

CONSTRUCTION SPECIFICATIONS

FOR

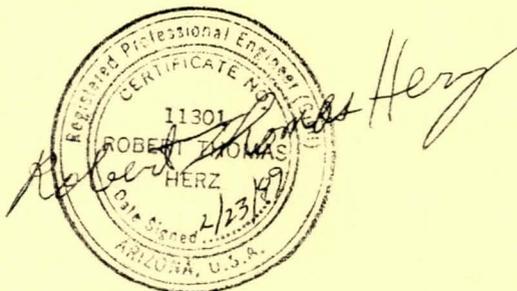
NORTHERN AVENUE SANITARY SEWER RELOCATION  
AT THE  
ARIZONA CANAL DIVERSION CHANNEL

FCD CONTRACT NO. 88-11

Property of  
Flood Control District of MC Library  
Please Return to  
2801 W. Durango  
Phoenix, AZ 85009

Construction Special Provisions  
Prepared By:

RGA Engineering Corporation  
2633 East Indian School Road, Room #401  
Phoenix, Arizona 85016



(Engineer's  
Seal)

Prepared For:

Flood Control District of Maricopa County

and

Recommended By: Nick Karan Date: 2-27-89  
Nicholas P. Karan, P.E.  
Chief, Engineering Division

Approved By: Stanley L. Smith, Jr. Date: 2-27-89  
Stanley L. Smith, Jr., P.E.  
Deputy Chief Engineer

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

A118.527

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FOR

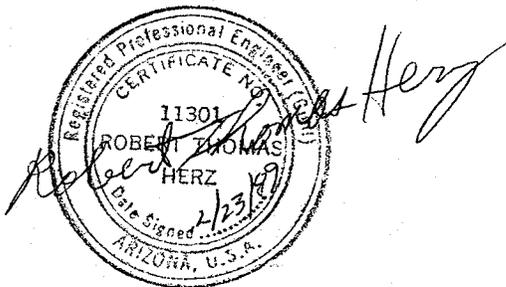
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SUPPLEMENTARY TO MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION EDITION OF 1979 AND REVISIONS AND SUPPLEMENTS THERETO.

ATTENTION

ALL PROSPECTIVE BIDDERS

Some of the Bid Bonds previously received with bids for construction projects have not been in complete compliance with Arizona Revised Statutes (ARS).

ARS 34-201-A3 requires that every bid be accompanied by a certified check, cashier's check or surety bond for five percent (5%) of the amount of the bid.

In some cases the bond limits the five percent (5%) to the difference between the low bid and that of the next lowest responsible bidder, to whom a contract could be awarded, in the event that the low bidder failed to enter into contract within the specified time.

Bids received with limitation on the five percent (5%) will be considered as non-responsive bids and will not be accepted or considered for award of contract.

Please take note and submit your bids accordingly.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  
 CONTRACT FCD 88-11  
 NORTHERN AVENUE SANITARY SEWER RELOCATION AT THE  
 ARIZONA CANAL DIVERSION CHANNEL

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Design Consultant  
 RGA Engineering Corporation  
 2633 East Indian School Road, Room #401  
 Phoenix, Arizona 85016

Robert Thomas Herz, P.E.

Construction Special Provisions Only

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  
INVITATION TO BID

BID OPENING DATE: March 15, 1989

LOCATION:

The project is located in Phoenix, Arizona, north of and adjacent to the Arizona Canal, between 7th Street and 12th Street, approximately 8 miles northeast of downtown Phoenix in Maricopa County, Arizona.

PROPOSED WORK:

The construction of approximately 1,017 l.f. and 978 l.f. of 10" and 8" Sanitary Sewer Line, respectively; 277 l.f. of 6" Waterline; 813 s.y. of new pavement and ABC; and miscellaneous structures demolition.

BIDS:

SEALED BIDS for the proposed work will be received by the Flood Control District of Maricopa County, 3335 West Durango Street, Phoenix, Arizona 85009 until 2:00 p.m. (Phoenix time) on the above date and then publicly opened and read at 3335 W. Durango St., Phoenix, AZ 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, or national origin.

The bidder shall be required to certify that it is appropriately licensed as a Contractor in the State of Arizona for performing the before-mentioned type of work. Verification 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.

In order to determine if bidder is entitled to the provisions of A.R.S. Section 34-241, all bidders shall submit, as a part of their proposal, an affidavit stating whether or not taxes have been paid for two successive years as provided in A.R.S. Section 34-241. The affidavit shall be in the form provided herein.

In the event a bidder challenges compliance with the tax provision, the successful bidder will be required to provide proof of compliance.

CONTRACT TIME:

All work on this Contract is to be completed within ninety (90) calendar days after date of Notice to Proceed.

MBE/WBE PARTICIPATION:

For this project, a goal of twenty-five (25) percent is desired for Minority/Women-Owned Business Enterprises. Instructions and required forms are included in the Minority and Women-Owned Business Enterprise Program Section.

PRE-BID CONFERENCE:

A pre-bid conference will be held on March 1, 1989 at 10:00 a.m. in the Flood Control District conference room, 3335 W. 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, Contracts Branch, preferably in writing, prior to the Pre-bid Conference. Where appropriate, any answers or clarifications affecting the cost may be addressed to all bidders in an addendum. Under no circumstances will verbal answers or clarifications be given to individual contractors either before or after the Pre-bid Conference.

PROJECT PLANS, SPECIAL PROVISIONS AND CONTRACT DOCUMENTS:

Plans and Construction Specifications may be obtained from Flood Control District of Maricopa County, 3335 West Durango Street, Phoenix, Arizona 85009 upon payment of \$12.00 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 \$19.50 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 5 percent (5%) 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.

All bids are to be marked in accordance with Section 102.9 of the Uniform Standard Specifications and addressed to the Chief Engineer and General Manager, Flood Control District of Maricopa County, 3335 West Durango Street, Phoenix, Arizona 85009.

PRINCIPLE ITEMS AND APPROXIMATE QUANTITIES

<u>ITEM</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
1.	1,017	l.f.	10" V.C.P. Sanitary Sewer
2.	978	l.f.	8" V.C.P. Sanitary Sewer
3.	277	l.f.	6" A.C.P. Waterline
4.	813	s.y.	2" A.C. Pavement

PROPOSAL

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

Gentlemen:

The following Proposal is made for constructing Northern Avenue Sanitary  
Sewer Relocation at the Arizona Canal Diversion Channel

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, 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, Construction Specifications, Special Provisions, or conditions to be overcome be pled. On the basis of the Plans, Construction 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 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 Bond 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 the time limits as specified in the Construction Specifications and maintain at all times a Contract Bond, approved by the Board of Directors, in an amount equal to one hundred percent 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 fulfilled.

A Proposal Guaranty in the amount and character named in the Invitation to Bid is enclosed amounting to not less than five (5) 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 his Proposal, 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.

The undersigned acknowledges receipt of the following addenda and has included their provisions in the proposal:

Addendum No. _____	Dated _____

The undersigned has enclosed the required bid security and subcontractor listing to this Proposal.

BIDDING SCHEDULE

PROJECT: Northern Avenue Sanitary Sewer Relocation  
at the Arizona Canal Diversion Channel

CONTRACT: FCD 88-11

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
310-1	813	s.y.	Aggregate Base Course (6" Thickness)			
321-1	813	s.y.	Asphalt Concrete C-3/4 (2" Thickness)			
350-1	1	L.S.	Removal of Existing Improvements			
350-2	1	L.S.	Demolition of 1115 E. Kaler/Structure Rehabilitation @ 1117 E. Kaler			
350-3	671	L.f.	Fence Relocation			
350-4	590	L.f.	Railroad Tie Curb Relocation			
610-1	277	L.f.	6" Water Line			
610-2	2	ea.	6" x 6" T.S. & Valve, V B & C			
615-1	1,017	L.f.	10" Sewer Line			
615-2	978	L.f.	8" Sewer Line			
615-3	11	ea.	Std. Manhole - MAG Det 420 & 422			
615-4	1	ea.	Adjust Manhole Frame & Cover			

TOTAL: \_\_\_\_\_

IF BY AN INDIVIDUAL:

\_\_\_\_\_  
(NAME - TITLE) (ADDRESS)  
Date: \_\_\_\_\_  
(PHONE)

IF BY A FIRM OR PARTNERSHIP:

\_\_\_\_\_  
(FIRM NAME) (FIRM ADDRESS)  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
(NAME - TITLE) (PHONE)

\*\* 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: \_\_\_\_\_ DATE: \_\_\_\_\_  
(PHONE)

TITLE: \_\_\_\_\_

\* Incorporated under the Laws of \_\_\_\_\_

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.

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 \_\_\_ percent (\_\_\_%) 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 A.R.S. 34.201.A.3.

WHEREAS, the said Principal is herewith submitting its proposal for Northern Avenue Sanitary Sewer Relocation at the Arizona Canal Diversion Channel

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 such proposal and give such Bonds and Certificates of Insurance as specified in the Standard Specifications with good and sufficient Surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter into such contract and give such Bond and Certificates of Insurance, if the Principal shall pay to the Flood Control District of Maricopa County the sum of money set forth above as liquidated damages for failure of the Principal to enter into the contract, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, A.D., 19\_\_.

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Title

Witness:  
\_\_\_\_\_

\_\_\_\_\_  
Surety

\_\_\_\_\_  
Title

Witness:  
\_\_\_\_\_





VERIFICATION OF LICENSE

Pursuant to Arizona Revised Statutes Section 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 Arizona Revised Statutes Section 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 ARIZONA REVISED STATUTES SECTION 13-2704.

DATE: \_\_\_\_\_ SIGNATURE OF LICENSEE: \_\_\_\_\_

COMPANY: \_\_\_\_\_

MINORITY AND WOMEN-OWNED BUSINESS ENTERPRISE PROGRAM

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 which is located in the Maricopa County Highway Department building, 3325 West Durango Street, Phoenix. In addition, only those firms certified at least seven calendar days 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 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. Any MBE/WBE Wholesaler, Distributor, or Jobber that does not manufacture or substantially alter the materials or product it sells will be limited to 20 percent of the sale price when determining the percentage of MBE/WBE participation.

B. Required forms:

An affidavit is included as part of this section. The form must be completed within seven calendar days after the Notice of Award of Contract. The low bidder is required to submit a Minority/Women-Owned Business Enterprise Program MBE/WBE Participation Affidavit listing the MBE/WBE participation by MBE/WBE firm and the related dollar value of the MBE/WBE contract.

C. Requests for Pay:

Each Request for Pay must be accompanied by a Maricopa County Minority/Women-Owned Business Enterprise Program MBE/WBE Participation Report. The final pay request shall include a listing of total contract MBE/WBE participation.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  
MINORITY/WOMEN-OWNED BUSINESS ENTERPRISE PROGRAM

MBE/WBE PARTICIPATION ASSURANCES  
AFFIDAVIT

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.
- \_\_\_\_\_ Will not participate in the MBE/WBE Program.

The bidder will specify its MBE/WBE participation on the Intended Participation Affidavit or provide documentation of its good faith efforts not later than 4:00 p.m., the seventh calendar day following the bid opening. The required affidavit shall be obtained by the apparent first and second low bidders from the Minority Business Office, Maricopa County Highway Department Building, 3325 West Durango Street, Phoenix, Arizona 85009, following the opening and reading of bids; a sample affidavit form for reference purposes follows.

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  
MINORITY-OWNED BUSINESS ENTERPRISE PROGRAM

MBE/WBE PARTICIPATION AFFIDAVIT  
(To be submitted within seven calendar days of Notice of Award)

Flood Control District of Maricopa County Contract No. 88-11

1. Intended Minority/Women-Owned Business Enterprise Participation (attach additional papers, if necessary.)

Name of Firm	Principal	Address	Item Number(s) or Work Description	Dollar Value of Subcontract
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

MBE/WBE Contract Goal 25%

Total Dollar Value of Proposed Subcontract(s) \_\_\_\_\_

Contract Bid Total \_\_\_\_\_

Percent of Contract Bid to be Subcontracted \_\_\_\_\_

2. Substitution

I understand that if a Maricopa County certified MBE/WBE (sub)contractor is unable to perform for any part of the intended work, my company should make sufficient efforts to (sub)contract either the same, or other work to an alternative Maricopa County certified MBE/WBE equal to the amount to attain the MBE/WBE goal and that I must document such efforts.

SAMPLE \_\_\_\_\_

Name of Firm

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

cc: Minority Business Office  
Maricopa County Highway Building  
3325 West Durango Street  
Phoenix, Arizona 85009

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: \_\_\_\_\_  
Contract Number: \_\_\_\_\_  
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, %: \_\_\_\_\_  
Total Cumulative MBE/WBE  
Participation on This Contract, %: \_\_\_\_\_

MBE/WBE subcontract payment made  
during this reporting period (yes or no): \_\_\_\_\_

cc: Minority Business Office  
Maricopa County Highway Building  
3325 West Durango Street  
Phoenix, Arizona 85009

SPECIAL PROVISIONS

FOR

NORTHERN AVENUE SANITARY SEWER RELOCATION

AT THE

ARIZONA CANAL DIVERSION CHANNEL

FCD CONTRACT NO. 88-11

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

CONSTRUCTION SPECIAL PROVISIONS  
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  
FCD CONTRACT NO. 88-11  
for  
NORTHERN AVENUE SANITARY SEWER RELOCATION  
at the  
ARIZONA CANAL DIVERSION CHANNEL

PROPOSED WORK: The work includes the construction of approximately 2000 L.F. of Sanitary Sewer Line, 275 L.F. of 6" Waterline, 800 S.Y. of new pavement and miscellaneous structures demolition.

LOCATION OF THE WORK: This project is located in Phoenix, Arizona, north of and adjacent to the Arizona Canal, between 7th Street and 12th Street.

SPECIFICATIONS: Except as otherwise required in these specifications, construction of this project shall be in accordance with all applicable Maricopa Association of Governments (MAG) Uniform Standard Specifications and Uniform Standard Details, latest revision, and the latest revision of the City of Phoenix Supplements to the MAG Uniform Standard Specifications and Details.

PRECEDENCE OF CONTRACT DOCUMENTS: The City of Phoenix Supplements to MAG Specifications and Details will govern over the MAG Standard Specifications and Details. In case of a discrepancy or conflict, Project Plans will govern over both the City of Phoenix Supplements and MAG Standard Specifications and Details. These Construction Special Provisions will govern over the City of Phoenix Supplements and MAG Standard Specifications and Details and the Project Plans.

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).

CONTRACT TIME: The Contractor shall start work within seven (7) calendar days and complete all work on the project within ninety (90) calendar days after the date of Notice to Proceed.

In the event the Contractor elects to schedule overtime, second shifts, weekend work, and generally all work as specified in Section 108.5 of these specifications in order to complete the project, the Contractor is reminded that the costs associated with additional testing time, additional test cost, additional Inspection, Survey, Engineering, or other work by the Construction Administrator and/or the Flood Control District of Maricopa County shall be borne by the Contractor in accordance with MAG Section 108.5. These costs shall be deducted from the money due to the contractor by the Flood Control District of Maricopa County. The cost associated with the items above shall be incidental to the unit price of items in the bid schedule.

NEGOTIATION CLAUSE: Recovery of damages related to expenses incurred by the Contractor for a delay for which the Flood Control District of Maricopa County 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 Flood Control District of Maricopa County. This provision shall not be construed to void any provision in the contract which requires notice of delays, provides for arbitration or other procedure for settlement, or provides for liquidated damages.

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 Engineer for approval at or before the pre-construction conference.

MATERIAL SOURCES: Concrete, Aggregate Base and Pipe 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 certificates stating that the material produced from commercial sources is in accordance with the Uniform Standard Specifications and these Special Provisions.

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.

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 authorized representative.

Change the definition of Owner to read as follows: The City of Phoenix, acting through its legally constituted officials, officers, or employees.

SECTION 102 - ADDENDA & SUBMISSION OF BIDDING SCHEDULE: It shall be the responsibility of prospective bidders to determine, prior to submission of a bid, if any addenda 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 that do not include appropriate addenda and show appropriate changes to the Bidding Schedule shall be invalid.

SECTION 102.4 - EXAMINATION OF SITE: The bidder shall examine the site of the proposed work and all documents pertaining to the work. It is mutually agreed that the submission of a proposal shall be prime facie evidence that the bidder has made such examination and is familiar with the character, quality and quantity of the work to be performed and material to be furnished.

Logs of test holes, ground water levels, and any accompanying soil reports as furnished by the Contracting Agency are furnished for general information only. The field so set forth shall not constitute a representation or warranty, expressed or implied, that such conditions are actually existent. Bidders shall make their own investigations and form their own estimates of the site conditions.

After submission of the proposal, no complaint or claim that there was any misunderstanding as to the quantities, conditions or nature of the work will be entertained.

SECTION 102.5- PREPARATION OF PROPOSAL: The bidder's Arizona State Contractor's License number and classifications shall be shown on the proposal.

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.

- \$1,000,000 bodily injury per person
- \$5,000,000 bodily injury each occurrence
- \$1,000,000 property damage

The Flood Control District of Maricopa County shall be named as additional insured, and a certificate of insurance shall be filed with the Flood Control District of Maricopa County.

SECTION 104 - SCOPE OF WORK:

104.1 General: The Contractor shall perform all work as may be necessary to complete the contract in a satisfactory and acceptable manner in full compliance with the plans, specifications and terms of the contract.

Unless otherwise specified in the special provisions, he shall furnish all labor, materials, equipment, transportation, utilities, services and facilities required to perform all work for the construction of the project within the time specified.

SUBSECTION 105.2 - PLANS AND SHOP DRAWINGS: Sub-section 105.2 of the MAG Standard Specifications is amended to include the following:

The Contractor shall furnish the Engineer with six (6) copies of shop drawings, pipe layout diagrams, manufacturer's catalog data, and detailed information, in sufficient detail to show complete compliance with all specified requirements, covering, but not limited to, the following items:

- A. Fabricated Pipe including Design Data
- B. Pre-Cast Manhole Risers
- C. Castings
- D. Manhole Covers and Appurtenances

Review: The Contractor, at his own expense, shall make such changes in the drawings as may be necessary to conform to the plans and specifications. Prior to return of such drawings, marked "Furnish as Noted", any work which the Contractor may do on the fabrications covered by the same shall be at his own risk, as the County will not be responsible for any expense or delays incurred by the Contractor for changes required to make the same conform to the drawings as finally reviewed.

One copy of submitted drawings will be returned to the Contractor marked "Furnish as Submitted" or "Furnish as Noted". If the submittal is marked "Revise and Resubmit" or "Rejected", a new submittal shall be made in the same manner as the original submittal.

When submitted for the Engineer's review, shop drawings, line layouts, etc. shall bear the Contractor's certification that he has reviewed, checked, and approved the shop drawings, etc. and that they are in conformance with the requirements of the Contract Documents. The Engineer will not review any submittals which do not bear the Contractor's certification. After the review has been completed, the above drawings, lists, samples, design calculations, and other data shall become a part of the Contract Documents, and the fabrications furnished shall conform to the submittal.

Review of material and layout drawings consists of review for general conformity to plans and specifications, and in no way relieves the Contractor or the supplier from responsibility for the correctness of the drawings.

Deviations or changes from plans or specifications must be called out as such and will require review by the Engineer for approval or rejection.

SECTION 105.6 - COOPERATION WITH UTILITIES: An attempt has been made to determine the locations of all underground utilities, drainage pipes, culverts, and structures. The Contractor shall comply with the requirements of the ARS 40-360.21 through 40-360.29 in notification of the interested utility owners prior to the start of construction and shall ascertain the approximate locations of the various underground utilities shown on the plans and as may be brought to his attention. The exact locations of these underground utilities shall be determined by the excavations made by the Contractor prior to any trenching operations. It shall be the Contractor's responsibility to cooperate with the pertinent utility companies, so that any obstructing utility installation may be adjusted. Should 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.

Natural gas, cable TV, electric and telephone utilities are to be relocated by the utility owners. The contractor shall coordinate with these utilities.

The following phone numbers, as indicated, should place the Contractor in contact with proper personnel:

U.S. West Communications .....	Andrew Andrade.....	842-7746
Salt River Valley Water Users Association...	Slavko Jovanovic.....	236-5072
Southwest Gas Corporation.....	Ronald Morency.....	484-5254
Arizona Public Service.....	Lois Winkler.....	271-2014
Location Staking (APS, Mountain Bell, SRP) .....		263-1100
City of Phoenix (Water).....	Steve Schebler.....	268-4709
(Sewer).....	Bob Renfro.....	268-1864
(Landscape).....	Terry Mills.....	262-1831
Flood Control District of Maricopa County.....		262-1501

SECTION 105.8 - CONSTRUCTION STAKES, LINES AND GRADES: The project control lines and bench mark elevation are shown on the drawings. 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 to the plans and specifications.

The Flood Control District of Maricopa County reserves the right to adjust design grades or the locations of the sanitary sewer prior to construction if, in the opinion of the Engineer, it should become necessary, without additional cost to the Flood Control District of Maricopa County.

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.

SECTION 105.10 - INSPECTION OF WORK: Work will be subject to City of Phoenix inspection and acceptance prior to final acceptance by the Engineer.

SECTION 105.12 - MAINTENANCE DURING CONSTRUCTION: The Contractor shall maintain the work during construction and until the project is accepted. The maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces to the end so that the roadway and other work areas are kept in satisfactory condition at all times.

SECTION 106 - CONTROL OF MATERIALS:

106.1 Source of Materials and Quality: The Contractor shall guarantee the construction work for one year against faulty materials, faulty workmanship and failure to meet the requirements of the specifications. 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.

SECTION 106.5 - CONTRACTOR'S MARSHALING YARDS: Contractor shall obtain approval of the Engineer when using vacant property to park and service equipment and store material for use.

- A. The Contractor shall notify adjacent property owners/residents of this proposed use.
- B. Any use of vacant property adjacent to or near the project for parking or servicing equipment and/or storing material will require the Contractor to obtain written approval from the property owner. This approval shall contain any requirements which are a condition of this approval.
- C. A copy of the property owner's approval shall be submitted along with the Contractor's request to the Engineer for approval for use of the marshaling yard in connection with the project. An appropriate distance from adjacent property will be set by the Engineer on a case by case basis based on the size and type of equipment to be used on the project.
- D. The yard shall be fenced and adequately dust-proofed in a manner such as to preclude tracking of mud onto paved City streets.
- E. Work in yard shall be scheduled so as to comply with the City Noise ordinance.
- F. Equipment, materials, etc., shall be located so as to minimize impact on adjacent properties. A sound barrier may be required if deemed necessary by the Engineer.
- G. The Contractor shall clean up property promptly upon completion of the use.
- H. Contractor's request for approval shall specify in detail how he or she proposes to comply with D through G above.

In the event the Contractor uses Flood Control Property for these uses, he shall obtain a license from FCDMC.

SECTION 107.2 - PERMITS: The Contractor shall be responsible for obtaining all permits and licenses, paying all charges, fees, taxes, and giving all notices necessary and incidental to the due and lawful execution of the work. Permits for earth moving may be obtained from the Bureau of Air Pollution Control, Maricopa County Department of Health Services, 1845 East Roosevelt, telephone number 258-6381.

The Contractor shall obtain a permit from S.R.P. for any construction activities within their right of way.

SECTION 108.5 - LIMITATION OF OPERATIONS: Should the Contractor elect to perform any work before or after regular working hours, on weekends, or legal holidays, any charges incurred by the District for inspection of the work, surveys, or tests of materials will be deducted from monies due or to become due to the Contractor.

SUBSECTION 108.7 - DETERMINATION AND EXTENSION OF CONTRACT TIME:

SEQUENCE OF CONSTRUCTION

General:

Prior to commencement of the work, the Contractor shall prepare and submit to the Engineer for approval, a written schedule covering the general sequence of the whole work to be performed. The schedule shall be submitted to the Engineer at the Pre-Construction Conference.

Orderly procedure of all work to be performed under this contract shall be the full responsibility of the Contractor. The work schedule must conform to the contract time requirements.

SECTION 201 - CLEARING AND GRUBBING: The work under this item shall be in accordance with Section 201 of the MAG Standard Specifications. No special payment will be made for removal of trees regardless of size.

The Contractor shall note that trees shall not be removed without prior approval of the Engineer, and the Contractor will be required to work around trees and vegetation and protect them from damage during the course of his work.

SECTION 225 - WATERING: The work under this item shall be in accordance with Section 225 of the MAG Standard Specifications.

SECTION 301 - SUBGRADE PREPARATION: The work under this item shall be in accordance with Section 301 of the MAG Standard Specifications. Subgrade preparation shall be considered incidental to construction and no separate payment shall be made for this item.

SECTION 310 - UNTREATED BASE: The work under this item shall be in accordance with Section 310 of the MAG Standard Specifications. Payment shall be made on the basis of the price bid per square square yard for the depth indicated.

SECTION 315 - BITUMINOUS PRIME COAT: The work under this item shall conform to Section 315 of the MAG Standard Specifications. Prime coat shall be placed as directed by the Engineer. There will be no separate payment for bituminous prime coat. The cost for bituminous prime coat shall be considered incidental to related bid items.

SECTION 321 - ASPHALT CONCRETE PAVEMENT (2"-C 3/4): The work under this item shall be in accordance with Section 321 of the MAG Standard Specifications. Payment will be at the contract price per square yard.

SECTION 336 - PAVEMENT MATCHING AND SURFACING REPLACEMENT: The work under this item shall conform to Section 336 of the MAG Standard Specifications. This work shall be considered incidental to construction.

SECTION 350 - REMOVAL AND RELOCATION OF EXISTING IMPROVEMENTS: The work in this section includes pay items 350-1 thru 350-4.

Bid item 350-1, removal of existing improvements shall include all work as described in section 350 of the MAG Standard Specifications together with the following:

- A. Removal of Buildings: The Contractor shall wholly or in part, remove and dispose of all structures, their associated footings and concrete slabs, abandon in place and/or remove utility lines, backfilling any resulting cavities and grade the area to a smooth surface. The removal of canopies over the parking areas shall include the removal of supporting posts, concrete footings and associated pavement section. The asphalt shall be sawcut along a straight and even line and removal shall be done in a manner so as not to disturb the adjacent asphalt. Any asphalt accidentally disturbed shall be repaired to the satisfaction of the Engineer at no extra cost to the owner. The area from which the asphalt and aggregate base courses have been removed shall be backfilled with native soil to the level of the remaining asphalt, compacted and graded smooth.
- B. Removal of all fences and other obstructions within the A.C.D.C. right of way adjoining demolition area.
- C. Lawn Restoration: Where existing lawns, not specifically associated with a building to be demolished, are disturbed due to construction or demolition, the Contractor shall grade the disturbed area and reseed with grass identical to the existing grass. Where conditions prohibit reseeding, the area shall be restored with sod of the same type grass, as approved by the Engineer.
- D. Restoration of Construction Easements: The Contractor shall leave the easements in as good condition, or better, than was found prior to commencement of work.
- E. Any and all items not specifically set forth as a separate pay item.
- F. Sawcutting and matching existing pavements and curbs, gutters, etc.
- G. Cut and Plug Existing Sewer Lines: The Contractor shall install plugs in all sanitary sewer lines to be abandoned in place at locations indicated on the drawings and/or as directed by the Engineer.
- H. Cut and Plug Sewer Service: The Contractor shall excavate, remove pipe, install pipe plugs and provide surface replacement as needed for all sanitary sewer services for buildings being demolished at locations as indicated on the drawings and/or as directed by the Engineer.
- I. Cut and Plug Water Service: The Contractor shall excavate, backfill, and provide surface replacement for the city crews to accomplish the cutoffs indicated on the plans and as directed by the Engineer. The Contractor shall coordinate with the City of Phoenix Water Department.

BID ITEM 350-2: Demolition of 1115 E. Kaler, involves removing approximately one-third of a structure which encompasses three residences. The residence located at 1115 E. Kaler Drive will be demolished while the residences at 1117 and 1119 E. Kaler Drive will remain.

Prior to commencing demolition of 1115 E. Kaler, the Contractor shall conduct an on-site inspection of the adjoining residence at 1117 E. Kaler. Both the interior and exterior of 1117 E. Kaler shall be examined. The inspection shall include, but not be limited to, visual inspection of the structure for any cracking, settling or other signs of damage. Upon completion of the inspection and before beginning actual demolition, submit a written report of the inspection to the Engineer. The report should include photographs, sketches, dimensions of cracks or other damage in sufficient detail so that the present condition of the structure to remain can be accurately assessed.

The first step in the actual removal of 1115 E. Kaler Drive shall involve the removal of finish materials on the walls and ceilings of the area adjacent to 1117 E. Kaler so that the structural framing of 1115 E. Kaler is exposed and the presence of common walls with the adjoining residence can be verified.

The Contractor shall inform the Engineer of his findings and advise him of any unforeseen or complicating problems he has uncovered prior to proceeding further. Then all connections including but not limited to bolts, nails, metal straps, etc. that exist between portions to be removed and portions to remain shall be disconnected, severed, or otherwise removed. Demolition of 1115 E. Kaler shall then be accomplished. Appropriate methods and extreme care shall be used in order to prevent damage to the remaining structure.

After demolition is complete, restore the exposed areas of the remaining structure to match existing areas according to the contract drawings and material specifications. Materials from demolished areas may be used where appropriate in order to match existing condition of the structure to remain.

Upon completion of restoration work the Contractor shall make another inspection of 1117 E. Kaler Drive. All damage, cracking, settling, etc. observed at this time that was not present at the time of the pre-demolition inspection shall be the responsibility of the Contractor to restore to a condition equal to or better than that which existed prior to demolition.

The Contractor will be accompanied by the project inspector and resident owner at the pre-construction and post construction inspections of 1117 E. Kaler Drive.

Building restoration work shall conform to the following specifications.

Section 06100 - Rough Carpentry  
Section 07210 - Building Insulation  
Section 09220 - Stucco

BID ITEM 350-3: Fence relocation shall be paid for by the linear foot as measured along the relocation alignment. No measurement nor payment shall be made for fence removals.

BID ITEM 350-4: Railroad tie curb relocation shall be paid for by the linear foot as measured along the face of the relocated alignment. The curb reinstallation shall match the existing curb in appearance.

Curves shall be approximated by shorter tie lengths, with the adjoining ends cut to form a tight, well matched joint.

SECTION 601 - TRENCH EXCAVATION, BACKFILLING, AND COMPACTION:

- A. CITY OF PHOENIX SUPPLEMENT SUBSECTION 601.2.1 GENERAL: is amended to add the following paragraph:  
"No extra compensation or additional time will be authorized for claims that soil conditions differ from those anticipated or those indicated by soils logs and/or reports. It is the Contractor's responsibility to make his own determination as to actual existing conditions."
- B. SUBSECTION 601.2.2 TRENCH WIDTH: is amended to add the following paragraph:  
"If the Contractor elects to slope the trench walls in lieu of shoring, sheeting or other wall support measures, he shall be responsible for any and all problems encountered and costs incurred as a result of the increased trench width. Furthermore, no increases in contract time will be allowed as a result of sloping trench walls."
- C. SUBSECTION 601.2.5 OVER EXCAVATION: is amended to add the following paragraph:  
"When the Engineer determines that over excavation and backfilling, below the normal foundation and bedding depth, are required as a result of unsuitable material, it will be considered extra work. Payment and construction time extension will be negotiated with the Contractor or as otherwise provided for in these contract documents. As a condition of the Contractor receiving payment, agreement on method of payment and construction time extension shall be reached prior to start of work unless otherwise authorized in writing by the Engineer."
- D. SUBSECTION 601.2.8 GRADING AND STOCKPILING: Add the following paragraph:  
"Excavated material shall not be considered as unsuitable due to an excessive moisture content or an adequate moisture content for proper compaction. The Contractor shall take whatever measures are required, at his own expense, to add or remove moisture from material to be used as backfill in order that proper compaction can be obtained within the limits set in Section 601.4.

The Contractor may elect, at no cost to the Contracting Agency, to haul off and dispose of excessively wet or dry material and replace it with material conforming to the specifications for backfill.

In either event, the proper compaction shall be obtained.

There will be no additional payment or time extension for this work."

- E. SUBSECTION 601.4.3 BACKFILL: Delete the fourth paragraph in its entirety, and substitute the following:

"When mechanical compaction is to be used, the Contractor will provide demonstrating his proposed method and equipment to be used. Upon agreement with the Engineer as to the acceptability of the Contractor's proposed method and equipment, they shall not be changed without the prior approval of the Engineer. Mechanical compacted lifts in excess of one foot will not be allowed without the express written consent of the Engineer."

- F. SUBSECTION 601.4.3 BACKFILL: is amended to add the following paragraphs:

"Backfill material shall be within the range of +2% to -4% of the optimum moisture content, prior to placing the material in the trench. The moisture content shall be uniform throughout the backfill material. Material not meeting these requirements may be required to be removed from the trench and moisture added or correct the deficiencies prior to replacement, all at no increase in cost to the contract.

It shall be the Contractor's responsibility to blend excavated material, removing or adding moisture as may be necessary to meet the requirements of the specifications, all at no increase in cost to the contract.

Excavated material when used for backfill shall meet the requirements of the preceding paragraph.

The moisture content requirements contained herein are waived when granular material is used and water settled.

The Engineer may require all or any part of the trench to be load tested for stability with Contractor's equipment prior to placement of asphalt or Portland cement concrete pavement. Unstable areas as determined by the Engineer shall be corrected by the Contractor at no increase in cost to the contract."

- G. SUBMITTAL: The Contractor shall submit his plan, methods, and procedures for protecting existing utilities prior to beginning construction. Approval of the plan does not limit the Contractor's responsibility for utility protection, and the Contractor shall implement all additional utility protection measures as determined to be necessary in the field.

SECTION 610 - WATERLINE CONSTRUCTION: The work under this section shall conform in its entirety to sections 610, 611, and 630 of the MAG Standard Specifications and these special provisions.

The trenching, bedding and backfilling of the foregoing items shall be in accordance with section 601 of the MAG Standard Specifications and the amendments of these Special Provisions.

Water Line Cut and Plug:

- a. Water line shut-down time shall be minimal and may be at night or during other non-standard working hours.
- b. The Contractor shall pay all applicable shut down fees.
- c. The Contractor shall provide coordination and all notifications required for waterline shut-down.

Bid Item 610-1, 6" Waterline: All pipe shall be measured by the lineal foot and shall include lengths of fittings.

The accepted quantities of pipe, measured as provided above, will be paid for at the contract unit price complete-in-place. No measurement or direct payment shall be made for furnishing and placing bedding material, fittings, collars, bands, or couplings joining the various sections of pipe.

SECTION 615 - SEWER LINE CONSTRUCTION: The work under this section shall conform in its entirety to Section 615 of the MAG Standard Specifications. All vitrified clay pipe shall be extra strength, conforming to MAG Specifications Section 743.

The trenching, bedding and backfilling of the foregoing items shall be in accordance with Section 601 of the Standard Specifications and the amendments in these special provisions.

All pipe shall be measured by the linear foot, and shall include lengths of fittings.

The accepted quantities of pipe, measured as provided above, will be paid for at the contract unit price complete-in-place. No measurement or direct payment will be made for furnishing and placing bedding material, fittings, collars, bands, or couplings joining the various sections of pipe.

GENERAL COMMENTS: The term "or equal" when used in the description of any construction materials, shall be understood to mean "or approved equal", as determined by the Engineer.

The Contractor shall exercise care to prevent damage to any existing facilities.

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

## SECTION 06100 - ROUGH CARPENTRY

### PART 1 - GENERAL

- 1.01 **Work Specified Herein:** All labor, materials, equipment and services necessary to furnish and install the rough carpentry and related items as indicated or specified.
- 1.02 **Substitutions:** In accordance with Section 106.
- 1.03 **Submittals:** Furnish the Engineer with a certificate of inspection from the mill supplying dimension lumber stating that the lumber conforms to the grades specified according to standards set by the WWPA. Each piece of lumber shall have an approved WWPA grade identification stamp as identified in 1980 Grading Rules for Western Lumber. Regardless of grade stamp or certification, each piece of lumber in place in the structure shall be of the original grade specified, or better; grade loss resulting from weathering, handling, storage, resawing, or dividing length, may be cause for rejection.
- 1.04 **Product Delivery, Storage and Handling:** Carefully store all lumber delivered to the site off the ground in a manner to assure proper drainage, ventilation and protection from the weather.
- 1.05 **General:**
- A. **Lumber:** For each use, comply with the "American Softwood Lumber Standard" PS 20 by the U.S. Department of Commerce. Nominal sizes are shown or specified; provide actual sizes complying with the minimum size requirements of PS 20 for the moisture content specified for each use. All lumber to be S-Dry.
  - B. **Plywood:** Comply for each use, with the requirements of the U.S. Product Standard PS-1 for "Softwood Plywood/Construction and Industrial", except as otherwise specified herein. Provide plywood of any PS-1 species classification group, except where particular species is shown or specified or where PS-1 limits groups for particular grade specified.
- 1.06 **Coordination:**
- A. Obtain measurements and verify dimensions shown and shop drawing detail before proceeding with carpentry work wherever possible.
  - B. Correlate location of furring, nailers, blocking, grounds and similar supports so that attached work will comply with design requirements.
  - C. Fit carpentry work to other work. Scribe and cope as required for accurate fit.
  - D. Time delivery and installation of carpentry work to avoid delaying other trades whose work is dependent on or affected by the carpentry work and to comply with protection and storage requirements.

## SECTION 06100 - ROUGH CARPENTRY

- E. Examine all parts of the supporting structure and the conditions under which the carpentry work is to be installed, and notify the Engineer in writing of any conditions detrimental to the proper and timely completion of the work.
- F. Keep carpentry materials dry during delivery. Store lumber and plywood in stacks. Protect bottom of stacks against contact with damp or wet surfaces. Protect exposed materials against weather.
- G. Do not store dressed or treated lumber or plywood outdoors.
- H. Store materials for which a maximum moisture content is specified only in areas where relative humidity has been reduced to a level where specified moisture content can be maintained.

## **PART 2 - PRODUCTS**

### **2.01 Materials:**

- A. Framing Lumber: All framing lumber shall be of a grade and species with the minimum properties as indicated in General Structural notes.
- B. Plywood:
  - 1. Wall Sheathing: Grade: CD-Exposure 1 (PS 1-83)  
Thickness: 1/2"  
Span Index: 32/16
- C. Miscellaneous Lumber: Provide wood for support or attachment of other work such as cant strips, bucks, nailers, blocking, furring, grounds, stripping and similar members. Provide lumber of the sizes shown or specified, worked to shapes shown, and as follows:
  - 1. Moisture Content: 19% maximum for all lumber items not specified to receive wood preservatives treatment.
  - 2. Grade: Construction grade light framing size lumber of any species or board size lumber, as required. Provide construction grade boards (WCLB) or No. 2 boards (WWPA).

**2.02 Anchorage and Fastening Materials:** Select proper type, size, material and finish for each application. Comply with the following:

- A. Nails and staples: FS FF-N-105.
- B. Wood Screws: FS FF-S-111.
- C. Bolts and Studs: FS FF-B-575.
- D. Nuts: FS FF-N-836.

## SECTION 06100 - ROUGH CARPENTRY

- E. Washers: FS FF-W-92.
- F. Lag Screws or Lag Bolts: FS FF-B-561.
- G. Expansion Shields, Expansion Nails and Drive Screw Devices: FS FF-B-561.
- H. Toggle Bolts: FS FF-B-588.
- I. Bar or Strap Anchors: ASTM A-525 zinc coated steel, 18 gauge minimum.
- J. General Structural Notes: (GSN) on Drawings.

**2.03 Wood Preservative Treatment:** Treat wood, including lumber and plywood, as specified herein to be treated, to comply with the applicable requirements of the AWPI.

- A. Pressure treat the following items with water borne preservatives for above-ground use, complying with the AWPB LP-2:
  - 1. Wood cants, nailers, blocking stripping and similar members in connection with roofing, flashing, vapor barriers and waterproofing (except plywood sheathing).
  - 2. Wood sills, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete or below grade.

## **PART 3 - EXECUTION**

### **3.01 Installation:**

- A. Use only sound, thoroughly seasoned, well manufactured materials of the longest practical lengths and sizes to minimize jointing.
- B. Use materials free from warp which cannot be easily corrected by anchoring and attachment. Sort out and discard warped material and material with other defects which would impair the quality of the work.
- C. Securely attach carpentry work to substrates by anchoring and fastening as shown and as required by recognized standards. Provide washers under bolt heads and nuts in contact with wood.
- D. Nail plywood to comply with APA recommendations.
- E. Set carpentry work accurately to required levels and lines with members plumb and true and accurately cut and fitted.
- F. Shim with metal or slate for full bearing on concrete or masonry substrates.

## SECTION 06100 - ROUGH CARPENTRY

**3.02 Attachment and Anchorage:** Use common wire nails, except as otherwise shown or specified herein. Do not wax or lubricate fasteners that depend on friction for holding power. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; predrill as required. Do not drive threaded friction type fasteners; turn into place. Tighten bolts and lag screws at installation and retighten as required for tight connections prior to closing in or at completion of work.

### **3.03 Wood Grounds, Nailers, and Blocking**

- A. Provide wherever shown and where required for screeding or attachment of other work. Form to shapes as shown and cut as required for true line and level of work to be attached.
- B. Coordinate location with other work involved; refer to shop drawings of such work.
- C. Attach to substrates securely with anchor bolts and other attachment devices as shown and as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise shown.
- D. Set true to line and level, plumb, with intersections true to required angle. Build into masonry as work progresses, cutting to fit masonry unit size involved. Anchor to formwork before concrete placement.
- E. Provide grounds of dressed, preservative treated, key-beveled lumber not less than 1-1/2" wide and of the thickness required to bring face of ground to exact thickness of finish material involved. Remove temporary grounds when no longer required.

END OF SECTION

## SECTION 07210 - BUILDING INSULATION

### PART 1 - GENERAL

- 1.01 **Work Specified Herein:** All labor, materials, and services necessary to furnish and install all flexible insulation materials as indicated or specified.
- 1.02 **Substitutions:** In accordance with Section 106.
- 1.03 **Product Handling:** Store all materials on the site in a dry area protected from the weather.
- 1.04 **Submittals:** Submit manufacturers literature for each type of insulation required for use and respective locations.

### PART 2 - PRODUCTS

#### 2.01 Materials:

- A. Insulation materials shall be flexible fiberglass batts or blankets. Material shall conform to ASTM C665. All materials shall be properly identified on the packages with R value and manufacturer's name.
1. Concealed behind Gypsum Board: Type II, Class C (Kraft-faced).
  2. Exposed to air (in attics, plenums, soffits, etc.): Type II, Class A (flame Spread of 20 or less for rating of facing material).

### PART 3 - EXECUTION

#### 3.01 General Requirements:

- A. Do not install insulation until such a time as the construction has progressed to the point that inclement weather will not damage or wet the insulation material.
- B. Fully insulate all small areas between closely spaced framing members.
- C. Do all end matching neatly with ends and edges fitting snugly or overlapped.
- D. Exercise extreme care to maintain vapor barrier continuous over insulated surface. Patch all tears in vapor barrier in an approved manner.
- E. Cut and fit insulation materials around pipes, conduits, outlet boxes, etc., as necessary to maintain the integrity of the insulation. Where pipes are installed in spaces to receive insulation, place insulation between exterior wall and the pipe, compressing insulation as necessary.

**SECTION 07210 - BUILDING INSULATION**

- F. At ceiling areas install insulation between framing members with vapor barrier in and flanges continuously tight against inside of framing members. Secure insulation flange to framing members to retain it in position using staples or nails or other approved methods.
- G. Methods of securing insulation in position shall be the responsibility of the insulation applicator. Installation shall be performed so that insulation will not be displaced.

**END OF SECTION**

## SECTION 09220 - STUCCO

### **PART 1 - GENERAL**

**1.01 Work Specified Herein:** All labor, materials, equipment and services necessary to furnish and install all stucco, including lath, as indicated or specified.

**1.02 Substitutions:** In accordance with Section 106.

**1.03 Submittals:**

- A. Submit manufacturer's certificate that materials meet Specifications requirements.
- B. Submit manufacturer's written recommendations, proportion mixes, and installation instructions for factory prepared finish materials.
- C. Samples shall be provided on the job site and when approved, shall become the standard for all work. Samples shall show color, texture and workmanship of finished work. Construct successive panels, if necessary, until approved.

**1.04 Quality Assurance:**

- A. Comply with applicable requirements of ASTM C-926 as applicable; and Plaster, Wood, Framing System, Lath Manual, 1981 Edition.
- B. Allowable Tolerances: Maximum deviation from true plane of 1/8" in 10 feet as measured by straight edge placed at any location on surface.

**1.05 Product Delivery, Storage and Handling:** Deliver all products in their original packages, containers or bundles bearing the name of the manufacturer and the brand. Keep stucco and all other cementitious materials dry until ready for use, keeping them off the ground, under cover, and away from damp walls or surfaces. Remove damaged or deteriorated materials from the premises.

**1.06 Job Conditions:**

- A. Cold Weather Requirements: Do not use frozen materials in stucco mixes. Do not apply stucco to frozen surfaces or surfaces containing frost. Do not apply stucco when ambient temperature is less than 40 degrees F.
- B. Hot Weather Requirements: Protect stucco from uneven and excessive evaporation during hot, dry weather.
- C. Exercise extreme care and provide necessary forms of protection for protecting finish work of other trades during stucco operation (in particular door and window units) from being stained, tarnished or otherwise damaged for work under this Section. Mask materials to protect same.
- D. The work of this contract shall match the texture and thickness of the existing stucco surfaces.

SECTION 09220 - STUCCO

**PART 2 - PRODUCTS**

**Materials:**

- A. Portland Cement: ASTM C-150, Type I or II.
- B. Hydrated Lime: ASTM C-207, Type S.
- C. Aggregate: Clean, well graded sand or screenings from crushed stone or slag, and shall conform to ASTM C-897 for fine aggregate except that it shall be graded within the following limits:

1.	Passing No.	4 sieve	100%
2.	Passing No.	8 sieve	90%
3.	Passing No.	16 sieve	60 - 90%
4.	Passing No.	30 sieve	35 - 70%
5.	Passing No.	50 sieve	10 - 30%
6.	Passing No.	100 sieve	5%
- D. Metal casing beads shall be 26 gauge galvanized steel with expansion flange; No. 4, No. 60 or No. 66, or as detailed.
- E. Metal expansion joints shall be 26 gauge galvanized steel with expansion flange; No. 15 for field; No. 30 for inside corners; or as detailed.
- F. Drip screed moldings shall be a manufactured by Fry Reglet Corporation, Los Angeles, CA. Unit to be made of extruded aluminum 0.050" thick (recodized) clear coating.
- G. Water shall be potable.
- H. Metal Lath:
  - 1. Wood Studs: K-Lath Corporation, Aqua K-Lath or Stucco-Rite, type SFB, standard for 16" support spacing, heavy duty for 24" support spacing.
- I. Corner Reinforcement: K-Lath Corporation, Kwik Corner, Accessories welded wire mesh, to match radius of existing.
- J. Tie Wire: Double annealed and galvanized conforming to Type I, FS QQ-W-461, of gauges specified.
- K. Colored finish coat shall be factory - mixed and applied in strict accordance with manufacturer's printed instructions. Color and texture to be as per manufacturer's printed instructions. Color and texture to be as per approved sample panel.

## SECTION 09220 - STUCCO

### 2.02 Proportioning and Mixing:

- A. Mortar for all coats shall consist of one volume of portland cement to not less than 3 or more than 5 volumes of damp, loose aggregate.
- B. Hydrated lime, hydrated lime putty, or slaked lime may be added as a plasticizing agent, but the amount used shall not exceed 10% by weight not more than 25% by volume of the cement used.
- C. Measurements of ingredients shall be accurate and successive batches proportioned exactly alike. Mix aggregate, cement and any other dry ingredients until the mass is uniform in color and homogeneous before adding water. Determine the quantity of water necessary for the desired consistency by trial, and thereafter measure in proper proportions. Retempering of mortar will not be allowed.

### PART 3 - EXECUTION

3.01 Inspection: Make a detailed inspection of all areas and surfaces to be enclosed or covered by the work of this Section, and make arrangements for satisfactory correction of all defective workmanship or materials that might affect the work herein.

### 3.02 Lath Installation:

- A. General: Apply with long dimension at right angles to the supports. Extend both horizontal and vertical factory laps. On walls, install first course at bottom and work up. Work from right to left. Stagger all vertical laps.
- B. Wood Framing: Attachments shall securely engage the back wire within the lath and be spaced no more than 6" o.c. on each support.
- C. Vertical Surfaces: Nails must have a minimum penetration of 3/4" into the support unless otherwise required by code. Nails to be corrosion resistant. Staples of (16) (14) gauge galvanized wire, (7/8") (1-1/4") long and 3/4" wide may be used.

### 3.03 Metal Trim:

- A. Where stucco terminates against dissimilar materials, install casing beads.
- B. Install expansion joints in the stucco field as indicated, or, where not indicated, install joints to create panels no larger than 144 square feet with no dimension exceeding 18 feet or a length to width ratio of 2-1/2 to 1.
- C. Fasten metal trim by wire-tying or nailing depending on the type, style and back-up collateral material.
- D. When used with metal lath, wire ties must be used. Install trim with attachments only to the edges of abutting sheets of lath, so that the lath is not continuous or tied across the joint.

## SECTION 09220 - STUCCO

E. Where expansion joints are placed parallel to framing members, install joints so that none is more than 4" away from a framing member.

### 3.04 Stucco Application:

A. Apply scratch coat over metal lath with sufficient pressure so that it is shoved through the metal reinforcement against the backing to form full keys and to embed completely the reinforcement. Apply to an approximate thickness of 3/8" from the face of the backing. Scratch to provide bond for succeeding coat. Cure with water for minimum of 72 hours.

B. Apply brown coat not sooner than 72 hours after the application of the scratch coat. Dampen scratch coat evenly to obtain uniform suction. Apply to an approximate thickness of 3/8". Bring surface to a true, even surface by floating or rodding and leave rough, ready to receive finish coat. Cure with water for minimum of 7 days.

C. Apply finish coat not sooner than 7 days after the application of the preceding coat. Before applying, dampen the surface of the preceding coat evenly to obtain uniform suction. The thickness of the finish coat shall be sufficient to secure the texture specified, but in no case, less than 1/8", and the total thickness of the stucco shall be at least 7/8" from the face of the backing. Avoid excessive troweling. When applying the finish, plan work so that the entire wall can be completed at one time to eliminate joining marks. If not practical, use a corner, door or window as a breaking point. Texture of finish coat shall match and align with adjacent existing stucco.

3.05 Curing: Keep each coat of stucco damp for at least 72 hours (brown coat 7 days) after application. Moistening of each coat shall begin as soon as the stucco has hardened sufficiently so as not to be injured. Apply water in a fine fog spray. Avoid soaking the wall. Apply only as much water as can be readily absorbed. Protect stucco from uneven and excessive evaporation during hot, dry weather and also from strong blasts of wind.

3.07 Patching: Stucco containing cracks, blisters, pits or discoloration will not be acceptable. Remove such stucco and replace with stucco conforming to the requirements of this Specification. Patching inherently defective work will be permitted only when approved and such patching shall match existing work in texture and colors. Repair all defects after other trades have finished their work.

END OF SECTION

CONTRACT AGREEMENT

THIS AGREEMENT, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, 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 Chief Engineer and General Manager, a project for the Flood Control District of Maricopa County, designated as FCD Contract 88-11, Northern Avenue Sanitary Sewer Relocation at the Arizona Canal Diversion Channel, and furnish at his 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, 3335 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, 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 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 in accordance with the requirements of MAG, Section 109.

ARTICLE V - TERMINATION: The OWNER hereby gives notice that pursuant to A.R.S. Sec. 38-511.A this contract may be cancelled 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: 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, or national origin.

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 handicap 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: 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.

\_\_\_\_\_  
PARTY OF THE FIRST PART

BY: \_\_\_\_\_  
Printed Name

BY: \_\_\_\_\_  
Signature

DATE: \_\_\_\_\_

RECOMMENDED BY:

\_\_\_\_\_  
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: \_\_\_\_\_

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  
PARTY OF THE SECOND PART

BY: \_\_\_\_\_  
CHAIRMAN, BOARD OF DIRECTORS

DATE: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
CLERK OF THE BOARD

CERTIFICATE OF INSURANCE APPROVED:

BY: \_\_\_\_\_  
DIRECTOR, RISK MANAGEMENT

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 \_\_\_\_\_, 19\_\_\_\_, for Northern Avenue Sanitary Sewer Relocation at the Arizona Canal Diversion Channel, which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

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

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

The prevailing party or any party which recovers judgement 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\_\_\_\_.

\_\_\_\_\_  
AGENCY OF RECORD

\_\_\_\_\_  
AGENCY ADDRESS

\_\_\_\_\_  
BOND NUMBER.

\_\_\_\_\_  
PRINCIPAL SEAL

BY: \_\_\_\_\_

\_\_\_\_\_  
SURETY SEAL

BY: \_\_\_\_\_

\_\_\_\_\_  
POWER OF ATTORNEY SEAL

BY: \_\_\_\_\_

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 \_\_\_\_\_, 1989,  
for Northern Avenue Sanitary Sewer Relocation at the Arizona Canal Diversion  
Channel, 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 \_\_\_\_\_, 19\_\_\_\_.

\_\_\_\_\_  
AGENCY OF RECORD

\_\_\_\_\_  
AGENCY ADDRESS

\_\_\_\_\_  
BOND NUMBER

\_\_\_\_\_  
POWER OF ATTORNEY

SEAL

BY: \_\_\_\_\_

\_\_\_\_\_  
PRINCIPAL

SEAL

BY: \_\_\_\_\_

\_\_\_\_\_  
SURETY

SEAL

BY: \_\_\_\_\_

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

CERTIFICATE OF INSURANCE

Northern Avenue Sanitary Sewer

CONTRACT FCD 88-11

PROJECT TITLE Relocation at the Arizona Canal Diversion Chann

NAME AND ADDRESS OF INSURANCE AGENCY	INSURANCE COMPANIES AFFORDING COVERAGES
	Company Letter <b>A</b>
	Company Letter <b>B</b>
	Company Letter <b>C</b>
NAME AND ADDRESS OF INSURED	Company Letter <b>D</b>
	Company Letter <b>E</b>
	Company Letter <b>F</b>
	Company Letter <b>G</b>

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	
	<b>COMMERCIAL GENERAL</b> <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	1,000  1,000
	<b>COMPREHENSIVE AUTO</b> <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"/> OTHER				
	<input type="checkbox"/> OTHER				

Except for 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. 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  
 3335 West Durango Street  
 Phoenix, Arizona 85009

DATE ISSUED \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
 FCD Contract No. 88-11

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 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 departments, agencies, officers or employees shall include in the event of an action, court costs, expenses for litigation and reasonable attorney's fees.

\_\_\_\_\_  
Firm

\_\_\_\_\_  
Date

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Title

SUBCONTRACTOR LISTING

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. This is not an exhaustive or inclusive list.

Grading \_\_\_\_\_

Trucking \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(Signature) \_\_\_\_\_



**Northern Avenue Sanitary Sewer Relocation  
at the  
Arizona Canal Diversion Channel  
Contract No. FCD 88-11**

**Preconstruction Conference Agenda**

1.0 INTRODUCTION OF:

- 1.1 Owner Personnel
- 1.2 Engineer Personnel
- 1.3 Contractor Personnel
- 1.4 Concerned Entities' Personnel
- 1.5 List of Key Personnel and Positions
  - 1.5.1 Name, Firm, Emergency (24 hour) No.
- 1.6 Subletting of Contracts

2.0 ADMINISTRATION

- 2.1 Notice to proceed *Apr 10 - July 9*
- 2.2 Purpose of Preconstruction Conference
- 2.3 Description of Work
- 2.4 Contract Time
- 2.5 Progress Schedule (construction schedule)
- 2.6 Permits
- 2.7 Projects Documents:
  - 2.7.1 Change Orders
  - 2.7.2 Time Extensions
  - 2.7.3 Progress Payments
  - 2.7.4 Insurance Bonds
  - 2.7.5 Overtime Work

3.0 CONTROL OF WORK AND COORDINATION

- 3.1. Communication
  - CONTRACTOR-CONTRACT MANAGER-OWNER
- 3.2 Submittals/Shop Drawings/Correspondence
- 3.3 Cooperation with Utilities and Other Contractors
- 3.4 Weekly Construction Coordination Meetings
- 3.5 Safety and Sanitary Requirements
  - 3.5.1 Accident Reports
    - SAFETY VIOLATIONS CAN RESULT IN IMMEDIATE SHUTDOWN
- 3.6 Traffic Control
- 3.7 Alcohol/Drug Use
- 3.8 Guarantee of Work

4.0 TECHNICAL

4.1 Testing-Types and Quantities

4.2 Inspections

4.2.1 Inspector's Duties

4.2.2 Inspection of Work

4.2.3 Surveying

4.2.4 Additional and or Corrective Work and Acceptance

4.3 Material Compliance/Substitutes

5.0 PUBLIC

5.1 Safety

5.2 Convenience

5.3 Noise/Dust Control

5.4 Work Hours

5.5 Property Damage

5.6 Complaints

ENGINEERS COST ESTIMATE

PROJECT: Northern Avenue Sanitary Sewer Relocation  
at the Arizona Canal Diversion Channel

CONTRACT: FCD 88-11

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
310-1	813	s.y.	Aggregate Base Course (6" Thickness)		5.00	\$ 5,065.00
321-1	813	s.y.	Asphalt Concrete C-3/4 (2" Thickness)		7.00	5,691.00
350-1	1	L.S.	Removal of Existing Improvements		72,000.00	72,000.00
350-2	1	L.S.	Demolition of 1115 E. Kaler/Structure Rehabilitation @ 1117 E. Kaler		20,000.00	20,000.00
350-3	671	L.f.	Fence Relocation		9.00	6,039.00
350-4	590	L.f.	Railroad Tie Curb Relocation		4.00	2,360.00
610-1	277	L.f.	6" Water Line		24.00	6,648.00
610-2	2	ea.	6" x 6" T.S. & Valve, V B & C		1,400.00	2,800.00
615-1	1,017	L.f.	10" Sewer Line		18.00	18,306.00
615-2	978	L.f.	8" Sewer Line		15.00	14,670.00
615-3	11	ea.	Std. Manhole - MAG Det 420 & 422		1,500.00	16,500.00
615-4	1	ea.	Adjust Manhole Frame & Cover		300.00	300.00

TOTAL: \$ 170,379.00

AREA DEMOLITION  
FOR THE  
ARIZONA CANAL DIVERSION CHANNEL  
FCD CONTRACT #88-11

ASSESSOR PARCEL NUMBER	ADDRESS	BUILDING AREA (SQ. FT.)	ACTIVITY
160-21-108	1106 E. BELMONT	816	STRUCTURE DEMOLITION
160-21-109	1104 E. BELMONT	816	
160-21-110	1102 E. BELMONT	816	
		2448	
160-21-118	7635 N. 11TH STREET	816	STRUCTURE DEMOLITION
160-21-119	7633 N. 11TH STREET	816	
		1632	
160-21-154	7629 N. 11TH STREET	816	STRUCTURE DEMOLITION
160-21-155	7627 N. 11TH STREET	1368	
160-21-156	7625 N. 11TH STREET	1248	
160-21-157	7621 N. 11TH STREET	1008	
		4440	
160-21-158	1106 E. KALER DRIVE	1008	STRUCTURE DEMOLITION
160-21-159	1104 E. KALER DRIVE	1248	
160-21-160	1102 E. KALER DRIVE	816	
		3072	
160-21-194	1105 E. KALER DRIVE	816	STRUCTURE DEMOLITION
160-21-195	1101 E. KALER DRIVE	1118	
		1934	
160-21-190	1113 E. KALER DRIVE	1118	STRUCTURE DEMOLITION
160-21-191	1111 E. KALER DRIVE	1248	
160-21-192	1109 E. KALER DRIVE	816	
160-21-193	1107 E. KALER DRIVE	816	
		3998	
160-21-188	1117 E. KALER DRIVE	1248	STRUCTURE REMODEL (TO REMAIN)
160-21-189	1115 E. KALER DRIVE	1368	(TO BE REMOVED)

file

PRE-BID CONFERENCE  
3/1/89  
NORTHERN AVENUE SANITARY SEWER RELOCATION AT THE ACDC  
FCD 88-11

1. A List of the meeting attendees is attached.
2. The Project Manager (Ed Raleigh) discussed the main items of work, then opened the floor for questions. Ed emphasized that construction fencing is mandatory, and is not optional, at the Torre Blanca Subdivision and the Palo Verde Gardens Housing project, as indicated on the plans. Construction fencing for the remainder of the project is subject to MAG Specifications and the Phoenix supplement.
3. The Flood Control District will provide the baseline survey, and the contractor is responsible for the construction staking.
4. Materials testing will be provided by FCD. If additional testing is required due to deficient work, the contractor will be responsible for the cost of the additional testing.
5. City permits are required to be obtained by the Contractor, and the fee will be waived for the sewer and water permit. (\*\*NOTE\*\* See Item 9 below!).
6. FCD has obtained the SRP permit for the Contractor, and there will be no fee.
7. All other required permits for construction, including a pollution permit, will be obtained and paid for by the Contractor as required in the Construction Special Provisions.
8. Dumping fees are the responsibility of the contractor.

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\*\*\*NOTE\*\*\*

9. Fees for the demolition and reconstruction of structures shown on the plans will be charged by the City and must be paid for by the Contractor. As with other permit fees, there is not a separate bid item, so the cost must be included in related bid items by the Contractor. Contact Robert Gawry, Construction Permit Specialist, City of Phoenix Building Safety Department, at 262-7889, for information regarding the demolition and reconstruction permits and fees.

EAR/jnk

Info: LC

File: FCD 88-11

3/1/89

PRE-BID CONFERENCE  
 NORTHERN AVE. SEWER RELOC  
 FCD 88-11

<u>NAME</u>	<u>COMPANY</u>	<u>PHONE #</u>
JAN WHIPPER	FCD	262-1501
Paul Lindgren	FCD	262-1501
Linda Olson	Hard Rock Const.	492-0518
Roger H. Carter	Swengel Robbins Inc	978-3950
REAVIS J. FRANKLIN	PERMUL/PHOENIX CONCL. CASTING	967 5029
JERRY W. BURDETTE	GILBERT Pump	276-5599
Edy Raleigh	Flood Control District	262-1501
Jeanna Cumberland	" " "	262-1507
Ellery Bistrow	FCD	262-1501

AREA DEMOLITION  
FOR THE  
ARIZONA CANAL DIVERSION CHANNEL  
FCD CONTRACT #88-11

ASSESSOR PARCEL NUMBER	ADDRESS	BUILDING AREA (SQ. FT.)	ACTIVITY
160-21-108	1106 E. BELMONT	816	STRUCTURE DEMOLITION
160-21-109	1104 E. BELMONT	816	
160-21-110	1102 E. BELMONT	816	
		----- 2448	
160-21-118	7635 N. 11TH STREET	816	STRUCTURE DEMOLITION
160-21-119	7633 N. 11TH STREET	816	
		----- 1632	
160-21-154	7629 N. 11TH STREET	816	STRUCTURE DEMOLITION
160-21-155	7627 N. 11TH STREET	1368	
160-21-156	7625 N. 11TH STREET	1248	
160-21-157	7621 N. 11TH STREET	1008	
		----- 4440	
160-21-158	1106 E. KALER DRIVE	1008	STRUCTURE DEMOLITION
160-21-159	1104 E. KALER DRIVE	1248	
160-21-160	1102 E. KALER DRIVE	816	
		----- 3072	
160-21-194	1105 E. KALER DRIVE	816	STRUCTURE DEMOLITION
160-21-195	1101 E. KALER DRIVE	1118	
		----- 1934	
160-21-190	1113 E. KALER DRIVE	1118	STRUCTURE DEMOLITION
160-21-191	1111 E. KALER DRIVE	1248	
160-21-192	1109 E. KALER DRIVE	816	
160-21-193	1107 E. KALER DRIVE	816	
		----- 3998	
160-21-188	1117 E. KALER DRIVE	1248	STRUCTURE REMODEL (TO REMAIN)
160-21-189	1115 E. KALER DRIVE	1368	(TO BE REMOVED)

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FOR THE  
ARIZONA CANAL DIVERSION CHANNEL  
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160-21-160	1102 E. KALER DRIVE	816	
		----- 3072	
160-21-194	1105 E. KALER DRIVE	816	STRUCTURE DEMOLITION
160-21-195	1101 E. KALER DRIVE	1118	
		----- 1934	
160-21-190	1113 E. KALER DRIVE	1118	STRUCTURE DEMOLITION
160-21-191	1111 E. KALER DRIVE	1248	
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3/1/89  
NORTHERN AVENUE SANITARY SEWER RELOCATION AT THE ACDC  
FCD 88-11

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EAR/jnk  
 Info: LC  
 File: FCD 88-11

PRE-BID CONFERENCE 3/1/89  
NORTHERN AVE. SEWER RELOC  
FCD-88-11

<u>NAME</u>	<u>COMPANY</u>	<u>PHONE #</u>
JAN WHITNER	FCD	262-1501
Paul Lindgren	FCD	262-1501
Linda Olson	Hard Rock Const.	492-0518
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AREA DEMOLITION  
FOR THE  
ARIZONA CANAL DIVERSION CHANNEL  
FCD CONTRACT #88-11

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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  
 F C D Contract 88-11  
 NORTHERN AVENUE SANITARY SEWER RELOCATION  
 AT THE ARIZONA CANAL DIVERSION CHANNEL

TECH ENGINEERING CONSTRUCTION CORP.  
 PROPOSED CONSTRUCTION SCHEDULE

	Initials	Date
Prepared By		
Approved By		

