION COURSE:** the number for Subsection 407-1 Construction Requirements of the Standard Specifications is revised to read:

407-10 **Construction Requirements:**

Page 256:

408-7.03 **Proportioning:** the fourth sentence of the third paragraph of the Standard Specifications is revised to read:

The mixing device shall be designed such that the mixture of aggregate and admixture is moved in a near horizontal direction by the mixing paddles without the aid of conveyor belts for a distance of at least three feet.

Page 326:

503-2.01 - **Concrete:** of the Standard Specifications is revised to read:

Portland cement concrete shall conform to the requirements of Section 1006 for Class B concrete.

Page 340:

601-3.02 (D) **Removal of Falsework and Forms:** the first sentence of the seventh paragraph of the Standard Specifications is revised to read:

Placement of backfill material shall be in accordance with Subsection 203-5.03 (B).

Page 472:

730-6 **Locations of Utilities:** the second and third paragraphs of the Standard Specifications are revised to read:

In addition to the requirements of Subsection 107.20, the contractor's attention is directed to the requirements of A.R.S. 40-360.21 through .29 requiring all parties excavating in public streets, alleys or utility easements to first secure the locations of all underground facilities in the vicinity of the excavation.

The contractor shall contact the Blue Stake Center at least two working days prior to commencing excavation, for information relative to the location of buried utilities within the project limits.

Page 626:

902-2.05 **Tension Wire and Fabric Fasteners:** the last paragraph of the Standard Specifications is revised to read:

The minimum weight of zinc-coating shall conform to the requirements of ASTM A641, Class 3. The minimum weight of aluminum coating shall be 0.40 ounces per square foot of wire surface area.

Page 642:

905-5 **Basis of Payment:** the last paragraph of the Standard Specifications is modified to add:

Concrete barrier that is part of a guard rail transition shall be measured and paid for in accordance with the requirements of Section 910 for concrete barrier transition.

Page 656:

910-4 **Method of Measurement:** the last paragraph of the Standard Specifications is modified to add:

Sections of concrete barrier that transition from one shape, or type, to another shape, or type, and concrete barrier for guard rail transition, shall be measured by the linear foot of concrete barrier transition that is not part of a structure.

910-5 Basis of Payment: of the Standard Specifications is modified to add:

The accepted quantities of concrete barrier transition, measured as provided above, will be paid at the contract unit price per linear foot, which price shall be full compensation for the work, complete in place, including excavation, backfill, caissons, structural concrete, reinforcing steel, and dowels. Guardrail attached to concrete barrier will be paid for in accordance with the requirements of subsection 905-5.

Page 672:

SECTION 914 - SOUND BARRIER WALLS: the title for Section 914 of the Standard Specifications is revised to read:

WALLS AND MISCELLANEOUS STRUCTURES:

SECTION 914-1 Description: of the Standard Specifications is revised to read:

The work under this section consists of furnishing all materials and constructing walls and miscellaneous structures at the locations and in accordance with the details shown on the project plans.

SECTION 914 - SOUND BARRIER WALLS: the number of subsection 915-5 Basis of Payment of the Standard Specifications is revised to read:

914-5 Basis of Payment:

Page 757:

1012-3 Miscellaneous Materials: the first sentence of the fourth paragraph of the Standard Specifications is revised to read:

The metal used to manufacture reflector tabs shall be either 3003-H14 aluminum strip 0.063" \pm .004 inch thick or steel strip 0.078" \pm .008 inch thick with a G-90 galvanized coating.

SECTION 203 - EARTHWORK: of the Standard Specifications is modified to add:

203-2.02 Contractor Quality Control:

The contractor shall perform the quality control measures described in section 106.04(B). The written narrative shall include the following processes:

- (a) Backfill production, including crusher methods, pit extraction, and washing.

- (b) Stockpile management, including stacking methods, separation techniques, stockpile pad thickness, and segregation prevention.
- (c) Transporting and placing, including transport technique, lift thickness, processing and mixing technique, and compaction methods.
- (d) Excavation and transporting, including method of excavation and transporting methods.
- (e) Embankment, including method of mixing, compaction methods, unsuitable material control, waste site, and lift thickness.

The contractor shall obtain samples and perform the tests specified in the following table:

CONTRACTOR QUALITY CONTROL TESTING REQUIREMENTS					
TYPE OF TEST	TEST METHOD	SAMPLING POINT	MINIMUM TESTING FREQUENCY		
Structure Backfill					
Gradation	ARIZ 201	Stockpile	1 per 500 CY per Source		
PI	AASHTO T89, T90				
Proctor Density	ARIZ 225, ARIZ 226, ARIZ 245	Roadway	1 per 200 CY, minimum 1 per lift		
Compaction	ARIZ 227, ARIZ 230, ARIZ 231, ARIZ 232, ARIZ 235, ARIZ 246				
Subgrade					
Gradation	ARIZ 201			Roadway	1 per Soil Type
PI	AASHTO T89, T90				
Proctor Density	ARIZ 225, ARIZ 226, ARIZ 245			Roadway	1 per 1000 linear foot per lift
Compaction	ARIZ 227, ARIZ 230, ARIZ 231, ARIZ 232, ARIZ 235, ARIZ 246				

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Natural Ground for Embankment less than 5 feet

Proctor Density	ARIZ 225, ARIZ 226, ARIZ 245	In-place	1 per soil type
Compaction	ARIZ 227, ARIZ 230, ARIZ 231, ARIZ 232, ARIZ 235, ARIZ 246	In-place	1 per 1000 linear foot per lift

Embankment

Proctor Density	ARIZ 225, ARIZ 226, ARIZ 245	In-place	1 per Soil Type
Compaction	ARIZ 227, ARIZ 230, ARIZ 231, ARIZ 232, ARIZ 235, ARIZ 246	In-place	1 per 1000 linear foot per lift

Borrow Within 3 ft. of Finished Subgrade Elevation

Gradation PI	ARIZ 201 AASHTO T89, T90	In-place	1 per 2000 CY
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SECTION 901 - MOBILIZATION:

901.5 Basis of Payment: first paragraph of the Standard Specifications is revised to add:
Contract Lump Sum Price shall be determined by calculating three (3%) percent of the Project Total.
(CQC924, 4055/T, 03/15/93)

ITEM 9240170 - CONTRACTOR QUALITY CONTROL:

Description:

The work under this section shall consist of furnishing all personnel, materials, and equipment necessary to perform all certification of test equipment, sampling, testing, and other control actions. The work shall also include the preparation of linear control charts, written narratives, Weekly Quality Control Reports, and other reports and records as described in Subsection 106.04 (B) of the Standard Specifications.

Method of Measurement:

Contractor Quality Control will be measured for payment on a lump sum basis as a single unit of work.

Basis of Payment:

The accepted quantities of Contractor Quality Control, measured as provided above, will be paid at the contract lump sum price, which price shall be full compensation for the work, complete, as described and specified herein.

Partial payments under this item will be made in accordance with the following provisions:

The first partial payment price will be the lesser of twenty five percent of the contract lump sum price for Contractor Quality Control, or one percent of the original total contract bid amount.

The remaining portion of the lump sum price will be prorated over the duration of the original contract on a monthly basis, and monthly progress payments will be made.

If adjustments to pay items covered under the Quality Control Plan are approved by supplemental agreement, an equitable adjustment to the lump sum amount for Contractor Quality Control may be made. Any adjustment to Contractor Quality Control shall be included in the supplemental agreement and the adjusted amount, less previous payments, will be prorated equally over the remaining contract period, including any related time extensions.

Failure of the contractor to submit Weekly Quality Control Reports, current to the most recent Wednesday submittal date, will be grounds for the Engineer to Withhold payment on a monthly basis for the Contractor Quality Control item until compliance is attained.

Withheld payments on which requirements have been met will be made on the next regular estimate.

(SRVY925, 4055/O, 07/15/91)

SECTION 925 - CONSTRUCTION SURVEYING AND LAYOUT:

925-1 Description: The last four sentences of the first paragraph of the Standard Specifications are revised to read:

The work shall be done under the direction of a registered professional engineer or a registered land surveyor employed by the contractor. The crew chief shall be NICET Certified Level III or a registered land surveyor. A minimum of 50 percent of the survey crew shall be NICET certified level II or possess a land surveyor-in-training certificate. All right-of-way monuments and lines shall be established by a registered land surveyor employed by the contractor.

925-3 Construction Requirements: of the Standard Specifications is modified to add:

Office Survey Work:

The contractor shall be compensated for office work associated with project survey under the following circumstances:

- (a) When the project plans fail to provide information which renders it impossible to lay out the project or any part thereof.
- (b) When the contractor performs office survey work based on erroneous plans information which results in the duplication of work.
- (c) If the Department should change any plans information for which the contractor has already performed office work which results in the duplication of that work.

The contractor shall not be due compensation for any office survey work:

- (a) When information is provided in the plans where additional information necessary for the complete layout of the project can be routinely calculated.
- (b) When the contractor fails to inform the Engineer of discovered plan errors prior to the performance of any extra office survey work.
- (c) That is included in any other existing pay item.

The contractor shall inform the Engineer in a timely manner of any omissions, ambiguities, or errors which the contractor feels may result in extra office survey work so as not to delay the project or create any unnecessary calculations.

All office survey work shall be documented by the contractor and verified by the Engineer for compensation. Documentation shall consist of at least a detailed office diary specifically addressing the work involved in the alleged problem area. The contractor may be required to provide the calculations, charts, graphs, drawings, or any other physical evidence which will verify the extra work.

925-4 Method of Measurement: the second paragraph of the Standard Specifications is revised to read:

Two, three, and four person survey party, and office survey technician will be measured by the hour to the nearest half hour.

925-5 Basis of Payment: the first sentence of the second paragraph of the Standard Specifications is revised to read:

If additional staking and layout are required as a result of additional work ordered by the Engineer, such work will be paid under ITEM 9250102 - TWO-PERSON SURVEY PARTY at the predetermined rate of \$70 per hour, ITEM 9250103 - THREE-PERSON SURVEY PARTY at the predetermined rate of \$85 per hour, ITEM 9250104 - FOUR-PERSON SURVEY PARTY at the predetermined rate of \$95 per hour, and/or ITEM 9250105 - OFFICE SURVEY TECHNICIAN at the predetermined rate of \$45 per hour.

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925-5 **Basis of Payment:** of the Standard Specifications is modified to add:

The amount per hour for office survey technician shall include all necessary office supplies and equipment.

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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
PART A - SPECIAL PROVISIONS

BEARDSLEY ROAD REGIONAL DRAINAGE SYSTEM (PHASE I)

ARIZONA PROJECT 101 L MA 024 H 3635 01C

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SECTION 105 - CONTROL OF WORK:

105.6 Cooperation with Utilities: of the Standard Specifications is modified to add:

The contractor shall be the Engineer's Blue Stake field locator, and perform all requirements as prescribed in A.R.S. 40-360.21 through .29, for all underground facilities that have been installed by him on the current project, until the project is accepted by the Engineer.

At least two (2) working days prior to commencing excavation, the contractor shall call BLUE STAKE CENTER, between the hours of 7:00 a.m. and 4:30 p.m., Monday through Friday for information relative to the location of buried utilities. The number to be called is as follows:

Maricopa County 263-1100

Copies of existing ADOT permits, subject to availability, may be obtained from the ADOT Area Permit Supervisor as listed below:

DISTRICT 1 Area Permit Supervisor

Phoenix 255-7381 2140 W. Hilton Ave.

Private utilities have not been totally relocated prior to commencement of this contract. The contractor's work in the vicinity of existing utilities shall be coordinated with the owner's representatives as specified below:

Southwest Gas Corporation (SWG):

Southwest Gas has a 4" steel gas line west of 19th Avenue and north of Beardsley Road. They will relocate this facility vertically below the proposed 6-19'x4' CBC. Estimated date for completing this work is September 1, 1994.

Southwest Gas has a 4" steel gas line north of Beardsley Road from 23rd Avenue to 19th Avenue which crosses the proposed storm drain. This line will not be relocated. The contractor shall be responsible for protecting this line in-place during this construction.

The contact person at Southwest Gas Corporation (SWG) is:

Paul McLaughlin (602) 484-5649
9 S. 43rd Avenue
Phoenix, Arizona 85072

Arizona Public Service (APS):

Arizona Public Service has power poles north of Beardsley Road and east of 21st Avenue near the proposed interceptor drain pipe. The contractor shall be responsible to protect these poles in-place, especially during installation of that pipe. APS will install temporary braces for these poles to replace the guy wires after the detour of 21st Avenue is no longer needed. The contractor shall

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provide 30-day notification to APS prior to commencing construction of the storm drain in the vicinity of their poles for placement of the temporary bracing. The contractor shall also provide 30-day notification to APS prior to commencing construction of the berm in the vicinity for removal of the temporary bracing and reinstallation of the guy wire. APS will perform this work at no cost to the contractor.

Arizona Public Service has a power pole west of 19th Avenue and north of Beardsley Road which is in conflict with the proposed 6-10'x4' CBC. They will relocate this pole north to eliminate this conflict. Estimated date for completing this work is September 1, 1994.

The overhead power line west of 19th Avenue is in use. The contractor shall use extreme caution to maintain ten feet clearance to any equipment being operated in this vicinity.

Arizona Public Service has a transformer box east of 13th Avenue and south of Pontiac Drive. The contractor shall be responsible to protect this transformer in-place, especially during construction of the adjacent concrete-lined channel.

Arizona Public Service has 4 power poles west of 7th Avenue and north of Beardsley Road. The contractor shall be responsible to protect these poles in-place, especially during construction of the adjacent concrete box culverts.

For any excavation within ten feet of an APS power pole, the contractor shall contact APS to make field determination of the need for temporary pole bracing. The cost of temporary bracing, if required, shall be borne by the contractor.

The contact person at Arizona Public Service (APS) is:

Ms. Lois Winkler (602) 371-6837
Arizona Public Service Co.
2121 W. Cheryl Drive
P.O. Box 53999, Sta. 3260
Phoenix, AZ 85072-3999

U.S. West Communications (USW):

USW has a duct bank and cable west of 19th Avenue that conflict with the interceptor box. They will relocate the duct bank vertically to avoid the box. The estimated date for completing this work is October, 1, 1994. The contractor shall plan his work to avoid this area until the relocation is complete.

The contact person at U.S. West Communications (USW) is:

Mr. Curt Sayer (602) 395-2550
ADOT Liaison, Westside
U.S. West Communications
2233 West Dunlap, Room 331
Phoenix, AZ 85021

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Dimension Cable T.V.:

Dimension has a trunkline in conflict with the interceptor drain west of 21st Avenue and west of 7th Avenue. They will relocate these lines to the right-of-way to avoid the interceptor construction. Estimated date for completing this work is September 1, 1994.

The contact person of Dimension Cable T.V. is:

Mr. Blair Tanner (602) 352-5860
Dimension Cable T.V.
115 North 51st Avenue
Phoenix, AZ 85043

City of Phoenix:

All City of Phoenix waterline and sewerline relocation work shall be scheduled and coordinated with the City through the Engineer. No line shall be tapped prior to approval by the City. Approval by the City shall also be obtained prior to placing a new line in service or abandoning an old line.

The 24" waterline on 7th Avenue must remain in service between April 30 to October 1. It can be taken out of service between October 1 and April 30 for a maximum of one month.

The contact person at the City of Phoenix is:

Mr. Gerald Arakaki (602) 261-8229
Water Services Department
200 West Washington Street, Suite 800
Phoenix, AZ 85003

General Utilities:

The utilities in the construction area are shown on the plan as accurate as possible with available information. Utilities which are not designated "to be relocated by others" are to be protected in-place. Numerous utilities will require support across open trenches in this construction. Payment for any support shall not be compensated for separately but shall be included in the contract unit price for the storm drain installation.

Subsection 107.9 - Protection and Restoration of Property and Landscape: Is modified to add:

BUS MAINTENANCE FACILITY IMPROVEMENTS:

The contractor shall construct the fenced overflow parking area east of 15th Avenue prior to commencing work in the facility parking lot. The contractor shall maintain this overflow parking area for the duration of the construction in the parking lot.

For the duration of this work in this facility, the contractor shall provide a uniformed security guard in the hours of 6:00 p.m. to 6:00 a.m. weekdays and all weekend.

Prior to leaving this work site at the end of his shift, the contractor shall securely fence along this facility.

SECTION 202-3.03 - REMOVAL OF PAYMENT: is modified to add:

SAWCUTTING:

Transverse sawcuts at the points of abutting existing pavements will be required. Sawcuts shall be made to minimum depth of 1-1/2 inches and in all cases deep enough to insure a neat vertical joint. Payment for sawcuts will be considered included in the cost of contract items.

SECTION 203 - EARTHWORK: of the Standard Specifications is modified to add the following:

Erosion Control

Description: This work shall consist of implementing measures to comply with the requirements of the NPDES requirements as required in Subsection 107.2-Permits, as modified in the Supplementary General Conditions.

Measurement and Basis of Payment:

Payment for this work will be made at the lump sum price for this item and will include all erosion control measures which are not included in a separate bid item.

Subsection 203-4 - Drainage Excavation: Shall be modified to add the following:

19th AVENUE EMBANKMENT:

The Contractor shall bid a unit cost for the drainage excavation based on placing a portion in embankments at 19th Avenue as shown in the plans in conformance with Section 203-4, Drainage Excavation.

If the Contractor has other beneficial use of this material, he is encouraged to submit a Value Engineering Proposal for consideration by the Engineer.

SECTION 406 - ASPHALTIC CONCRETE: of the Standard Specifications is revised as follows:

406-2 Asphaltic Concrete Mix Design Criteria: TABLE 406-1 is modified to add:
Arizona

Criteria	Requirements			Test Method
	1/2" Mix	3/4" Mix	Misc. Paving	
Effective Voids, Percent, Range	5.5 ± 0.2	5.5 ± 0.2	5.5 ± 0.2	815
Index of Retained Strength, Percent, Min.	60	60	60	802

406-3 Materials: is modified to add:

For comparative purposes, quantities shown in the bidding schedule have been calculated based on the following data:

	1/2" Mix	3/4" Mix	Misc. Paving
Unit Weight, Pounds per Cubic Foot	147	145	145
Percent, Asphalt Cement	5.25	5.25	5.25
Percent, Mineral Admixture	2	2	2

406-3.02 MINERAL AGGREGATE: Table 406-3 is modified to add:

The Combined Bulk Specific Gravity shall be 2.35 - 2.85.

The Combined Water Absorption shall be 0 - 2.50.

The requirement for crushed faces, determined in accordance with Arizona Test Method 212, shall be 50% minimum for the 1/2" mix and the 3/4" mix, and 70% minimum for the Base Mix asphaltic concrete.

406-3.03 Mineral Admixture: the first paragraph is modified to add:

A Certificate of Analysis conforming to the requirements of Subsection 106.05 of the Standard Specifications shall be submitted.

406-3.03 Mineral Admixture: the requirement for lime in Table 406-4 is revised to read ASTM C 1097.

406-3.04 Bituminous Material: is modified to add:

The grade of bituminous material to be used shall be AC-40.

406-6 Verification Testing: Table 406-6 is revised to read:

TABLE 406-6

VERIFICATION CRITERIA

Property	Allowable Deviation From Proposal Targets	Limiting Values
1) Sand Equivalent	-10 (Note 1)	45 Min.
2) Crushed Faces, Percent		
(a) 1/2" mix, 3/4" mix	----	30 Min.
(b) Base Mix	----	70 Min.
3) Abrasion 100 Revolutions	----	9 Max.
500 Revolutions	----	40 Max.
4) VMA, Percent		
(a) 1/2" mix, 3/4" mix	+1.5	14.5 Min.
(b) Base Mix	----	14.0 Min.
5) Effective Voids, Percent	±1.0	
6) Stability, Pounds		
(a) 1/2" mix, 3/4" mix	----	1,750 Min.
(b) Base Mix	----	2,500 Min.
7) Flow, 0.01 Inch	----	7-17
8) Index of Retained Strength, Percent	----	(Note 2)
9) Wet Strength, psi	----	140 Min.
10) Absorbed Asphalt, Percent	----	1.0 Max.

(Note 1): In verifying previously used mix designs only.

(Note 2): The limiting value for Index of Retained Strength Shall be 5 less than the index of retained strength requirement from table 406-1.

406-6 Verification Testing: the last paragraph is revised to read:

Results of testing will be verbally furnished to the contractor within ten working days following the date of receipt of both an acceptable mix design proposal and the samples in the Central laboratory. For any mix design that requires artificial gradation, an additional two working days will be required for verification testing. The contractor will be verbally notified of failing test results within one working day of failure.

406-10.08 (B) (2) Compaction Acceptance Procedure: the last paragraph is revised to read:

In the event the contractor elects to question the core test results obtained for a particular lot, he may make a written request for additional testing of that lot. The core samples previously saved will be tested in accordance with the requirements of Arizona Test Method 415 in an independent testing laboratory designated by the Engineer. The testing of the samples will be performed by the independent testing laboratory without knowledge of the specific project conditions such as the identity of the contractor, the test results by the Department, or the density target. Using the referee test results, the Engineer will determine new PTs for the compaction characteristic. The result of this determination will be binding on both the contractor and the Engineer. The Engineer will pay for this testing; however, if the compaction pay factor of the lot does not improve, is reduced, or the lot remains in reject, payment to the contractor for asphaltic concrete shall be reduced by the amount of the cost of this testing.

(QCDRN501, 4054/R, 03/15/93)

SECTION 501 - PIPE CULVERT AND STORM DRAINS:

501-3 Construction Requirements: of the Standard Specifications is modified to add:

501-3.01 (A) Contractor Quality Control:

The contractor shall perform the quality control measures described in section 106.04(B). The written narrative shall include the following processes:

- (a) Bedding and backfill production, including crusher methods, pit extraction, and washing.
- (b) Stockpile management, including stacking methods, separation techniques, stockpile pad thickness, and segregation prevention.
- (c) Transporting and placing, including transport technique, lift thickness, processing and mixing technique, and compaction methods.

The contractor shall obtain samples and perform the tests specified in the following Table:

CONTRACTOR QUALITY CONTROL TESTING REQUIREMENTS

TYPE OF TEST	TEST METHOD	SAMPLING POINT	MINIMUM TESTING FREQUENCY
Backfill and Bedding Material			
Gradation	ARIZ 201	Stockpile	1 per 500 CY per Source
PI	AASHTO T89, T90		
Proctor Density	ARIZ 225, ARIZ 226, ARIZ 245		1 per Source
Compaction	ARIZ 227, ARIZ 230, ARIZ 231, ARIZ 232, ARIZ 235, ARIZ 246	Roadway	1 per 200 CY, minimum 1 per lift

SECTION 501 - PIPE CULVERT AND STORM DRAINS: the number and title of subsection 501-3.01 of the Standard Specifications is revised to read:

Backfill material shall be placed in layers of not more than eight inches in depth and shall be compacted to a density as herein before specified.

Placing and Compacting Aggregate Base Material (Alternate 2):

When the depth of the excavation to the elevation one foot above the top of the pipe from the surface of the existing ground is greater than four feet, the contractor may utilize water settlement methods to obtain the required density from one foot above the top of the pipe to a point four feet below the top of the trench.

Water settlement shall be utilized only when the Engineer has determined that the bottom and sides of the trench are of such material and the procedure to perform the work is such that water will not be impounded and no damage to the pipe will result from the hydrostatic pressure.

Aggregate base material shall be placed in lifts not to exceed four feet in thickness before compaction and shall be jetted along the trench and transversely across the trench at intervals not to exceed six feet, with the jetting locations on one side of the trench offset to the jetting locations on the other side of the trench. Water shall be provided to the jetting probe at a minimum pressure of 30 pounds per square inch.

Jetting shall be supplemented by the use of vibratory or other compaction equipment when necessary to obtain the required density.

The contractor shall excavate holes in the compacted material to the depths and at the locations designated by the Engineer. These holes shall be of such size as to allow Department employees to perform the required density tests. Upon completion of the tests, the contractor shall refill the

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excavated areas and compact the material to the required density in a manner satisfactory to the Engineer.

The density of the aggregate base material shall be as herein before specified.

501-4 Method of Measurement: and

501-5 Basis of Payment:

No measurement or direct payment will be made for excavating and backfilling for pipe, the cost being considered as included in the price of the respective pipe items.

(PRCST601, 4054/D, 06/15/92)

SECTION 601 - CONCRETE STRUCTURES:

601-1 Description: of the Standard Specifications is modified to add:

The following have been approved as alternates to cast-in-place minor structures:

Utility Vault Company Drawing HD-101A, dated 03-09-92, has been approved as an alternate to Standard Drawing C-11.10 for H-20 Loading. The use of this unit shall be limited to roadway locations with maximum longitudinal grades of six percent.

Utility Vault Company Drawing HD-101B, dated 03-09-92, has been approved as an alternate to Standard Drawing C-11.10 for H-10 Loading. The use of this unit shall be limited to a roadway locations with maximum longitudinal grades of six percent.

Pre-Cast Manufacturing Company Drawing CGF-C-11.10 Cattle Guard Foundation, as revised 01-25-88 has been approved as an alternate to Standard Drawing C-11.10.

Utility Vault Company Drawing HD-102, revised 03-09-92, has been approved as an alternate to Standard Drawing C-15.90.

Utility Vault Company Drawing HD-103, revised 03-09-92, has been approved as an alternate to Standard Drawing C-15.80.

Utility Vault Company Drawing HD-121, revised 03-09-92, has been approved as an alternate to Standard Drawing C-15.10 or C-15.30.

Pre-Cast Manufacturing Company Drawing CB-103, revised 05-27-86, has been approved as an alternate to Standard Drawing C-15.90.

Pre-Cast Manufacturing Company Drawings CB 15301, dated 04-19-87; CB 15302, dated 06-08-87; CB 15303, dated 06-09-87; and CB 15304, dated 06-04-87; have been approved as alternates to Standard Drawing C-15.30.

Pre-Cast Manufacturing Company Drawings CB 15801, dated 04-19-87; and CB 15802, dated 06-01-87; have been approved as an alternate to Standard Drawing C-15.80.

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Pre-Cast Manufacturing Company Drawings CB 15101, dated 04-07-88; CB 15102, dated 01-21-88; and CB 15103, dated 01-23-88; have been approved as alternates to Standard Drawing C-15.10.

Hiway Hardware Inc. Drawing 92-100, dated 05-15-92, has been approved as an alternate to Standard Drawing C-11.11.

The "H" dimension for catch basins shall be determined in the field prior to casting. The contractor is advised to acquaint himself with conditions peculiar to the project which might limit the use of precast items.

To obtain approval of drawings for precast minor structures, the drawings must be submitted to the Engineer at least six weeks in advance of their need. Eight sets of clear, legible drawings, not exceeding 36 inches by 22 inches in size, must be submitted by the manufacturer. If corrections are required, one set of drawings will be returned with the required revisions noted thereon. After corrections have been made, two sets of corrected drawings must be re-submitted. Upon approval, the manufacturer will be notified in writing and the precast item will be listed as an approved alternate.

SECTION 601 - REINFORCED CONCRETE BOX CULVERT

601.1 Description:

The work under this section shall consist of furnishing all materials and constructing reinforced concrete box culverts and box culvert transition at the locations shown on the project plans and in accordance with the details shown on the plans and the requirements for these specifications.

601.2 Materials:

Concrete shall be Class S portland cement concrete conforming to the requirements of Section 1006. Compressive strength of at least 3000 pounds per square inch at 28 days shall be obtained for cast-in-place materials. Compressive strength of 5000 pounds per square inch at 28 days shall be obtained for precast materials.

Reinforcing steel shall be in accordance with the requirements of Section 1003.

Dowels shall be corrosion resistant coated dowel bars conforming to the requirements of AASHTO M 254, Type A.

All precast material must conform to manufacturers' specifications for construction and installation.

601.3 Construction:

Reinforced concrete box culvert shall be constructed by any of the following methods or combinations thereof, at the contractor's option:

1. Cast-in-place by fixed forms
2. Precast.

Contractor shall construct cast-in-place box in accordance to ADOT Standard Drawing B-2.10. Precast box shall be constructed in accordance to ASTM C-850-90.

The reinforced box culvert shall be placed and finished in conformity to the lines, grades and dimensions established by the Engineer shown on the project plans, or the Standard Drawings.

The bedding material shall be compacted to at least 95 percent of the maximum density determined in accordance with the requirement of Arizona Test Methods 225, 226 and 227.

601.4 Method of Measurement:

Measurement shall be by the linear feet, measured by the centerline of the box culvert, including transition.

601.5 Basis of Payment:

Payment will be at the price per linear foot of each size.

(MPTPD701, 4055/A, 09/15/94)

SECTION 701 - MAINTENANCE AND PROTECTION OF TRAFFIC:

SECTION 701 is modified to add:

Normal traffic flow shall be maintained on all roadways within the project except for designed detours. No reduction of lanes or lane incursions by the contractor's activities will be permitted unless approved by the Engineer. The contractor must maintain traffic on either 13th Avenue or 14th Avenue at all times.

The contractor shall be responsible for the design, construction and cost of temporary drainage facilities for contractor-proposed detour changes or construction phasing changes which impact temporary drainage facility requirements.

The cost of the detour maintenance and removal shall be considered incidental to the cost of other contract items. Payment for the grading of the detours will be made under Item 2050001 Grading Roadway for Pavement. Payment for surfacing and other miscellaneous items will be measured and paid under appropriate contract bid items. Areas disturbed by detour construction or removal shall be graded and restored to match surrounding terrain as approved by the Engineer.

701-4.02 (B) Elements of Work (Complete-in-Place): of the Standard Specifications is revised to read:

The elements of work listed under this subsection will be measured for payment upon the satisfactory completion of the initial installation or obliteration. Except as hereinafter specified under Basis of Payment, no subsequent measurements will be made.

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<u>Element of Work</u>	<u>Unit</u>	<u>Rate(\$)</u>
Specialty Sign (High Intensity Reflective Sheeting)	Sq. Ft.	10.00
Specialty Sign (Std. Intensity Reflective Sheeting)	Sq. Ft.	7.25
Preformed Pavement Marking (Taped Line) (Type II)	L.Ft.	1.60
Preformed Pavement Marking (Taped Line) (Type III)	L.Ft.	0.80
Temporary Pavement Marking (Painted Line)	L.Ft.	0.13
Obliterate Pavement Marking	L.Ft.	0.50
Obliterate Pavement Legends	Each	10.00
Obliterate Pavement Arrows	Each	20.00
Delineator (Std. Dwg. 4-M-4.01)	Each	27.00
Reflective Raised Pavement Marker (Temporary)	Each	4.00
Reflective Raised Pavement Marker (Permanent) (Used As Temporary)	Each	4.50
Non-Reflective Raised Pavement Marker (Temporary)	Each	2.50
Remove Raised Pavement Marker	Each	0.10
Chip Seal Pavement Marker (Single Capped)	Each	2.00
Chip Seal Pavement Marker (Double Capped)	Each	3.00

701-4.02 (C) Elements of Work (In Use): of the Standard Specifications is revised to read:

The elements of work listed under this subsection will be measured from the point at which the element is put into active use on the project and accepted by the Engineer until such times that the Engineer determines that the element is no longer required:

<u>Element of Work</u>	<u>Unit</u>	<u>Rate(\$)</u>
Temporary Concrete Barrier(In Use)	L.Ft./Day	0.05
Impact Attenuation Device (Sand Barrel) (In Use)	Ea./Day	0.05
Impact Attenuation Device (Energy Absorbing Terminal)(In Use)	Ea./Day	1.00
Impact Atten Dev. (Truck Mounted)	Hour	27.00
Flashing Arrow Panel	Hour	5.00
Pilot Truck	Hour	6.36
Relocation Service, Truck	Hour	9.00
Flagger	Hour	20.20
Flagger (Uniformed Police Officer)	Hour	27.11
Official Police Vehicle	Hour	2.50
Truck Driver: Pilot, Reloc Svcs, Truck Mount Atten. Devices	Hour	15.24
Relocation Service, Barricade Setter	Hour	10.93
Maintain Changeable Message Board Vertical Panels	Hour	1.45
Tubular Marker	Ea./Day	0.50
Barricade (Type II)	Ea./Day	0.35
Barricade (Type III)	Ea./Day	0.50
Flashing Warning Light (Type A)	Ea./Day	0.75
Flashing Warning Light (Type B)	Ea./Day	0.25
Steady-Burn Warning Light (Type C)	Ea./Day	2.50
High Intensity Reflective Sheeting, Small Sign (Less than 10 Sq.Ft.)	Ea./Day	0.80
High Intensity Reflective Sheeting, Medium Sign (10-16 Sq.Ft.)	Ea./Day	1.10
High Intensity Reflective Sheeting, Large Sign (More than 16 Sq.Ft.)	Ea./Day	1.30
Std. Intensity Reflective Sheeting, Small Sign (Less than 10 Sq.Ft.)	Ea./Day	1.50
Std. Intensity Reflective Sheeting, Medium Sign (10-16 Sq.Ft.)	Ea./Day	0.50
Std. Intensity Reflective Sheeting, Large Sign (More than 16 Sq.Ft.)	Ea./Day	0.65
Embedded Sign Posts	Ea./Day	1.00
Portable Sign Stand (Spring Type)	Ea./Day	0.10
Port. Sign Stand (9 Sq.Ft. or More)	Ea./Day	2.10
Port. Sign Stand (Under 9 Sq.Ft.)	Ea./Day	1.00
High Level Flag Tree	Ea./Day	0.70
		0.80

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Traffic Cones, 28 inch	Ea./Day	0.40
Drum (18" x 36")	Ea./Day	1.20

*Based on U.S. Dept. of Labor, General Wage Decision.

701-4.03 Relocation Services: the second sentence of the first paragraph of the Standard Specifications is revised to read:

Except as hereinafter specified for Temporary Concrete Barrier (New Installation) or the exceptions specified in the remainder of this Subsection or Subsection 701-4.04, measurement for reimbursement of the work associated with such relocation will be made as specified for the Relocation Service elements of work.

701 - 5 Method of Measurement: the first paragraph of page 428 is revised to read:

Overtime hours will be converted into straight time hours for measurement. An off-duty law enforcement officer shall not work more than 12 consecutive hours unless an emergency situation exists which, in the opinion of the Engineer, requires that the officer remains in the capacity of flagger. In the event an off duty officer reports to the project site and the work shift is canceled within the first two hours, the contractor will be reimbursed for two hours at the appropriate rate. Flaggers which are required to permit contractor's traffic to safely enter into normal traffic within the project limits will be paid under this item. Flaggers required by a written local permit agreement will be paid under this item. Additional Flaggers used within the project limits will be measured for payment under this item, subject to the approval of the Engineer.

Flaggers and traffic control devices used outside the project limits will be measured under this item. The state will pay fifty percent of the designated rates for flaggers and traffic control devices used as described in this paragraph, subject to the approval of the Engineer. The project limits are defined as the beginning and ending stations as shown on the plans of the specific section of highway under construction.

701-6.01 (C) Furnish and Install Temporary Traffic Control Devices: the second paragraph of the Standard Specifications is revised to read:

The cost of additional information traffic control signs, shown on the project plans, furnished by the contractor and not included as reusable traffic control signs as listed in Subsection 701-4.02(C), will be included in Item 7010006, which costs shall include all materials, labor and other additional costs for the installation, any relocation and removal of the signs.

SECTION 732 - ELECTRICAL UNDERGROUND MATERIAL: of the Standard Specifications is modified to add the following:

Remove and Salvage Traffic Signals

Description:

The work under this item consists of removal and salvage of traffic signals at 7th Avenue and Beardsley Road. The work shall be performed in accordance with the project plans. All salvaged

equipment shall be delivered to Ted Foster (262-6733), City of Phoenix Signal Shop, 2631 South 22nd Avenue, Phoenix, Arizona.

Construction Requirements:

The contractor shall install and operate the temporary traffic signals before removing the existing traffic signals. Once the temporary traffic signals are made operational, contractor shall contact Phil Lindsay (262-4693) of City of Phoenix to de-energize the existing traffic signals.

Method of Measurement:

Measurement will be on a lump-sum basis.

SECTION 734 - TRAFFIC CONTROLLER ASSEMBLY

734-2.01 (D) Pre-approval of Controller Equipment: of the Standard Specifications is modified to add:

The following signal controller units have been pre-approved by the Department as of August 1992:

1. **Type MPS Controllers; Digital Microprocessor Special Programmable and System Applications:**

a. **Eagle Signal Corporation:**

EPAC 300 with the following special programs:

MPS-S1	Computer Supervised Unit
MPS-P	Pre-emption
MPS-T-C	Time Base and Traffic Actuated Coordination
MPS-M	Arterial Master Controller

b. **Econolite Control Products Inc.**

ASC-8000 with the following special programs:

MPS-S1	Computer Supervised Unit
MPS-P	Pre-emption
MPS-T-C	Time Base and Traffic Actuated Coordination
MPS-M	Arterial Master Controller

c. **Traffic Control Technology:**

LMD - 8000 with the following special programs:

MPS-P	Pre-emption
MPS-T-C	Time Base and Traffic Actuated Coordination
MPS-M	Arterial Master Controller

d. Transyt Corporation

1800EL eight-phase with the following special programs:

MPS-P	Pre-Emption
MPS-T-C	Time Base and Traffic Actuated Coordination

e. Naztec, Inc.

NT-900 with the following special programs:

MPS-P	Pre-emption
MPS-T-C	Time Base and Traffic Actuated Coordination

f. Winko-Matic Signal Co. Multisonics Corp.

820A OSAM with the following special programs:

MPS-P	Pre-emption
MPS-T-C	Time Base and Traffic Actuated Coordination

2. N.E.M.A. Conflict Monitors:

a. Eagle

3 Channel - LT-213
6 Channel - LT-216
12 Channel - LT-222

b. Econolite

3 Channel - NCMU-3L
6 Channel - NCMU-6L
12 Channel - NCMU-12L

c. E.D.I

3 Channel - NSM-3L
6 Channel - NSM-6L
12 Channel - NSM-12L

d. Solid State Devices

3 Channel - NM(NP)-3L
6 Channel - NM(NP)-6L
12 Channel - NM(NP)-12L

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e. Transyt Corporation

3 Channel - Model 300
6 Channel - Model 600
12 Channel - Model 1200

f. Traffic Control Technologies

3 Channel - LSM-3
6 Channel - LSM-6
12 Channel - LSM-12

12 Channel - LNM-12E

SECTION 737 - INCIDENTAL ELECTRICAL WORK: is modified to add the following:

Temporary Traffic Signals (Construction Phase 6)

Description:

The work under this section consists of installing a temporary traffic signal at the 7th Avenue detour and Beardsley Road (Construction Phase 6) and maintaining operation of the temporary traffic signal during the construction of the interceptor box culvert.

Materials:

Construction Phase 6 will utilize wooden poles and span wires. Wooden poles will be supplied by ADOT.

Measurement and Basis of Payment:

Payment for this work will be made at the lump-sum price for this item.

Controller, signal heads, conduit, and conductors will be paid as specified for those items as part of permanent construction.

Temporary Traffic Signals (Construction Phase 7)

Description:

The work under this item consists of adjusting the signal heads as per Construction Phase 7 when the detour is on the west side of 7th Avenue and maintaining operation of the temporary traffic signal during construction of the interceptor box culvert.

Materials:

Construction Phase 7 will utilize the same wooden poles and span wire which are installed as part of Construction Phase 6.

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Measurement and Basis of Payment:

Payment for this item will be at the lump-sum price for the item.

The controller, cabinet, conduit, and signal heads paid for as part of Construction Phase 6 shall also be used for Construction Phase 7. The service connection is common to Construction Phase 6 and 7 and permanent traffic signals.

Traffic Signal Span Wire Assembly:

Description:

The work under this item consists of furnishing and installing the span wire support system and mounting assemblies for signal heads and traffic signs at the 7th Avenue/Beardsley Road traffic signal.

Cables and fittings shall be installed in accordance with plan details.

Materials:

Span Wire and Tether Wire:

The span wire shall be of 3/8" nominal diameter, 7-strand, zinc-coated steel wire conforming to ADTM A475, utilities grade, having a minimum breaking strength of 11,500 pounds. The tether wire shall be 1/4" nominal diameter. The span and tether wire shall be installed in accordance with the details shown in the project plans.

Span Wire Accessories:

The components of span wire accessories shall meet the following requirements, and with the exception of nylon cable hangers, shall be galvanized in accordance with AASHTO M 232:

The thimble-eye bolts and nuts shall be 5/8" nominal diameter and conform to ASTM A307.

The 3-bolt clamps shall have a minimum breaking strength of 11,500 pounds.

Split clamps with thimble-eye connections shall have a minimum breaking strength of 11,500.

Method of Measurement and Basis of Payment:

Payment for this work will be made at the lump-sum price for this item, which shall be full compensation for the item complete in-place.

Conductors and signal heads will be paid as specified for those items. Payment for delivery and installation of wooden poles is considered incidental to other items.

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Electrical Service:

Description:

The work under this item consists of furnishing certain materials and installing conduit runs at 7th Avenue. The work shall be performed in accordance with the Standard Specifications, the project plans and these special provisions.

Materials:

Materials to be provided are as shown on the plans.

Construction Requirements:

Within six weeks of the award of the contract, the contractor shall arrange a meeting with the Resident Engineer and APS to familiarize all parties with the construction schedules, timing, inspection and installation requirements for this work.

The contractor shall coordinate his work through the Engineer to afford APS opportunity to install their cables, switching cabinets and transformers, and to perform all overhead work and removal of their above-ground equipment.

Following completion of placement of conduit by the contractor, the contractor shall provide APS unencumbered time (21 calendar days) to perform their work.

The contractor shall notify the Engineer in writing 10 days in advance of start of the unencumbered time.

Method of Measurement:

Measurement will be on a lump-sum basis.

Basis of Payment:

Payment for this item at the contract price will be full compensation for the work complete including trenching, backfill, conduit, sleeves, coordination, installation of APS-furnished items, and incidental as described herein and on the project plans.

(WATSE810, DC, 07/31/90)

SECTION 810 WATERLINE AND SEWER CONSTRUCTION: is hereby added to the Standard Specifications

810-1 Description:

The work under this section shall consist of furnishing all materials and constructing or relocating waterlines and sewerlines, including excavation and backfill where required, in conformity with the Plans and the requirements of the Special Provisions. The work includes connections, taps, tees, thrust blocks, testing, disinfecting, adjustments to existing facilities and related work.

810-2 Materials:

Materials shall be as specified in these Special Provisions or as shown on the Plans:

Polyvinyl chloride (PVC) pipe and fittings shall meet the requirements of AWWA C-900, Class 150, minimum SDR18, with integral bell gasket joints, and dimensioned to cast iron outside diameter.

All cast iron and ductile iron water pipe shall be cement-mortar lined and coal tar coated in accordance with AWWA C-104.

Unless shown otherwise on the Plans, concrete shall conform to the requirements of Section 1006, for Class S ($f_c=2500$).

810-3 Construction:

Waterline construction, disinfecting water lines, tapping sleeves, valves and valve boxes on water lines shall conform to MAG Specifications. Department Standard Specifications will apply for MAG references not listed herein.

The governing MAG Specifications are as follows:

MAG 610	Water Line Construction
MAG 611	Disinfecting Water Mains
MAG 615	Sewer Line Construction
MAG 630	Tapping Sleeves, Valves and Valve Boxes on Water Lines
MAG 741	Lining for Reinforced Concrete Sanitary Sewer Pipe
MAG 743	Vitrified Clay Pipe
MAG 750	Iron Water Pipe and Fittings
MAG 753	Galvanized Pipe and Fittings
MAG 754	Copper Pipe, Tubing and Fittings
MAG 756	Fire Hydrant
MAG 765	Rubber Gaskets for Concrete Pipe
MAG 787	Gray Iron Castings

Excavation, bedding and backfill shall conform to the requirements of Section 501.

Where the use of restrained joints is indicated on the Plans, the restrained joints shall be of the flexible type provided by the pipe manufacturer.

All fire hydrant installations shall have flanged joints between the main and operating valve.

Horizontal Separation:

When water pipe and sewers are laid parallel to each other, the horizontal distance between the water and sewer pipes shall not be less than 6 feet. Each line shall be laid in a separate trench or the space in between filled and compacted.

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Vertical Separation:

When a sewer pipe crosses a water pipe and the sewer pipe is 2 feet or more below the water pipe, no extra protection is required. At all other crossings the sewer pipe shall be ductile iron pipe with mechanical joints, or approved equal, for a distance of at least 6 feet in each direction measured perpendicular to the water line. As an alternate, the sewer shall be encased in concrete 6 inch minimum thickness for the same distance.

Bedding material shall be placed to a depth equal to one half (1/2) the diameter of the pipe except as noted on the Plans. Pipe and trench backfill material as shown on Standard C13.15 shall conform to the requirements of Section 501-3.04(A). Backfill placement and compaction shall conform to the requirements of the Plans and Section 501-3.04(B) and (C).

Water consolidation methods shall not be permitted for backfilling pipe; however, slurry methods in accordance with Section 203-5.03 (B) will be allowed.

Thrust blocks shall be constructed in accordance with Standards C-23.10, C-23.20, or C-23.35 as applicable.

810-4 Method of Measurement:

Measurement shall be by the linear feet, measured along the centerline of the pipe, through all the valves and fittings; from the centerline of fittings or centerline of valves on ends of pipe or to the end of pipe.

810-5 Basis of Payment:

Payment will be at the contract unit price per linear foot of each type and size of pipe, including excavation and backfilling, connections, taps, tees, thrust blocks, plugs, testing, disinfecting, adjustments to existing facilities and related work.

(FNCRT902, 4056/I, 05/01/93)

SECTION 902 - CHAIN LINK FENCE:

902-2.01 General: of the Standard Specifications is revised to read:

Certificates of Compliance conforming to the requirements of Subsection 106.2 of the Standard Specifications shall be submitted for all materials except for Subsection 902-2.08 Barbed Wire. Barbed Wire will be sampled and tested in accordance with methods used by the Department and will require written approval by the Engineer prior to being incorporated into the work.

SECTION 903 - WIRE FENCE; shall be revised to add the following:

Install Razor Wire and Pipe

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Description:

The work under this item shall consist of furnishing and installing razor wire to match the razor wire to be reconstructed.

Prior to placing his order for this wire and taking delivery, the Contractor shall submit a sample of the intended wire to the Engineer for his approval.

(PCC1006, 4055/R, 11/30/93)

SECTION 1006 - PORTLAND CEMENT CONCRETE:

1006-2.01 Hydraulic Cement: the fifth paragraph of the Standard Specifications is revised to read:

Certificates of Analysis conforming to the requirements of Subsection 106.2 shall be submitted.

1006-2.03(A) General Requirements: of the Standard Specifications is modified to add:

The contractor shall maintain at least two full days worth of production of fine and coarse aggregate stockpiled at the batch plant for Class P concrete prior to starting and throughout the duration of portland cement concrete paving operations. This requirement is waived for the last two days of production.

1006-2.03 (C) Coarse Aggregate: the second paragraph of the Standard Specifications is revised to read:

The coarse aggregate gradation, determined in accordance with Arizona Test Method 201, shall conform to the appropriate size designation of AASHTO M 43, except the amount of material passing the No. 200 sieve shall not exceed 1.0 percent.

1006-2.05 Concrete Curing Materials: the last sentence of the first paragraph is revised to read:

Type 1-D compound with either a Class A or Class B vehicle shall be used for other concrete items.

1006-3.01 Design Criteria: the eighth paragraph of the Standard Specifications is revised to read:

Class S concrete shall have a compressive strength of not less than that shown on the plans. Unless otherwise shown on the plans, the minimum required 28-day compressive strength of Class S concrete shall be $f'_c = 3000$ psi. Class B and Class P concrete shall have minimum 28-day strengths of not less than that shown in Table 1006-A. Testing for compressive strength of cylinders shall be in accordance with the requirements of Arizona Test Method 314.

1006-5.02 Hot Weather Concreting: of the Standard Specifications is modified to add:

Mix water may be cooled by refrigeration, liquid nitrogen, or well-crushed ice of a size that will melt completely during the mixing operation. Crushed ice may be substituted for part of the mix water on a pound for pound basis.

1006-6.02 (B) Low-Pressure Steam Curing: the last paragraph of the Standard Specifications is revised to read:

In the event the side forms are removed, before the precast unit has obtained the required release compressive strength, the curing method shall be continuous in maintaining the temperature and moisture level as described above, within the enclosure, as nearly as practical. There shall not be a delay in re-covering the girder or prestress member.

1006-7.02 Sampling and Testing of Concrete: of the Standard Specifications is revised to read:

A sample of concrete for determination of temperature, slump, and air content as well as for fabrication of test cylinders for compressive strength determination at 28 days will be taken at random at the specified sampling frequency for each type of concrete.

Samples of concrete will be taken in accordance with the requirements of AASHTO T141 except that the concrete for Class S or B will be sampled only once during discharge in the middle portion of the batch. That sample shall be of sufficient size to perform all the required tests and fabricate the necessary test cylinders. At the discretion of the Engineer, a sample may be obtained at the beginning of the discharge if, in his opinion, the properties of the concrete do not appear to be within the specification limits for slump or temperature.

If concrete is pumped to facilitate placement, at the discretion of the Engineer, samples may be taken from the truck and pump hose discharge to determine that the compressive strength specifications are met in the structure, and to correlate temperature, slump and air content results. If the correlation is satisfactory and meets with the approval of the Engineer, sampling may continue from the most convenient location with occasional re-testing for correlation. Rejection of concrete due to improper temperature or slump may occur at either the truck or pump hose discharge; however, rejection of concrete due to improper air content will only occur due to a failing test for a sample obtained at the final point of discharge.

Temperature of the concrete mixture will be determined in accordance with ASTM C1064. Slump of the concrete mixture will be determined in accordance with AASHTO T119. Air content of the concrete mixture will be determined in accordance with AASHTO T152. All compressive strength test cylinders will be fabricated in accordance with the requirements of AASHTO T23. Testing for compressive strength of cylinders shall be in accordance with the requirements of Arizona Test Method 314.

A strength test will consist of the average strength of two cylinders or 95 percent of the higher strength cylinder, whichever is greater.

1006-7.03 Sampling Frequency for Cast-in-place Concrete: the first paragraph of the Standard Specifications is revised to read:

A sample of concrete for the required tests, as specified in Subsection 1006-7.02, will be taken for each 50 cubic yards, or fraction thereof, of continuously placed concrete, on a daily basis, for Class B concrete and for each strength classification of Class S concrete, from each batch plant or source. A sample of concrete will be taken for each 50 cubic yards placed, for air content testing, at altitudes above 3,000 feet. A sample for the required tests on daily placements of 20 cubic yards or less may be taken at the discretion of the Engineer. An additional sample or samples for any of the required tests may be taken, at an interval of less than 100 cubic yards, at the discretion of the Engineer on any batch or load of concrete. The Engineer will determine the quantity of concrete represented by each sample of concrete for any test performed.

1006-7.05 Testing for Minor Precast Concrete Structures: the second paragraph of the Standard Specifications is revised to read:

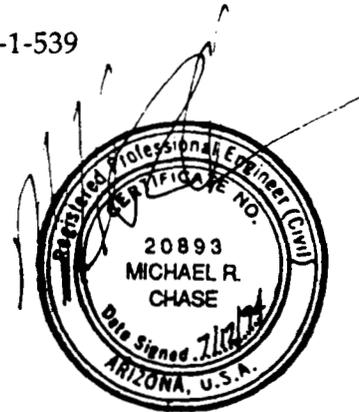
The compressive strength of the concrete will be determined from the average rebound number and the calibration chart established for the specific rebound hammer being used. The calibration chart will be established from rebound readings taken on concrete test cylinders fabricated at the precast plant and the actual compressive strength of the cylinders. The test cylinders will be fabricated in accordance with the requirements of AASHTO T23. Testing for compressive strength of cylinders shall be in accordance with the requirements of Arizona Test Method 314.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
PART B - SPECIAL PROVISIONS

BEARDSLEY ROAD REGIONAL DRAINAGE SYSTEM (PHASE I)

ARIZONA PROJECT 101 L MA 024 H 3635 01C

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SUBSECTION 107.12 is modified to add:

The Contractor shall not remove or damage any existing private improvements outside the A.D.O.T. right-of-way. Private improvements cannot be removed by the Contractor unless otherwise shown on the project plans.

The Contractor shall ensure that no grading is performed within the limits of the existing frontage road shoulders. Any base material disturbed during the grading operation shall be replaced at the Contractor's expense.

SECTION 203 is modified to add:

The grading for the maintenance road from the private driveway to Skunk Creek shall be considered to be incidental to the bid item for Drainage Excavation.

SECTION 406 is modified to add:

There will be no direct payment for saw cutting and/or wheel cutting, the cost being considered as included in the price for the contract item "Asphaltic Concrete". All sawcuts shall be full depth through the existing pavement sections.

SECTION 701 is modified to add:

The Contractor shall maintain traffic around the bridge construction sites at 41st Avenue and the Private Drive via a graded roadway fill section across the existing ditch. The section at 41st Avenue shall be a minimum of 24 feet wide to accommodate two-way traffic. The section at the private drive shall be a minimum of 14 feet wide. The Contractor shall be required to maintain the existing flow through the channel. Full channel blockage will not be allowed during any phase of construction. The Contractor shall utilize temporary pipe culverts or other approved methods to convey drainage flows underneath temporary graded roadways around the bridge construction areas. This work shall be considered incidental to the bridge construction. The Contractor shall include the cost for this work in the respective bridge items.

The Contractor shall be responsible for maintaining traffic in accordance with the applicable sections of both the 1990 Standard Specifications and the current edition of the Manual of Uniform Traffic Control Devices. All traffic control required for the construction of a specific item shall be considered to be incidental to that bid item. There will be no separate measurement or payment for any traffic control items.

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SECTION 920 is modified to add:

There will be no direct payment for saw cutting, the cost being considered as included in the price for the contract item "Concrete Channel Lining (6)". All sawcuts shall be full depth through the existing channel lining sections.

Bid item Concrete Channel Lining (6") shall consist of furnishing all materials, equipment, tools and labor necessary to construct reinforced concrete channel lining in accordance with the details provided in the plans, the requirements of the ADOT Standard Specifications for Road and Bridge Construction (1990) and these Special Provisions and to provide traffic control necessary to construct this item.

Concrete shall be Class S (f'c 3000 psi) conforming to Section 601 of the Standard Specifications. Reinforcing steel shall be Grade 60 conforming to Section 605 of the Standard Specifications.

Concrete Channel Lining shall be constructed to the lines and grades depicted in the plans. All construction joints shall be formed. The cutoff wall shall be constructed along the entire perimeter of the channel lining including all vehicular access ramps. Concrete shall be finished by means of a float, then steel troweled and then broomed with a fine brush in a transverse to the channel flow line.

Two specific locations are depicted in the plans where provisions are being made for construction of spillways by others. The 12 inch cutoff walls shall be constructed continuously through the full length of these channel spillway areas.

Connection to the existing concrete channel lining at Skunk Creek will require drilling and grouting of dowel bars.

Concrete Channel Lining (6") will be measured by the square yard of exposed concrete surface. There will be no separate measurement or payment for the cutoff walls. The cutoff walls are considered to be incidental to the channel lining. There will be no separate measurement or payment for the channel reinforcing. The reinforcing is considered to be incidental to the channel lining. The drilled and grouted dowel bars for the connection to the Skunk Creek channel lining shall be considered incidental to the channel lining. Traffic control for the construction of the channel lining is incidental to this item.

The construction of the weep hole detail as shown in the plans is considered to be incidental to the construction of the channel lining. There will be no separate measurement or payment of materials, labor, equipment and tools for construction of the weep hole detail.

The accepted quantities of Concrete Channel Lining (6"), measured as provided above, will be paid for at the contract unit price per square yard complete in place inclusive of all necessary materials, labor and equipment.

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