

920.000

ENGINEERING DIVISION

Elliot

LIBRARY

ELLIOT ROAD BRIDGES

AT

RWCD CANAL AND FLOODWAY

A121.509

TO CONTRACT DOCUMENTS

ENTITLED: Elliot Road Bridges at RWCD Canal and Floodway

OWNER: FLOOD CONTROL DISTRICT of Maricopa County

The above documents are herein modified. The provisions of said documents applicable to these modifications remain unchanged unless specifically indicated otherwise herein. This Addendum forms a part of the Contract Documents and modifies them as follows:

1. On the BIDDING SCHEDULE-ITEM 622-3, Page 4 of 17, in the column labeled "Approximate Quantity," delete the number "170" and substitute the number "340." In the column labeled "Description," delete the number 48' and substitute the number 60" to denote pipe diameter.
2. On the ALTERNATE BIDDING SCHEDULE-ITEM 622-3, Page 9 of 17, in the column labeled "Approximate Quantity" delete the number "170" and substitute the number "340." In the column labeled "Description" delete the number 48" and substitute the number 60" to denote pipe diameter.

ITEM 622-3, Page 14 of 17, in the column labeled "Approximate Quantity," delete the number "194" and substitute the number "388." In the column labeled "Description," delete the number 48" and substitute the number 60" to denote pipe diameter.

3. To the Construction Special Provisions, Page 11 of 13, add the following:
SECTION 622-PIPE CULVERT: Corrugated Metal Pipe, 60" diameter, if furnished, as 60" Pipe Culvert at the Contractor's option, shall be 12 gauge.
4. On the Plans Sheets, No. 10 of 26, in the upper left corner, the note reading "170 L.F.-48" Pipe Culvert (By-Pass) shall be changed to read "340 L.F.-60" Pipe Culvert (By-Pass).

All other references to the By-Pass Pipe in the plans sheets shall be changed from 48" to 60".

FCD Contract No. 82-31

Page 1 of 1

TO CONTRACT DOCUMENTS

ENTITLED: Elliot Road Bridges at RWCD Canal and Floodway

OWNER: FLOOD CONTROL DISTRICT of Maricopa County

The above documents are herein modified. The provisions of said documents applicable to these modifications remain unchanged unless specifically indicated otherwise herein. This Addendum forms a part of the Contract Documents and modifies them as follows:

1. In the Construction Special Provisions page 3 of 11 add the following section: "SECTION 105.8 CONSTRUCTION STAKES, LINES AND GRADES: The project control line and bench mark elevation are shown on the drawings and will be established by the Engineer. The Contractor shall establish offset stakes and temporary bench marks for referencing the designated construction lines and grades. The Contractor shall provide all rough grade, fine grade, and structural reference lines and shall be responsible for their conformance with the plans and specifications.

Survey work shall be performed by a qualified and experienced surveyor under the supervision of a licensed land surveyor.

No separate payment will be made for construction surveying and the cost thereof shall be included in the price bid for related items of work."

TO CONTRACT DOCUMENTS

ENTITLED: Elliot Road Bridges at RWCD Canal and Floodway

OWNER: FLOOD CONTROL DISTRICT of Maricopa County

The above documents are herein modified. The provisions of said documents applicable to these modifications remain unchanged unless specifically indicated otherwise herein. This Addendum forms a part of the Contract Documents and modifies them as follows:

1. In the INVITATION FOR BIDS, Page 1 of 5, delete the date "November 4, 1982" and substitute the date "November 10, 1982" as the date scheduled for bid opening.
2. To the Construction Special Provisions, add the following:

SECTION 108: The Contractor shall give priority to the construction of the canal bridge and shall have it completed to such an extent that the canal shall be in usable condition, i.e., carry irrigation water, by February 15, 1983.

SUBSECTION 104.2.4: Any request for change in the design of any bridge member, i.e., beam thickness on the canal bridge, requested by the Contractor must be accompanied by calculations indicating that the requested change conforms to the design standards as indicated by the plans.

ADDENDUM NO. 2
October 21, 1982

Flood Control District of Maricopa County
Property of
District of MC Library
Return to
Durango
009

FCD Contract No. 82-31

Page 1 of 1

TO CONTRACT DOCUMENTS

ENTITLED: Elliot Road Bridges at RWCD Canal and Floodway

OWNER: FLOOD CONTROL DISTRICT of Maricopa County

The above documents are herein modified. The provisions of said documents applicable to these modifications remain unchanged unless specifically indicated otherwise herein. This Addendum forms a part of the Contract Documents and modifies them as follows:

1 - To the Construction Special Provisions; add the following:

Subsection 107.2 Permits:

The Contractor shall be responsible to obtain the necessary permit from the Roosevelt Water Conservation District to work within the canal right-of-way. Application should be made to:

Grant Ward
Roosevelt Water Conservation District
P. O. Box 168
Higley, Arizona 85236

TO CONTRACT DOCUMENTS

ENTITLED: Elliot Road Bridges at RWCD Canal and Floodway

OWNER: FLOOD CONTROL DISTRICT of Maricopa County

The above documents are herein modified. The provisions of said documents applicable to these modifications remain unchanged unless specifically indicated otherwise herein. This Addendum forms a part of the Contract Documents and modifies them as follows:

1. To the Construction Special Provisions, add the following:

CONTRACT TIME: Add the following: "If the contract is awarded on the ALTERNATE BID, the total time allowed for completion of all work on the project shall be one hundred twenty (120) calendar days after the date of Notice to Proceed."

2. The amount of \$350.00 per calendar day or the actual costs incurred by the District for Engineering and Inspection Services, whichever is less, 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 the Contractor for each and every calendar day that work shall remain uncompleted after the time specified for the completion of the work in the proposal, or as adjusted by the Engineer.

SPECIAL PROVISIONS
FOR
ELLIOT ROAD BRIDGES
AT RWCD CANAL AND FLOODWAY

CONTRACT NO. FCD 82-31



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: _____

Date: _____

SUPPLEMENTARY TO MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARD
SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION EDITION OF 1979 AND REVISIONS
AND SUPPLEMENTS THERETO.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

CONTRACT NO. FCD 82-31

TABLE CONTENTS:

1. Invitation for Bids
2. Bid Form
3. Construction Special Provisions
4. No Collusion Affidavit
5. Contract
6. Statutory Payment Bond
7. Statutory Performance Bond
8. Certificate of Insurance
9. Drawings: Elliot Road Bridges at RWCD Canal and Floodway
Sheets 1 through 26 of 26

INVITATION FOR BIDS
(Construction Contract)

Project: Elliot Road Bridges at RWCD
Canal and Floodway

Ref: Invitation FCD 82-31
Date: October 5, 1982
Issued by: Flood Control District
Maricopa County

Location: Elliot Road at the RWCD Canal, approximately 0.2 miles east of
Power Road.

SEALED BIDS, IN SINGLE COPY FOR THE WORK DESCRIBED HEREIN WILL BE RECEIVED UNTIL 2:00 P.M. LOCAL TIME AT THE PLACE OF THE BID OPENING, NOVEMBER 4, 1982, IN THE OFFICE OF THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, 3335 WEST DURANGO STREET, PHOENIX, ARIZONA, 85009, AND AT THAT TIME PUBLICLY OPENED.

ALTERNATIVE BIDS CONSISTING OF A COMBINED PROPOSAL AS OUTLINED HEREIN AND IN SEPARATE PROPOSAL PAMPHLET IFB FCD 82-30 MAY BE SUBMITTED FOR CONSIDERATION.

BID SECURITY IN AN AMOUNT OF NOT LESS THAN FIVE PERCENT (5%) OF THE TOTAL BID PRICE MUST BE SUBMITTED WITH EACH BID. THE BID SECURITY MAY BE IN THE FORM OF A BID BOND, CASHIER'S CHECK, POSTAL MONEY ORDER, OR CASH. THE BID SECURITY WILL BE MADE PAYABLE TO THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY AS A GUARANTEE THAT IF THE WORK IS AWARDED TO THE BIDDER, HE WILL, WITHIN TEN (10) DAYS FROM THE DATE OF SUCH AWARD, ENTER INTO PROPER CONTRACT AND BOND CONDITIONS FOR THE FAITHFUL PERFORMANCE OF THE WORK. OTHERWISE, SAID AMOUNT WILL BE FORFEITED TO THE FLOOD CONTROL DISTRICT. BID SECURITY, WILL BE RETURNED AS PRESCRIBED BY MAG 103.

THE SUCCESSFUL BIDDER SHALL BE REQUIRED TO FURNISH PERFORMANCE AND PAYMENT BONDS IN PENAL SUMS NOT LESS THAN ONE HUNDRED PERCENT (100%) RESPECTIVELY, OF THE ORIGINAL AMOUNT OF THE CONTRACT.

DESCRIPTION OF WORK:

Construction of a concrete floodway bridge, concrete or steel canal bridge, canal control structure, approach road and related miscellaneous items.

THE WORK SHALL COMMENCE WITHIN SEVEN (7) CALENDAR DAYS AND BE COMPLETED WITHIN ONE HUNDRED TWENTY (120) CALENDAR DAYS AFTER RECEIPT OF THE NOTICE TO PROCEED.

ALTERNATE BID. THE WORK SHALL BE COMPLETED WITHIN ONE HUNDRED TWENTY (120) CALENDAR DAYS AFTER RECEIPT OF THE NOTICE TO PROCEED.

NOTICE: THE BID SCHEDULE, SPECIAL PROVISIONS, INSTRUCTIONS TO BIDDERS, UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1979 EDITION (MAG) AND REVISIONS AND SUPPLEMENTS THERETO, DRAWINGS LISTED UNDER THE CONTENTS, WILL BE INCORPORATED IN AND BECOME A PART OF THE RESULTANT CONTRACT.

CHERIE PENNINGTON, CLERK
BOARD OF DIRECTORS
FLOOD CONTROL DISTRICT OF
MARICOPA COUNTY

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
INVITATION FOR BIDS, FCD
INSTRUCTIONS TO BIDDERS

1. Explanation to Bidders. Any explanations desired by the bidder, questions, or items for clarification regarding the meaning or interpretation of the invitation for bids, drawings, specification, etc., may be addressed to the Chief Engineer and General Manager, preferably in writing, prior to the pre-bid conference. Any answers, interpretations or clarifications affecting the cost will be addressed to all bidders in an addendum to the invitation. The receipt of an addendum by the bidder must be acknowledged in the space provided on the bid form or by letter or telegram received before the time set for the bid opening. Oral explanations or instructions given before the award of the contract will not be binding.
2. Conditions Affecting the Work. Bidders should visit the site and take such other steps as may be reasonably necessary to ascertain the nature of the work, the general and local conditions which can affect the work and the cost thereof. Failure to do so will not relieve bidders from responsibility for estimating properly the difficulty or cost of successfully performing the work. (See MAG 102.4)
3. Bidder's Qualifications. Before a bid is considered for award, a bidder may be requested by the Chief Engineer and General Manager of the Flood Control District to submit a statement regarding his previous experience in performing comparable work, his business and technical organization, financial resources, and plant available to be used in performing the work.
4. Bid Guarantee. Where a bid guarantee is required by the invitation for bids, failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

If the successful bidder, upon acceptance of his bid by the Flood Control District with the period specified herein for acceptance (sixty days if no period is specified), fails to execute such further contractual documents, if any, and give such bond(s) as may be required by the terms of the bid as accepted within the time specified (ten days if no period is specified) after receipt of the forms by him, his contract may be terminated for default. In such event he shall be liable for any cost of procuring the work which exceeds the amount of his bid, and the bid guarantee shall be available toward offsetting such difference.

5. Preparation of Bids. Bids shall be submitted on the forms furnished, or copies thereof, and must be manually signed. If erasures or other changes appear on the forms, each erasure or change must be initialed by the person signing the bid. Unless specifically authorized in the invitation for bids, telegraphic bids will not be considered.

No bid will be considered unless all items in the bid schedule are priced. In case of an error in the extension of price, the unit price shall govern. The quantities listed on the bid schedule on which unit prices are requested are estimates only.

Unless called for, alternate bids will not be considered.

Modifications of bids already submitted will be considered if received at the office designated in the invitation for bids by the time set for opening bids.

As an inducement for a reduction in the amount of the bid(s) submitted, an alternate bid may be submitted, consisting of a combined proposal for the construction of the Baseline Road Bridges at RWCD Canal and Floodway (IFB FCD 82-30) and the (IFB FCD 82-31) Elliot Road Bridges at RWCD Canal and Floodway.

Bidders shall acknowledge the receipt of and agree that the proposal submitted is based on any Addenda issued with or subsequent to the proposal pamphlet. Acknowledgement shall be indicated on the last page of the Bidding Schedule.

6. Submission of Bids. Bids must be sealed, addressed to the Chief Engineer and General Manager, Flood Control District of Maricopa County, 3335 West Durango, Phoenix, Arizona, 85009, and marked to identify the bid to the referenced Contract FCD Number. Failure to appropriately identify the bid may result in a premature opening of, or a failure to open, such bid. The name of the bidder shall be on the outside of the envelope. (See MAG 102.9.)
7. Withdrawal of Bids or Modifications. Bids may be withdrawn by written request received from the bidder prior to the time set for the opening of bids.
8. Public Opening of Bids. Bids will be publicly opened at the time and place set for the opening in the invitation for bids. Their content will be made public for the information of bidders and others interested who may be present either in person or by representative.
9. The contract(s) will be awarded either to the separate low bidder(s) on each bridge contract or to the low and/or best responsible bidder of the ALTERNATIVE (Combined bridge contractes).
10. Specifications. Specifications referred to herein shall include all revisions and amendments in effect on the date of issuance of the invitation for bids. These instructions, Special Instructions to Bidders, and the herein contained Construction Special Provisions supplement the Uniform Standard Specifications herein referred to by "MAG" section number of paragraph number; however, in case of conflict, these instructions and Special Provisions supersede the Uniform Standard Specifications (MAG).

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
 INVITATION FOR BIDS, FCD
 SPECIAL INSTRUCTIONS TO BIDDERS

Location of the Work

Elliot Road at the RWCD Canal, approximately 0.2 miles east of Power Road.

ALL WORK UNDER THIS CONTRACT IS
 TO BE COMPLETED BY THE DATE SPECIFIED

Contract Plans, Special Provisions and Contract Documents: Plans, Special Provisions, and forms for proposal, Bidding Schedule, Contract Agreement and Performance Bond may be obtained from the Flood Control District of Maricopa County, 3335 West Durango Street, Phoenix, Arizona, upon payment of \$15.00 by check payable to the FLOOD CONTROL DISTRICT OF MARICOPA COUNTY. This payment will not be refunded. The plans sheets may be purchased separately for a non-refundable fee of \$10.00.

APPROXIMATE QUANTITY (MAJOR ITEMS)

<u>QUANTITY</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
4600	C.Y.	Excavation
160	Tons	Asphalt Concrete
140	L.F.	Drilled Shafts
700	L.F.	Concrete Piles
1250	C.Y.	Class A & B Concrete
260,000	Lbs.	Reinforcing Steel
16	Ea.	Precast Concrete Beam (Alternate)
24000	Lbs	Structural Steel (Alternate)

and such other pertinent items as are necessary for the completion of the project as shown on the plans or as called for in the Special Provisions or in the Maricopa Association of Governments Uniform Standard Specifications for Public Works Construction.

CHERIE PENNINGTON, CLERK
 BOARD OF DIRECTORS
 FLOOD CONTROL DISTRICT OF
 MARICOPA COUNTY

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
(Construction Contract)

BID FORM

Project: Elliot Road Bridges at RWCD Canal Invitation FCD 82-31
and Floodway Date: October 5, 1982

Location: Elliot Road at the RWCD Canal, approximately 0.2 miles east of
Power Road.

To: Chief Engineer and General Manager
Flood Control District of Maricopa County
3335 West Durango
Phoenix, Arizona 85009

The following Proposal is made on behalf of _____

_____ and no others. The Total contract
amount of this proposal is (in words) Alternate A

_____ and _____/100 dollars, (in figures)

_____ (in words) Alternate B

_____ and _____/100 dollars, (in figures)

_____. This amount being the sum total of the extended
amount for each pay item on the Bidding Schedules.

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 Flood Control District 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, Uniform Standard Specifications for Public Works Construction, 1979 Edition (MAG) and revisions and supplements thereto, together with the Special Provisions, forms of Contract and Bond 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, Specifications, Special Provisions, or conditions to be overcome, be plead. On the basis of the Plans, Specifications, Special Provisions, the forms of Contract, and the Bond 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 therefor, the sum of various products obtained by multiplying each unit price, herein bid for work or materials, by the quantity thereof actually incorporated in the completed project, as determined by the Chief Engineer and General Manager, Flood Control District of Maricopa County.

The Undersigned understands that the quantities mentioned herein are approximate 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.

Furthermore, in consideration of the proximity of the projects and the reduced mobilization and overhead costs realized therefrom, and as an inducement for the award of a single contract for the construction of both the Baseline Road Bridges at the RWCD Canal and Floodway (IFB FCD 82-30) and the Elliot Road Bridges at the RWCD Canal and Floodway (IFB FCD 82-31), the total alternate bid contract amount of this proposal is (in words) (Alternate A-1)

_____ and _____

100/dollars, (in figures) _____, _____:
(Alternate B-1)

_____ and _____

100/dollars, (in figures) _____
This amount being the sum total of the extended amount for each pay item on the ALTERNATE BIDDING SCHEDULE.

BIDDING SCHEDULE

Project: FLOODWAY BRIDGE, APPROACHES AND MISCELLANEOUS

Contract: FCD 82-31

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
215	4600	C.Y.	Channel Excavation			
225	410	M.Gal.	Watering			
301	1450	S.Y.	Subgrade Preparation			
310-1	480	Ton	Select Material			
310-2	510	Ton	Aggregate Base			
315	1.5	Ton	Bituminous Prime Coat			
321-C-3/4	170	Ton	Asphalt Concrete			
350	1	L.S.	Removal of Existing Improvements			
420	210	L.F.	Chain Link Fence			
502	145	L.F.	Drilled Shaft Foundations			
505-1	1033	C.Y.	Class A Concrete			

Elliot Road Bridges

at R.W.C.D. Canal and Floodway

BIDDING SCHEDULE

Project: FCD 82-31

Floodway bridge, approaches and miscellaneous

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
505-2	98	C.Y.	Class B Concrete			
505-3	251,100	Lb.	Reinforcing Steel			
505-4	1	Ea.	Outlet Structure MAG 501-4			
525	2400	S.F.	Canal Lining			
622-1	39	L.F.	24" Pipe Culvert			
622-2	45	L.F.	36" Pipe Culvert			
622-3	170	L.F.	48" Pipe Culvert			
635	1050	L.F.	Tailwater Ditch			

Sub-Total
Floodway Bridge
Approaches and Miscellaneous _____

Elliot Road Bridges

at R.W.C.D. Canal and Floodway

Page 5 of 17

BIDDING SCHEDULE

Alternate A - Concrete Beam
Canal Bridge and Control Structure

Project:

Contract: FCD 82-31

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
420	29	L.F.	Chain Link Fence			
501-1	688	L.F.	Furnishing Concrete Piles			
501-2	676	L.F.	Driving Concrete Piles			
505-1	85	C.Y.	Class A Concrete			
505-2	56	C.Y.	Class B Concrete			
505-3	14,300	Lb.	Reinforcing Steel			
506	16	Ea.	Precast Concrete Beams			
520	17	L.F.	Pipe Railing			

Sub-total
Alternate A
Concrete Beam Canal Bridge _____

BIDDING SCHEDULE

Project:

Alternate B - Steel Beam Canal Bridge
and Control Structure

Contract: FCD 82-31

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
420	30	L.F.	Chain Link Fence			
501-2	656	L.F.	Furnishing Concrete Piles			
501-3	654	L.F.	Driving Concrete Piles			
505-1	144	C.Y.	Class A Concrete			
505-2	52	C.Y.	Class B Concrete			
505-3	23,690	Lb.	Reinforcing Steel			
515	28,850	Lb.	Structural Steel			
520	17	L.F.	Pipe Railing			

Sub-total
Alternate B
Steel Beam Canal Bridge _____

AT R.W.C.D. CANAL AND FLOODWAY

Contract: FCD 82-31

BIDDING SCHEDULE SUMMARY

Alternate A - Concrete Beam Canal Bridge

Floodway Bridge, Approaches and Miscellaneous _____

Canal Bridge and Control Structure _____

Total _____

Alternate B - Steel Beam Canal Bridge

Floodway Bridge, Approaches and Miscellaneous _____

Canal Bridge and Control Structure _____

Total _____

The Bidder hereby acknowledges receipt of and agrees his proposal is based on the following Addenda _____

Elliot Road Bridges
 at R.W.C.D. Canal and Floodway

ALTERNATE
 BIDDING SCHEDULE

Project: FLOODWAY BRIDGE, APPROACHES AND MISCELLANEOUS

Contract: FCD 82-31

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
215	4600	C.Y.	Channel Excavation			
225	410	M.Gal.	Watering			
301	1450	S.Y.	Subgrade Preparation			
310-1	480	Ton	Select Material			
310-2	510	Ton	Aggregate Base			
315	1.5	Ton	Bituminous Prime Coat			
321-C-3/4	170	Ton	Asphalt Concrete			
350	1	L.S.	Removal of Existing Improvements			
420	210	L.F.	Chain Link Fence			
502	145	L.F.	Drilled Shaft Foundations			
505-1	1033	C.Y.	Class A Concrete			

Elliot Road Bridges
 at R.W.C.D. Canal and Floodway

ALTERNATE
 BIDDING SCHEDULE

Project: Floodway bridge, approaches and miscellaneous

Contract: FCD 82-31

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
505-2	98	C.Y.	Class B Concrete			
505-3	251,100	Lb.	Reinforcing Steel			
505-4	1	Ea.	Outlet Structure MAG 501-4			
525	2400	S.F.	Canal Lining			
622-1	39	L.F.	24" Pipe Culvert			
622-2	45	L.F.	36" Pipe Culvert			
622-3	170	L.F.	48" Pipe Culvert			
635	1050	L.F.	Tailwater Ditch			

Sub-Total
 Floodway Bridge
 Approaches and Miscellaneous

Sub-total to be included on ALTERNATE BIDDING SCHEDULE SUMMARY for Alternate A-1 and Alternate B-1 bids.

Elliot Road Bridges
 at R.W.C.D. Canal and Floodway

ALTERNATE
 BIDDING SCHEDULE
 Alternate A-1- Concrete Beam
 Canal Bridge and Control Structure

Project:

Contract: FCD 82-31

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
420	29	L.F.	Chain Link Fence			
501-1	688	L.F.	Furnishing Concrete Piles			
501-2	676	L.F.	Driving Concrete Piles			
505-1	85	C.Y.	Class A Concrete			
505-2	56	C.Y.	Class B Concrete			
505-3	14,300	Lb.	Reinforcing Steel			
506	16	Ea.	Precast Concrete Beams			
520	17	L.F.	Pipe Railing			

Sub-total
 Alternate A-1
 Concrete Beam Canal Bridge _____

Elliot Road Bridges

at R.W.C.D. Canal and Floodway

Page 11 of 17

ALTERNATE
BIDDING SCHEDULE

Project:

Alternate B-1 - Steel Beam Canal Bridge
and Control Structure

Contract: FCD 82-31

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
420	30	L.F.	Chain Link Fence			
501-2	656	L.F.	Furnishing Concrete Piles			
501-3	654	L.F.	Driving Concrete Piles			
505-1	144	C.Y.	Class A Concrete			
505-2	52	C.Y.	Class B Concrete			
505-3	23,690	Lb.	Reinforcing Steel			
515	28,850	Lb.	Structural Steel			
520	17	L.F.	Pipe Railing			

Sub-total
Alternate B-1
Steel Beam Canal Bridge _____

ALTERNATE
BIDDING SCHEDULE

Project: Baseline Road Bridges at RWCD Canal & Floodway

Contract: FCD 82-30

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
215	5,400	C.Y.	Channel Excavation			
225	600	M.Gal.	Watering			
301	0.33	Mile	Subgrade Preparation			
310-1	1,023	Ton	Aggregate Base			
310-2	1,815	Ton	Select Material			
315	10	Ton	Bituminous Prime Coat			
321-C 3/4	603	Ton	Asphaltic Concrete			
350	1	L.S.	Removal of Existing Improvements			
415	57	L.F.	Bridge Guard Rail			
420	236	L.F.	Chain Link Fence			
501-1	1,090	L.F.	Concrete Piles-Furnished			

ALTERNATE
BIDDING SCHEDULE

Project: Baseline Road Bridges at RWCD Canal & Floodway

Contract: FCD 82-30

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
501-2	1,090	L.F.	Concrete Piles-Driven			
502	829	L.F.	Drilled Shaft Foundations			
505-1	1,519	C.Y.	Class A Concrete			
505-2	192	C.Y.	Class B Concrete			
505-3	309,000	lbs.	Reinforcing Steel			
505-4	1	ea.	Junction Box, Special Detail			
506	20	ea.	Precast Concrete Beams			
515	3	ea.	Deck Units			
520	17	L.F.	Pipe Railing			
525	5,000	S.F.	Canal Lining			
621	144	L.F.	48" Corrugated Metal Pipe			

ALTERNATE
BIDDING SCHEDULE

Project: Baseline Road Bridges at RWCD Canal & Floodway

Contract: FCD 82-30

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
622-1	25	L.F.	42" Pipe Culvert			
622-2	31	L.F.	36" Pipe Culvert			
622-3	194	L.F.	48" Pipe Culvert			
623	73	S.F.	Headwall, MAG 501-1			
625	1	Ea.	Manhole, MAG 522			
634	1,017	L.F.	Tailwater Ditch			
635	24	L.F.	Concrete Lined Ditch			

The Bidder hereby acknowledges receipt of and agrees that the proposal is based on the following Assumptions:

Total _____

Total to be included on ALTERNATE BIDDING SCHEDULE SUMMARY for Alternate A-1 and Alternate B-1 bids.

ELLIOT ROAD BRIDGES & BASELINE ROAD BRIDGES

AT R.W.C.D. CANAL AND FLOODWAY

Contract: FCD 82-31
FCD 82-30

ALTERNATE
BIDDING SCHEDULE SUMMARY

Alternate A-1 Concrete Beam Canal Bridge

Baseline Road Bridges	_____
Elliot Road Floodway Bridge, Approaches and Miscellaneous	_____
Elliot Road Canal Bridge and Control Structure	_____
Total	_____

Alternate B-1 Steel Beam Canal Bridge

Baseline Road Bridges	_____
Elliot Road Floodway Bridge, Approaches and Miscellaneous	_____
Elliot Road Canal Bridge and Control Structure	_____
Total	_____

The Bidder hereby acknowledges receipt of and agrees his proposal is based on the following Addenda _____

The Undersigned further proposes to execute the Contract Agreement and furnish satisfactory Bonds within ten (10) days from the date of award, time being of the essence. The Undersigned further proposes to begin the work as specified in the Contract attached hereto, and to complete the work within the time limits as specified in the Special Provisions and maintain at all times a Contract Bond, approved by the Board of Directors, in an amount equal to one hundred percent (100%) of the total bid. 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 Bond to be in full force and effect until the work is finally accepted and the provisions of the Plans, Specifications, and Special Provisions are fulfilled.

A Proposal guaranty in the amount and character named in the Invitation for Bids is enclosed amounting to not less than five percent (5%) of the total bid, which Proposal guaranty is submitted as a guaranty of the good faith of the Bidder and that 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 this Proposal, or if the Proposal is accepted and there should be failure on the part of the Undersigned to execute the Contract and furnish satisfactory Bond 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.

Date: _____, 19____.

IF BY AN INDIVIDUAL:

(Name)

(Address)

IF BY A FIRM OR PARTNERSHIP:

(Firm Name)

(Firm Address)

By: _____

*Name and Address of Each Member:

Date: _____, 19____.

IF BY A CORPORATION:

(Corporate Name)

(Corporation Address)

By: _____

**Incorporated under the Laws of _____

Names and Addresses of Officers:

(President)

(Address)

(Secretary)

(Address)

(Treasurer)

(Address)

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

**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.

CONSTRUCTION SPECIAL PROVISIONS
FOR
ELLIOT ROAD BRIDGES
AT RWCD CANAL AND FLOODWAY
CONTRACT FCD 82-31

LOCATION OF THE WORK: This project is located on Elliot Road at the RWCD Canal, 0.2 miles east of Power Road.

PROPOSED WORK: The work consists of constructing a concrete floodway bridge, concrete or steel beam canal bridge, approaches, canal control structure and other miscellaneous items of work required for the completion of the project.

SPECIFICATIONS: The work embraced herein and as shown on the plans for the construction of this project shall be done in accordance with the Maricopa Association of Governments Uniform Standard Specifications for Public Works Construction dated 1979 and the current revisions thereto together with the Maricopa County Highway Department Supplement to the Uniform Standard Specifications adopted August 3, 1981 and October 19, 1981 and the Construction Special Provisions contained herein.

CONTRACT TIME: The Contractor shall complete all removals, canal bridge sub-structure, irrigation and canal work during the period of low flow in the canal and shall complete all work on the project within one hundred twenty (120) calendar days after the date of Notice to Proceed.

PROGRESS SCHEDULE: The Contractor shall submit his proposed work progress schedule to the Engineer for approval before starting the work.

ITEM COMMENTS: The herein contained Construction Special Provisions supplement the Uniform Standard Specifications and the Maricopa County Highway Department Supplement to the Uniform Standard Specifications; however, in case of conflict these Special Provisions supersede the Uniform Standard Specifications and the Maricopa County Supplement.

MATERIAL SOURCES: Select material, aggregate base and mineral aggregate shall be obtained from commercial sources. The Contractor shall pay all royalties or any other charges or expenses incurred in connection with the securing and hauling of the material. The Contractor will be required to furnish the Engineer with a list of his proposed commercial sources prior to use, and shall present satisfactory evidence that the material produced from any commercial source will meet the specifications as noted and these Special Provisions for such material.

SOIL BORINGS: Soil boring information is available for viewing at the Flood Control District of Maricopa County.

WORK STANDARDS: The 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).

WATER, LIGHT, POWER, HEAT, TELEPHONE: All water for construction purposes, drinking water, lighting, temporary electric power, heat and telephone service shall be arranged for and provided for the requirements of the work by the Contractor at his expense.

PROGRESS SCHEDULE: The Contractor shall submit his proposed work progress schedule to the Chief Engineer and General Manager for approval before starting to work.

SUBSECTION 101.2 - DEFINITIONS AND TERMS: Change the definition of Budget Project to read as follows: A project financed by funds set aside in the annual budget or otherwise approved by the Board of Directors of the Flood Control District of Maricopa County.

Change the definition of Engineer to read as follows: The Chief Engineer and General Manager of the Flood Control District of Maricopa County acting directly or through his duly authorized representative.

Change the definition of Owner to read as follows: The Flood Control District of Maricopa County, acting through its legally constituted officials, officers or employees.

SECTION 102 - ADDENDUMS & SUBMISSION OF BIDDING SCHEDULE: It shall be the responsibility of prospective bidders to determine, prior to submission of a bid, if any addendums have been issued. This may be accomplished by calling 602-262-1501. Any addendum issued, if not already bound into the Special Provisions, must be included as a part of the Special Provisions and any quantities on the Bidding Schedule requiring change shall be adjusted by pen and ink, to the new figure.

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

SECTION 102.5 - PREPARATION OF PROPOSAL: The bidder's Arizona State Contractor's License number and classification need not be shown on the proposal. The possession of such a license is no longer a bidding requirement; however, the Contractor may be required to provide certification of prior satisfactory completion for similar construction.

SECTION 103.6 CONTRACTOR'S INSURANCE: Concurrently with the execution of the contract the contractor shall furnish a Certificate of Insurance. The types of insurance and the limits of liability shall be as indicated thereon, i.e.

bodily injury per person	\$ 500,000
bodily injury each occurrence	1,000,000
property damage	500,000

SECTION 105.2 - PLANS AND SHOP DRAWINGS: Shop drawings shall be submitted as follows:

Initial submittal for review and/or approval - Three (3) sets of plans of which one (1) will be returned to the Contractor.

Final submittal for approval - Five (5) sets of plans of which two (2) sets will be returned to the Contractor.

SECTION 105.6 - COOPERATION WITH UTILITIES: When the Contractor's operations result in damage to any utility, the location of which has been brought to his attention, he shall assume full responsibility for such damage.

The following telephone numbers as indicated should put the Contractor in contact with the proper personnel:

Mountain Bell Telephone Company.....	263-3219
Salt River Project.....	273-2201
Arizona Public Service.....	271-7014
Location Staking (A.P.S., Mtn. Bell, S.R.P.)...Blue Stake.....	263-1100
Roosevelt Water Conservation District.....	963-3414
City of Mesa.....	834-2516
Town of Gilbert.....	892-0956
Maricopa County Highway Department	262-3631

See Exhibit A that is attached to these Special Provisions.

SUBSECTION 108.7 - DETERMINATION AND EXTENSION OF CONTRACT TIME:

The contractor shall be responsible for having taken steps reasonably necessary to ascertain the nature and location of the work and the conditions which can affect the work and the cost thereof. Failure to do so will not relieve bidders from responsibility for successfully performing the work without additional expense to the Flood Control District. The Flood Control District assumes no responsibility for understandings, representations, or predictions concerning conditions of the work area during the period of the contract.

If performance of all or any part of the work is suspended, delayed, or interrupted by weather conditions or by a rise in the water level causing unstable ground conditions, an extension of the period for contract performance equal to the lost days will be granted by the Flood Control District. No claim for additional costs incurred because of such delay will be allowed.

If the contractor finds it impossible for reasons beyond his control to complete the work within the contract time as specified or as extended in accordance with the provisions of this subsection, he may, at any time prior to the expiration of the contract time as extended, make a written request to the Engineer for an extension of time setting forth therein the reasons which he believes will justify the granting of his request. If the Engineer determines that the contractor has proceeded with such diligence as would normally have ensured completion within the contract time, and that the reasons stated to justify a time extension are valid, he may extend the time for completion in such amount as conditions justify. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

SECTION 206 - STRUCTURE EXCAVATION AND BACKFILL: Structure excavation consists of the removal of material for the construction of the bridge pile caps and substructure units in accordance with the plans and Section 206 of the Uniform Standard Specifications.

Structure backfill consists of furnishing, placing and compacting select material and other backfill material in accordance with the plans and Section 206 of the Uniform Standard Specifications, except that the backfill for the floodway bridge piers may be excavated material.

Select Material shall conform to the requirements of Section 702 of the Uniform Standard Specifications.

No separate payment will be made for structure excavation and backfill as such, and the cost thereof shall be included in the price bid for the items to which they are appurtenant.

SECTION 215 - CHANNEL EXCAVATION: The work under this section consists of the excavation of the floodway channel in accordance with the plans and Section 215 of the Uniform Standard Specifications.

The excavated material shall be used to construct the approach road embankments in accordance with Section 2-1 of the Uniform Standard Specifications.

After the floodway bridge substructure is completed, the existing floodway shall be relocated through the proposed bridge excavation.

Volumes will be computed by the average and area method.

Payment for all work under this section will be made at the unit price bid per cubic yard for ITEM NO. 215-CHANNEL EXCAVATION.

CONSTRUCTION SPECIAL PROVISIONS

SECTION 301 - SUBGRADE PREPARATION: The work under this section consists of the preparation of subgrades for the approach road paving and bridge approach slabs in accordance with the plans and Section 301 of the Uniform Standard Specifications.

Direct payment will not be made for excavation, drainage excavation, structural excavation, waste, haul, overhaul, clearing, rolling or for the disposal of waste materials, except as hereinafter noted.

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

The earthwork quantities shown on the plans are approximate and were determined during the design process. They are included to aid the bidder in formulating his bid.

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

The Contractor will be required to furnish the Engineer certified weight tickets covering all of the Select Material and Aggregate Base placed on the project. Final pay quantities will be based upon the scale tickets accepted by the Engineer.

SECTION 315 - BITUMINOUS PRIME COAT: The bituminous materials shall be Grade MC-70 or MC250 liquid asphalt as determined by the Engineer. Prime coat shall be applied to the total width of the Aggregate Base Material at the rate of 0.40 gallon per square yard unless otherwise specified by the Engineer.

SECTION 321 - ASPHALT CONCRETE: The bituminous material to be used shall be AR-4000 Paving Asphalt and shall comply with Sections 710 and 711 of the Uniform Standard Specifications or AC-30 and shall comply with ADOT Table 705-1 as modified on October 16, 1981.

The mineral aggregate shall meet the grading requirements within the range of the specified tolerances for Mix-Designation C-3/4 in accordance with Section 710 of the Uniform Standard Specifications and Maricopa County Highway Department Supplement to the Uniform Standard Specifications.

The work shall fully comply with Section 321 except that no mineral filler or blending sand will be required.

In addition to pugmill type mixing plants, Drum Dryer Mixers will be allowed in accordance with Standard Specifications 710.8. The moisture contents of the bituminous mixture immediately behind the paver shall not exceed three percent. If a drum dryer is used, the type of oil shall be AR-8000 or AC-30 as specified above.

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

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

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

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

SECTION 350 - REMOVAL OF EXISTING IMPROVEMENTS: The work under this section shall consist of the removal and disposal of the concrete canal bridge and floodway box culvert, control structure, irrigation facilities and any other obstacle to construction, whether shown on the plans or not, unless specifically called out on the plans to be removed or relocated by other agencies.

Arrangements for disposal of all waste material shall be the responsibility of the Contractor, except that all usable pipe culvert removed shall be stockpiled within the right-of-way for salvage by the County.

If a Maricopa County landfill is selected for disposition of road construction waste and/or debris, a Maricopa County Landfill Use Permit will be required. Application for permit can be made at the Maricopa County Landfill Office, located at 3325 West Durango Street, Phoenix, Arizona, 85009 (Telephone 269-2661). Charges will be levied on a volume basis for each load delivered to the landfill in accordance with the current fee schedule (see attachment). The nearest County landfill to this project is Queen Creek located at Hawes Road, 0.5 miles south of Chandler Heights Road.

Removal of the canal control structure shall be coordinated with the RWCD to determine what parts they want salvaged.

Payment for all work under this section will be made at the lump sum price bid for ITEM No. 350 - REMOVAL OF EXISTING IMPROVEMENTS.

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

The number and kind of barricades, signs, delineators, sand berms and all other traffic control devices can be subject to approval; however, approval of traffic control devices and the approval of the Contractor's method of application of all traffic control measures, shall not relieve the contractor of the responsibility of protecting the work, the workment and the traveling public.

A road closure is authorized. One week prior to closing the road, signs advising of closure date and duration shall be placed for east and west bound traffic at the bridge construction site.

Road closure signing shall be placed at the construction site as well as at the Elliot Road intersections of Ellsworth Road, Sossaman Road and Power Road.

The contractor shall install and maintain deceleration sand berms (approximately five feet high) in the path of through traffic prior to bridge construction or excavation. Sand berms shall remain until the road is open to traffic or construction presents less of a hazard than the berm.

All necessary signs and barricades shall remain three working days beyond the acceptance of the project by the District.

SECTION 420 - CHAIN LINK FENCE: The work under this section consists of constructing chain link fence on the bridge docks in accordance with the plans and Section 420 of the Uniform Standard Specifications.

SECTION 501 - CONCRETE PILE FOUNDATIONS: The work under this section consists of constructing the concrete piles for the canal bridge in accordance with the plans and the applicable provisions of Section 501 of the Uniform Standard Specifications.

Concrete and reinforcing steel will be paid for separately as indicated in Section 505 - Concrete Structures.

Payment for all other work under this section will be made at the unit price bid per linear foot for ITEM NO. 501-1 - CONCRETE PILES FURNISHED, and ITEM NO. 501-2 CONCRETE PILES-DRIVEN.

SECTION 502 - DRILLED SHAFT FOUNDATIONS:

Description: This item shall govern for the construction of foundations consisting of "reinforced concrete dilled shafts." Concrete shafts shall be placed in a drilled excavation. Foundations shall be constructed in accordance with this item and in conformance with the details and dimensions shown on the plans.

Materials. All concrete and materials shall be in accordance with the requirements of Section 505 of the Standard Specifications and the requirements herein. Concrete shall be Class "A," unless otherwise shown on the plans. The maximum size coarse aggregate shall be 1-1/2 inches for cased shafts. A retarder or water reducing agent will be required in all concrete when casting is used. Reinforcing steel shall conform to the requirements of Section 727 of the Standard Specification. The sizes and dimensions shall be as shown on the plans.

Construction Methods:

Excavation: The Contractor shall perform the excavation required for the shafts, through whatever materials encountered, to the dimensions and elevations shown on the plans or required by the site conditions.

Shaft alignment shall be within a tolerance of one inch per ten feet of depth. The axis of the shaft at the top elevation shall be within three inches of its plan location.

The plans indicate the expected depths and elevations where satisfactory bearing material will be encountered. This information will be used as a basis for the contract. If satisfactory material is not encountered at plan elevation, the footing may be raised or lowered as determined by the Engineer. Alteration of plan depth shall be made to satisfactorily comply with the design requirements. Casing will be required when necessary to prevent caving of the material or when necessary to exclude seepage water. Casing shall be metal of ample strength to withstand handling stresses, the pressure of concrete and of the surrounding earth or backfill materials, and shall be watertight. The outside diameter of casing shall not be less than the specified size of shaft; otherwise, the size of casing and the size of drilled excavation in which it is to be placed will be left to the discretion of the Contractor, except as noted below. No extra compensation will be allowed for concrete required to fill an oversize casing or oversize excavation.

Where caving conditions and/or excess groundwater is encountered, no further drilling will be allowed until a construction method is employed which will prevent excessive caving that will make the excavation appreciably larger than the size of casing to be used. Drilling in a mud slurry, or other method which will control the size of excavation, will be required.

If the excavation of the top of shaft is below ground level at the time of concrete placement, a casing from ground elevation to a point below the top of the shaft will be required to control caving of any material into the freshly placed concrete.

Where casing is not required, any excavation for the shafts beyond the lines required by the plans shall be filled with Class "A" concrete at the Contractor's expense. Where casings are used, the Contractor will be permitted to backfill around the upper portions of the casing with pea gravel or other granular material, but space shall be provided to allow for escape of muck, slurry or water displaced by the concrete.

When casing is used, it shall be smooth and well oiled and shall extend approximately to the top of the shaft.

Under normal operations, the removal of the casing shall not be started, until all concrete placement is completed in the shaft. Movement of the casing for short pulls of a few inches, rotating, exerting downward pressure and tapping it to facilitate extraction will be permitted. When unusual conditions warrant, the casing may be pulled in partial stages. A sufficient head of concrete shall be maintained above the bottom of the casing to overcome hydrostatic pressure. Casing extraction shall be at a slow, uniform rate with the pull in line with the center of the shaft.

The elevation of the top of the steel cage shall be carefully checked before and after casing extraction. Generally, any upward movement of the steel not exceeding 2 inches, or any downward movement thereof not exceeding 6 inches per 20 feet of shaft length will be acceptable. Any upward movement of the concrete or displacement of the steel beyond the above limits will be cause for rejection.

The minimum length of steel required for lap with column steel shall be maintained. Dowel bars may be used if the proper lap length is provided both into the shaft and into the column.

Material excavated from shafts, including drilling mud, and not used in the backfill around the completed bents or piers shall be disposed of as directed by the Engineer.

At the time concrete is placed, the excavation shall be free from accumulated seepage water. All loose material shall be removed from the bottom of the excavation prior to placing concrete.

The Contractor shall provide suitable access and lighting for proper inspection of the completed excavation, to check the dimensions and alignment of shafts.

Any required lighting shall be electric. Any mechanical equipment used within the excavation shall be operated by air or electricity. The use of gasoline driven engines within the excavation for pumping or drilling will not be permitted.

Reinforcing Steel: The cage of reinforcing steel, consisting of longitudinal bars and lateral ties shall be completely assembled and placed as unit immediately prior to concrete placement.

If the shaft is lengthened, and the plans require full depth reinforcement, the longitudinal bars required in the upper portion of the shaft shall be extended to the bottom, with proper lateral reinforcement. These bars may be lap spliced. Any splices required shall be approved by the Engineer.

The cage shall be supported from the top by some positive method, to minimize its slumping downward during concrete placement and/or extraction of the casing. The support shall be concentric with the cage to prevent racking and distortion of the steel. A minimum of one half of the vertical bars shall be supported.

In uncased shafts, concrete spacer blocks, or steel chairs shall be used at sufficient intervals to insure concentric spacing for the entire length of the cage. In cased shafts, concrete spacer blocks shall not be used. Metal "chair" type spacers or bent pieces of steel bars shall be placed at sufficient intervals around the steel cage to insure concentric spacing inside the casing.

Concrete: The work shall be performed in accordance with the provisions of the Standard Specifications and the requirements herein.

Concrete shall be placed as soon as possible after all excavation is complete and reinforcing steel placed and shall be of such workability that vibrating or rodding will not be required.

Concrete placing shall be continuous in the shaft to the construction joint indicated on the plans.

Concrete shall be placed through a suitable tube or tremie to prevent segregation of materials. The tube or tremie shall be made in sections to provide proper discharge and permit raising it as the placement progresses. A nonjointed pipe may be used if sufficient openings of the proper size are provided to allow for the flow of concrete into the shaft.

The elapsed time from the beginning of concrete placement in the cased portion of the shaft, until extraction of the casing is begun, shall not exceed one hour.

Where a cap or tie beam is required to be placed monolithically with the shaft, a time interval will be allowed for placing the required form and reinforcing after casing removal.

A riser block of equal diameter as the column end or a maximum height of 6 inches may be cast at the top of the completed shaft.

The top surface shall be cured and any construction joint area shall be treated as prescribed in the Standard Specification, Section 505.

Measurement: Acceptable drilled shafts (of the specified diameter) complete in place, will be measured by the linear foot. Shafts will be measured from elevations or dimension indicated on the plans, unless the Engineer directs otherwise to meet unusual conditions.

Payment: Drilled shafts will be paid for at the unit price bid per linear foot of drilled shaft of the specified diameter for ITEM NO. 502 - DRILLED SHAFT FOUNDATIONS. Class "A" Concrete and Reinforcing Steel will be included in and paid for as items under Section 505.

SECTION 505 - CONCRETE STRUCTURES: The work under this section consists of constructing in place the concrete portions of the bridges and approach slabs in accordance with the plans and Section 505 of the Uniform Standard Specifications. Other methods as described in Subsection 505.8 will be allowed in place of water curing.

The concrete shall conform to Section 725 and the reinforcing steel shall conform to Section 727 of the Uniform Standard Specifications.

The use of fly ash will be permitted in all concrete mixes in accordance with subsection 725.2.1.

Payment for all work under this section will be made at the unit price bid per cubic yard for ITEM NO. 505-1 CLASS "A" CONCRETE and ITEM NO. 505-2 CLASS "B" CONCRETE and at the unit price bid per pound for ITEM NO. 505-3 REINFORCING STEEL, and at the unit price bid for ITEM NO. 505-4 OUTLET STRUCTURE, MAG 501-4, respectively.

Plaster ditch connection is not a pay item, the cost thereof shall be included in the unit price bid for outlet structure.

SECTION 515 - STEEL STRUCTURES: The work under this section consists of furnishing and placing steel beams and connections in accordance with the plans and Section 515 of the Uniform Standard Specifications.

The steel beams and connections shall conform to Section 770 and the paint to Section 790 of the Uniform Standard Specifications.

Payment for all work under this section will be made at the unit price bid per pound for ITEM NO. 515 - STRUCTURAL STEEL, which price shall be full compensation for the item complete in place, including painting.

SECTION 520 - PIPE RAILING: The work under this section consists of constructing pipe railing on the canal control structure in accordance with the plans and Section 520 of the Uniform Standard Specifications.

SECTION 525 - CANAL LINING: The work under this section consists of replacing canal lining in accordance with the plans and Section 525 of the Uniform Standard Specifications.

Canal lining shall be 3" thick handplaced concrete or 1½" thick pneumatically placed mortar, both reinforced with wire mesh.

SECTION 622 - PIPE CULVERT: The work under this section shall consist of furnishing and placing pipe culvert of the size and at the locations as called for on the plans.

Where the bidding schedule calls for the general term pipe culvert, the Contractor at his option, may furnish Reinforced Concrete Pipe Class III (Rubber Gasket) conforming to the requirements of Section 735 of the Uniform Standard Specifications or he may furnish 14 gauge Corrugated Metal Pipe (arch if specified) AASHTO Designation M-190, Type "C". All Corrugated Metal Pipe shall be outside bituminous coated and shall conform to Section 621 of the Uniform Standard Specifications.

The by-pass pipe shall be removed after the canal lining is completed and stock-piled as indicated under Section 350.

SECTION 635 - TAILWATER DITCH: The work under this section consists of relocating the existing tailwater ditch in accordance with the plans and the applicable requirements of Section 205 of the Uniform Standard Specifications.

Measurement of this item will be to the nearest lineal foot.

Payment will be made at the unit price bid per lineal foot for ITEM NO. 635 - TAILWATER DITCH.

GENERAL COMMENT: The cost of all work required under this contract as shown on the plans for which there are no specific items shown on the Bidding Schedule, shall be included in the prices bid for related items.

An attempt has been made to determine the location of all underground utilities and to design the location and elevation of all irrigation and drainage pipes, culverts and structures so as not to interfere with the existing utilities; however, it shall be the Contractor's responsibility to cooperate with the pertinent utility companies so that any obstructing utility installation may be adjusted.

The District reserves the right to adjust design grades or the location of drainage structures prior to construction, if it should become necessary in the opinion of the Engineer, without additional cost to the District.

It shall be the Contractor's responsibility to protect the structure and construction site from any excessive or detrimental flooding, within the canal or floodway right-of-way which may occur during the construction period and until final acceptance of the completed bridges by the Engineer.

Upon completion of the construction, the Contractor shall clear the canal and floodway bed and work area of all debris to the satisfaction of the Engineer.

No vehicular loads will be permitted on the bridges before the lapse of twenty-one (21) days from the date of the last pour of concrete for the bridge deck, unless approval is obtained in writing from the Engineer.

The Contractor shall take special precautions to keep the area around the bridges properly barricaded and marked with flares to prevent automotive traffic from running into the canal or floodway crossing the new bridge structures prior to the acceptance of the completed project by the Engineer. The installation of any necessary conduits, brackets or piping or any other facility or work which may be performed for the accommodation of any utility, shall be paid for by the utility owner. The Contractor shall make all arrangements that may be necessary for the construction and any financial agreement shall be solely between the Contractor and the utility owner.

GUARANTEE: The Contractor shall guarantee the structures for one year against faulty materials, faulty workmanship and failure to meet the specifications requirements. Said guarantee by the Contractor shall not apply to damage caused by earthquakes or other acts of God, land subsidence or faulty operations or any abuse of the structures by others.

MARICOPA COUNTY LANDFILL
FEE SCHEDULE

EFFECTIVE - DECEMBER 16, 1981

CLASS 1 REFUSE shall include all loose, easily compactible matter of a unit size which can be moved readily or handled by machinery or equipment normally used in the operation of a landfill project. The fee shall be based upon the size of the vehicle used to transport the refuse to the landfill. Landfills using scales will charge by weight at \$5.50 per ton.

1. Commercial Hauling

- A. 1/2 - 3/4 - 1-ton truck or large trailer of comparable size (up to 3.8 cubic yards volume) CODE (A) \$ 5.50/load
- B. 1 1/2 to 3-ton trucks or large trailer of comparable size (up to 10 cubic yards volume) CODE (B) \$14.50/load
- C. Garbage trucks or compactors-up to 20 cubic yards CODE (C) \$29.00/load
- D. Garbage trucks or compactors-up to 30 cubic yards CODE (D) \$43.50/load
- E. Garbage trucks or compactors-up to 40 cubic yards CODE (E) \$58.00/load
- F. Garbage trucks or compactors-up to 50 cubic yards CODE (F) \$72.50/load
- G. Garbage trucks or compactors-up to 60 cubic yards CODE (G) \$87.00/load

2. Dump trucks or open semi trucks will be charged the next lower rate from their actual truck volume for loose or uncompacted Class 1 refuse applicable to items C through G above only. (Exception - Class 2 refuse will pay the full rate as listed in paragraph 1 above.)

CLASS 2 REFUSE shall include trees, logs, stumps, construction wastes, or any other items of refuse of a unit size or weight such as to be difficult and costly to move, handle or compact by normal landfill operations. Trees, logs, and stumps must be trimmed and cut into pieces not exceeding six feet in length, or eighteen inches in diameter. No construction refuse or demolished building material which is too large for the landfill equipment to handle readily will be accepted for dumping. The dumping fees for commercial haulers shall be based upon the size, quantity and nature of the refuse material and the unit size as follows:

- 1. Construction refuse CODE (J) Same as Class 1
- 2. Tires/whole tires CODE (T) Four times Class 1
- 3. Vehicle bodies CODE (X) \$35.00 each
- 4. Barrels (30 to 55 gallons) CODE (R) Four times Class 1
Barrels crushed or cut into quarter sections Same as Class 1

CLASS 3A REFUSE shall consist of non-hazardous liquid waste. Types of acceptable liquid wastes include grease trap materials, chemical toilet waste, car wash waste, laundry waste, service station sump materials, steam cleaning rack waste, and septic tank waste. Waste other than these listed above will NOT be accepted.

- 1. Each liquid load will be assessed a fee for liquid waste testing at \$1.50/load
- 2. Each disposal of a non-hazardous liquid waste will be assessed according to the non-hazardous liquid waste manifest at \$2.00/500 gallons

CLASS 3B REFUSE shall consist of small dead animals of the household variety
(No livestock accepted) **CODE (K)** Same as Class 1

Residents hauling Class 1 refuse from home only - no charge.

Because of the inability to predict all types of refuse that might be presented for disposal, the right to refuse dumping privileges, in the best interest of operating and prolonging the life of the landfill, is reserved to the discretion of the landfill operator.

A surcharge of \$25 may be assessed to any user of a landfill, if their account is not paid in full within 30 days after billing.

PERMITS MAY BE OBTAINED FOR AN ANNUAL FEE (NOT PRORATED) OF \$10 AT THE MARICOPA COUNTY LANDFILL DEPARTMENT, 3325 WEST DURANGO STREET, PHOENIX, ARIZONA 85009 OR BY MAIL WITH FEE ATTACHED. FOR FURTHER INFORMATION CALL 269-2661. A \$50 TRUST FEE WILL ALSO BE REQUIRED WHICH IS REFUNDABLE UPON CANCELLATION OF ACCOUNT.

NOTICE- SCAVENGING AT MARICOPA COUNTY SANITARY LANDFILLS IS PROHIBITED. VIOLATORS WILL BE REFERRED TO THE SHERIFF'S OFFICE FOR APPROPRIATE ACTION.

CONTRACT

THIS AGREEMENT, made and entered into this _____ day of _____, 19 __, by and between _____

of the City of _____, County of _____, State of _____, party of the first part, hereinafter designated the CONTRACTOR, and the FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, acting by and through its BOARD OF DIRECTORS, a political subdivision of the State of Arizona, a body politic with corporate power, party of the second part, hereinafter designated OWNER.

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

ARTICLE I-SCOPE OF WORK: The contractor shall furnish any and all labor, materials, equipment, transportation, utilities, services and facilities required to perform all work for the construction of Project No. _____

and to completely and totally construct the same and install the material therein for the Owner, in a good and workmanlike and substantial manner and to the satisfaction of the Owner through its Engineers and under the direction and supervision of the Engineer, or his properly authorized agents and strictly pursuant to and in conformity with the Plans and Specifications prepared by the Engineers for the Owner, and with such modifications of the same and other documents that may be made by the Owner through the Engineer or his properly authorized agents, as provided herein,

ARTICLE II-CONTRACT DOCUMENTS: The Invitation for Bids, Plans, Standard Specifications and Details, Special Provisions, Addenda, if any, and Proposal, as accepted by the BOARD OF DIRECTORS, Performance Bond, Payment Bond, Certificates of Insurance, and Change Orders, if any, are by this reference made a part of this Contract to the same extent as if set forth herein in full.

ARTICLE III-TIME OF COMPLETION: The Contractor further covenants and agrees at his 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 his 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 within forty (40) days after final inspection and acceptance of the work.

IN WITNESS WHEREOF: Four (4) identical counterparts of this contract each of which shall for all purposes be deemed an original thereof, have been duly executed by the parties hereinabove named, on the date and year first above written.

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

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
PARTY OF SECOND PART

By: _____
Chairman, Board of Directors

Date: _____

RECOMMENDED BY:

ATTEST:

Chief Engineer and General Manager
Flood Control District
of Maricopa County

Clerk of the Board

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, 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 the
Obligee, dated the _____ day of _____, 19____, for _____

_____ 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 moneys due to all persons supplying labor or
materials to him or his subcontractors in the prosecution of the work provided
for in said contract, then this obligation shall be void, otherwise to remain in
full force and effect.

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

The prevailing party or any party which recovers judgment on this bond shall
be entitled to such reasonable attorney's fees as may be fixed by the court or a
judge thereof.

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

PRINCIPAL SEAL

AGENCY OF RECORD

BY: _____

AGENCY ADDRESS

SURETY SEAL

BY: _____

POWER OF ATTORNEY SEAL

BY: _____

CONTRACT NO. FCD 82-31
PAYMENT BOND

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

KNOW ALL MEN BY THESE 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 the
Flood Control District of Maricopa County, dated the _____ day of _____
_____, 19____, for _____

_____ 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 were copied at length
herein.

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

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

AGENCY OF RECORD

AGENCY ADDRESS

CONTRACT NO. FCD 82-31
PERFORMANCE BOND

PRINCIPAL SEAL

By: _____

SURETY SEAL

BY: _____

POWER OF ATTORNEY SEAL

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

CERTIFICATE OF INSURANCE

CONTRACT FCD _____ PROJECT TITLE _____

NAME AND ADDRESS OF INSURANCE AGENCY	INSURANCE COMPANIES AFFORDING COVERAGES
	Company Letter A
	Company Letter B
	Company Letter C
	Company Letter D
	Company Letter E
	Company Letter F
NAME AND ADDRESS OF INSURED	Company Letter D
	Company Letter E
	Company Letter F

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
	<input type="checkbox"/> COMPREHENSIVE GENERAL LIABILITY FORM <input type="checkbox"/> PREMISES OPERATIONS <input type="checkbox"/> CONTRACTUAL <input type="checkbox"/> BROAD FORM PROPERTY DAMAGE <input type="checkbox"/> EXPLOSION & COLLAPSE <input type="checkbox"/> PRODUCTS/COMPLETED OPERATIONS HAZARD <input type="checkbox"/> UNDERGROUND HAZARD <input type="checkbox"/> INDEPENDENT CONTRACTORS <input type="checkbox"/> PERSONAL INJURY			BODILY INJURY per person \$500 each occurrence \$1,000 PROPERTY DAMAGE \$500 OR BODILY INJURY AND PROPERTY DAMAGE Combined \$1,000	
	<input type="checkbox"/> COMPREHENSIVE AUTO LIABILITY & NON-OWNED			SAME AS ABOVE	
	<input type="checkbox"/> EXCESS LIABILITY			NECESSARY IF UNDERLYING NOT ABOVE MINIMUM	
	<input type="checkbox"/> WORKERS' COMPENSATION and EMPLOYERS' LIABILITY			STATUTORY	each accident \$100
	<input type="checkbox"/> OTHER				

The Flood Control District of Maricopa County is added as an additional insured as respects work done for the District by the named insured as required by statute, contract, purchase order or otherwise requested. 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 fifteen days written notice to the District. THIS CERTIFICATE IS NOT VALID UNLESS COUNTERSIGNED BY AN AUTHORIZED REPRESENTATIVE OF THE INSURANCE COMPANY.

NAME AND ADDRESS OF CERTIFICATE HOLDER
 FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
 3335 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, or any of its 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. The Flood Control District of Maricopa County 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. The above cost of damages incurred by the Flood Control District of Maricopa County or any of its court costs, expenses for litigation and reasonable attorney's fees.

Date _____ Contractor _____