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FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL
CANYON COUNTY, IDAHO

General Site Reconstruction Project

1969

SPECIFICATIONS AND CONTRACT DOCUMENTS



ADDENDUM NO. 1

FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL
CANYON COUNTY, IDAHO

GENERAL SITE RECONSTRUCTION PROJECT

Bid Opening Date: Unchanged
4:00 o'clock p.m. (MDST)
City Hall - 704 Blaine Street, Caldwell, Idaho

ADDENDUM NO. 1 TO PLANS, SPECIFICATIONS, AND CONTRACT DOCUMENTS AS PREPARED BY J-U-B ENGINEERS, INC., ENGINEER:

1. Idaho Public Works Contractor license requirements will be in accordance with Idaho Code and will supersede the requirements as stated in the sixth paragraph of page 2 of the Advertisement for Bids of the Specifications.
2. For the information of all plan holders, the financing of this project includes Federal funds.

NOTICE is hereby given that this Addendum No. 1 must be signed and enclosed with the sealed proposal for "Farm Labor Camp, Caldwell Housing Authority, City of Caldwell, Canyon County, Idaho," as evidence that the bidder has familiarized himself with all changes incorporated herein.

Name of Bidder: Snake River Builders, Inc.

By: /S/ Ralph L. Aldrich
Ralph L. Aldrich

Title: President

Date: 3 October 1969

GENERAL SITE RECONSTRUCTION PROJECT

FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL
CANYON COUNTY, IDAHO

PLANS, SPECIFICATIONS, AND CONTRACT DOCUMENTS

THE OWNER:

Calvin E. Burns, Chairman
Robert L. Kerfoot, Secretary

HOUSING AUTHORITY
CITY OF CALDWELL
CANYON COUNTY, IDAHO

THE ENGINEER:

J-U-B ENGINEERS, Inc.
212 Tenth Avenue South
Nampa, Idaho 83651

Telephone: 466-2323 or 888-2321
Area Code 208

Set No. 3

GENERAL SITE RECONSTRUCTION PROJECT
FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL, CANYON COUNTY, IDAHO

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GENERAL SITE RECONSTRUCTION PROJECT
FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL, CANYON COUNTY, IDAHO

ADVERTISEMENT FOR BIDS

Separate sealed bids can be delivered to the Owner or his Representative until four o'clock p.m., Mountain Daylight Savings Time, in the Council Chambers of the City Hall, 704 Blaine, Caldwell, Idaho, on Friday, October 3, 1969, immediately after which time the proposals will be opened and publicly read.

The work consists generally of the following:

- 880 linear feet of 72-foot wide bituminous street construction.
- 2,700 linear feet of 32-foot wide bituminous street construction.
- 2,940 linear feet of 24-foot wide bituminous street construction.
- 3,045 linear feet of 12-foot wide bituminous alley construction.
- 47 individual two-car bituminous covered driveways.
- 2,400 square yards of bituminous covered community parking lots.
- 10,300 linear feet of asphalt curbing.
- 125 linear feet of 18-inch storm sewer pipe, including catch basins.
- 1,215 linear feet of 10-inch storm sewer pipe, including catch basins and manholes.
- 860 linear feet of 8-inch storm sewer pipe, including catch basins and manholes.
- 1,400 linear feet of 12-inch irrigation pipe, including headgate and weir station.
- 1,350 linear feet of 10-inch irrigation pipe, including irrigation risers.
- 7,450 linear feet of 8-inch irrigation pipe, including irrigation risers.
- 11,300 linear feet of 4-strand barbed wire fencing.
- 840 linear feet of 6-wire clothes lines.
- Site demolition and clearing.
- Site grading and landscaping.
- Construction of three sewage lagoon ponds and appurtenances.
- Renovation of existing sewage lift station.

The Information for Bidders, Form of Bid, Form of Contract, Plans, Specifications, and Forms of Proposal Bond, Performance Bond, Payment Bond, and other contract documents may be examined at the office of J-U-B ENGINEERS, Inc., 212 Tenth Avenue South, Nampa, Idaho. Copies of the said documents may be obtained at the office listed above upon payment of \$40.00 for each set. Any unsuccessful bidder, upon returning such set promptly and in good condition, will be refunded his payment, and any non-bidder upon so returning such a set will be refunded \$20.00. Payment is to be made to J-U-B ENGINEERS, Inc., Nampa, Idaho.

The Owner reserves the right to waive any informalities or to reject any or all bids.

Each bidder must deposit with his bid, security in the amount, form and subject to the conditions provided in the Information for Bidders.

Attention of bidders is particularly called to the requirements as to conditions of employment to be observed and minimum wage rates to be paid under the contract.

Special time limits for certain demolition work will be imposed to insure coordination between this project and a building project for the Farm Labor Camp that will be under construction at the same time.

No bidder may withdraw his bid within 60 days after the actual date of the opening thereof.

All bidders shall accompany proposals with evidence of holding a valid Idaho Contractor's license, covering work to be performed and shall list subcontractors as required by Idaho Code.

Bidders on this work will be required to comply with President's Executive Order No. 11246. The requirements for bidders and contractors under this order are explained in the specifications.

Dated this 17th day of October, 1969.

THE OWNER:

Calvin E. Burns, Chairman
Robert L. Kerfoot, Secretary
HOUSING AUTHORITY
CITY OF CALDWELL
CANYON COUNTY, IDAHO

THE ENGINEER:

J-U-B ENGINEERS, Inc.
212 Tenth Avenue South
Nampa, Idaho 83651

Telephone: 466-2323 or 888-2321
Area Code 208

GENERAL SITE RECONSTRUCTION PROJECT
FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL, CANYON COUNTY, IDAHO

INFORMATION FOR BIDDERS

1. RECEIPT AND OPENING OF BIDS.

Separate sealed bids can be delivered to the Owner or his Representative until four o'clock p.m., Mountain Daylight Saving Time, in the Council Chambers of the City Hall located at 704 Blaine Street in Caldwell, Idaho, on Friday, October 3, 1969, immediately after which time the proposals will be opened and publicly read.

2. PREPARATION OF BID.

Each bid must be submitted on the prescribed form. All blank spaces for bid prices must be filled in, in ink or typewritten, in both words and figures unless otherwise expressly stipulated.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to the Engineer.

3. TELEGRAPHIC MODIFICATION.

Any bidder may modify his bid by telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic communication is received by the Owner prior to the closing time, and, provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the bidder was mailed prior to the closing time. The telegraphic communication should not reveal the bid price but should provide the addition or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed bid is opened. If written confirmation is not received within two (2) days from the closing time, no consideration will be given to the telegraphic modification.

4. BID SECURITY.

Each bid must be accompanied by a certified check or bidder's bond payable to the Owner for five per cent of the total amount of the bid. As soon as the bid prices have been compared, the Owner will return the check or bond of all except the three lowest responsible bidders. When the contract is

awarded, the checks or bonds of the two remaining unsuccessful bidders will be returned. The check or bond of the successful bidder will be retained until the contract and surety bond have been executed and approved, after which it will be returned.

5. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT.

The successful bidder, upon his failure or refusal to execute and deliver the contract and bonds required within five (5) days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

6. SECURITY FOR FAITHFUL PERFORMANCE.

A performance and payment bond in the amount of 100 percent of the contract price with a corporate surety approved by the Owner and the Engineer, will be required for the faithful performance of the contract, and the bidder shall state in the proposal the name and address of the surety or sureties who will sign this bond in case the contract is awarded to him. A maintenance bond guaranteeing the repair of all damage due to improper materials or workmanship for a period of one year after the acceptance of the work by the Owner will also be required.

7. POWER OF ATTORNEY.

Attorneys-in-fact who sign proposal bonds or contract bonds must file with each a certified and effectively dated copy of their power of attorney.

8. NOTICE OF SPECIAL CONDITIONS.

Attention is particularly called to those parts of the contract documents and specifications which deal with the following:

- a. Insurance requirements.
- b. Wage rates.
- c. Method of selecting contractor, selecting equipment, and awarding contract.

The Contractor also should pay special attention to the special time limits imposed on Bid Items Nos. 1, 2, and 3, and Alternate Bid Items Nos. 1a, 2a, and 3a, concerning the demolition and removal of the existing row shelter complexes since the Contractor's failure to comply with time limits as stated in the Bid Items will seriously affect the Building Contractor's completion date as determined in another construction contract. Therefore, the Contractor hereby agrees that the special time limits are reasonable and can be adhered to and that failure to do so will automatically impose the same liquidated damage clause as inserted herein in these specifications for project completion.

9. DELIVERY OF BONDS.

The party to whom the contract is awarded will be required forthwith to execute the contract and a performance and payment bond within ten calendar days from the date when the written notice of the award of the contract is mailed to the bidder at the address given by him. In case of failure to do so, the Owner may at his option consider that the bidder has abandoned the contract, in which case the certified check or bidder's bond accompanying the proposal shall become the property of the Owner.

10. BID AWARD

The Owner reserves the right to reject any and all bids or to accept any bid. It is understood that the work to be done is being financed with a loan or grant or both from the Farmers Home Administration, U. S. Department of Agriculture. Contractors' proposals shall hold firm for sixty days to allow the Owner to complete its financing arrangements. Mutually agreed upon extensions of time may be made, if necessary.

11. ADDENDA AND INTERPRETATIONS.

No interpretation of the meaning of the plans, specifications, or other prebid documents will be made to any bidder orally.

Every request for such interpretation should be in writing addressed to J-U-B ENGINEERS, Inc., at 212 Tenth Avenue South, Nampa, Idaho, 83651, and to be given consideration must be received at least seven (7) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be mailed by certified mail with return receipt requested to all prospective bidders (at the respective addresses furnished for such purposes), not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.

12. TIME OF COMPLETION AND LIQUIDATION DAMAGES.

Time for completion of this Contract shall begin on the seventh (7) day following the date of mailing, by regular mail, of the Notice to Proceed and shall be completed no later than May 1, 1970.

13. QUALIFICATION OF BIDDER.

Before the award of the contract, any bidder may be required to furnish evidence satisfactory to the Owner and to the Engineer of the necessary facilities, ability, and pecuniary resources to fulfill the conditions of the said contract.

14. CONSTRUCTION SCHEDULE.

Prior to signing the contract, the Contractor shall submit on a form acceptable to the Owner and Engineer, an overall construction schedule for the project. This construction schedule shall start with the proposed date of signing the contract, and the completion date shall be the date specified in the contract.

15. OBLIGATION OF BIDDER.

Bidders must satisfy themselves by personal examination of the location of the proposed work, by examination of the Plans and Specifications and requirements of the work and the accuracy of the estimate of the quantities of the work to be done, and shall not at any time after the submission of a bid dispute or complain of such estimate nor assert that there was any misunderstanding in regard to the nature or amount of work to be done.

16. CONDITION OF CONTRACT.

The Construction Contract and the Detailed Specifications contain the provisions required for the construction of the project. No information obtained from any officer, agent, or employee of the Owner on any such matters shall in any way affect the risk or obligation assumed by the Contractor or relieve him from fulfilling any of the conditions of the contract.

17. PREPARATION OF PROPOSAL.

Proposals which are incomplete, unbalanced, conditional or obscure or which contain additions not called for, erasures, alterations or irregularities of any kind or which do not comply with the Notice and Instructions to Bidders may be rejected at the option of the Owner.

18. BID WITHDRAWAL.

A bidder may withdraw any proposal he has submitted at any time prior to the hour set for the closing of the bids provided the request for withdrawal is signed in a manner identical with the proposal being withdrawn. No withdrawal or modification will be permitted after the hour designated for closing the bids.

19. FEDERAL APPROVALS.

For the purpose of clarification it is understood that the work to be done is being financed in whole or in part by means of a loan and grant made or insured by the United States of America acting through the Farmers Home Administration of the Department of Agriculture. The Farmers Home Administration will, therefore, require approval by its representatives of all contracts, attachments, and similar documents, all partial and final payment estimates,

and all change orders.

20. ALTERNATE EQUIPMENT AND MATERIALS.

Items of equipment in these Specifications are specified by name of manufacturer, catalog number, etc., for the purpose of establishing a standard of quality, finish, durability, and functional performance and efficiency. Similar equipment, if approved by the Engineer as equal to the designated equipment in the above-named respects, will be considered on the basis of the money saved by the Owner.

Substitution of items or equipment other than those named in the Specifications will be considered only if in the opinion of the Engineer the equipment proposed for substitution is equal to or superior in construction and/or functional efficiency to that named in these Specifications. To receive consideration, sufficient data including materials of construction, operating characteristics, performance curves, and any other information necessary for proper evaluation by the Engineer, shall be submitted by the bidder not less than ten (10) days prior to bid opening. Upon proper submission of this data, the bidder will be notified of the Engineer's approval or rejection of alternate equipment not less than five (5) days prior to bid opening. The burden of proof that the alternate equipment offered is equal to or superior in construction and/or functional efficiency to that named in the Specifications shall rest on the bidder. The decision of the Engineer on acceptability of alternate equipment shall be final.

The statements and requirements of equipment and alternate equipment shall apply equally to materials and products as specified and alternate materials and products that may be offered. Materials and products of the specified types and makes shall be used until the Engineer shall approve in writing an alternate or substitute.

21. PAYMENT.

Computation of quantities that will be the basis for payment estimates, both monthly and final, will be made by the Engineer.

22. DEFINITIONS.

The word "Owner" means the Caldwell Housing Authority Farm Labor Camp. The Owner will be responsible for payment in accordance with the terms of the contract.

The word "Contractor" means the person, firm or corporation to whom the award is made. Subcontractors as such will not be recognized.

The word "Engineer" refers to J-U-B ENGINEERS, Inc., designated by the Owner as its engineering representative during the course of construction to make appropriate inspections and computations of payments.

The word "Representative" means the State Director of the Farmers Home Administration or his designee.

PROPOSAL

Place Nampa, Idaho

Date 3 October 1969

1. In compliance with your invitations for bids dated 17 October 1969 and subject to all the conditions thereof, the undersigned Snake River Builders, Inc.

*A Corporation incorporated in the State of Idaho *a partnership,
or an individual doing business as a corporation

of the City of Nampa, State of Idaho
hereby proposes to furnish and do everything required by the contracts to which this refers for the construction of all structures listed at the unit prices shown for each bid item on the following Bid Schedule. (The Bid Schedule attached lists the various divisions of construction contemplated in the Plans and Specifications, together with an estimate of the units of each. With these units as the basis, the bidder will extend each item, using the cost he inserts in the unit column. Any total cost found inconsistent with the unit cost when the bids are examined will be deemed in error and corrected to agree with the unit cost which shall be considered correct.)

2. The undersigned bidder does hereby declare and stipulate that this proposal is made in good faith, without collusion or connection with any other person or persons bidding for the same work, and that it is made in pursuance of and subject to all the terms and conditions of the Notice and Instructions to Bidders, the Construction Contract, the Detailed Specifications, and the Plans pertaining to the work to be done, all of which have been examined by the undersigned.
3. Accompanying this proposal is a certified check or standard bid bond in the sum of 5% of Bid dollars (\$ Bid Bond) in accordance with the Notice and Instructions to Bidders.
4. The undersigned bidder agrees to execute the contract and a performance and payment bond for the amount of the total of this bid within 10 calendar days from the date when the written notice of the award of the contract is delivered to him at the address given on this proposal. The name and address of the corporate surety with which the Bidder proposes to furnish the specified performance and payment bond is as follows:

General Insurance Company of American

Seattle, Washington

*Insert corporation, partnership, or individual as applicable.

Proposal (Continued)

5. The undersigned bidder agrees to execute, as a part of the Construction Contract, Form FHA 400-2, "Equal Opportunity Clause," which is required by Executive Order No. 11246, as amended. This is included in the Contract Documents. In this connection, the bidder states his previous experience on Form FHA 400-6, "Compliance Statement," included in the Contract Documents. (Revised 3-26-29--PN148.)
6. All the various phases of work enumerated in the Detailed Specifications with their individual jobs and overhead, whether specifically mentioned, included by implication or appurtenant thereto, are to be performed by the Contractor under one of the items listed in the Bid Schedule, irrespective of whether it is named in said list.
7. Payment for work performed will be in accordance with the Bid Schedule, subject to changes as provided for in the Construction Contract.

Snake River Builders, Inc.
(Contractor)

By /s/ Ralph L. Aldrich
Ralph L. Aldrich
President
(Title)

(SEAL - if bid is by corporation)

1207 State Street, Nampa, Idaho 83651
(Business Address)

Seal Affixed

Contractor's License No. _____

NOTE: The "Proposal" continues through succeeding pages, each of which carries the heading "Proposal."

GENERAL SITE RECONSTRUCTION PROJECT
FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL, CANYON COUNTY, IDAHO

PROPOSAL - SCHEDULE OF ITEMS AND PRICES

NOTE: In case of discrepancy between words and figures, the amount written in words shall control the extensions.

<u>Item Number</u>	<u>Description</u>	<u>Total for Items</u>
1.	Row Shelter Complex "D" Floor Slab Demolition and Removal between October 15 and October 22, 1969 (contingent on an October 13, 1969, Notice to Proceed), for the lump sum price of Three Thousand One Hundred Twenty Seven Dollars and No Cents 1 Lump Sum at \$ 3,127.00 complete	\$ 3,127.00
1a.	Alternate for Demolition and Removal or Burning Individual Row Shelter Buildings in Complex "D" between October 15, and October 22, 1969 (contingent on an October 13, 1969, Notice to Proceed) at the unit price of Fifty Three Dollars and No Cents (\$ 53.00) per each	
2.	Row Shelter Complex "E" Floor Slab Demolition and Removal between October 15 and October 29, 1969 (contingent on an October 13, 1969, Notice to Proceed), for the lump sum price of Two Thousand One Hundred Twenty Seven Dollars and No Cents 1 Lump Sum at \$ 2,127.00 complete	\$ 2,127.00

Proposal (continued)

<u>Item Number</u>	<u>Description</u>	<u>Total for Items</u>
2a.	Alternate for Demolition and Removal or Burning Individual Row Shelter Buildings in Complex "E" between October 15 and October 29, 1969, (contingent on an October 13, 1969, Notice to Proceed) at the unit price of <u>Fifty Three</u> Dollars and <u>No</u> Cents (\$ <u>53.00</u>) per each	
3.	Row Shelter Complex "C" Floor Slab Demolition and Removal between November 1 and November 8, 1969, for the lump sum price of <u>Three Thousand One Hundred Twenty Seven</u> Dollars and <u>No</u> Cents 1 Lump Sum at \$ <u>3,127.00</u> complete	 \$ <u>3,127.00</u>
3a.	Alternate for Demolition and Removal or Burning Individual Row Shelter Buildings in Complex "C" between November 1 and November 8, 1969, at the unit price of <u>Sixty Three</u> Dollars and <u>Sixty</u> Cents (\$ <u>63.60</u>) complete	
4.	Demolition and Site Removal <u>other than</u> Row Shelter Buildings and Items within the Lift Station Control Building, complete for the lump sum of <u>Five Thousand Eighty Eight</u> Dollars and <u>No</u> Cents 1 Lump Sum at \$ <u>5,088.00</u> complete	 \$ <u>5,088.00</u>

Proposal (continued)

Item Number	Description	Total for Items
5.	Utility Relocation within all Paved or Gravel Parking, Streets or Alley Limits, complete for the lump sum bid of <div> <div>Three Hundred Seventy One</div> <div>Dollars</div> </div> <div> <div>and No</div> <div>Cents</div> </div> 1 Lump Sum at \$ 371.00 complete	\$ 371.00
6.	Stripping, Excavation, Backfill and Base Course for all Bituminous Covered or Graveled On-Street Parking Lots, Streets and Alleys, complete, 31,500 square yards at the unit price of <div> <div>No</div> <div>Dollars</div> </div> <div> <div>and Thirty Two</div> <div>Cents</div> </div> 31,500 square yards at \$ 0.32 per square yard	\$ 10,080.00
7.	Stripping, Excavation, Backfill and Base Course for Bituminous Covered Off-Street Parking Areas and Trash Container Pads, complete, 3,200 square yards at the unit price of <div> <div>No</div> <div>Dollars</div> </div> <div> <div>and Fifty Five</div> <div>Cents</div> </div> 3,200 square yards at \$ 0.55 per square yard	\$ 1,760.00
8.	2" Leveling Course for all Bituminous Covered Areas and Gravel Parking Areas, in place, 34,700 square yards at the unit price of <div> <div>No</div> <div>Dollars</div> </div> <div> <div>and Nineteen</div> <div>Cents</div> </div> 34,700 square yards at \$ 0.19 per square yard	\$ 6,593.00

Proposal (continued)

<u>Item Number</u>	<u>Description</u>	<u>Total for Items</u>
9.	0.15 Foot of Plant Mix Asphaltic Pavement, in place, 33,100 square yards at the unit price of	
	One _____ Dollars	
	and Twelve _____ Cents	
	33,100 square yards at \$ 1.12 _____ per square yard	\$ 37,072.00 _____
10.	Extruded Asphalt Curbs, complete, 10,300 linear feet at the unit price of	
	No _____ Dollars	
	and Seventy Five _____ Cents	
	10,300 linear feet at \$ 0.75 _____ per linear foot	\$ 7,725.00 _____
11.	12-Inch Concrete Irrigation Pipe including Excavation and Backfill, in place, 1400 linear feet at the unit price of	
	Two _____ Dollars	
	and Eighty Five _____ Cents	
	1400 linear feet at \$ 2.85 _____ per linear foot	\$ 3,990.00 _____
12.	10-Inch Concrete Irrigation Pipe including Excavation and Backfill, in place, 1350 linear feet at the unit price of	
	Two _____ Dollars	
	and Fifteen _____ Cents	
	1350 linear feet at \$ 2.15 _____ per linear foot	\$ 2,902.50 _____
13.	8-Inch Concrete Irrigation Pipe including Excavation and Backfill, in place, 7,450 linear feet at the unit price of	
	One _____ Dollars	
	and Sixty Four _____ Cents	
	7,450 linear feet at \$ 1.64 _____ per linear foot	\$ 12,218.00 _____

Proposal (continued)

<u>Item Number</u>	<u>Description</u>	<u>Total for Items</u>
14.	6-Inch Irrigation Risers complete with Valve, in place, 79 each at the unit price of Twenty Three _____ Dollars and Twenty Eight _____ Cents 79 each at \$ 23.28 _____ per each	\$ 1,839.12
15.	12-Inch Standard Concrete Headgate, in place, 1 each at the unit price of Twenty Nine _____ Dollars and Eighty Nine _____ Cents 1 each at \$ 29.89 _____ per each	\$ 29.89
16.	8-Inch In-Line Irrigation Gate Valves, in place, 8 each at the unit price of One Hundred Fifty Six _____ Dollars and Three _____ Cents 8 each at \$ 156.03 _____ per each	\$ 1,248.24
17.	Irrigation Weir, in accordance with Black Canyon Irrigation District Specifications, in place, 1 each at the unit price of Two Hundred Fifteen _____ Dollars and Eighteen _____ Cents 1 each at \$ 215.18 _____ per each	\$ 215.18
18.	Irrigation Overflow Siphon, complete with 8-Inch Steel Pipe, 3-Inch By Pass and Valve and Breather Pipe, in place, 1 each at the unit price of Three Hundred Sixty Three _____ Dollars and Eighty _____ Cents 1 each at \$ 363.80 _____ per each	\$ 363.80

Proposal (continued)

<u>Item Number</u>	<u>Description</u>	<u>Total for Items</u>
19.	18-Inch Non-Reinforced Concrete Storm Sewer Pipe or Class 1500 Asbestos-Cement Storm Sewer Pipe including Excavation and Backfill, in place, 125 linear feet at the unit price of <div> <div>Seven</div> <div>Dollars</div> </div> <div> <div>and Twenty One</div> <div>Cents</div> </div> 125 linear feet at \$ <u>7.21</u> per linear foot	\$ <u>901.25</u>
20.	10-Inch Non-Reinforced Concrete Storm Sewer Pipe or Class 1500 Asbestos-Cement Storm Sewer Pipe including Excavation and Backfill, in place, 1215 linear feet at the unit price of <div> <div>Two</div> <div>Dollars</div> </div> <div> <div>and Fifteen</div> <div>Cents</div> </div> 1215 linear feet at \$ <u>2.15</u> per linear foot	\$ <u>2,612.25</u>
21.	8-Inch Non-Reinforced Concrete Storm Sewer Pipe or Class 1500 Asbestos-Cement Storm Sewer Pipe including Excavation and Backfill, in place, 860 linear feet at the unit price of <div> <div>One</div> <div>Dollars</div> </div> <div> <div>and Sixty Five</div> <div>Cents</div> </div> 860 linear feet at \$ <u>1.65</u> per linear foot	\$ <u>1,419.00</u>
22.	Standard Catch Basins, complete, 26 each at the unit price of <div> <div>Ninety Five</div> <div>Dollars</div> </div> <div> <div>and Forty</div> <div>Cents</div> </div> 26 each at \$ <u>95.40</u> per each	\$ <u>2,480.40</u>

Proposal (continued)

<u>Item Number</u>	<u>Description</u>	<u>Total for Items</u>
23.	Landscaping for Yards Around the Individual Homes, including Topsoil where required, Cultivation, Leveling and Seeding, complete for the lump sum price of Three Thousand Two Hundred Ten Dollars and No Cents 1 lump sum at \$ 3,210.00 complete	\$ 3,210.00
24.	Landscaping Berm Strips Along Each Edge of Proposed Paving Areas, Row Shelter Complexes, Irrigation Trenches through presently seeded areas and Playground Areas in Housing Complexes "F" "G" and "H", including Top Soil where required, Cultivation, Leveling, Seeding, Rolling and Watering Areas Herein Specified, complete for the lump sum price of Ten Thousand Four Hundred Eighty Six Dollars and No Cents 1 lump sum at \$ 10,486.00 complete	\$10,486.00
25.	4-Strand Barbed Wire Fencing Complete with Strain Posts, Corner Posts, Gate Posts, 5 Signs, and Interior Posts, in place, 11,250 linear feet at the unit price of No Dollars and Fifty Two Cents 11,250 linear feet at \$ 0.52 per linear foot	\$ 5,850.00
26.	24-Foot Metal Gate, in place, 1 each at the unit price of Eight Five Dollars and Sixty Cents 1 each at \$ 85.60 per each	\$ 85.60

Proposal (continued)

<u>Item Number</u>	<u>Description</u>	<u>Total for Item</u>
27.	12-Foot Metal Gates, in place, 5 each at the unit price of	
	<u>Seventy Four</u> Dollars	
	and <u>Ninety</u> Cents	
	5 each at \$ <u>74.90</u> per each	\$ <u>374.50</u>
28.	Chain Gates, including Gate Posts, Log Chains and Padlocks, complete, 12 each at the unit price of	
	<u>Sixty Three</u> Dollars	
	and <u>Thirteen</u> Cents	
	12 each at \$ <u>63.13</u> per each	\$ <u>757.56</u>
29.	Clothes Line Poles, in place, 40 each at the unit price of	
	<u>Sixty Three</u> Dollars	
	and <u>Thirteen</u> Cents	
	40 each at \$ <u>63.13</u> per each	\$ <u>2,525.20</u>
30.	Clothes Line Wire, including turn buckels, in place, 5050 linear feet at the lump sum price of	
	<u>Five Hundred Ninety Four</u> Dollars	
	and <u>Thirty Nine</u> Cents	
	1 lump sum at \$ <u>594.39</u> complete	\$ <u>594.39</u>
31.	Standard Manholes, complete, 5 each at the unit price of	
	<u>Two Hundred Ninety One</u> Dollars	
	and <u>Fifty</u> Cents	
	5 each at \$ <u>291.50</u> per each	\$ <u>1,457.50</u>

<u>Item Number</u>	<u>Description</u>	<u>Total for Item</u>
32.	Construct Sewage Lagoons, including Clearing, Stripping, Inlet Diversion, Excavation, Embankment, Bottom Leveling, Drain Ditches, Rolling, Watering, Lowering Existing Dike Tops, Graveling Required Dike Tops and Constructing Access Road, complete for the lump sum price of <u>Seven Thousand Four Hundred Eight</u> Dollars and <u>No</u> Cents 1 lump sum at \$ <u>7,480.00</u> complete	 \$ <u>7,480.00</u>
33.	Lagoon Inlet Structure, including Parshall Flume, complete for the lump sum price of <u>One Thousand Three Hundred Forty Nine</u> Dollars and <u>Thirty Eight</u> Cents 1 lump sum at \$ <u>1,349.38</u> complete	 \$ <u>1,349.38</u>
34.	Transfer Structure No. 1, including 25 linear feet of 8-inch Sewer Pipe, in place, for the lump sum price of <u>Three Hundred Ninety Four</u> Dollars and <u>Fifty Three</u> Cents 1 lump sum at \$ <u>394.53</u> complete	 \$ <u>394.53</u>
35.	Transfer Structure No. 2, including 125 linear feet of 8-inch Sewer Pipe, in place, for the lump sum price of <u>Nine Hundred Eleven</u> Dollars and <u>Sixty</u> Cents 1 lump sum at \$ <u>911.60</u> complete	 \$ <u>911.60</u>

Proposal (continued)

<u>Item Number</u>	<u>Description</u>	<u>Total for Item</u>
36.	Transfer Structure No. 3, including 60 linear feet of 8-inch Sewer Pipe, in place, for the lump sum price of Four Hundred Thirty Four Dollars and Sixty Cents 1 lump sum at \$ 434.60 complete	\$ 434.60
37.	Outlet Structure, including 60 linear feet of 8-inch Sewer Pipe, in place, for the lump sum price of Four Hundred Thirty Four Dollars and Eighteen Cents 1 lump sum at \$ 434.18 complete	\$ 434.18
38.	Drain Valve, including 130 linear feet of 8-inch Sewer Pipe, Valve and Valve Box, in place, for the lump sum price of Four Hundred Ninety Nine Dollars and Twenty One Cents 1 lump sum at \$ 499.21 complete	\$ 499.21
39.	Drain Valve, including 100 linear feet of 6-inch Sewer Pipe, Valve and Valve Box, in place, for the lump sum price of Five Hundred Twenty Four Dollars and Seventy Cents 1 lump sum at \$ 524.70 complete	\$ 524.70

Proposal (continued)

<u>Item Number</u>	<u>Description</u>	<u>Total for Item</u>
40.	8-Inch Standard Strength Concrete Rubber Gasket Pipe, or Class 1500 Asbestos-Cement Inlet Pipe, in place, 175 linear feet at the unit price of	
	Four _____ Dollars	
	and Thirteen _____ Cents	
	175 linear feet at \$ 4.13 per linear foot	\$ 722.75
41.	Inlet Pad and Sump, including Gravel, complete for the lump sum price of	
	Three Hundred Seventy One _____ Dollars	
	and No _____ Cents	
	1 lump sum at \$ 371.00 complete	\$ 371.00
42.	Floating Aerators, in place, including the Mooring Cables and Anchors, Controls and Service Wiring, 2 each at the unit price of	
	Three Thousand Sixty _____ Dollars	
	and Twenty Two _____ Cents	
	2 each at \$ 3,060.22 per each	\$ 6,120.44
43.	Metal Frame for Aerator Controls and Aerator Anchor Posts, in place, for the lump sum price of	
	Five Hundred Thirty _____ Dollars	
	and No _____ Cents	
	1 lump sum at \$ 530.00 complete	\$ 530.00

<u>Item Number</u>	<u>Description</u>	<u>Total for Item</u>
44.	Chlorine Discharge Renovation, including one Standard Manhole, 80 linear feet of 8-inch Outlet Pipe, Necessary Demolition and Relocating the Chlorine Discharge Line, complete for the lump sum price of	
	One Thousand Two Hundred Sixty Three _____ Dollars	
	and _____ Ninety Four _____ Cents	
	1 lump sum at \$ <u>1,263.94</u> complete	\$ <u>1,263.94</u>
45.	Control Building Renovation, including Sewage Piping, Valves, Painting, Wall Heater, Ventilator Fan, Cover Lid, Electrical Wiring and Controls, Sludge Pump Removal and Chlorine Room Removal, complete for the lump sum price of	
	Two Thousand Four Hundred Eighty Four _____ Dollars	
	and _____ Sixty Four _____ Cents	
	1 lump sum at \$ <u>2,484.64</u> complete	\$ <u>2,484.64</u>
46.	In-line Comminutor complete with Concrete Box and Electrical Service at the lump sum price of	
	Three Thousand Sixty Three _____ Dollars	
	and _____ Forty _____ Cents	
	1 lump sum at \$ <u>3,063.40</u> complete	\$ <u>3,063.40</u>
TOTAL BASE BID (Sum of Bid Items No. 1 through and including No. 46 -- DO NOT INCLUDE ANY AMOUNTS for Bid Item Alternate Nos. 1a, 2a and 3a) -----		\$159,214.75

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Proposal (continued)

NOTICES

- A. The Contractor shall list on the following lines, the names and addresses of the Mechanical and Electrical Subcontractors:

<u>Caldwell Plumbing & Heating</u>	<u>Johnson Electric</u>
<u>Mechanical Subcontractor</u>	<u>Electrical Subcontractor</u>
Address: <u>919 Main</u>	Address: <u>228 Caldwell Blvd.</u>
<u>Caldwell, Idaho</u>	<u>Nampa, Idaho</u>

- B. The Bidder hereby acknowledges that he *~~(XXX)~~ * (has not) performed other contract work requiring conformance with Executive Order 11246.

*Mark Out One

PLAN AND EQUIPMENT QUESTIONNAIRE

Submitted to Caldwell Housing Authority, Caldwell, Idaho

By Snake River Builders, Inc.

☒ Corporation
☐ Co-Partnership
☐ An Individual

Principal Office Nampa, Idaho

Idaho Contractor License No. _____, Class _____

The signatory of this Questionnaire guarantees the truth and accuracy of all statements and of all answers to interrogatories hereinafter made.

1. In what manner have you inspected this work? Explain in detail.

Visual on site inspection.

2. Explain your plan or layout for performing the proposed work.

In a business like manner

3. The work, if awarded to you, will have the personal supervision of whom?

Jay Jackson

4. Do you intend to do all of the work on the proposed work with your own forces?
If so, give amount and type of equipment to be used.

No

5. Do you intend to sublet any portions of the work? Yes X No
If so, state name and address of the subcontractor and the amount of the subcontract.

Electrical
Paving
Fencing
Painting

6. From which subcontractor do you expect to require a bond?

None .

7. What equipment do you own that is available for the proposed work?

<u>Quantity</u>	<u>Item</u>	<u>Type, Size, Capacity</u>	<u>Condition</u>	<u>Present Location</u>
3	Backhoe	1-1/2 yd, 580 & 680	Excellent	Nampa
2	Trencher	12"	Excellent	Nampa
5	Dump Truck	5 - 10 yds	Excellent	Nampa
1	Cat-Dozer	D-6	Excellent	Nampa
3	Loaders	1 yd, 1-1/4 yd, 2 yd	Excellent	Nampa
2	Pick up Truck	1 Ton	Excellent	Nampa
4	Compactor		Excellent	Nampa
1	Crane	15 Ton	Excellent	Nampa

8. What equipment do you intend to purchase for use on the proposed work, should the contract be awarded to you?

<u>Quantity</u>	<u>Item</u>	<u>Type, Size, Capacity, Etc.</u>	<u>Approximate Cost</u>
	None		

9. How and when will you pay for the equipment to be purchased?

Not Applicable

10. Do you propose to rent any equipment for this work? Yes ____ No X
If so, state type, quantity, and reason for renting.

11. Have you made Contracts or received firm offers for all the materials within prices used in preparing your proposals? Do not give names of dealers or manufacturers.

Yes

Dated at Nampa, Idaho this 3rd day of October, 1969.

Snake River Builders, Inc.

Organization

/S/ Ralph L. Aldrich

Ralph L. Aldrich

Signature

President

Title of Person Signing

STATE OF Idaho)
COUNTY OF Canyon) ss.

Ralph L. Aldrich being first duly sworn deposes
and says that he is President of the above
Snake River Builders, Inc. and that
the answers to the foregoing questions and all statements therein contained are
true and correct.

Sworn to before me this 3rd day of October, 1969.

/S/ Shirley Michaelis

Notary Public

Residing at Nampa, Idaho

My Commission Expires June 1, 1972

Seal Affixed

PROPOSAL BOND

KNOW ALL MEN BY THESE PRESENTS, That we SNAKE RIVER BUILDERS, INC.
(Contractor)
_____ of Nampa, Idaho
(Address)
as Principal, and THE GENERAL INSURANCE COMPANY OF AMERICA, Seattle, Washington
(Surety)
as Surety, are held and firmly bound unto CITY OF CALDWELL, IDAHO
(Owner)
_____, hereinafter called the Owner, in the full and penal sum
of five per cent (5%) of the total amount of the proposal of said Principal for
the work hereinafter described, for the payment of which, well and truly to be
made, we bind ourselves, our heirs, executors, administrators, successors and as-
signs, firmly by these presents.

The condition of this obligation is such, that whereas the Principal
has this day submitted a sealed proposal for General Sire Reconstruction
project, Farm Labor Camp, Caldwell Housing Authority, Caldwell, Idaho.

NOW, THEREFORE, if the said Principal shall be awarded and shall duly
make and enter into a contract with the Owner in accordance with the terms of
said proposal and award, and shall within ten (10) days after presentation of the
contract furnish a bond acceptable to the Owner for the faithful performance of
such contract, then this obligation shall be null and void; otherwise it shall be
and remain in full force and effect.

IN WITNESS WHEREOF, the above bounded parties have executed this instru-
ment, this third day of October, 1969.

Witness: _____ SNAKE RIVER BUILDERS, INC.
(If Individual or Firm) (Principal)

Attest: _____ By SNAKE RIVER BUILDERS, INC.
(If Corporation) /S/ Ralph L. Aldrich
(Title) Ralph Aldrich, President

(CORPORATE SEAL)

Seal Affixed

_____ GENERAL INSURANCE COMPANY OF AMERICA
(Surety)

_____ /S/ Robert M. Sample
(Attorney-in-Fact) Robert M. Sample

Attest: _____ Seal Affixed By _____
(Title)

(SEAL OF SURETY)

POWER OF ATTORNEY
GENERAL INSURANCE COMPANY OF AMERICA

Home Office
SEATTLE, WASHINGTON

No. 258-A

KNOW ALL MEN BY THESE PRESENTS:

That the General Insurance Company of America

by R. E. BANGERT Its Vice-President,
in pursuance of authority granted by Sections 3 and 4, Article V, of the By-Laws of said Company, a copy of which sections is hereto attached, does
hereby nominate, constitute and appoint.

ROBERT M. SAMPLE, Nampa, Idaho

its true and lawful attorney-in-fact, to make, execute, seal and deliver for and on its behalf, and as its act and deed any and all bonds and undertakings, in its business of guaranteeing the fidelity of persons holding places of public or private trust and the performance of contracts other than insurance policies, and executing and guaranteeing bonds or other undertakings required or permitted in all actions or proceedings, or by law required or permitted.

All such bonds and undertakings as aforesaid to be signed on behalf of the General Insurance Company of America and the corporate seal of the Company affixed thereto by Robert M. Sample, individually.

And the execution of such bonds or undertakings in pursuance of these presents shall be as binding upon said Company, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its Home Office, Seattle, Washington, in their own proper persons.

IN WITNESS WHEREOF, the said R. E. BANGERT has hereunto
subscribed his name and affixed the Corporate Seal of the said General Insurance Company of America this
18 day of May 1964.

(signed) R. E. Bangert

Vice-President

(SEAL)

STATE OF WASHINGTON, }
COUNTY OF KING, 18 } ss.

On this.....day of May A.D. 1964, before the subscriber,
a Notary Public of the State of Washington, in and for the County of King, duly commissioned and qualified, came.....
R. E. BANGERT Vice-President of the General Insurance Company of America, to me personally
known to be the individual and officer described in, and who executed, the preceding instrument, and he acknowledged the execution of the same,
and being by me duly sworn, deposeth and saith, that he is the officer of the Company aforesaid, and that the seal affixed to the preceding instrument
is the Corporate Seal of said Company, and the said Corporate Seal and his signature as such officer was duly affixed and subscribed to the said
instrument by the authority and direction of said Corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

(SEAL)

(signed) Ida Dahl

Notary Public

Extracts from By-Laws of the General Insurance Company of America, adopted February 28, 1923, and amended April 27, 1950, by the Stockholders:
"Article V, Section 3.--POWERS AND DUTIES OF PRESIDENT:....He shall also have power and authority to designate individuals under appropriate titles who shall be authorized to execute on behalf of the Company fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business and who may also have authority to attach the official seal of the Company to such fidelity and surety bonds and documents of like character issued by the Company in the course of its business."

"Article V, Section 4.--POWERS AND DUTIES OF VICE-PRESIDENT:....In the absence of the President, the Vice-President, or if more than one Vice-President, the Vice-Presidents in the order of their election shall perform the duties of the President, subject to the direction of the Board of Directors. He shall also have power and authority to designate individuals under appropriate titles who shall be authorized to execute on behalf of the Company fidelity and surety bonds and other documents of a similar character issued by the Company in the course of its business and who may also have authority to attach the official seal of the Company to such fidelity and surety bonds and documents of like character issued by the Company in the course of its business."

I, R. E. BANGERT Vice-President of the General Insurance Company of America,
hereby certify that the foregoing is a true copy of Sections 3 and 4, Article V, of the By-Laws of said Company and is still in force.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name as Vice-President and affixed the Corporate Seal of the General Insurance Company of America, this 18 day of May A.D. 1964.

(signed) R. E. Bangert

Vice-President

(SEAL)

STATE OF WASHINGTON, }
COUNTY OF KING, } ss.

S. C. STRANDBERG

I, Assistant Secretary of the
General Insurance Company of America, do hereby certify that the foregoing is a true copy of Sections 3 and 4, Article V, of the By-Laws of said Company, and is now in force; and I do hereby certify that the above and foregoing Power of Attorney is a true and correct copy of a Power of Attorney, executed by said General Insurance Company of America, which is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Company, at the City of Seattle, this.....
Thid day of October A.D. 1964.

Assistant Secretary

CONTRACT AGREEMENT

THIS AGREEMENT, made and entered into, in quadruplicate, this 13th day of October, 1969, by and between the Housing Authority, City of Caldwell, Canyon County, Idaho, hereinafter called the Owner, party of the first part, and The Snake River Builders, Inc.

_____ of Nampa, Idaho,
hereinafter called the Contractor, party of the second part.

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

Site Reconstruction Project, Farm Labor Camp, Caldwell Housing Authority,

City of Caldwell, Canyon County, Idaho

to furnish all necessary machinery, tools, apparatus, materials, and labor and to complete the work in the most substantial and workmanlike manner according to the plans and specifications therefor on file in the office of J-U-B ENGINEERS, Inc. and such modifications of the same and other directions that may be made by the Architect/Engineer as provided herein:

Exhibit A, as included herein, shall be and is hereby made a part of this

contract agreement.

CONTRACT DOCUMENTS:

It is further agreed that the contractual documents, which include the advertisement; the notice to bidders; the Contractor's proposal; the Contractor's qualifications; the written agreement between the Owner and the Contractor; the notice to proceed; the bonds, general conditions, special provisions, special specifications, plans and drawings by the Architect/Engineer including any supplemental drawings; and, those working drawings submitted by the Contractor and approved by the Architect/Engineer including any manufacturer's working drawings of equipment for permanent installation in this project, appended to this contract agreement are hereby specifically referred to and made a part of this contract, and shall have the same force and effect as though all of same were fully inserted herein.

EXHIBIT A

The following modifications shall be made in the Contractor's Proposal - Schedule of Items and Prices and said modifications shall become a part of this contract agreement and all other contract documents, plans and specifications:

1. Bid Item No. 7 shall be modified to eliminate the stripping, excavation, backfill and base course for the two supplemental parking areas in Complex "G" and for the two supplemental parking areas in Complex "H", all as shown on sheet 13 of the Plans.
2. Bid Item No. 8 shall be modified to eliminate the two-inch leveling course for the two supplemental parking areas in Complex "G" and for the two supplemental parking areas in Complex "H", all as shown on sheet 13 of the Plans.
3. Bid Item No. 9 shall be modified to eliminate the 0.15 foot of plant mix asphaltic pavement for the two supplemental parking areas in Complex "G" and for the two supplemental parking areas in Complex "H", all as shown on sheet 13 of the Plans.
4. Bid Item No. 13 shall be modified to delete in its entirety the eight-inch irrigation line that serves the playground area of Complex "F" at its take off from the ten-inch main at the Northwest corner of the project site, the elimination of this line being a reduction of approximately 980 linear feet of eight-inch irrigation line.
5. Bid Item No. 14 shall be modified to delete the two, six-inch irrigation risers to serve the playground area of Complex "F" and every other irrigation riser, amounting to ten each, as called for on the eight-inch line across the Southerly limits of the project; therefore, the total reduction in quantity of this bid item is twelve, six-inch risers.
6. Bid Item No. 23 shall be withheld from award at this time in its entirety and it is specifically agreed that the Owner has the right to award this item later in its entirety in accordance with the contract documents, provided that the award is made on or before February 15, 1970.
7. Bid Item No. 25 shall be modified in that the fencing as specified in this item and as shown on sheet 13 of the Plans as it lies Southerly of "A" Street and the fencing that lies immediately North and adjacent to "A" Street and "D" Complex and the fencing that lies immediately East of "D" Complex is withheld from contract award at this time, said fencing being approximately 3000 linear feet, but with the provision that the Owner reserves the right to award any or all portions of this withheld fencing for the contract price as submitted in the Contractor's Proposal, provided that the award is made on or before February 15, 1970.

8. Bid Item No. 27 shall be modified in that two of the 12-foot gates as called for in the fencing that is being withheld under Bid Item No. 25 hereinabove are to be withheld from contract award at this time, but with the provision that the Owner reserves the right to award the said two gates for the contract price as stipulated in the Contractor's Proposal, provided that the award is made on or before February 15, 1970.
9. Bid Item No. 28 shall be deleted in its entirety.
10. Bid Item No. 29 shall be withheld from award at this time in its entirety but with the provision that the Owner reserves the right to award this item for the contract price as stipulated in the Contractor's Proposal, provided that the award is made on or before February 15, 1970.
11. Bid Item No. 30 shall be deleted in its entirety.
12. Bid Item No. 42 shall be modified to provide for one, three-horsepower aerator unit with the mooring cables having a total length of 290 linear feet. Also, the Contractor shall furnish and deliver a three-horsepower motor and accessories to the Owner to serve as a standby power unit for the surface aerator to be installed under the revised Bid Item No. 42.

Because of the modification in this bid item, Section 5.11, Surface Aerators, of the Special Specifications has been revised to incorporate specifications for the alternate equipment; said revised Section 5.11 shall supersede the original Section 5.11 and is hereby made a part of these contract documents and shall be appended hereto.

Section 5.14, Electrical, of the Special Specifications, shall be amended to conform to the revised electrical details concerning the three-horsepower aerator to meet the specifications outlined by the manufacturer of the aerator.

Based on the amended conditions to the Contractor's Proposal as hereinabove outlined, the total revised amount of contract as awarded at this time is \$144,861.23.

The amount of the items being withheld from award at this time with the stipulation that they may be awarded by the Owner on or before February 15, 1970, is an additional \$7445.00.

SECTION 5.11. SURFACE AERATOR - REVISED

A. Scope. There shall be furnished one complete floating surface aerator unit located at the center of Pond No. 1 capable of high oxygenation by entraining and dispersing atmospheric oxygen in large quantities with mixing and blending. A rebuilt three-horsepower motor and accessories shall be furnished and delivered to the Owner to serve as a standby power unit for the surface aerator as installed. The Contractor is required to provide the Owner with a one-year in-service guarantee for the standby power unit as furnished. The aerator shall be of a type which pumps liquid from well beneath the surface of the basin and discharges it radially at the surface with a high velocity impingement pattern.

B. Aerator Description. The aerator shall consist essentially of a motor, a direct drive impeller driven at a constant speed, and an integral flotation unit which shall support the weight of the aeration unit. The unit shall be Model FLTM-3-2 Floating Aqua-Lator surface aerators as manufactured by Welles Products Corporation, Roscoe, Illinois, or approved equal.

The drive motor shall be three-horsepower and be connected for 220/440 dual voltage reconnectable, three-phase, 60-cycle electrical service. The motor shall be totally enclosed, fan-cooled, chemical service type and be suitable for continuous service. The motor shall operate at a constant speed of 1750 rpm.

The impeller shall be cast of corrosion resistant type 304 stainless steel and dynamically balanced within 0.5 inch-ounces.

The flotation unit shall be constructed of polyester resin, reinforced with fiberglass mat and woven glass roving. The flotation unit shall be internally reinforced and filled with high-density polyurethane foam, foamed in place and completely sealed from the external environment. All wetted metal parts shall be of corrosion resisting high-nickel alloys and shall not require painting.

The flotation unit shall be equipped with not less than four stainless steel mooring eyes which shall be directly connected to the internal reinforcing structure.

All fasteners shall be of heavy, type 18-8 stainless steel.

Mooring or anchoring cable shall be 7 x 19 x 1/8-inch diameter aircraft type. Mooring hardware shall be of stainless steel and shall include a stainless steel thimble at each end of the cable and secured by not less than two wire rope clips at each thimble. The connection at the aerator shall be made with an appropriate size anchor shackle or an equivalent removable connector. Connections at the shore (or to suitable anchors, as shown on Plans) shall be by an appropriate ring attachment.

C. Installation. The aerator shall be located at the center of Pond No. 1. The mooring or anchoring cables shall be installed as recommended by the manufacturer so the aerator will be permitted to rise and fall in a vertical movement, but shall have a minimum of lateral movement.

The electrical motor starter shall be mounted as shown on the Plans. The starter, wiring, and all electrical connections shall be as specified in Section 5.14, Electrical, of these Special Specifications.

D. Measurement and Payment. The floating aerator, standby power unit, all electrical controls and appurtenances shall be combined in a lump sum bid as set forth in the Bidder's Proposal - Schedule of Items and Prices.

PAYMENTS:

For 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 Architect/Engineer and to his satisfaction, the Owner agrees to pay said Contractor the amount earned, computed from the actual quantities of the work performed as shown by the estimates of the Architect/Engineer and prices named in such proposal, and to make such payments in the manner and at the times provided in the general conditions thereto appended.

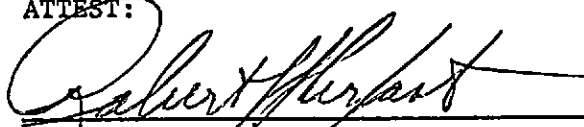
This contract shall be binding upon the parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed the day and year first above written.

OWNER, Party of the First Part:

Housing Authority, City of Caldwell
(Name)

ATTEST:



Robert L. Kerfoot
Secretary

(Title)

By



Calvin E. Burns
Chairman

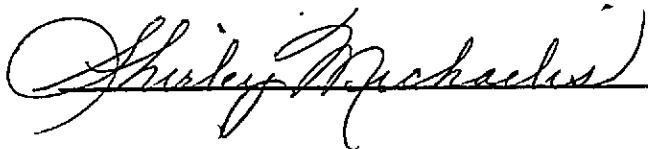
(Title)

CONTRACTOR, Party of the Second Part:

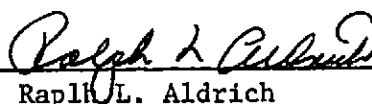
Snake River Builders, Inc.

(Name)

In the Presence of -



By



President
(Title)

By

(Title)

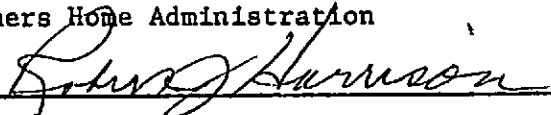
By

(Title)

Approved as lender or insurer of funds to defray the costs of this contract, and without liability for any payments thereunder, the Farmers Home Administration hereby concurs in the award of this contract to The Snake River Builders, Inc., as modified in Exhibit A hereto.

U. S. Department of Agriculture
Farmers Home Administration

By



(Title)



This contract shall not be effective unless and until approved by the State Director of the Farmers Home Administration, U. S. Department of Agriculture, or his delegated representative.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, That we the Snake River Builders, Inc.
(Contractor)

_____ of Nampa, Idaho
(Address)
as Principal, and General Insurance Company of America
(Surety)
as Surety are held and firmly bound unto the Housing Authority, City of Caldwell,
(Owner)
in the penal sum of One Hundred Forty-four Thousand Eight Hundred Sixty-one
(Amount of Bond)

and 23/100 Dollars (\$144,861.23) lawful money of the United States, which sum is agreed to be the maximum liability hereunder, well and truly to be paid, and for the payment of which we and each of us bind ourselves, our heirs, executors, administrators and assigns, jointly and severally, firmly by these presents.

The condition of this instrument is such, that whereas the principal has entered into a certain agreement, hereto attached, with the Housing
(Owner)
Authority, City of Caldwell, dated October 13, 1969,
for General Site Reconstruction Project, Farm Labor Camp, Caldwell Housing
Authority, City of Caldwell, Canyon County, Idaho.

NOW THEREFORE, If the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said contract during the original term of said contract and any extensions thereof that may be granted, with or without notice to the Surety and shall also well and truly 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 modification to the Surety being hereby waived, then this obligation to be null and void, otherwise to remain in full force and effect.

PROVIDED, However, that this bond is executed pursuant to the provisions of the Public Contracts Bond Act, and all liabilities on this bond shall be determined in accordance with said provisions to the same extent as if set forth in full herein.

IN WITNESS WHEREOF, The Principal and Surety have executed this instrument this 13th day of October, 1969.

(Witness if Individual or Firm) Snake River Builders, Inc.
(Principal)

Shirley Michaelis, Sec.
(Attest if Corporation)

By: Ralph L. Albert, Pres

General Insurance Company of America
(Surety)
Countersigned: Robert M. Sample
By Robert M. Sample Resident Agent at Nampa, Idaho.
(SEAL OF SURETY)

POWER OF ATTORNEY
GENERAL INSURANCE COMPANY OF AMERICA
Home Office
SEATTLE, WASHINGTON

No. 258-A

KNOW ALL MEN BY THESE PRESENTS:

That the General Insurance Company of America
by R. E. BANGERT Its Vice-President,
in pursuance of authority granted by Sections 3 and 4, Article V, of the By-Laws of said Company, a copy of which sections is hereto attached, does
hereby nominate, constitute and appoint.....

ROBERT M. SAMPLE, Nampa, Idaho

its true and lawful attorney-in-fact, to make, execute, seal and deliver for and on its behalf, and as its act and deed any and all bonds and undertakings, in its business of guaranteeing the fidelity of persons holding places of public or private trust and the performance of contracts other than insurance policies, and executing and guaranteeing bonds or other undertakings required or permitted in all actions or proceedings, or by law required or permitted.

All such bonds and undertakings as aforesaid to be signed on behalf of the General Insurance Company of America and the corporate seal of the Company affixed thereto by Robert M. Sample, individually.

And the execution of such bonds or undertakings in pursuance of these presents shall be as binding upon said Company, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its Home Office, Seattle, Washington, in their own proper persons.

IN WITNESS WHEREOF, the said R. E. BANGERT has hereunto
subscribed his name and affixed the Corporate Seal of the said General Insurance Company of America this 18 day of May 1964.

(SEAL)

(signed) R. E. Bangert

Vice-President

STATE OF WASHINGTON, }
COUNTY OF KING, 18 } ss.

On this.....day of.....May.....A.D. 1964....., before the subscriber,
a Notary Public of the State of Washington, in and for the County of King, duly commissioned and qualified, came.....

R. E. BANGERT Vice-President of the General Insurance Company of America, to me personally
known to be the individual and officer described in, and who executed, the preceding instrument, and he acknowledged the execution of the same,
and being by me duly sworn, depose and saith, that he is the officer of the Company aforesaid, and that the seal affixed to the preceding instrument
is the Corporate Seal of said Company, and the said Corporate Seal and his signature as such officer was duly affixed and subscribed to the said
instrument by the authority and direction of said Corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

(SEAL)

(signed) Ida Dahl

Notary Public

Extracts from By-Laws of the General Insurance Company of America, adopted February 28, 1923, and amended April 27, 1950, by the Stockholders:

"Article V, Section 3.—POWERS AND DUTIES OF PRESIDENT:....He shall also have power and authority to designate individuals under appropriate titles who shall be authorized to execute on behalf of the Company fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business and who may also have authority to attach the official seal of the Company to such fidelity and surety bonds and documents of like character issued by the Company in the course of its business."

"Article V, Section 4.—POWERS AND DUTIES OF VICE-PRESIDENT:....In the absence of the President, the Vice-President, or if more than one Vice-President, the Vice-Presidents in the order of their election shall perform the duties of the President, subject to the direction of the Board of Directors. He shall also have power and authority to designate individuals under appropriate titles who shall be authorized to execute on behalf of the Company fidelity and surety bonds and other documents of a similar character issued by the Company in the course of its business and who may also have authority to attach the official seal of the Company to such fidelity and surety bonds and documents of like character issued by the Company in the course of its business."

I, R. E. BANGERT Vice-President of the General Insurance Company of America,
hereby certify that the foregoing is a true copy of Sections 3 and 4, Article V, of the By-Laws of said Company and is still in force.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name as Vice-President and affixed the Corporate Seal of the General Insurance Company of America, this 18 day of May A.D. 1964.

(SEAL)

(signed) R. E. Bangert

Vice-President

STATE OF WASHINGTON, }
COUNTY OF KING, } ss.

S. C. STRANDBERG

I,.....Assistant Secretary of the
General Insurance Company of America, do hereby certify that the foregoing is a true copy of Sections 3 and 4, Article V, of the By-Laws of said Company, and is now in force; and I do hereby certify that the above and foregoing Power of Attorney is a true and correct copy of a Power of Attorney, executed by said General Insurance Company of America, which is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Company, at the City of Seattle, this.....thirteenth day of.....October.....A.D. 1964.

S. C. Strandberg
Assistant Secretary

Power of Attorney

NO. _____

FROM

GENERAL INSURANCE COMPANY
OF AMERICA

Home Office: 4347 Brooklyn Ave. N.E., Seattle 5, Washington



TO

DATED _____
FILED _____

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, That we the Snake River Builders, Inc.
(Contractor)

_____ of Nampa, Idaho
(Address)
as Principal, and _____ General Insurance Company of American
(Surety)
as Surety are held and firmly bound unto _____ the Housing Authority, City of Caldwell,
(Owner)
in the penal sum of _____ One Hundred Forty-four Thousand Eight Hundred Sixty-one
(Amount of Bond)

and 23/100 Dollars (\$ 144,861.23) lawful money of the United States, which sum is agreed to be the maximum liability hereunder, well and truly to be paid, and for the payment of which we and each one of us bind ourselves, our heirs, executors, administrators and assigns, jointly and severally, firmly by these presents.

The condition of this instrument is such, that whereas the principal has entered into a certain agreement, hereto attached, with the Housing Authority, City of Caldwell (Owner), dated October 13, 1969, for General Site Reconstruction Project, Farm Labor Camp, Caldwell Housing Authority, City of Caldwell, Canyon County, Idaho.

NOW THEREFORE, If the said principal shall pay all claimants supplying labor or materials to him or his subcontractors in the prosecution of the work provided for in said contract, and 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 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 the Public Contracts Bond Act, and all liabilities on this bond shall be determined in accordance with said provisions to the same extent as if set forth in full herein.

IN WITNESS WHEREOF, The Principal and Surety have executed this instrument this 13th day of October, 1969.

(Witness if Individual or Firm) _____ Snake River Builders, Inc. _____
(Principal)

(Attest if Corporation) Shirley Michaels Sec. By Ralph L. Albright Pres.

General Insurance Company of America
(Surety)

~~Countersigned:~~

By Robert M. Sample Resident Agent at Nampa, Idaho.

(SEAL OF SURETY)

GENERAL CONDITIONS OF THE CONTRACT

Copyright 1958

CONSULTING ENGINEERS COUNCIL

SECTION 2.1 DEFINITIONS

2.1.01 CONTRACT DOCUMENTS: The Contract comprises the following documents, including all additions, deletions and modifications incorporated therein before the execution of the Contract:

a. Legal and Procedural Documents

1. Advertisement
2. Information for Bidders
3. Proposal
4. Proposal Guaranty
5. Contract
6. Performance Bond

b. General Conditions of the Contract

c. Detailed Specification Requirements

d. Drawings

2.1.02 ENGINEER is the Engineer named in the Contract Documents or his representative duly authorized in writing to act for the Engineer.

2.1.03 OWNER is the Owner named in the Contract Documents.

2.1.04 CONTRACTOR is the Contractor named in the Contract Documents.

2.1.05 SUB-CONTRACTOR is any person, firm or corporation with a direct contract with the Contractor who acts for or in behalf of the Contractor in executing any part of the Contract, but does not include one who merely furnishes material.

2.1.06 PROPOSAL: The offer of a Bidder to perform the work described by the Contract Documents when made out and submitted on the prescribed Proposal Form, properly signed and guaranteed.

2.1.07 PROPOSAL GUARANTY: The cashier's check or Bidder's bond accompanying the Proposal submitted by the Bidder, as a guaranty that the Bidder will enter into a Contract with the Owner for the construction of the work, if the Contract is awarded to him.

2.1.08 CONTRACT is the agreement covering the performance of the work described in the Contract Documents including all supplemental agreements thereto and all general and special provisions pertaining to the work or materials therefor.

2.1.09 PERFORMANCE BOND is the approved form of security furnished by the Contractor and his Surety as a guaranty of good faith on the part of the Contractor to execute the work in accordance with the terms of the Contract.

2.1.10 SURETY is the person, firm or corporation who executes the Contractor's Performance Bond.

2.1.11 SPECIFICATIONS shall mean the Legal and Procedural Documents, General Conditions of the Contract, together with the modifications thereof, and the Detailed Specification Requirements, with all addenda thereto.

2.1.12 DRAWINGS are those listed in the Index to Specifications and Drawings with all addenda thereto.

2.1.13 WRITTEN NOTICE: Written notice shall be considered as served when delivered in person or sent by registered mail to the individual, firm or corporation or to the last business address of such known to him who serves the notice.

a. Change of Address: It shall be the duty of each party to advise the other parties to the Contract as to any change in his business address until completion of the Contract.

2.1.14 ACT OF GOD means an earthquake, flood, cyclone or other cataclysmic phenomenon of nature. Rain, wind, flood or other natural phenomenon of normal intensity for the locality shall not be construed as an Act of God and no reparation shall be made to the Contractor for damages to the work resulting therefrom.

SECTION 2.2 DRAWINGS, SPECIFICATIONS AND RELATED DATA

2.2.01 INTENT OF DRAWINGS AND SPECIFICATIONS: The intent of the Drawings and Specifications is that the Contractor furnish all labor and materials, equipment and transportation necessary for the proper execution of the work unless specifically noted otherwise. The Contractor shall do all the work shown on the Drawings and described in the Specifications and all incidental work considered necessary to complete the project in a substantial and acceptable manner, and to fully complete the work or improvement, ready for use, occupancy and operation by the Owner.

2.2.02 CONFLICT: If there be conflicting variance between the Drawings and the Specifications, the provisions of the Specifications shall control. In case of conflict between the General Conditions of the Contract or any modifications thereof and the Detailed Specification Requirements, the Detailed Specification Requirements shall control.

2.2.03 DISCREPANCIES IN DRAWINGS: Any discrepancies found between the Drawings and Specifications and site conditions or any errors or omissions in the Drawings or Specifications shall be immediately reported to the Engineer, who shall promptly correct such error or omission in writing. Any work done by the Contractor after his discovery of such discrepancies, errors or omissions shall be done at the Contractor's risk.

2.2.04 ADEQUACY OF DRAWINGS AND SPECIFICATIONS: Responsibility for adequacy of the design and for sufficiency of the Drawings and Specifications shall be borne by the Owner. The complete requirements of the work to be performed under the Contract shall be set forth in Drawings and Specifications to be supplied by the Owner through the Engineer or by the Engineer as representative of the Owner. Drawings and Specifications furnished shall be in accordance with the Contract Documents and shall be true and accurate developments thereof.

2.2.05 ADDITIONAL INSTRUCTIONS: Further instructions may be issued by the Engineer during the progress of the work by means of Drawings or otherwise to make more clear or specific the Drawings and Specifications or as may be necessary to explain or illustrate changes in the work to be done.

2.2.06 COPIES OF DRAWINGS AND SPECIFICATIONS FURNISHED: Except as provided for otherwise, all required copies of Drawings and Specifications necessary for the execution of the work shall be furnished to the Contractor without charge.

2.2.07 DRAWINGS AND SPECIFICATIONS AT JOB SITE: One complete set of all Drawings and Specifications shall be maintained at the job site and shall be available to the Engineer at all times.

2.2.08 OWNERSHIP OF DRAWINGS AND SPECIFICATIONS: All original or duplicated Drawings and Specifications and other data prepared by the Engineer shall remain the property of the Engineer, and they shall not be re-used on other work, but shall be returned to him upon completion of the work.

2.2.09 DIMENSIONS: Figured dimensions on the plans will be used in preference to scaling the Drawings. Where the work of the Contractor is affected by finish dimensions, these shall be determined by the Contractor at the site, and he shall assume the responsibility therefor.

2.2.10 MODELS: All models prepared for this work shall become the property of the Owner at the completion of the work.

2.2.11 SAMPLES: All samples called for in the Specifications or required by the Engineer shall be furnished by the Contractor and shall be submitted to the Engineer for his approval. Samples shall be furnished so as not to delay fabrication, allowing the Engineer reasonable time for the consideration of the samples submitted.

a. **Samples for Tests:** Contractor shall furnish such samples of material as may be required for examination and test. All materials and workmanship shall be in accordance with approved samples. All samples of materials for tests shall be taken according to methods provided in the Specifications.

2.2.12 SHOP DRAWINGS: The Contractor shall provide shop drawings, settings, schedules and such other drawings as may be necessary for the prosecution of the work in the shop and in the field as required by the Drawings, Specifications or Engineer's instructions. Deviations from the Drawings and Specifications shall be called to the attention of the Engineer at the time of the first submission of shop drawings and other drawings for approval. The Engineer's approval of any drawings shall not release the Contractor from responsibility for such deviations. Shop drawings shall be submitted according to the following schedule:

a. Three copies shall be submitted at least thirty (30) days before the materials indicated thereon are to be needed, or earlier if required to prevent delay of the work.

b. The Engineer shall, within fourteen (14) days of the submittal of any shop drawings, return one copy to the Contractor marked with all corrections and changes.

c. The Contractor shall then correct the shop drawings to conform to the corrections and changes requested by the Engineer.

d. Following completion of such corrections and changes, the Contractor shall furnish the Engineer two copies of the shop drawings conforming to the required corrections and changes.

2.2.13 QUALITY OF EQUIPMENT AND MATERIALS: In order to establish standards of quality, the Engineer has, in the detailed Specifications, referred to certain products by name and catalog number. This procedure is not to be construed as eliminating from competition other products of equal or better quality by other manufacturers where fully suitable in design.

a. The Contractor shall furnish the complete list of proposed desired substitutions prior to signing of the Contract, together with such engineering and catalog data as the Engineer may require.

b. The Contractor shall abide by the Engineer's judgment when proposed substitute materials or items of equipment are judged to be unacceptable and shall furnish the specified material or item of equipment in such case. All proposals for substitutions shall be submitted in writing by the General Contractor and not by individual trades or material suppliers. The Engineer will approve or disapprove proposed substitutions in writing within a reasonable time. No substitute materials shall be used unless approved in writing.

2.2.14 EQUIPMENT APPROVAL DATA: The Contractor shall furnish one copy of complete catalog data for every manufactured item of equipment and all components to be used in the work, including specific performance data, material description, rating, capacity, working pressure, material gage or thickness, brand name, catalog number and general type.

a. This submission shall be compiled by the Contractor and approved by the Engineer before any of the equipment is ordered.

b. Each data sheet or catalog in the submission shall be indexed according to specification section and paragraph for easy reference.

c. After written approval, this submission shall become a part of the Contract, and may not be deviated from except upon written approval of the Engineer.

d. Catalog data for equipment approved by the Engineer does not in any case supersede the Engineer's Contract Documents. The approval of the Engineer shall not relieve the Contractor from responsibility for deviations from Drawings or Specifications, unless he has in writing called the Engineer's attention to such deviations at the time of submission, nor shall it relieve him from responsibility for errors of any sort in the items submitted. The Contractor shall check the work described by the catalog data with the Engineer's Contract Documents for deviations and errors.

e. It shall be the responsibility of the Contractor to insure that items to be furnished fit the space available. He shall make necessary field measurements to ascertain space requirements, including those for connections, and shall order such sizes and shapes of equipment that the final installation shall suit the true intent and meaning of the Drawings and Specifications.

f. Where equipment requiring different arrangement of connections from those shown is approved, it shall be the responsibility of the Contractor to install the equipment to operate properly, and in harmony with the intent of the Drawings and Specifications, and to make all changes in the work required by the different arrangement of connections.

2.2.15 SURVEYS: Unless otherwise specified, the Owner shall establish all base lines for the location of the principal component parts of the work together with a suitable number of bench marks adjacent to the work. Based upon the information provided by the Owner, the Contractor shall develop and make all detail surveys necessary for construction, including slope stakes, batter boards, stakes for pile locations and other working points, lines and elevations. The Contractor shall have the responsibility to carefully preserve bench marks, reference points and stakes, and, in the case of destruction thereof by the Contractor or resulting from his negligence, the Contractor shall be charged with the expense and damage resulting therefrom and shall be responsible for any mistakes that may be caused by the unnecessary loss or disturbance of such bench marks, reference points and stakes.

SECTION 2.3 ENGINEER-OWNER-CONTRACTOR RELATIONS

2.3.01 ENGINEER'S RESPONSIBILITY AND AUTHORITY: All work shall be done under the general supervision of the Engineer. The Engineer shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, rate of progress of work, interpretation of Drawings and Specifications and all questions as to the acceptable fulfillment of the Contract on the part of the Contractor.

2.3.02 ENGINEER'S DECISIONS: All claims of the Owner or the Contractor shall be presented to the Engineer for decision which shall be made in writing within a reasonable time. All decisions of the Engineer shall be final except in cases where time and/or financial considerations are involved, which shall be subject to arbitration.

2.3.03 SUSPENSION OF WORK: The Engineer shall have the authority to suspend the work, wholly or in part, for such period or periods, as he may deem necessary, due to unsuitable weather, or such other conditions as are considered unfavorable for prosecution of the work, or failure on the part of the Contractor to carry out the provisions of the Contract or to supply materials meeting the requirements of the Specifications. The Contractor shall not suspend operation without the Engineer's permission.

2.3.04 ARBITRATION: Should there be any dispute or any questioned decision of the Engineer which is subject to arbitration, it shall be promptly submitted to arbitration upon demand by either party to the dispute. The Contractor shall not delay the work because arbitration proceedings are pending unless he shall have written permission from the Engineer so to do and such delay shall not extend beyond the time when the arbitrators shall have opportunity to determine whether the work shall continue or be suspended pending decision by the arbitrators of such a dispute. Any demand for arbitration shall be in writing and shall be delivered to the Engineer and any adverse party either by personal delivery or by registered mail addressed to the last known address of each within ten (10) days of receipt of the Engineer's decision, and in no event after final payment has been made and accepted, subject, however, to any express stipulation to the contrary in the Contract Documents. Should the Engineer fail within a reasonable period to make a decision, a demand for arbitration may then be made as if the Engineer's decision had been rendered against the party demanding arbitration.

a. No one shall be qualified to act as an arbitrator who has, directly or indirectly, any financial interest in the Contract or who has any business or family relationship with the Owner, the Contractor, or the Engineer. Each arbitrator selected shall be qualified by experience and knowledge of the work involved in the matter to be submitted to arbitration.

b. Arbitration shall be in accordance with the procedure and standards of The American Arbitration Association.

2.3.05 INSPECTION OF WORK: All materials and each part or detail of the work shall be subject at all times to inspection by the Engineer, and the Contractor will be held strictly to the true intent of the Specifications in regard to quality of materials, workmanship, and the diligent execution of the Contract. Such inspection may include mill, plant, or shop inspection, and any material furnished under these Specifications is subject to such inspection. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

2.3.06 EXAMINATION OF COMPLETED WORK: If the Engineer requests it, the Contractor at any time before acceptance of the work shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the Specifications. Should the work thus exposed or examined prove acceptable, the uncovering or removing, and the replacing of the covering or making good of the parts removed shall be paid for as Extra Work, but should the work so exposed or examined prove unacceptable, the uncovering, removing and replacing shall be at the Contractor's expense.

2.3.07 CONTRACTOR'S SUPERINTENDENCE: A qualified superintendent, who is acceptable to the Engineer, shall be maintained on the work and give efficient supervision to the work until its completion. The superintendent shall have full authority to act in behalf of the Contractor, and all directions given to the superintendent shall be considered given to the Contractor. In general, the Engineer's instructions shall be confirmed in writing and always upon written request from the Contractor.

2.3.08 LANDS BY OWNER: The Owner shall provide the lands shown on the Drawings upon which the work under the Contract is to be performed and to be used for rights of way for access. Any delay in furnishing these lands by the Owner shall be deemed proper cause for adjustment in the Contract Amount and in the time of completion.

2.3.09 LANDS BY CONTRACTOR: Any additional land and access thereto not shown on the Drawings that may be required for temporary construction facilities or for storage of materials shall be provided by the Contractor with no liability to the Owner. The Contractor shall confine his apparatus and storage of materials and operation of his workmen to those areas described in the Drawings and Specifications and such additional areas which he may provide as approved by the Engineer.

2.3.10 PRIVATE PROPERTY: The Contractor shall not enter upon private property for any purpose without obtaining permission, and he shall be responsible for the preservation of all public property, trees, monuments, etc. along and adjacent to the street and/or right-of-way, and shall use every precaution necessary to prevent damage or injury thereto. He shall use suitable precautions to prevent damage to pipes, conduits, and other underground structures, and shall protect carefully from disturbance or damage all monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed.

2.3.11 ASSIGNMENT OF CONTRACT: Neither the Contractor nor the Owner shall sublet, sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

2.3.12 REMOVAL OF CONSTRUCTION EQUIPMENT, TOOLS AND SUPPLIES: At the termination of this Contract, before acceptance of the work by the Engineer, the Contractor shall remove all of his equipment, tools and supplies from the property of the Owner. Should the Contractor fail to remove such equipment, tools, and supplies, the Owner shall have the right to remove them.

2.3.13 SUSPENSION OF WORK BY OWNER: The work or any portion thereof may be suspended at any time by the Owner provided that he gives the Contractor five (5) days' written notice of suspension, which shall set forth the date on which work is to be resumed. The Contractor shall resume the work upon written notice from the Owner and within ten (10) days after the date set forth in the notice of suspension. If the Owner does not give written notice to resume work within ten (10) days of the date fixed in the notice of suspension, the Contractor may abandon that portion of the work so suspended and shall be entitled to payment in accordance with Paragraph 2.7.11.

2.3.14 OWNER'S RIGHT TO CORRECT DEFICIENCIES: Upon failure of the Contractor to perform the work in accordance with the Contract Documents, including any requirements with respect to the Schedule of Completion, and after five (5) days' written notice to the Contractor and receipt of written approval from the Engineer, the Owner may, without prejudice to any other remedy he may have, correct such deficiencies.

2.3.15 OWNER'S RIGHT TO TERMINATE CONTRACT AND COMPLETE THE WORK: The Owner shall have the right to terminate the employment of the Contractor after giving ten (10) days' written notice of termination to the Contractor in the event of any default by the Contractor and upon receiving written notice from the Engineer certifying cause for such action. In the event of such termination, the Owner may take possession of the work and of all materials, tools and equipment thereon and may finish the work by whatever method and means he may select. It shall be considered a default by the Contractor whenever he shall:

- a. Declare bankruptcy, become insolvent, or assign his assets for the benefit of his creditors.
- b. Disregard or violate important provisions of the Contract Documents or Engineer's instructions, or fail to prosecute the work according to the agreed Schedule of Completion, including extensions thereof.
- c. Fail to provide a qualified superintendent, competent workmen or sub-contractors, or proper materials, or fail to make prompt payment therefor.

2.3.16 CONTRACTOR'S RIGHT TO SUSPEND WORK OR TERMINATE CONTRACT: The Contractor may suspend work or terminate Contract upon ten (10) days' written notice to the Owner and the Engineer, for any of the following reasons:

- a. If an order of any court, or other public authority caused the work to be stopped or suspended for a period of ninety (90) days through no act or fault of the Contractor or his employees.
- b. If the Engineer should fail to act upon any Request for Payment within ten (10) days after it is presented in accordance with the General Conditions of the Contract.
- c. If the Owner should fail to act upon any Request for Payment within thirty (30) days after its approval by the Engineer.
- d. If the Owner should fail to pay the Contractor any sum within thirty (30) days after its award by arbitrators.

2.3.17 RIGHTS OF VARIOUS INTERESTS: Wherever work being done by the Owner's forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Engineer, to secure the completion of the various portions of the work in general harmony.

2.3.18 SEPARATE CONTRACTS: The Owner may let other contracts in connection with the work of the Contractor. The Contractor shall cooperate with other Contractors with regard to storage of materials and execution of their work. It shall be the Contractor's responsibility to inspect all work by other Contractors affecting his work and to report to the Engineer any irregularities which will not permit him to complete his work in a satisfactory manner. His failure to notify the Engineer of such irregularities shall indicate the work of other Contractors has been satisfactorily completed to receive his work. The Contractor shall not be responsible for defects of which he could not have known, which develop in the work of others after the work is completed. It shall be the responsibility of the Contractor to measure the completed work in place and report to the Engineer immediately any difference between completed work by others and the Drawings.

2.3.19 SUB-CONTRACTS: At the time specified by the Contract Documents or when requested by the Engineer, the Contractor shall submit in writing to the Owner for approval of the Engineer the names of the sub-contractors proposed for the work. Sub-contractors may not be changed except at the request or with the approval of the Engineer. The Contractor is responsible to the Owner for the acts and omissions of his sub-contractors, and of their direct and indirect employees, to the same extent as he is responsible for the acts and omissions of his employees. The Contract Documents shall not be construed as creating any contractual relation between any sub-contractor and the Owner. The Contractor shall bind every sub contractor by the terms of the Contract Documents.

a. For convenience of reference and to facilitate the letting of Contracts and sub-contracts, the Specifications are separated into titled sections. Such separations shall not, however, operate to make the Engineer an arbiter to establish limits to the contracts between Contractor and sub-contractors.

2.3.20 WORK DURING AN EMERGENCY: The Contractor shall perform any work and shall furnish and install any materials and equipment necessary during an emergency endangering life or property. In all cases he shall notify the Engineer of the emergency as soon as practicable, but he shall not wait for instructions before proceeding to properly protect both life and property.

2.3.21 ORAL AGREEMENTS: No oral order, objection, claim or notice by any party to the others shall affect or modify any of the terms or obligations contained in any of the Contract Documents, and none of the provisions of the Contract Documents shall be held to be waived or modified by reason of any act whatsoever, other than by a definitely agreed waiver or modification thereof in writing, and no evidence shall be introduced in any proceeding of any other waiver or modification.

SECTION 2.4 MATERIALS AND WORKMANSHIP

2.4.01. MATERIALS FURNISHED BY THE CONTRACTOR: All materials used in the work shall meet the requirements of the respective Specifications, and no material shall be used until it has been approved by the Engineer. All materials not otherwise specifically indicated shall be furnished by the Contractor.

2.4.02 MATERIALS FURNISHED BY THE OWNER: Materials specifically indicated shall be furnished by the Owner. The fact that the Owner is to furnish material is conclusive evidence of its acceptability for the purpose intended, and the Contractor may continue to use it until otherwise directed. If the Contractor discovers any defect in material furnished by the Owner, he shall notify the Engineer. Unless otherwise noted or specifically stated, materials furnished by the Owner, which are not of local occurrence, are considered to be f.o.b. the nearest railroad station. The Contractor shall be prepared to unload and properly protect all such material from damage or loss. The Contractor shall be responsible for material loss or damage after receipt of material at the point of delivery.

2.4.03 STORAGE OF MATERIALS: Materials shall be so stored as to insure the preservation of their quality and fitness for the work. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces, and not on the ground, and/or they shall be placed under cover. Stored materials shall be located so as to facilitate prompt inspection. Private property shall not be used for storage purposes without the written permission of the owner or lessee.

2.4.04 CHARACTER OF WORKMEN: The Contractor shall at all times be responsible for the conduct and discipline of his employees and/or any sub-contractor or persons employed by sub-contractors. All workmen must have sufficient knowledge, skill, and experience to perform properly the work assigned to them. Any foreman or workman employed by the Contractor or sub-contractor who, in the opinion of the Engineer, does not perform his work in a skillful manner, or appears to be incompetent or to act in a disorderly or intemperate manner shall, at the written request of the Engineer, be discharged immediately and shall not be employed again in any portion of the work without the approval of the Engineer.

2.4.05 REJECTED WORK AND MATERIALS: All materials which do not conform to the requirements of the Contract Documents, are not equal to samples approved by the Engineer, or are in any way unsatisfactory or unsuited to the purpose for which they are intended, shall be rejected. Any defective work whether the result of poor workmanship, use of defective materials, damage through carelessness or any other cause shall be removed within ten (10) days after written notice is given by the Engineer, and the work shall be re-executed by the Contractor. The fact that the Engineer may have previously overlooked such defective work shall not constitute an acceptance of any part of it.

a. Should the Contractor fail to remove rejected work or materials within ten (10) days after written notice to do so, the Owner may remove them and may store the materials.

b. Correction of Faulty Work After Final Payment shall be in accordance with Paragraph 2.7.19.

2.4.06 MANUFACTURER'S DIRECTIONS: Manufactured articles, material and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer unless herein specified to the contrary.

2.4.07 CUTTING AND PATCHING: The Contractor shall do all necessary cutting and patching of the work that may be required to properly receive the work of the various trades or as required by the Drawings and Specifications to complete the structure. He shall restore all such cut or patched work as directed by the Engineer. Cutting of existing structure that shall endanger the work, adjacent property, workmen or the public shall not be done unless approved by the Engineer and under his direction.

2.4.08 CLEANING UP: The Contractor shall remove from the Owner's property, and from all public and private property, all temporary structures, rubbish, and waste materials resulting from his operation or caused by his employees, and shall remove all surplus materials leaving the site smooth, clean and true to line and grade.

2.4.09 GUARANTY PERIOD: The Contractor shall warrant all equipment furnished and work performed by him for a period of one year from the date of written acceptance of the work.

a. Correction of Faulty Work After Final Payment shall be as provided in Paragraph 2.7.19.

SECTION 2.5 INSURANCE, LEGAL RESPONSIBILITY AND PUBLIC SAFETY

2.5.01 INSURANCE: The Contractor shall secure and maintain such insurance from an insurance company authorized to write casualty insurance in the State where the work is located as will protect himself, his sub-contractors, and the Owner from claims for bodily injury, death or property damage which may arise from operations under this Contract. The Contractor shall not commence work under this Contract until he has obtained all insurance required under this paragraph and shall have filed the certificate of insurance or the certified copy of the insurance policy with the Owner. Each insurance policy shall contain a clause providing that it shall not be cancelled by the insurance company without ten (10) days' written notice to the Owner of intention to cancel. The amounts of such insurance shall be not less than the following:

a. Workmen's Compensation and Employer's Liability Insurance shall be secured and maintained as required by the State where the work is located.

b. Public Liability, Bodily Injury, and Property Damage:

1. Injury or death of one person:\$ 50,000
2. Injury to more than one person in a single accident:\$200,000
3. Property damage:\$ 50,000

c. Automobile and Truck Public Liability, Bodily Injury, and Property Damage:

1. Injury or death of one person:\$ 50,000
2. Injury to more than one person in a single accident:\$200,000
3. Property damage:\$ 50,000

2.5.02 INDEMNITY: The Contractor shall indemnify and save harmless the Owner from and against all losses and all claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against him by reason of any omission or act of the Contractor his agents or employees, in the execution of the work or in the guarding of it. The Contractor shall obtain in the name of the Owner and shall maintain and pay the premiums for such insurance in such amount and with such provisions as will protect the Owner from contingent liability under this Contract and a copy of such insurance policy or policies shall be delivered to the Owner. Full compliance by the Owner with the terms and provisions of such insurance policy or policies shall be a condition precedent to the Owner's right to enforce against the Contractor any provisions of this article.

2.5.03 FIRE INSURANCE: In addition to such Fire Insurance as the Contractor elects to carry for his own protection, he shall secure and maintain in the name of the Owner policies upon such structures and material and in such amounts as shall be designated in SECTION 2.8—MODIFICATIONS OF THE GENERAL CONDITIONS. The policies shall be secured from a company which is satisfactory to the Owner and delivered to the Owner.

2.5.04 PERFORMANCE BOND: The Contractor shall, at the time of his execution of the Contract, furnish a corporate surety bond in the sum equal to the Contract Amount. The form of the bond shall be as the Owner may prescribe and with a Surety Company authorized to do business in the State where the work is located.

2.5.05 PATENTS AND ROYALTIES: If any design, device, material or process covered by letters patent or copyright is used by the Contractor, he shall provide for such use by legal agreement with the owner of the patent or a duly authorized licensee of such owner, and shall save harmless the Owner from any and all loss or expense on account thereof, including its use by the Owner.

2.5.06 PERMITS: All permits and licenses necessary for the prosecution of the work shall be secured by the Contractor.

2.5.07 LAWS TO BE OBSERVED: The Contractor shall give all notices and comply with all Federal, State and local laws, ordinances and regulations in any manner affecting the conduct of the work, and all such orders and decrees as exist, or may be enacted by bodies or tribunals having any jurisdiction or authority over the work, and shall indemnify and save harmless the Owner against any claim or liability arising from, or based on, the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees.

2.5.08 WARNING SIGNS AND BARRICADES: The Contractor shall provide adequate signs, barricades, red lights and watchmen and take all necessary precautions for the protection of the work and the safety of the public. All barricades and obstructions shall be protected at night by red signal lights which shall be kept burning from sunset to sunrise. Barricades shall be of substantial construction and shall be painted white or whitewashed to increase their visibility at night. Suitable warning signs shall be so placed and illuminated at night as to show in advance where construction, barricades, or detours exist.

2.5.09 PUBLIC SAFETY AND CONVENIENCE: The Contractor shall at all times so conduct his work as to insure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the work, and to insure the protection of persons and property in a manner satisfactory to the Engineer. No road or street shall be closed to the public except with the permission of the Engineer and proper governmental authority. Fire hydrants on or adjacent to the work shall be kept accessible to fire-fighting equipment at all times. Temporary provisions shall be made by the Contractor to insure the use of sidewalks and the proper functioning of all gutters, sewer inlets, drainage ditches, and irrigation ditches, which shall not be obstructed except as approved by the Engineer.

2.5.10 CROSSING UTILITIES: When new construction crosses highways, railroads, streets or utilities under the jurisdiction of State, County, City or other public agency, public utility or private entity, the Contractor shall secure written permission from the proper authority before executing such new construction. A copy of this written permission must be filed with the Owner before any work is done. The Contractor will be required to furnish a release from the proper authority before final acceptance of the work.

2.5.11 SANITARY PROVISIONS: The Contractor shall provide and maintain such sanitary accommodations for the use of his employees and those of his sub-contractors as may be necessary to comply with the requirements and regulations of the local and State departments of health and as directed by the Engineer.

SECTION 2.6 PROGRESS AND COMPLETION OF WORK

2.6.01 NOTICE TO PROCEED: Following the execution of the Contract by the Owner, written Notice to Proceed with the work shall be given to the Contractor. The Contractor shall begin and shall prosecute the work regularly and uninterruptedly thereafter (unless otherwise directed in writing by the Owner) with such force as to secure the completion of the work within the time stated in the Proposal.

2.6.02 CONTRACT TIME: The Contractor shall complete, in an acceptable manner, all of the work contracted for in the time stated in the Proposal. Computation of Contract Time shall commence on the seventh (7th) day following the date of mailing, by regular mail, of the Notice to Proceed and every calendar day following, except as herein provided, shall be counted as a working day.

2.6.03 SCHEDULE OF COMPLETION: The Contractor shall submit, at such times as may reasonably be requested by the Engineer, schedules which shall show the order in which the Contractor proposes to carry on the work, with dates at which the Contractor will start the several parts of the work, and estimated dates of completion of the several parts.

2.6.04 CHANGES IN THE WORK: The Owner may, as the need arises, order changes in the work through additions, deletions or modifications without invalidating the Contract. Compensation and time of completion affected by the change shall be adjusted at the time of ordering such change.

2.6.05 EXTRA WORK: New and unforeseen items of work found to be necessary and which cannot be covered by any item or combination of items for which there is a Contract price shall be classed as Extra Work. The Contractor shall do such Extra Work and furnish such materials as may be required for the proper completion or construction of the whole work contemplated upon written order from the Owner as approved by the Engineer. In the absence of such written order, no claim for Extra Work shall be considered. Extra Work shall be performed in accordance with these Specifications where applicable and work not covered by the Specifications or special provisions shall be done in accordance with the best practice as approved by the Engineer. Extra Work required in an emergency to protect life and property shall be performed by the Contractor as required.

2.6.06 EXTENSION OF CONTRACT TIME: A delay beyond the Contractor's control occasioned by an Act of God, or act or omission on the part of the Owner or by strikes, lockouts, fire, etc., may entitle the Contractor to an extension of time in which to complete the work as determined by the Engineer, provided, however, that the Contractor shall immediately give written notice to the Engineer of the cause of such delay.

2.6.07 USE OF COMPLETED PORTIONS: The Owner shall have the right to take possession of and use any completed or partially completed portions of the work, notwithstanding that the time for completing the entire work or such portions may not have expired; but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the completion of uncompleted work or causes refinishing of completed work, the Contractor shall be entitled to such extra compensation, or extension of time or both, as the Engineer may determine.

SECTION 2.7 MEASUREMENT AND PAYMENT

2.7.01 DETAILED BREAKDOWN OF CONTRACT AMOUNT: Except in cases where unit prices form the basis for payment under the Contract, the Contractor shall within ten (10) days of receipt of Notice to Proceed, submit a complete breakdown of the Contract Amount showing the value assigned to each part of the work, including an allowance for profit and overhead. Upon approval of the breakdown of the Contract Amount by the Engineer, it shall be used as the basis for all Requests for Payment.

2.7.02 REQUESTS FOR PAYMENT: The Contractor may submit periodically but not more than once each month a Request for Payment for work done and materials delivered and stored on the site. The Contractor shall furnish the Engineer all reasonable facilities required for obtaining the necessary information relative to the progress and execution of the work. Payment for materials stored on the site will be conditioned upon evidence submitted to establish the Owner's title to such materials. Each Request for Payment shall be computed from the work completed on all items listed in the Detailed Breakdown of Contract Amount, less 10% to be retained until final completion and acceptance of the work, and less previous payments. Where unit prices are specified, the Request for Payment shall be based on the quantities completed.

2.7.03 ENGINEER'S ACTION ON A REQUEST FOR PAYMENT: Within ten (10) days of submission of any Request for Payment by the Contractor, the Engineer shall:

- a. Approve the Request for Payment as submitted.
- b. Approve such other amount as he shall decide is due the Contractor, informing the Contractor in writing of his reasons for approving the amended amount.
- c. Withhold the Request for Payment, informing the Contractor in writing of his reasons for withholding it.

2.7.04 OWNER'S ACTION ON AN APPROVED REQUEST FOR PAYMENT: Within thirty (30) days from the date of approval of a Request for Payment by the Engineer, the Owner shall:

- a. Pay the Request for Payment as approved.
- b. Pay such other amount in accordance with Paragraph 2.7.05 as he shall decide is due the Contractor, informing the Contractor and the Engineer in writing of his reasons for paying the amended amount.
- c. Withhold payment in accordance with Paragraph 2.7.05 informing the Contractor and the Engineer of his reasons for withholding payment.

2.7.05 OWNER'S RIGHT TO WITHHOLD PAYMENT OF AN APPROVED REQUEST FOR PAYMENT: The Owner may withhold payment in whole or in part on an approved Request for Payment to the extent necessary to protect himself from loss on account of any of the following causes discovered subsequent to approval of a Request for Payment by the Engineer:

- a. Defective work.
- b. Evidence indicating the probable filing of claims by other parties against the Contractor.
- c. Failure of the Contractor to make payments to sub-contractors, material suppliers or labor.
- d. Damage to another contractor.

2.7.06 INTEREST ON UNPAID REQUESTS FOR PAYMENT: Should the Owner fail to pay an approved Request for Payment within thirty (30) days from the date of approval by the Engineer, and should he fail to inform the Engineer and the Contractor in writing of his reasons for withholding payment, the Owner shall pay the Contractor interest on the amount of the Request for Payment at the rate of six per cent (6%) per annum until payment is made.

2.7.07 RESPONSIBILITY OF THE CONTRACTOR: Unless specifically noted otherwise, the Contractor shall furnish all materials and services and perform all the work described by the Contract Documents or shall have all materials and services furnished and all the work performed at his expense. It shall be the Contractor's responsibility to pay for:

- a. Replacement of survey bench marks, reference points and stakes provided by the Owner under Paragraph 2.2.15.
- b. Lands by Contractor provided in accordance with Paragraph 2.3.09.
- c. Insurance obtained in accordance with Paragraphs 2.5.01 and 2.5.02.
- d. Fire Insurance obtained in accordance with Paragraph 2.5.03.
- e. Performance Bond obtained in accordance with Paragraph 2.5.04.
- f. Royalties required under Paragraph 2.5.05.
- g. Permits and Licenses required of the Contractor and all sub-contractors.

2.7.08 PAYMENT FOR UNCORRECTED WORK: Should the Engineer direct the Contractor not to correct work that has been damaged or that was not performed in accordance with the Contract Documents, an equitable deduction from the Contract Amount shall be made to compensate the Owner for the uncorrected work.

2.7.09 PAYMENT FOR REJECTED WORK AND MATERIALS: The removal of work and materials rejected under Paragraph 2.4.05 and the re-execution of acceptable work by the Contractor shall be at the expense of the Contractor, and he shall pay the cost of replacing the work of other contractors destroyed or damaged by the removal of the rejected work or materials and the subsequent replacement of acceptable work.

a. Removal of rejected work or materials and storage of materials by the Owner in accordance with Paragraph 2.4.05 shall be paid by the Contractor within thirty (30) days after written notice to pay is given by the Owner. If the Contractor does not pay the expenses of such removal and after ten (10) days' written notice being given by the Owner of his intent to sell the materials, the Owner may sell the materials at auction or at private sale and shall pay to the Contractor the net proceeds therefrom after deducting all the costs and expenses that should have been borne by the Contractor.

2.7.10 PAYMENTS FOR EXTRA WORK: Written notice of claims for payments for Extra Work shall be given by the Contractor within ten (10) days after receipt of instructions from the Owner as approved by the Engineer to proceed with the Extra Work and also before any work is commenced, except in emergency endangering life or property. No claim shall be valid unless so made. In all cases, the Contractor's itemized estimate sheets showing all labor and material shall be submitted to the Engineer. The Owner's order for Extra Work shall specify any extension of the Contract Time and one of the following methods of payment:

- a. Unit prices or combinations of unit prices which formed the basis of the original Contract.
- b. A lump sum based on the Contractor's estimate, accepted by the Owner, and approved by the Engineer.
- c. Actual cost plus 15% for overhead and profit.

2.7.11 PAYMENT FOR WORK SUSPENDED BY THE OWNER: If the work or any part thereof shall be suspended by the Owner and abandoned by the Contractor as provided in Paragraph 2.3.13, the Contractor will then be entitled to payment for all work done on the portions so abandoned, plus 15% of the value of the abandoned work to compensate for overhead, plant expense, and anticipated profit.

2.7.12 PAYMENT FOR WORK BY THE OWNER: The cost of the work performed by the Owner in removing construction equipment, tools and supplies in accordance with Paragraph 2.3.12 and in correcting deficiencies in accordance with Paragraph 2.3.14 shall be paid by the Contractor.

2.7.13 PAYMENT FOR WORK BY THE OWNER FOLLOWING HIS TERMINATION OF THE CONTRACT: Upon termination of the Contract by the Owner in accordance with Paragraph 2.3.15, no further payments shall be due the Contractor until the work is completed. If the unpaid balance of the Contract Amount shall exceed the cost of completing the work including all overhead costs, the excess shall be paid to the Contractor. If the cost of completing the work shall exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The cost incurred by the Owner, as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Owner, and approved by the Engineer.

2.7.14 PAYMENT FOR WORK TERMINATED BY THE CONTRACTOR: Upon suspension of the work or termination of the Contract by the Contractor in accordance with Paragraph 2.3.16, the Contractor shall recover payment from the Owner for the work performed, plus loss on plant and materials, plus established profit and damages, as approved by the Engineer.

2.7.15 PAYMENT FOR SAMPLES AND TESTING OF MATERIALS: Samples furnished in accordance with Paragraph 2.2.11 shall be furnished by the Contractor at his expense.

a. Testing of samples and materials furnished in accordance with Paragraph 2.2.11 shall be arranged and paid for by the Owner.

2.7.16 RELEASE OF LIENS: The Contractor shall deliver to the Owner a complete release of all liens arising out of this Contract before the retained percentage or before the final Request for Payment is paid. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner such amounts as the Owner may have been compelled to pay in discharging such liens including all costs and a reasonable attorney's fee.

2.7.17 ACCEPTANCE AND FINAL PAYMENT: When the Contractor shall have completed the work in accordance with the terms of the Contract Documents, the Engineer shall certify his acceptance to the Owner and his approval of the Contractor's final Request for Payment, which shall be the Contract Amount plus all approved additions less all approved deductions and less previous payments made. The Contractor shall furnish evidence that he has fully paid all debts for labor, materials, and equipment incurred in connection with the work, following which the Owner shall accept the work and release the Contractor except as to the conditions of the Performance Bond, any legal rights of the Owner, required guarantees, and Correction of Faulty Work after Final Payment, and shall authorize payment of the Contractor's final Request for Payment. The Contractor must allow sufficient time between the time of completion of the work and approval of the final Request for Payment for the Engineer to assemble and check the necessary data.

2.7.18 TERMINATION OF CONTRACTOR'S RESPONSIBILITY: The Contract will be considered complete when all work has been finished, the final inspection made by the Engineer, and the project accepted in writing by the Owner. The Contractor's responsibility shall then cease, except as set forth in his Performance Bond, as required by the Guaranty Period in accordance with Paragraph 2.4.09 and as provided in Paragraph 2.7.19.

2.7.19 CORRECTION OF FAULTY WORK AFTER FINAL PAYMENT: The approval of the final Request for Payment by the Engineer and the making of the final payment by the Owner to the Contractor shall not relieve the Contractor of responsibility for faulty materials or workmanship. The Owner shall promptly give notice of faulty materials or workmanship and the Contractor shall promptly replace any such defects discovered within one year from the date of written acceptance of the work. The Engineer shall decide all questions arising under this paragraph, and all such decisions shall be subject to arbitration.

GENERAL SITE RECONSTRUCTION PROJECT
FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL, CANYON COUNTY, IDAHO

SUPPLEMENTAL GENERAL CONDITIONS

The following items are in addition to the General Conditions stated herein, and other requirements that are pertinent to the work.

SECTION 3.01. DEFINITIONS.

Whenever used in these Supplemental General Conditions or in the other Contract Documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof.

Agreement. The written agreement between the Owner and the Contractor covering the work to be performed, including the Contractor's Bid and the Bonds.

Bid. The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the work to be performed.

Bidder. Any person, firm, or corporation submitting a bid for the work.

Bonds. Performance and payment bonds and other instruments of security, furnished by the Contractor and his surety in accordance with the Contract Documents.

Change Order. A written order to the Contractor signed by the Owner authorizing an addition, deletion, or revision in the work, or an adjustment in the contract price or the contract time issued after execution of the agreement.

Contract Price. The total moneys payable to the Contractor under the Contract Documents.

Modification. Any written amendment of any of the Contract Documents (including change orders) duly executed and delivered after execution of the agreement.

Project. The entire construction to be performed as provided in the Contract Documents.

Project Representative. The authorized representative of the Engineer who is assigned to the project or any parts thereof.

Shop Drawings. All drawings, diagrams, illustrations, brochures, schedules, and other data which illustrate the equipment, materials, and work to be furnished by the Contractor.

SECTION 3.02. DESCRIPTION AND SCOPE OF WORK.

It is the intention of this Contract to reconstruct general site conditions at the Caldwell Housing Authority Farm Labor Camp including complete street renovation complete with curbs, parking and storm drainage; grading and landscaping; demolition of row shelter floor slabs and other miscellaneous site removals with an alternate to demolish existing row shelter buildings; expansion of the existing sewage lagoon and renovation of the existing sewage lift station; construction of a complete low pressured tiled irrigation system; construction of a fencing layout and other miscellaneous items, as outlined in the Advertisement for Bids and as shown in detail on the accompanying Plans, stipulated in these Specifications, and on the Proposal - Schedule of Items and Prices; and as may be further ordered by the Engineer and approved by the Owner.

The Plan drawings show the general location, alignment, elevation, and characteristics of the project work, together with separate drawings showing construction, location and elevation details of segments of the work.

The general features of the work to be performed are listed in the Proposal - Schedule of Items and Prices.

The work under this contract includes furnishing all plant, labor, equipment, appliances, and materials required for the construction of the Farm Labor Camp General Site Reconstruction Project, as located northwest of the City of Caldwell, Canyon County, Idaho, complete and in strict accordance with these Specifications and the applicable drawings and subject to the terms of the Contract.

SECTION 3.03. AWARD, EXECUTION OF DOCUMENTS, DELIVERY OF BONDS.

The award of the contract, if it is awarded, will be to the lowest responsible bidder whose qualifications indicate the award will be in the best interest of the Owner and whose proposal complies with all the prescribed requirements. No award will be made until the Owner has concluded such investigations as he deems necessary to establish the responsibility, qualifications, and financial ability of the bidders to do the work in accordance with the Contract Documents to the satisfaction of the Owner within the time prescribed. The Owner reserves the right to reject the bid of any bidder who does not pass such investigation to the Owner's satisfaction. In analyzing bids, the Owner may take into consideration alternates and unit prices, if requested by the bid forms. If the contract is awarded, the Owner will give the successful bidder written notice of award within sixty (60) days after the opening of bids.

At least six (6) counterparts of the agreement and such other Contract Documents as practicable will be signed by the Owner and the Contractor. The Engineer will identify those portions of the Contract Documents not so signed and such identification will be binding on all parties. The Owner, the Contractor, and the Engineer will each receive an executed counterpart of the Contract Documents.

Simultaneously with the execution of the Contract Documents, the Contractor will deliver the Owner the required bonds.

Failure of the successful bidder to execute the Contract Documents and deliver the required bonds within ten days of the notification of the award shall be just cause for the Owner to annul the award and declare the bid and any guarantee thereof forfeited.

SECTION 3.04. PRECONSTRUCTION CONFERENCE.

Before starting the work, a conference will be held to review scheduling of the work to establish procedures for handling shop drawings and other submissions and for processing applications for payment, and to establish a working understanding between the parties as to the project. Present at the conference will be the Engineer, the project representative, the Contractor, and the superintendent.

SECTION 3.05. CORRELATION, INTERPRETATION, AND INTENT OF CONTRACT DOCUMENTS.

It is the intent of the Specifications and Drawings to describe a completed project to be performed under the agreement.

The Contract Documents comprise the entire agreement between the Owner and the Contractor. They may only be altered by a modification or as provided in the General Conditions of the Contract.

The Contract Documents are complementary; what is called for by one is as binding as if called for by all. If the Contractor finds a conflict, error, or discrepancy in the Contract Documents, he will call it to the Engineer's attention in writing before proceeding with the work affected thereby. In resolving such conflicts, errors, and discrepancies, the Documents shall be given precedence in the following order: Agreement, Specifications, Drawings. Within the Specifications the order of precedence shall be as follows: Contract Provisions for the Farmers Home Administration Grant, Supplemental General Conditions, Information for Bidders, General Conditions, Special Specifications.

Figure dimensions on Drawings shall govern over scale dimensions, and detailed Drawings shall govern over general Drawings. Any work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work, materials, or equipment described in words which so applied have a well-known technical or trade meaning shall be deemed to refer to such recognized standards. The Contractor assumes full responsibility for having familiarized himself with the nature and extent of the Contract Documents, work, locality, and local conditions that may in any manner affect the work to be done.

SECTION 3.06. TIME FOR COMPLETION OF CONTRACT.

Time for completion of this contract shall begin on the seventh (7) day following the date of mailing, by regular mail, of the Notice to Proceed and shall be completed no later than May 1, 1970.

To insure repayment of the Caldwell Housing Authority Revenue Bonds the work involved must be completed to provide full occupancy for migrant farm laborers by the above said date.

SECTION 3.07. LIQUIDATED DAMAGES.

It is hereby understood and mutually agreed by and between the Contractor and the Owner that the date of beginning and time for completion, as specified in the contract of the work to be done hereunder, are essential conditions of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the Notice to Proceed.

The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the specified time. It is expressly understood and agreed by and between the Contractor and the Owner that the time for completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range prevailing in this locality. If the said Contractor shall neglect, fail, or refuse to complete the work within the time herein specified or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the Owner the amount specified in the contract, not as a penalty, but as liquidated damages for such breach of contract as hereinafter set forth for each and every calendar day that the Contractor shall be in default after the time stipulated in the contract for completing the work.

The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and difficulty of fixing and ascertaining the actual damages that the Owner would sustain in such an event and said amount is agreed to be the amount of damages which the Owner would sustain and said amount shall be retained from time to time by the Owner from periodical estimates as a part of retainage to insure proper completion of the project.

It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever, and where under the contract additional time is allowed for the completion of any work, a new time limit fixed by such extension shall be of the essence of this contract.

The Owner is authorized to use such liquidated damages to pay additional costs for Resident Engineering and/or Inspection and such other costs as are incurred as a result of the delay in completion of the project within the specified contract time limit.

Failure to complete the work within the number of calendar days stipulated in the agreement, including extensions granted thereto, shall entitle the Owner to deduct from the moneys due to the Contractor as "Liquidated Damages" an amount equal to \$50.00 for each calendar day of delay in the completion of the work.

SECTION 3.08. COPIES OF DOCUMENTS.

The Owner will furnish to the Contractor up to six copies of the Specifications and Drawings as are reasonably necessary for the execution of the work. Additional copies will be furnished, upon request, at the cost of reproduction.

SECTION 3.09. SUBCONTRACTS.

Prior to the award of the contract, the successful bidder will submit to the Owner and the Engineer a list of the names of the subcontractors proposed for those portions of the work as to which the identity of the subcontractors must be submitted as specified in the Contract Documents. The Contractor will not employ any subcontractor (whether initially or as a substitute) against whom the Owner or the Engineer may have reasonable objection, nor will the Contractor be required to employ any subcontractor against whom he has reasonable objection. The Contractor will not make any substitution for any subcontractor who has been accepted by the Owner and the Engineer, unless the Engineer determines that there is good cause for doing so.

SECTION 3.10. TESTING OF MATERIALS.

The Contractor shall furnish the Engineer, upon his request, samples of materials used or to be used in the work. Such samples shall be made available so that proper tests can be made and the quality of the material determined without delaying the construction. Testing of the materials shall be done by a recognized testing laboratory in the State, and materials which fail to meet the requirements of the Specifications therefor will be rejected.

Testing of the required samples and materials shall be arranged and paid for by the Contractor. This section supersedes Paragraphs 2.2.11 and 2.7.15 of the General Conditions of Contract.

SECTION 3.11. PROGRESS SCHEDULE.

Within ten (10) days after Notice to Proceed has been received by the Contractor he shall fill out and complete a Proposed Progress Schedule form for this project as furnished by the Engineer. The Proposed Progress Schedule will be in a form suitable for plotting the progress of the work and will require the Contractor to show the proposed starting and completion dates of the various items of work listed thereon.

The Engineer reserves the right to reject any progress schedule that does not meet his approval and request new submittals until a progress schedule is submitted that meets the Engineer's approval. This section supplements Paragraph 2.6.03 of the General Conditions of Contract.

SECTION 3.12. SOURCE AND COST OF MATERIALS.

All materials furnished or incorporated in this project shall conform to the requirements of these Specifications hereof a part.

SECTION 3.13. WATER AND POWER.

The Contractor will be allowed to utilize water from existing fire hydrants located throughout the Farm Labor Camp for watering newly seeded lawn areas and for other minor requirements, but shall not in any case utilize this source for earth compaction such as required for trench, street and lagoon dike compaction.

The Contractor shall be responsible for furnishing other required utilities for construction purposes, including but not limited to electrical power, gas, telephone, and sanitary facilities, and shall pay all costs involved in securing and using such utilities.

SECTION 3.14. SCHEDULE OF OCCUPATIONAL CLASSIFICATIONS AND MINIMUM HOURLY WAGE RATES.

In accordance with Section 44-1006, Idaho Code (Supplement) as enacted by the Legislature of the State of Idaho, February 19, 1955, the current minimum wage rates are to be paid various classes of laborers and mechanics in the performance of this contract as listed by the Department of Labor, State of Idaho, which are hereinafter included and incorporated as a part of these Specifications, including any revisions made prior to bid opening date.

The minimum wages to be paid laborers and mechanics on this project, as determined by the U. S. Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the pertinent locality, are designated as the Wage Determination, and it is appended hereto.

In case of any differences between the prevailing wage rates as determined by the U. S. Secretary of Labor and the Idaho Department of Labor, the higher rate shall be the applicable minimum for such trade or occupation.

The Owner does not guarantee that labor can be procured for the minimum wages set forth in the schedules mentioned above. The rates of wages listed are minimum only, below which the Contractor cannot pay and they do not constitute a representation that labor can be procured for the minimum listed. It will be the responsibility of the Contractor to ascertain for himself the wages above the minimum set forth that he may have to pay.

Appended hereto are current wage rates as determined by the Idaho Department of Labor, and also the wage determination by the U. S. Secretary of Labor.

SECTION 3.15. INFORMATION REGARDING EXISTING FACILITIES.

The information relative to the location of utilities and structures indicated on the Plans was obtained from the best information available and field observations, however, the Owner cannot guarantee the accuracy or completeness of the information. The Contractor shall, insofar as possible, determine the exact location of the underground obstructions prior to commencing excavation, and will be held responsible for the repair of any damage to any and all underground structures and/or utilities caused by his construction operations.

SECTION 3.16. RIGHTS OF WAY.

The 12-inch irrigation lateral from the Notus Canal to the northeast property corner of the Farm Labor Camp as designated on the Plans is to be constructed in rights of way and easements furnished by the Owner. The Contractor shall confine his operations to the limits of the rights of way and easements as designated on the Plans, unless the Contractor, at his own expense, obtains the right to use adjacent property, in which case the Contractor shall pay all costs involved in acquiring such rights, and all clean up shall be made as required by these Specifications.

This section supersedes Paragraph 2.5.10 of the General Conditions of the Contract.

SECTION 3.17. FLAGMEN.

In addition to furnishing and maintaining adequate barricades, barriers, lights, flares, danger signals, or watchmen, the Contractor is required to furnish any and all flagmen that are required to control traffic through the work or re-route the traffic through the use of alternate routes or detours. The Owner and/or Engineer is hereby specifically exempt from furnishing any flagmen for this project.

SECTION 3.18. UNFORESEEN DIFFICULTIES.

The Contractor shall protect his work and materials from damage due to the nature of the work, the elements, carelessness of other contractors, or from any cause whatever until the completion and acceptance of the work. All loss or damages arising out of the nature of the work to be done under these Contract Documents, or from any unseen obstruction or defects which may be encountered in the prosecution of the work or from the action of the elements shall be sustained by the Contractor.

SECTION 3.19. MEASUREMENT AND PAYMENT.

All work acceptably completed under the contract shall be measured by the Engineer according to United States Standard measures, and the quantities of work performed or materials furnished shall be computed on the basis of such measurements.

The Contractor shall accept the compensation as herein provided, in full payment for furnishing all materials, labor, tools, and equipment and for performing all work under the contract; also for all loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work, until its final acceptance by the Owner.

SECTION 3.20. START-UP AND TEST RUN OF EQUIPMENT.

Prior to final acceptance of the work, the Contractor shall start up and place in operation all mechanical and electrical equipment as furnished and installed under this contract. During this time the equipment will be tested as to performance and accuracy and any malfunctions or adjustment shall be made or corrected by the Contractor.

GENERAL SITE AND RECONSTRUCTION PROJECT
FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL, CANYON COUNTY, IDAHO

CONTRACT PROVISIONS FOR
FARMERS HOME ADMINISTRATION OF THE
U. S. DEPARTMENT OF AGRICULTURE
LOAN AND GRANT

SECTION 4.01. STATEMENT OF WORK.

The Contractor shall furnish and pay the cost, including sales tax and all other applicable taxes and fees, of all the necessary materials not furnished by the Owner and shall furnish and pay for all the superintendence, labor, tools, equipment and transportation and perform all the work required for the construction of all structures listed and itemized under the bid schedule of the Bidder's Proposal attached hereto in strict accordance with the Plans, Specifications and requirements which are attached hereto and made a part hereof, and any amendments thereto and such supplemental Plans and Specifications which may hereafter be approved. This Construction Contract shall be construed as including and consisting of Sections 1, 2, 3, 4, 5 and 6 of the Specifications.

SECTION 4.02. COMPLETION OF WORK.

The Contractor shall commence the work covered by this contract within seven (7) calendar days after the date of the Notice to Proceed and shall complete the same by May 1, 1970, unless the period for completion is extended as hereinafter provided.

SECTION 4.03. CONTRACT SUM.

The Owner shall pay the Contractor in accordance with the Contractor's proposal for the performance of said work, subject to additions and deductions provided herein.

SECTION 4.04. PERFORMANCE AND PAYMENT BOND.

The Contractor shall within ten days after the receipt of the Notice of Award and before the commencement of any operations hereunder execute the contract and furnish the Owner with a performance and payment bond in a penal sum equal to the amount of the contract price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions and agreements of this contract, and upon the prompt payment by the Contractor to all persons supplying labor and materials in the prosecution of the work provided by this contract. Such bond shall be executed by the Contractor and a corporate bonding company licensed to transact such business in the State of Idaho and acceptable to the Owner. The expense of this bond shall be borne by the Contractor.

If at any time a surety on such bond becomes irresponsible or loses its right to do business in the State of Idaho, the Owner may require another surety which the Contractor shall furnish within ten calendar days after receipt of written notice to do so. Evidence of authority of an attorney-in-fact acting for the corporate surety must be provided in the form of a certificate as to his power of attorney and to the effect that it is not terminated and remains in full force and effect on the date of the bond. The form of the bond shall be subject to approval by the Owner.

SECTION 4.05. MAINTENANCE BOND.

A maintenance bond in the amount of 20 percent of the contract price with a corporate surety approved by the Owner and the Architect/Engineer will be required. Such bond shall be provided before final payment is made to the Contractor and shall guarantee the repair of all damage due to faulty materials or workmanship provided or done by the Contractor. This guarantee shall remain in effect for a period of one year after the date of final acceptance of the job by the Owner.

SECTION 4.06. LIQUIDATED DAMAGES.

If the work embraced by this contract is not completed on or before the date set for completion or any extension thereof, the actual damages for the delay will be impossible to determine and in lieu thereof, the Contractor shall pay to the Owner as fixed, agreed and liquidated damages the sum of Fifty Dollars (\$50.00) per day for each calendar day of delay until the work is satisfactorily completed. Whatever sums may be due the Owner as liquidated damages for delay may be deducted from payments due the Contractor or may be collected from the Contractor or the Contractor's surety.

SECTION 4.07. PAYMENT.

Payment shall be made to the Contractor for work performed under this contract for the quantities of work as determined in accordance with Sections 4.20 and 4.21 of the contract. Payment for extra work will be made in accordance with Sections 4.10 and 4.20 of this contract.

SECTION 4.08. SERVICE OF NOTICES.

All notices required to be given hereunder shall be mailed or delivered in the case of the Owner to J-U-B ENGINEERS, Inc., 212 Tenth Avenue South, Nampa, Idaho, 83651, and in the case of the Contractor to Snake River Builders, Inc., 1207 State Street, Nampa, Idaho 83651.

SECTION 4.09. INTENT OF PLANS AND SPECIFICATIONS.

The Contractor shall keep on the job a copy of the Plans and Specifications and shall at all times give the Owner and Architect/Engineer access thereto. Anything mentioned in the Specifications and not shown on the

Plans or shown on the Plans and not mentioned in the Specifications shall be of like effect as if shown or mentioned in both. In case of differences between the Plans and Specifications, the Specifications shall govern. The Contractor shall not take advantage of any errors, discrepancies or omissions which may exist in the Plans and Specifications, but shall immediately call them to the attention of the Architect/Engineer whose interpretation or correction thereof shall be conclusive.

SECTION 4.10. EXTRA WORK AND CHARGES.

Extra work shall be work for which no unit bid was received in the proposal and which was not included in the bid schedule and will not be construed to mean work for which unit bids were received but which is in excess of the quantity mentioned in the proposal. The Owner, without invalidating the contract, may order extra work or make changes in the work, the contract sum being adjusted accordingly. All such work shall be executed under the conditions of the original contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such change. All such changes shall be agreed to and recorded on Form FHA 424-7, "Contract Change Order." In giving instructions, the Architect/Engineer shall have authority to make minor changes in the work not involving extra cost and not inconsistent with the purpose of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless covered by Form FHA 424-7, and no claim for an addition to the contract sum shall be valid unless so covered. Before becoming effective, all Change Orders must be signed by all parties indicated.

The value of such extra work or change shall be determined in one or more of the following ways:

- (a) By estimate and acceptance in a lump sum.
- (b) By unit prices named in the contract or subsequently agreed upon.
- (c) By cost plus a percentage, the latter agreed upon prior to starting the extra or changed work.

In method (c), "cost" shall include all labor, materials, power, fuel and rental on major items of equipment. The Contractor shall keep and present in such form as the Architect/Engineer may direct, a correct account of the several items of cost, together with vouchers. This definition and requirement applies equally to work done by subcontractors.

The above accounts shall be understood to include all other costs and compensation such as insurance, small tools, superintendence, office and overhead costs and profits. Rental on equipment shall be charged against the extra or changed work only for the actual time the equipment is used specifically therefor.

Changed work shall be adjusted, considering separately the work added and the parts omitted. Amount of adjustment for parts omitted shall be estimated at the time omission of work is authorized and the agreed adjustment will be deducted from the subsequent monthly estimates.

The Owner reserves the right to contract with any person or firm other than the Contractor for any or all extra work. The Contractor's attention

is especially called to the fact that he shall be entitled to no claim for damages for anticipated profits on any portion of work that may be omitted.

SECTION 4.11. CLAIMS FOR EXTRA COST.

If the Contractor claims that any changes in the work or any instructions by means of drawings or otherwise involve extra cost, he shall give the Architect/Engineer written notice thereof within a reasonable time after receipt of such instructions or of notice of such changes and, in any event, before proceeding to carry out such instructions or to put such changes into effect, except in case of an emergency endangering life or property. In all such cases the Contractor shall keep a correct account of the extra cost in such form as the Architect/Engineer may direct and shall present such account supported by receipts to the Architect/Engineer. The Owner shall be entitled to reject any claim for extra cost concerning which the foregoing procedure is not followed.

SECTION 4.12. LICENSES AND PERMITS.

The Owner shall secure and pay for permits required for permanent structures. The Contractor shall obtain and pay for all other necessary licenses and permits and shall faithfully comply with all laws, ordinances and regulations, (Federal, State, or local) which may be applicable to the operations to be conducted hereunder.

SECTION 4.13. OTHER WORK.

Wherever work being done by the Owner or by other contractors is contiguous to work covered by this contract, the respective rights of the various interests involved shall be established by the Architect/Engineer to secure the completion of the various portions of the work in general harmony.

SECTION 4.14. RESPONSIBILITY OF THE ARCHITECT/ENGINEER.

The term "Architect/Engineer" wherever used in this contract shall be J-U-B Engineers, Inc., or his duly authorized representative. Notices of any change in the Architect/Engineer shall be given in writing by the Owner to the Contractor. The Architect/Engineer shall have full authority to interpret the Plans and Specifications and shall determine the amount, quality, and acceptance of the work and supplies to be paid for under this contract and every question relative to the fulfillment of the terms and provisions therein. Unless otherwise specifically provided in the Specifications, all workmanship, equipment, and materials incorporated in the work are to be of the best grade of their respective kinds for the purpose.

It shall be the duty of the Architect/Engineer to enforce the Specifications in a fair and unbiased manner, although he has the right to waive any term of the Specifications if that term is found to be unreasonable and inconsistent with the general spirit of the Specifications. If a variation from any requirement is allowed, the Architect/Engineer shall grant the same in writing with the reasons for his action outlined, and such actions will not invalidate or change the contract in any other manner.

SECTION 4.15. WAIVER.

It is expressly understood and agreed that any waiver granted by the Architect/Engineer or the Owner of any term, provision or covenant of this contract shall not constitute a precedent nor breach of the same or any other terms, provisions, or covenants of this contract.

Neither the acceptance of the work by the Owner nor the payment of all or any part of the sum due the Contractor hereunder shall constitute a waiver by the Owner of any claim which the Owner may have against the Contractor or surety under this contract or otherwise.

SECTION 4.16. SUPERINTENDENCE.

The Contractor shall constantly superintend all the work embraced in this contract in person or by a responsible agent who shall have in writing full authority to act for him and to carry out all the instructions given by the Architect/Engineer.

SECTION 4.17. LABOR PROVISIONS.

The Contractor and his subcontractors shall discharge whenever ordered to do so by the Architect/Engineer, any employee who is disorderly or whose conduct in the opinion of the Architect/Engineer is detrimental to the prosecution of the work.

No person whose age or physical condition is such as to make his employment dangerous to his health and safety or to the health and safety of others shall be employed on the work, and in no event shall any person under the age of sixteen years be employed.

The work shall at all times be prosecuted under safe working conditions, and the conditions of work shall be subject to inspection and correction by the Architect/Engineer or safety inspectors of the Owner.

Form FHA 400-2, "Equal Opportunity Clause," shall be a part of this Construction Contract and shall be signed by the Contractor at the time the contract is executed.

SECTION 4.18. LIABILITY INSURANCE.

The Contractor shall procure and maintain, at his own expense, during the life of this contract, liability insurance as hereinafter specified. All such insurance shall be subject to the approval of the Owner for adequacy of protection, and shall include a provision preventing cancellation without ten days' prior notice to the Owner in writing. The liability insurance required is as follows:

- (a) Contractor's General Public Liability and Property Damage Insurance issued to the Contractor and protecting him from all claims for personal injury, including death, and all claims for destruction of

or damage to property, arising out of or in connection with any operations under this contract, whether such operations be by himself or by any subcontractor under him, or anyone directly or indirectly employed by the Contractor or by a subcontractor under him.

All such insurance shall be written with a limit of liability of not less than \$100,000.00 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; a limit of liability of not less than \$200,000.00 for any such damages sustained by two or more persons in any one accident; a limit of liability of not less than \$25,000.00 for all damages arising out of injury or destruction of property, (including property of the Owner) in any one accident; and a limit of liability of not less than \$50,000.00 for all damage arising out of injury to or destruction of property, including property of the Owner, during the policy period.

All such insurance shall be written on a comprehensive policy form and in the event blasting operations are required in performance of the work, shall specifically cover all blasting operations. Certificates evidencing the issuance of such insurance, addressed to the Owner on forms approved by the Owner, shall be filed with the Owner within ten days after the date of the Notice of Award.

- (b) General Public Liability and Property Damage insurance issued to the Owner, its officials, its officers and its employees acting in the scope and course of their employment, and protecting them from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the Contractor's contract, whether such operations be by the Contractor or by any subcontractor under him or by anyone directly or indirectly employed by the Contractor or a subcontractor under him. All such insurance shall have the minimum limits of liability specified in the preceding paragraph. All such insurance policies shall be delivered to the Owner within ten days after the date of the Notice of Award.

SECTION 4.19. COMPENSATION INSURANCE.

The Contractor shall procure and maintain, at his own expense, during the life of this contract, in accordance with the provisions of the laws of the State of Idaho, Workman's Compensation Insurance, including occupational disease provisions, for all of his employees at the site of the project and in case any work is sublet, the Contractor shall require such subcontractor similarly to provide Workman's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor.

In case any class of employees engaged in hazardous work under this contract at the site of the project is not protected under Workman's Compensation statute, the Contractor shall provide, and shall cause each subcontractor to provide adequate and suitable insurance for the protection of his employees not otherwise protected.

Certificates evidencing the issuance of such insurance shall be filed with the Owner within ten days after the date of the Notice of Award.

SECTION 4.20. PAYMENTS FOR WORK COMPLETED.

Partial payments will be made as the work progresses at the end of each calendar month, or as soon thereafter as practicable on estimates made by the Architect/Engineer and as approved by the Owner, provided that the Contractor is performing the overall job in a diligent manner. In making partial payments, there shall be retained ten percent on the amount of each estimate until final completion and acceptance of all work covered by the contract.

Upon the completion and acceptance of the work, the Architect/Engineer shall issue a certificate that the work has been completed and accepted by him under the conditions of this contract, and shall make and approve the final estimate of the work. The entire balance found to be due the Contractor, including the retained percentages, but excepting such sums as may be lawfully retained by the Owner, shall be paid to the Contractor. Such payment shall be conditioned, however, upon the submission by the Contractor of evidence satisfactory to the Owner that all claims for labor, material, and any other outstanding indebtedness in connection with this contract have been paid.

If after the work has been substantially completed, full completion thereof is materially delayed through no fault of the Contractor and the Architect/Engineer so certifies, the Owner shall upon the Certificate of the Architect/Engineer, and without terminating the Contract, make payment for the balance due for that portion of the work fully completed and accepted. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claim.

SECTION 4.21. PAYMENTS WITHHELD.

The Architect/Engineer may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any estimate to such extent as may be necessary to protect the Owner from loss on account of:

- (a) Defective work not remedied.
- (b) Claims filed or reasonable evidence indicating probable filing of claims.
- (c) Failure of the Contractor to make payments properly to subcontractors or for material or labor.
- (d) A reasonable doubt that the contract can be completed for the balance then unpaid.
- (e) Damage to another Contractor.
- (f) Failure of the Contractor to keep his work progressing in accordance with his time schedule.

When the above grounds are removed, payment shall be made for amounts withheld because of them.

SECTION 4.22. MEASUREMENT OF QUANTITIES.

The computation of quantities that will be the basis for estimates, both monthly and final, shall be made by the Architect/Engineer in accordance with the methods defined in the Plans and Specifications.

SECTION 4.23. ASSIGNMENT AND TRANSFER OF CONTRACT.

The Contractor shall not assign or transfer this contract or any part thereof or any interest therein without consent in writing of the Owner and the Contractor's surety, and any such assignment or transfer without such written consent shall be null and void.

SECTION 4.24. INDEMNITY.

The Contractor shall indemnify and save harmless the Owner, the Owner's agents and employees, from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought or recovered against them by reason of any act or omission of the said Contractor, his agents, or employees, in the execution of the work or in guarding the same.

SECTION 4.25. SUBCONTRACTS.

The Contractor shall have full responsibility under these conditions, general provisions, Plans and Specifications for any subcontracts which he may let.

SECTION 4.26. ADJUSTMENT OF DISPUTE.

All questions or controversies which may arise between the Contractor and the Owner, under or in reference to this contract, shall be subject to the decision of some competent person to be agreed upon by the Owner and the Contractor, and his decisions shall be final and conclusive upon both parties. Should the Owner and Contractor be unable to agree upon such person, a board of three arbitrators shall be chosen, one by the Owner, one by the Contractor, and the third by the two so chosen, and the decision of any two of said arbitrators shall be final and binding upon the parties. If either party to the contract neglects or fails for a period of ten days after notice from the other party to designate an arbitrator hereunder, the arbitrator designated by the other party shall have full power to decide the dispute in the same manner as though a board of three arbitrators had been selected. The referee or arbitrators shall decide which party shall pay the cost of arbitration, and final payment to the Contractor shall not be made until the full decision of the referee or arbitrators has been rendered.

SECTION 4.27. PROTECTION OF WORK AND PROPERTY.

The Contractor shall continuously maintain adequate protection of all his work and materials from damage or theft and shall protect the Owner's

property and all adjacent property from injury or loss arising in connection with activities under his contract. The Contractor shall make good any such damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or such as may be caused by agents or employees of the Owner.

The Contractor shall take, use, provide, and maintain all necessary precautions, safeguards, and protection to prevent accidents, or injury to persons or property on, about, or adjacent to the site of the work. The Contractor shall post danger signs warning against any hazards created by the work being done under his contract. He shall designate a responsible member of his organization on the work, whose duty shall be the prevention of accidents, and the name of the person so designated shall be reported to the Architect/Engineer and Owner in writing. In an emergency affecting the safety of life, or of the work or adjoining property, the Contractor, without special instruction or authorization from the Architect/Engineer or Owner, is hereby permitted to act, at his discretion, to prevent such threatened loss or injury, and he must take such action if so instructed or authorized by the Architect/Engineer or Owner.

The Contractor shall also protect adjacent property as required by law.

SECTION 4.28. LAND OF OWNER, USE OF, BY CONTRACTOR.

The Owner shall provide the land upon which the work under this contract is to be done, and will, so far as is convenient, permit the Contractor to use as much of the land as is required for the erection of temporary construction facilities and storage of materials, together with the right of access to same, but beyond this, the Contractor shall provide, at his cost and expense, any additional land required.

SECTION 4.29. LIENS.

If at any time there shall be evidence of any lien or claim for which the Owner might become liable and which is chargeable to the Contractor, the Owner shall have the right to retain out of any payment then due or thereafter to become due, an amount sufficient for complete indemnification against such lien or claim. In the event the Owner has already paid to the Contractor all sums due under this contract or the balance remaining unpaid is insufficient to protect the Owner, the Contractor and his surety shall be liable to the Owner for any loss so sustained.

SECTION 4.30. TIMELY DEMAND FOR STAKES AND INSTRUCTIONS.

The Contractor shall provide reasonable and necessary materials, opportunities and assistance for setting stakes and making measurements, including the furnishing of a rodman or a chainman at intermittent times during the construction period. He shall not proceed until he has made timely demand upon the Architect/Engineer for, and has received from him, such stakes and instructions as may be necessary as the work progresses. The work shall be done in strict conformity with such stakes and instructions.

SECTION 4.31. PRESERVATION OF STAKES.

The Contractor shall carefully preserve bench marks, reference points and stakes, and in case of willful or careless destruction, he will be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

SECTION 4.32. INSPECTION.

The Architect/Engineer and his representative shall, at all times, have access to the work during its construction, and shall be furnished with every reasonable facility for ascertaining that the stock and materials used and employed, and the workmanship are in accordance with the requirements and intentions of the Specifications. All work done and all materials furnished shall be subject to their inspection and approval. If any work should be covered up without approval or consent of the Architect/Engineer, it must, if required by the Architect/Engineer, be uncovered for examination at the Contractor's expense.

Re-examination of questioned work may be ordered by the Architect/Engineer and if so ordered, the work must be uncovered by the Contractor. If such work be found in accordance with the Contract Documents, the Owner shall pay the cost of re-examination and replacement. If such work be found not in accordance with the Contract Documents, the Contractor shall pay such cost unless he shall show that the defect in the work was caused by another Contractor, and in that event, the Owner shall pay such cost.

The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill his contract as prescribed, and defective work shall be made good and unsuitable materials shall be rejected, notwithstanding that such defective work and materials have been previously overlooked and accepted on estimates for payment. All work shall be tested to the satisfaction of the Architect/Engineer before acceptance.

No work shall be done at night without the prior approval of the Architect/Engineer.

SECTION 4.33. DEFECTIVE WORK OR MATERIAL.

The Contractor shall promptly remove from the premises all work and materials condemned by the Architect/Engineer as failing to conform to the contract, whether incorporated or not, and the Contractor shall promptly replace and re-execute his own work in accordance with the Contract and without expense to the Owner and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

If the Contractor does not remove such condemned work or materials within a reasonable time after notice, the Owner may remove them and store the materials at the expense of the Contractor. If the Contractor does not pay the expenses of such removal within ten days' time thereafter, the

Owner may, upon thirty days' written notice, sell such materials at auction or at private sale and shall account for the net proceeds thereof after deducting all the costs and expenses that should have been borne by the Contractor.

SECTION 4.34. OTHER CONTRACTS.

The Owner may award other contracts. The Contractor shall fully cooperate with such other Contractors and carefully fit his own work to that provided under other contracts as may be directed by the Architect/Engineer. The Contractor shall be liable for any act which will damage or interfere with the performance of work by any other Contractor.

SECTION 4.35. OWNER'S RIGHT TO TAKE OVER THE WORK.

If the Contractor should be adjudged a bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed to take over his affairs, or if he should fail to prosecute his work with due diligence and carry the work forward in accordance with his work schedule and the time limits set forth in the Contract Documents, or if he should fail to substantially perform one or more of the provisions of the Contract Documents to be performed by him, the Owner may serve written notice on the Contractor and the surety on his performance bond, stating its intention to exercise one of the remedies hereinafter set forth and the grounds upon which the Owner bases its right to exercise such remedy.

In any event, unless the matter complained of is satisfactorily cleared within ten days after service of such notice, the Owner may, without prejudice to any other right or remedy, exercise one of such remedies, at once, having first obtained a certificate from the Architect/Engineer that sufficient cause exists to justify such action.

- (a) The Owner may terminate the services of the Contractor, which termination shall take effect immediately upon service of notice thereof on the Contractor and his surety, whereupon the surety shall have the right to take over and perform the contract. If the surety does not commence performance of the contract within ten days after service of the notice of termination, the Owner may itself take over the work, take possession of and use all materials, tools, equipment, and appliances on the premises and prosecute the work to completion by such means as it shall deem best. In the event of such termination of his service, the Contractor shall not be entitled to any further payment under his contract until the work is completed and accepted. If the Owner takes over the work and if the unpaid balance of the contract price when the Owner takes over the work, exceeds the cost of completing the work, including compensation for any damages or expenses incurred by the Owner through the default of the Contractor, such excess shall be paid to the Contractor. In such event, if such cost, expenses, and damages shall exceed such unpaid balance of the contract price, the Contractor and his surety shall pay the difference to the Owner. Such cost, expenses, and damages shall be certified by the Architect/Engineer.

- (b) The Owner may take control of the work and either make good the deficiencies of the Contractor itself or direct the activities of the Contractor in doing so, employing such additional help as the Owner deems advisable. In such event the Owner shall be entitled to collect from the Contractor and his surety, or to deduct from any payment then or thereafter due the Contractor, the costs incurred by it through the default of the Contractor, provided the Architect/Engineer approves the amount thus charged to the Contractor.
- (c) The Owner may require the surety of the Contractor's bond to take control of the work at once and see to it that all the deficiencies of the Contractor are made good with due diligence. As between the Owner and the surety, the cost of making good such deficiencies shall all be borne by the surety. If the surety takes over the work, either upon termination of the services of the Contractor or upon instructions from the Owner to do so, the provisions of the Contract Documents shall govern in respect to the work done by the surety, the surety being substituted for the Contractor as to such provisions, including provisions as to payment for the work and provisions of this section as to the right of the Owner to do the work itself or to take control of the work.

SECTION 4.36. CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT.

If the work shall be stopped under an order of any court or other public authority for a period of three months through no act or fault of the Contractor or of any one employed by him, then the Contractor may on seven days' written notice to the Owner and the Architect/Engineer stop work or terminate this contract and recover from the Owner payment for all work executed, any losses sustained on any plant or material, and a reasonable profit. If the Architect/Engineer shall fail to issue any certificate for payment within ten days after it is due, or if the Owner shall fail to pay the Contractor within fifteen days after its maturity and presentation any sum certified by the Architect/Engineer, then the Contractor may on seven days' written notice to the Owner and the Architect/Engineer stop work and give written notice of intention to terminate this contract. If the Owner shall thereafter fail to pay the Contractor within seven days after receipt of such notice, then the Contractor may terminate the contract and recover from the Owner payment for all work executed, any losses sustained upon any plant or materials, and a reasonable profit.

SECTION 4.37. DELAYS AND EXTENSION OF TIME.

If the Contractor be delayed at any time in the progress of the work by an act or neglect of the Owner or the Architect/Engineer, or of any employee of either, or by any separate Contractor employed by the Owner, or by changes ordered in the work, or by strike, lockouts, fire, unusual delay in transportation, unavoidable casualties, or any causes beyond the Contractor's control, or by delay authorized by the Architect/Engineer, or by any cause which the Architect/Engineer shall decide to justify the delay, then the time of completion shall be extended for such reasonable time as the Architect/Engineer may decide.

No such extension shall be made for delay occurring more than seven days before claim therefor is made in writing to the Architect/Engineer. In the case of a continued cause of delay, only one claim is necessary.

This section does not exclude the recovery of damages for delay by either party under other provisions in the Contract Documents.

SECTION 4.38 RIGHT OF OCCUPANCY.

The Owner shall have the right, if necessary, to take possession of and to use any completed or partially completed portions of the work, if such use be approved by the Architect/Engineer even if the time for completing the entire work or such portions of the work has not expired and even if the work has not been finally accepted. Such possession and use shall not constitute an acceptance of such portions of the work. The Owner shall not have the right of such possession and use if it materially interferes with the Contractor's operations. The Owner shall also have the right to enter the premises for the purpose of doing work not covered by its contract with the Contractor.

SECTION 4.39. UNDERGROUND OBSTRUCTIONS.

The Contractor shall anticipate all underground obstructions such as water lines, gas lines, sewer lines, utility lines, concrete, and debris. No extra payment will be allowed for the removal, replacement, repair or possible increased cost caused by underground obstructions. Any such lines or obstructions indicated on the map show only the approximate location and must be verified in the field by the Contractor. The Owner and Architect/Engineer will endeavor to familiarize the Contractor with all known underground utilities and obstructions, but this will not relieve the Contractor from full responsibility in anticipating all underground obstructions.

SECTION 4.40. ACCEPTANCE.

Final inspection and acceptance of the work shall be made for the Owner by the Architect/Engineer in collaboration with the Architect/Engineer for the Farmers Home Administration. Such inspection shall be made as soon as practical after the Contractor has notified the Owner in writing that the work is ready for such inspection.

SECTION 4.41. FINAL ESTIMATES.

Upon the completion and acceptance of the work, the Architect/Engineer shall issue a certificate that the whole work provided for in this contract has been completed and accepted by him under the conditions and terms thereof and shall make the final estimate of the work. The final estimate of the work must be checked and approved by both the Architect/Engineer and the Representative for the Farmers Home Administration. After issuance of the certificate, the entire balance found to be due the Contractor, including said retained percentage but excepting such sums as may be retained

lawfully by said Owner, shall be paid to the Contractor by the Owner in accordance with existing State laws. Before the approval of the final estimate, the Contractor shall submit evidence satisfactory to the Owner that all payrolls, material bills and outstanding indebtedness in connection with this contract have been paid.

SECTION 4.42. CLEANING UP.

Upon completion or termination of the work, the Contractor shall, as directed by the Architect/Engineer, remove from the vicinity of the work all equipment and all temporary structures, waste materials and rubbish resulting from his operations, leaving the premises in a neat and presentable condition. In the event of his failure to do so, the same may be done by the Owner at the expense of the Contractor, and his surety shall be responsible therefor.

SECTION 4.43. MAINTENANCE OF SYSTEM.

The Contractor shall, for a period of one year after completion and acceptance of work, repair at his expense any leak or other failures. During the first 30 days of this period, the Contractor shall clean out any screens or valves that have become plugged with dirt and debris during this 30-day period. The 10 percent retainer on the contract payments will be held by the Owner until the end of this 30-day period. In the event that the Contractor should fail to make such repairs and adjustments or other similar work, the Owner may do so and charge the Contractor the cost of the same. At the end of the 30 days, the Contractor may at his option furnish a maintenance bond for the remaining 11 months or he may elect to have the Owner retain the 10 percent for the remainder of the period.

LABOR STANDARDS CONTRACT PROVISIONS

(1) Minimum wages.

(i) All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amounts due at time of payment computed at wage rates not less than those contained in the wage determination decision of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics; and the wage determination decision shall be posted by the contractor at the site of the work in a prominent place where it can be easily seen by the workers. For the purpose of this clause, contributions made or costs reasonably anticipated under section 1 (b) (2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of clause (1) (iv) below. Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

(ii) The owner shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract, shall be classified or reclassified conformably to the wage determination, and a report of the action taken shall be sent through the Farmers Home Administration to the Secretary of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the question accompanied by the recommendation of the Farmers Home Administration shall be referred to the Secretary for final determination.

(iii) The owner shall require, whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the contractor is obligated to pay a cash equivalent of such a fringe benefit, an hourly cash equivalent thereof to be established. In the event the interested parties cannot agree upon a cash equivalent of the fringe benefit, the question, accompanied by the recommendation of the Farmers Home Administration, shall be referred to the Secretary of Labor for determination.

(iv) The contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1 (b) (2) (B) of the Davis-Bacon Act, or any, bona fide fringe benefits not expressly listed in section 1 (b) (2) of the Davis-Bacon Act or otherwise not listed in the wage determination decision of the Secretary of Labor which is included in this contract, only when the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. Whenever practicable, the contractor should request the Secretary of Labor to make such findings before the making of the contract. In the case of unfunded plans and programs, the Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding.

The Farmers Home Administration may withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics employed by the contractor or any subcontractor on the work the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic employed or working on the site of the work, all or part of the wages required by the contract, the Farmers Home Administration may, after written notice to the owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records will contain the name and address of each such employee, his correct classification, rates of pay (including rates of contributions or costs anticipated of the types described in section 1 (b) (2) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under clause (1) (iv) above that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1 (b) (2) (B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(11) The contractor will submit weekly a copy of all payrolls to the owner for transmission to the Farmers Home Administration. The copy shall be accompanied by a statement signed by the employer or his agent indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the Secretary of Labor and that the classifications set forth for each laborer or mechanic conform with the work he performed. A submission of a "Weekly Statement of Compliance" which is required under this contract and the Copeland regulations of the Secretary of Labor (29 CFR, Part 3) and the filing with the initial payroll or any subsequent payroll of a copy of any findings by the Secretary of Labor under clause (1) (iv) above shall satisfy this requirement. The prime contractor shall be responsible for the submission of copies of payrolls of all subcontractors. The contractor will make the records required under the labor standard clauses of the contract available for inspection by authorized representatives of the Farmers Home Administration and the Department of Labor, and will permit such representatives to interview employees during working hours on the job.

(4) Apprentices.

Apprentices will be permitted to work as such only when they are registered, individually, under a bona fide apprenticeship program registered with a State apprenticeship agency which is recognized by the Bureau of Apprenticeship and Training, United States Department of Labor; or, if no such recognized agency exists in a State, under a program registered with the Bureau of Apprenticeship and Training, United States Department of Labor. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The contractor or subcontractor will be required to furnish to the owner written evidence of the registration of his program and apprentices as well as of the appropriate ratios and wage rates, for the area of construction prior to using any apprentices on the contract work.

(5) Compliance with Copeland Regulations (29 CFR Part 3).

The contractor shall comply with the Copeland Regulations (29 CFR Part 3) of the Secretary of Labor which are herein incorporated by reference.

(6) Overtime requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of eight hours in any calendar day or in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate or pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such workweek, as the case may be.

(7) Violation; liability for unpaid wages; liquidated damages.

In the event of any violation of clause (6) above, the contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of clause (6) above, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by clause (6) above.

(8) Withholding for liquidated damages.

The Farmers Home Administration may withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for liquidated damages as provided in clause (7) above.

(9) Subcontracts.

The contractor shall insert in any subcontracts clauses (1) through (8) and (10) of these provisions and such other clauses as the Farmers Home Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(10) Contract termination; debarment.

A breach of clauses (1) through (9) may be grounds for termination of the contract, and for debarment as provided in 29 CFR 5.6.

UNITED STATES DEPARTMENT OF AGRICULTURE
FARMERS HOME ADMINISTRATION

COMPLIANCE STATEMENT

Date 3 October 1969

This statement relates to a proposed contract with

Caldwell Housing Authority, Caldwell, Idaho
(name of borrower or grantee)

who expects to finance the contract with assistance from the Farmers Home Administration, United States Department of Agriculture. I am the undersigned bidder or prospective contractor. I represent that --

1. I ☐ have, ☒ have not, participated in a previous contract or subcontract subject to Executive Order 11246 (regarding equal employment opportunity) or a preceding similar Executive Order.
2. If I have participated in such a contract or subcontract, I ☐ have, ☐ have not, filed all compliance reports that I have been required to file in connection with the contract or subcontract.

I understand that if I have failed to file any compliance reports that have been required of me, I am not eligible and will not be eligible to have my bid considered or to enter into the proposed contract unless and until I make an arrangement regarding such reports that is satisfactory to the Farmers Home Administration or to the office where the reports are required to be filed.

/S/ Ralph L. Aldrich

Signature of Bidder or Prospective Contractor
Ralph L. Aldrich, President

Snake River Builders, Inc.
1207 State Street
Nampa, Idaho 83651

Address (including Zip Code)

UNITED STATES DEPARTMENT OF AGRICULTURE

FARMERS HOME ADMINISTRATION

EQUAL OPPORTUNITY CLAUSE

Pursuant to Part III of Executive Order 11246 of September 24, 1965 and requirements issued thereunder, this agreement entitled "Equal Opportunity Clause" is hereby incorporated in and made a part of a construction contract (herein called "this contract") dated the 13th day of Oct., 1969 between Housing Authority, City of Caldwell, Idaho

(Name of borrower or grantee)

who expects to finance this contract with the aid of a loan, grant, or other financial assistance from the Farmers Home Administration, United States Department of Agriculture, and the undersigned Snake River Builders, Inc.

(Name of contractor)

(herein called "the contractor").

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

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited, to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Farmers Home Administration setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Farmers Home Administration, advising the said labor union or workers' representative of the contractor's commitments under this agreement as required pursuant to section 301 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of such Executive Order and of all relevant rules, regulations, and orders of the Secretary of Labor and of any prior authority which remain in effect.
- (5) The contractor will furnish all information and reports required by such Executive Order, rules, regulations, and orders, or pursuant thereto, and will permit access to his books, records, and accounts by the Farmers Home Administration and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further contracts in accordance with procedures authorized in such Executive Order and such other sanctions may be imposed and remedies invoked as provided in the such Executive Order or by any such rule, regulation, or order, or as otherwise provided by law.
- (7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order, unless exempted by such rules, regulations, or orders, so that such provisions will be binding upon each such subcontractor or vendor. The contractor will take such action as the Farmers Home Administration may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Farmers Home Administration, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

The provisions of this "Equal Opportunity Clause" are not applicable to any contract not exceeding \$10,000.

13 October 1969

Date

Ralph L. Aldrich

Ralph L. Aldrich, President
Snake River Builders, Inc.
1207 State Street
Nampa, Idaho 83651

Contractor

REPORT FORM FOR COMPLIANCE WITH ANTI-KICKBACK PROVISIONS
(FOR FEDERAL AID PROJECTS)

WEEKLY STATEMENT OF COMPLIANCE

_____, 19 ____

I, _____, (name
of signatory party) _____ (title),
do hereby state: That I pay or supervise the payment of the persons employed by
_____ (contractor or subcontractor)
on the _____ (building or work); that during
the payroll commencing on the _____ day of _____, 19____, and ending
the _____ day of _____, 19____, all persons employed on said project
have been paid the full weekly wages earned, that no rebates have been or will be
made either directly or indirectly to or on behalf of said _____
_____ (contractor or subcontractor) from the full weekly
wages earned by any person and that no deductions have been made either directly or
indirectly from the full weekly wages earned by any person, other than permissible
deductions, as defined in Regulations, Part 3 (29 CFR Part 3), issued by the
Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108,
72 Stat. 967; 40 U.S.C. 276c), and described below:

Total Wages	_____
Amounts Withheld:	
F.I.C.A.	_____
Federal Income Tax	_____
State Income Tax	_____
S.I.A.C.	_____
Med. and Hosp. Ins.	_____
Other	_____

Signature and Title

NOTICE TO LABOR UNIONS OR OTHER ORGANIZATIONS OF WORKERS
NONDISCRIMINATION IN EMPLOYMENT

To: _____
(Name of union or organization of workers)

The undersigned currently holds contract(s) with _____
(Name of Applicant)
involving funds or credit of the U. S. Government or (a) subcontract(s) with a
prime contractor holding such contract(s).

You are advised that under the provisions of the above contract(s) or subcontract(s) and in accordance with Executive Order 11246, the undersigned is obliged not to discriminate against any employee or applicant for employment because of race, color, creed, or national origin. This obligation not to discriminate in employment includes, but is not limited to the following:

HIRING, PLACEMENT, UPGRADING, TRANSFER, OR DEMOTION
RECRUITMENT, ADVERTISING, OR SOLICITATION FOR
EMPLOYMENT TRAINING DURING EMPLOYMENT, RATES OF
PAY OR OTHER FORMS OF COMPENSATION, SELECTION FOR
TRAINING INCLUDING APPRENTICESHIP, LAYOFF OR
TERMINATION

This notice is furnished you pursuant to the provisions of the above contract(s) or subcontract(s) and Executive Order 11246.

Copies of this notice will be posted by the undersigned in conspicuous places available to employees or applicants for employment.

/s/

(Contractor or Subcontractor)

(Date)

WLSA-1
(formerly SOL-123)
7/69

U.S. DEPARTMENT OF LABOR
OFFICE OF THE SECRETARY
WASHINGTON

DECISION OF THE SECRETARY

This case is before the Department of Labor pursuant to a request for a wage pre-termination as required by law applicable to the work described.

A study has been made of wage conditions in the locality and based on information available to the Department of Labor the wage rates and fringe payments listed are hereby determined by the Secretary of Labor as prevailing for the described classes of labor in accordance with applicable law.

This wage determination decision and any modifications thereof during the period prior to the stated expiration date shall be made a part of every contract for performance of the described work as provided by applicable law and regulations of the Secretary of Labor, and the wage rates and fringe payments contained in this decision, including modifications, shall be the minimums to be paid under any such contract by contractors and subcontractors on the work.

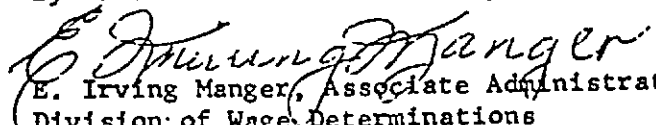
The contracting officer shall require that any class of laborers and mechanics which is not listed in the wage determination and which is to be employed under the contract, shall be classified or reclassified conformably to the wage determination, and a report of the action taken shall be sent by the Federal agency to the Secretary of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the question accompanied by the recommendation of the contracting officer shall be referred to the Secretary for determination.

Before using apprentices on the job the contractor shall present to the contracting officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U.S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U.S. Bureau of Apprenticeship and Training.

The contractor shall submit to the contracting officer written evidence of the established apprentice-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

Fringe payments include medical and hospital care, compensation for injuries or illness resulting from occupational activity, unemployment benefits, life insurance, disability and sickness insurance, accident insurance (all designated as health and welfare), pensions, vacation and holiday pay, apprenticeship or other similar programs and other bona fide fringe benefits.

By direction of the Secretary of Labor,


E. Irving Manger, Associate Administrator
Division of Wage Determinations
Wage and Labor Standards Administration

DEPARTMENT AGENCY, OR BUREAU

USDA, Farmers Home Administration
LOCATION OF PROJECT (CITY OR OTHER DESCRIPTION)
2 miles Northwest of Caldwell, Idaho
STATE

Idaho

DESCRIPTION OF WORK: Reconstruct and refurbish a farm labor camp; re-furbish and enlarge the sewage treatment facilities using the sewage lagoon process; install low-pressure concrete pipeline network for irrigation purposes; make street improvements including underground storm drain, street paving and parking areas; re-furbish the existing 47 individual houses; construct 112 two-bedroom living units with pumice block construction.

DIVISION NO.
A3-2,082
DATE OF BIDDING
7-14-69
EXPIRES
11-10-69
NATIONAL BUREAU NO.

1-2-8-14-20-23-37-38-43-44-IDA-ADA-ADAM-DOI-CAN-ELH-GEN-OWY-PAY-VAL-WAS-1-2-3-r (1-2)

1-2-8-14-20-23-37-38-43-44-IDA-ADA-ADAM-DOI-CAN-ELH-GEN-OWY-PAY-VAL-WAS-1-2-3-r (1-2)

	FRINGE BENEFITS PAYMENTS					BASIC HOURLY RATES
	H & V	PENSIONS	VACATION	APP. TR.	OTHERS	
ASBESTOS WORKERS	.21	.25	.35	.02		5.81
BOLTFITTERS	.30	.40	.35	.02		5.90
BOLTFITTERS' HELPERS	.30	.40				5.60
BRICKLAYERS; STONEMASONS						5.15
CARPENTERS	.15	.15		.02		5.00
Carpenters; Drywall applicators;	.15	.15		.02		5.15
Floor layers; Shinglers	.15	.15		.02		5.25
Piledrivers	.15	.15		.02		4.82
Millwrights; Piledriverman's boom men	.15	.15				4.97
CEMENT MASONS						5.85
Cement Masons	.15	.15				5.995
Guniting & composition floor; Power	.15	.15				5.23
grinder op.; Power trowel op.						70XJR
ELECTRICIANS	.15	.15				50XJR
Electricians	.15	.15				4.50
Cable Splicers						
ELEVATOR CONSTRUCTORS	.15	.15				
ELEVATOR CONSTRUCTORS' HELPERS	.15	.15				
ELEVATOR CONSTRUCTORS' HELPERS (PROB.)						
GLAZIERS						
IRONWORKERS: (Those parts of the						
confining of Adams, Valley & Washington						
north of the Waller-Gibbonsville line)						
Reinforcing	.35	.20		.01		6.22
Fence erectors; Structural	.35	.20		.01		6.33
IRONWORKERS: (Remaining portions of						
Adams, Valley & Washington Counties						
& remaining Co.)						
Fence structural; Reinforcing;						
Structural	.25	.15		.01		5.14
LATHERS						4.75
MASON TENDERS	.15	.15				5.15
MASON TENDERS						4.10
PAINTERS: (Counties of Canyon; Gen -						
includes city of Emmet; Owyhee -						
includes cities of Blaine, Fairview,						
McClellan, Marsling, Murphy, Reynolds,						
Silver City, Trianle, & Wilson;						
Payette)						4.55
Brush						5.02
STRAY						
PAINTERS: (Counties of Adams, Adams;						
Boise; Elmore; Gen - includes city						
of Oia; Owyhee - rest of county;						
Valley; Washington)						
Brush						4.50
Steel						4.60
Sign						4.62
Ferretators						4.50
Spray						4.97
PAINTERS: Mountain Home AFB						5.30
Brush						5.90
Sandblasting; Spray gun						4.60

	FRINGE BENEFITS PAYMENTS					BASIC HOURLY RATES
	H & V	PENSIONS	VACATION	APP. TR.	OTHERS	
PLASTERERS	.15	.15				4.50
PLASTERERS' TENDERS	.20	.20				4.10
PLUMBERS; STEAMFITTERS	.15	.15				5.40
ROOFERS	.12	.05				4.10
Kettlemen; Roofers	.12	.05				5.60
Roofers working with coal tar &	.15	.15	.10			4.50
pitch products						4.20
SHEET METAL WORKERS						5.00
SOFT FLOOR LAYERS (except Mountain	.15	.25				6.16
Home AFB)						5.15
SOFT FLOOR LAYERS (Mountain Home AFB)						5.15
SPRINKLER FITTERS						
TERRAZZO WORKERS						
TILE SETTERS						
WELDERS; Receive rate prescribed for						
craft performing operation to which						
welding is incidental.						
FOOTNOTES:						
a. Employer credits 4% basic hourly rate of employee with over 5 yrs' service, 2% basic hourly rate from 6 months to 5 yrs' service to Vacation plan. 6 paid Holidays: A through F.						
b. 2 wks' vacation with 80 hrs of straight-time pay after 1yr's continuous service with an employer.						
PAYD HOLIDAYS:						
A-New Year's Day; B-Memorial Day; C-Independence Day;						
D-Labor Day; E-Thanksgiving Day; F-Christmas Day.						

1-IDA-SIDA-LAB-1-2-3-f (2-2)

BASIC HOURLY RATES	FRINGE BENEFITS PAYMENTS			
	H & W	PENSIONS	VACATION	OTHERS
\$3.95	.15	.15		

LABORERS CONT'D

BRAXEMAN-Bullgang-Chucktender-Dumpman-Huckers-Bipper-Reboundman-Vibrator

1-IDA-SIDA-LAB-1-2-3-f (1-2)

BASIC HOURLY RATES	FRINGE BENEFITS PAYMENTS			
	H & W	PENSIONS	VACATION	OTHERS
4.40	.15	.15		
4.15	.15	.15		
4.10	.15	.15		
4.00	.15	.15		
3.90	.15	.15		
3.80	.15	.15		
4.40	.15	.15		
4.10	.15	.15		

LABORERS:

DRILLERS ON DRILLS WITH MANUFACTURERS RATING 3" or over-Powderman

DIAMOND DRILL-Gunite Nozzleman-High-scaler-Wagon Drill

BOD CARRIER-Mason Tender-Mason Tender (Concrete)-Plasterer Tender-Terrazzo Tender

ASPHALT RAKER-Electric Ballast Tamper-Free Air Caisson-Form Setter, Airport Paving-Form Setter (Highway-Curb & Cutter)-Gasoline Powered Tamper-Gunman (Gunite)-Hand Guided Machines, such as Post Hole Diggers, Motor Tillers, Trenchers, Walking Garden Tractors, etc.-Jackhammer-Manhole Setter-Paving Breaker-Pipelayer-Powderman Helper-Sandblasting-Vibrator (4" & over)

AIR TAMPERS-Air & Water Nozzleman (Green Cutter, Concrete)-Chuck Tender-Concrete Sawyer-Dumpman-Grade Checker-Gunite Nozzleman Tender-Handling Cement-Pipe Wrapper-Pumperete & Grout Pump Crew-Signalman-Steam Nozzleman-Tar Pot Tender-Timber Faller & Buckler-Vibrator (less than 4")

ASPHALT LABOR-Carpenter Tender-Choker Setter-Clearing & Grading -Concrete Crew-Cribbing & Shoring (in open ditches)-Crusher Helper-Fence Erector & installer (includes the installation & erection of fences, guard rails, guide posts, median rails, reference posts & right-of way markers)-Form Stripper-General Laborers-Header Tender-Hopper Tender-Leverman (manual or Mechanical)-Machinery & Parts Cleaner-Power Wheelbarrow-Rip Rap Man (Hand placed)-Scouring Concrete-Sloper-Spreader & Weighman-Stake Jumper; Flagmen

TUNNEL

DRILL DOCTORS-Machinezen-Miners-Spaders & Tuggers-Spilling and/or Caisson Workers-Steelmen-Timbermen

FORM SETTER & Mover

10

1-IDA-SIDA-PEO-1-2-3-h (1-2)

POWER EQUIPMENT OPERATORS:	FRINGE BENEFITS PAYMENTS				
	BASIC HOURLY RATES	H & V	PENSIONS	VACATION	OTHERS
BRAYMAN-Crusher Plant Feeder (Mechanical)-Dockhand-Drill Helpers-Grade Checkers- Heater Tender-Land Plane-Oilers-Pumpman- Rear Chainman	\$4.465	.18	.20		.02
AIR COMPRESSOR-Ball Key-Bit Grinder op. Blower Op. (Cement)-Broom, Power-Cement Hog-Concrete Mixer-Concrete Saw, Multiple Cut-Discing, Harrowing or Mulching (regardless of Motive Power)-Distributor Leverman-Drill Steel Threader Machine Operator-Fireman, All Heavy Duty Mechanic Helper or Welder Helper-Head Chainman-Hoist, Single Drum-Hydraulic Monitor Op., Skid Mounted-Oiler on Cranes and Spray Curing Machine-Tractor, Rubber-Tired Farm Type Using Attachments	4.595	.18	.20		.02
A-PRIME TRUCK (Hydra lift, Swedish Cranes, Boss Carrier, Hyster on Construction Jobs)-Battery Tunnel Locomotive-Belt Finishing Machine-Cable Tenders (underground)-Chip Spreader Machine (Self-propelled)-Front End and Overhead Loaders and Similar Machines under 2 yds., Rubber-tired-Hoist, 2 or more Drums or Tower Hoist-Hydraulic Lift, Fork Lift & Similar (When Hoisting)-Oilers (Underground)-Power Loader (Bucket Elevator, Conveyors)-Roadman-Road Roller (Regardless of Motive Power)-Service Oiler	4.735	.18	.20		.02
ASPHALT PAVERS & SPREADERS-Boring Machines (Earth or Rock)-Quarrymaster, Joy, Tractor Mounted-Drills; Churn, Core, Calyx, or Diamond-Front End & Overhead Loaders and Similar Machines, 2 yds., & incl., 4 yds., Rubber-tired-Grout Pump-Hydraulic Hammer-Instrument Van-Locomotive Engine-Longitudinal Float Machine-Micromobile-Spreader Machine- Tractor, Rubber-tired, using Backhoe-Transverse Finishing Machine-trenching Machine-Wagoner Compactor & Similar	4.985	.18	.20		.02

1-IDA-SIDA-PEO-1-2-3-h (2-2)

POWER EQUIPMENT OPERATORS: (CONT'D)	FRINGE BENEFITS PAYMENTS				
	BASIC HOURLY RATES	H & V	PENSIONS	VACATION	OTHERS
ASPHALT PLANT OPERATOR-Concrete Plant Operator-Concrete Road Paver (Dual)-Crusher Plant Operator-Elevating Grader operator-Euclid Elevating Loader-Front End & Overhead Loaders and Similar Machines, over 4 yds. to and incl. 6 yds.-Generator Plant Op.-Mechanic (Diesel Electric)-Power Shovels & Draglines, under 1 yd.-Pumpcrete-Refrigeration Plant Operator- Road Roller (Finishing High Type Pavement)-Sub Grader	5.125	.18	.20		.02
BLADE OPERATOR (Motor Patrol)-Cranes up to and incl. 50 tons-Concrete Slip Form Paver-Berrick Operator-Front End & Overhead Loaders & Similar Machines, over 6 yds.-Koering Scooper-Heavy Duty Mechanic or Welder-Mucking Machine (underground)-Piledriver Engineer-Power Shovels & Draglines, 1 yd. to and including 3 1/2 yds.-Tractor, Graveler, Type, including all attachments-Trimmer Machine Operator- Tournapulls, Euclid & Similar, to and including 40 yds.	5.265	.18	.20		.02
CABLEWAY OPERATOR-Cranes, Over 50 tons- Dredges-Power Shovels & Draglines over 3 1/2 yds.-Quad Type Tractors with all attachments-Tournapulls, Euclid & Similar over 40 yds.	5.515	.18	.20		.02

1-IDA-SIDA-TD-1-2-3-1 (1-2)

TRUCK DRIVERS	BASIC HOURLY RATES	FRINGE BENEFITS PAYMENTS				
		H & W	PENSIONS	VACATION	APP. TR.	OTHERS
BOTTOM DUMP TRUCK, over 50 yds. - end Dump Truck, over 50 yds. - side dump truck, over 50 yds.	\$5.36	.25	.20			
BOTTOM DUMP TRUCK, over 40 yds. thru 50 yds. - End Dump Truck, over 40 yds. thru 50 yds. - Side Dump Truck, over 40 yds. thru 50 yds.	5.26	.25	.20			
BOTTOM DUMP TRUCK, over 30 yds. thru 40 yds. - End Dump Truck, over 30 yds. thru 40 yds. - Side Dump Truck, over 30 yds. thru 40 yds.	5.16	.25	.20			
BOTTOM DUMP TRUCK, over 20 yds. thru 30 yds. - End Dump Truck, over 20 yds. thru 30 yds. - Side Dump Truck, over 20 yds. thru 30 yds. - Turnarocker & Similar Equipment	5.06	.25	.20			
TRANSIT MIX TRUCK, over 10 yds.	5.01	.25	.20			
BULK CEMENT TANKER, 96,000 lbs GVW & over - Lowboy, 96,000 lbs GVW & over	4.96	.25	.20			
BOTTOM DUMP TRUCK, over 12 yds. thru 20 yds. - End Dump Truck, over 12 yds. thru 20 yds. - Side Dump Truck, over 12 yds. thru 20 yds. - Transit Mix Truck, over 8 - 10 yds.	4.91	.25	.20			
DUMPERS-Transit Mix Trucks, over 6 - 8 yds.	4.81	.25	.20			
DISTRIBUTOR OR SPREADER TRUCK-Fuel Truck, over 1,000 gals.-Water Tank Truck, over 4,000 gals.	4.76	.25	.20			
BOTTOM DUMP TRUCK, over 6 yds. thru 12 yds. - End Dump Truck, over 6 yds. thru 12 yds. - Side Dump Truck, over 6 yds. thru 12 yds. - Transit Mix Truck, over 3 yds. - 6 yds.	4.71	.25	.20			
1 PRACE TRUCK (Swedish Crane, Iowa 3,000, Hydro-lift)-Bulk Cement Tanker, up to 96,000 lbs GVW-Flat Bed using Power Takeoff - Fork Lift, over 3,000 lbs. (Bull Lift, Hydro Lift)-Rosa, Hyster, and Similar Straddle Equipment-Sea Trailer, Low Boy, up to 96,000 lbs. 37'-Water Tank Truck, over 1,500 - 4,000 gals.	4.66	.25	.20			

1-IDA-SIDA-TD-1-2-3-2 (2-2)

TRUCK DRIVERS: (Cont'd)	BASIC HOURLY RATES	FRINGE BENEFITS PAYMENTS				
		H & W	PENSIONS	VACATION	APP. TR.	OTHERS
BOTTOM DUMP TRUCK, 6 yds. & under-End Dump Truck, 6 yds. & under-Side Dump Truck, 6 yds. & under-Slurry or Concrete Pumping Truck-Transit Mix Truck, 3 yds. & under-Truck Helpers Warehouse man	\$4.61	.25	.20			
BUGGYMOBILE-Flat Bed, 3 axle-Fuel Truck, 1,000 gals. & under-Greaser, Tiresman, Serviceman-Man Haul, Shuttle Truck or Bus	4.56	.25	.20			
AMBULANCE DRIVER-Flat Bed, 2 axle & pick up Hauling Material-Fork Lift, 3,000 & under-Water Tank Truck, 1,800 gals. & under	4.51	.25	.20			
LEVERMAN Loading at Bunkers Underground: 10% additional	4.46	.25	.20			

SCHEDULE #1 (South Idaho)

DEPARTMENT OF LABOR

STATE OF IDAHO

Prevailing hourly wage rates for:

Industrial Administration Bldg:
Boise, Idaho

JOB CLASSIFICATION

BASIC

HOURLY

(Fringe Benefits)

WAGE

H & W

PENSION

APPR.

OTHER

LABORERS:

General Laborers, Sloper, Clearing and Grading, Form Stripper, Concrete Crew, Carpenter Tender, Asphalt Labor, Hopper Tender, Flagmen, Watchman, Heater Tender, Stake Jumper, Choker setter, Spreader & Weighman, Power Wheelbarrow, Scouring Concrete, Riprap man (hand placed), Fence erector & Installer (incl. the installation & erection of fences, guard rails, median rails, reference posts, guide posts and right-of-way markers), Crusher helper, Cribbing & Shoring (in open ditches), Machinery & Parts cleaner, Leverman-Manual or mechanical ----- \$ 3.80 .15 .15

Chucktender, air tampers, Gunnite nozzle-man Tender, Pipe Wrapper, Tar Pot Tender, Concrete Sawyer, Signalman, Handling Cement, Timber Faller & Bucker, Dumpman, Steam Nozzleman, Air & Water Nozzleman, (Green cutter, concrete), Grade Checker, Vibrator (less than 4"), Pumpcrete Grout Pump Crew ----- 3.90 .15 .15

Pipelayer, Free Air Caisson, Jackhammer, Paving Breaker, Powderman Helper, Asphalt Raker, Gasoline Powered Tamper, Electric Ballast Tamper, Sand Blasting, Form Setter-Airport Paving, Gunman (Gunnite), Manhole Setter, Hand Guided Machines, such as Rotor Tiller, Trenchers, Post Hole Diggers, Walking Garden Tractors, etc., Form Setter (Highway-Curb & Gutter), Vibrator (4" and over) ----- 4.00 .15 .15

SCHEDULE #1

JOB CLASSIFICATION	BASIC				
	HOURLY	(Fringe Benefits)			
	WAGE	H & W	PENSION	APPR.	OTHER
<u>LABORERS: (Cont.)</u>					
Hod Carrier, Mason Tender, Plasterer Tender, Mason Tender (Concrete), Terrazzo Tender -----	4.10	.15	.15		
Highscaler, Wagon Drill, Gunnite Nozzelman, Diamond Drill -----	4.15	.15	.15		
Drillers on Drills w/manufacturers rating 3" or over, Powderman -----	4.40	.15	.15		
Underground:					
Reboundman, Chucktender, Nipper, Dumpman, Vibrator, Brakeman, Muckers, Bullgang -	3.95	.15	.15		
Form Setter and Mover -----	4.10	.15	.15		
Miners, Machinemen, Timbermen, Steelmen, Drill Doctors, Spaders & Tuggers, Spiling and/or Caisson Workers -----	4.40	.15	.15		
<u>POWER EQUIPMENT OPERATORS:</u>					
Apprentice, Brakeman, Crusher Plant Feeder (Mechanical, Deckhand, Drill Helpers, Grade Checkers, Heater Tender, Land Plane, Oilers, Pumpman, Rear Chainman--	4.465	.18	.20	.02	
Air Compressor, Bell Boy, Bit Grinder Operator, Blower Up. (Cement), Broom (Power), Cement Hog, Concrete Mixer, Concrete Saw (Multiple cut), Discing, Harrowing or Mulching (regardless of motive power), Distributor Leverman, Drill Steel Threader Machine Op., Fireman (All), Heavy Duty Mechanic Helper or Welder Helper, Head Chainman, Hoist (single drum), Hydraulic Monitor Op. (skid mounted), Oiler on Cranes & Shovels, Pugmixer, Box or Screed Op., Spray Curing Machine, Tractor (rubber tired farm type using attach.) -----	4.595	.18	.20	.02	

SCHEDULE #1

JOB CLASSIFICATION

BASIC HOURLY WAGE	(Fringe Benefits)			
	H & W	PENSION	APPR.	OTHER

POWER EQUIPMENT OPERATORS: (Cont.)

Blade Operator (motor patrol), Cranes (up to & incl. 50T), Concrete Slip Form Paver, Derrick Op., Front End & Overhead Loaders & similar mach. (over 6 yds), Koering-Scooper, Heavy Duty Mech. or Welder, Mucking Mach. (underground), Piledriver Engineer, Power Shovels & Draglines (1 yd. to & incl. 3-1/2 yds.) Tractor (crawler type, incl. all attach.), Trimmer Mach. Op., Tournapulls, Euclid & similar (to & incl. 40 yds.) ----- 5.265 .18 .20 .02

Cableway Op., Cranes (over 50T), Dredges, Power Shovels & Draglines (over 3-1/2 yds.), Quad type tractors with all attach., Tournapulls, Euclid & similar (over 40 yds.) ----- 5.515 .18 .20 .02

Undergroundmen shall be paid 10% add'l.- except op. of mucking mach. 7 battery tunnel locomotives and oilers and cable tenders.

TRUCK DRIVERS:

Leverman Loading at Bunkers ----- 4.46 .25 .20

Flat Bed (2 axle & pickup hauling material), Water Tank Truck (1800 gals. & under), Fork Lift, (3,000 & under); Ambulance Driver ----- 4.51 .25 .20

Flat Bed (3 axle), Fuel Truck (1000 gals. & under), Greaser, Tireman, Serviceman, Buggymobile, Man Haul, Shuttle Truck or Bus ----- 4.56 .25 .20

Transit Mix Truck (3 yds. & under), Warehouseman, Truck Helpers, Slurry or Concrete Pumping Truck ----- 4.61 .25 .20

Flat Bed using Power Takeoff, Water Tank Truck (over 1800 - 4000 gal.), Semi-Trailer, Low Boy (up to 96000 lbs. GVW), Bulk Cement Tanker (up to 96000 lbs. GVW), Fork Lift (over 3000 lbs - Bull Lift, Hydro Lift), Ross, Hyster & similar Straddle equip., "A" Frame Truck (Swedish Crane, Iowa 3000, Hydro-lift) ----- 4.66 .25 .20

SCHEDULE #1

JOB CLASSIFICATION	BASIC				
	HOURLY	(Fringe Benefits)			
	WAGE	H & W	PENSION	APPR.	OTHER
<u>TRUCK DRIVERS:(Cont.)</u>					
Transit Mix Truck (over 3 yd.-6 yd.)-----	4.71	.25	.20		
Water Tank Truck (over 4000 gal), fuel truck (over 1000 gal), Distributor or Spreader Truck -----	4.76	.25	.20		
Transit Mix Truck (over 6 - 8 yds.), Dumptors -----	4.81	.25	.20		
Transit Mix Truck (over 8 - 10 yds) -----	4.91	.25	.20		
Low Boy (96000 lbs GVW & over), Bulk Cement Tanker (96000 lbs. GVW & over)--	4.96	.25	.20		
Transit Mix Truck (over 10 yds.) -----	5.01	.25	.20		
** Turnarocker & similar equipment -----	5.06	.25	.20		
Truck, Side, End & bottom dump					
6 yds & under -----	4.61	.25	.20		
Over 6 yds - incl. 12 yds.-----	4.71	.25	.20		
Over 12 yds - incl. 20 yds.-----	4.91	.25	.20		
Over 20 yds - incl. 30 yds.-----	5.06	.25	.20		
Over 30 yds - incl. 40 yds.-----	5.16	.25	.20		
Over 40 yds - incl. 50 yds.-----	5.26	.25	.20		
Over 50 yds -----	5.36	.25	.20		
**2 or 4 wheeled power tractor 2/trailer, i.e., Tournatrailer; Athey Wagon, Terra Cobras, LeTourneaus, Westinghouse; DW-10, 20, 21, and 24; 619C & sim. type equip. when transporting material loaded by external means; also power boom & sim. type truck when performing work within the Teamster jurisdiction regardless of types of attachment--Base rate from Group 12 or yardage scale from Group 13, whichever is greater.					

SCHEDULE #1

JOB CLASSIFICATION

BASIC HOURLY WAGE	(Fringe Benefits)			
	H & W	PENSION	APPR.	OTHER

A-Frame Truck (Hydra lift, Swedish Cranes, Ross Carrier, Hyster on Const. Jobs), Battery Tunnel Locomotive, Belt Finishing Machine, Cable Tenders (underground), Chip Spreader Machine (self-propelled), Front End and Overhead Loaders, and similar machines under 2 yds., Rubber Tired, Hoist (2 or more drums or tower hoist), Hydralift, (Fork Lift & similar), (when hoisting); Oilers (Underground), Power Loader (bucket elevator, conveyors), Rodman, Road Roller (regardless of motive power), Service Oiler -----	4.735	.18	.20	.02
Asphalt Pavers & Spreaders, Boring Mach. (Earth or Rock - Quarrymaster, Joy, Tractor Mounted), Drills (Churn, Core, Calyx or Diamond), Front End & Overhead Loaders & similar machines (2 yds & incl. 4 yds, rubber tired), Grout Pump -----	4.985	.18	.20	.02
Hydra-Hammer, Instrument Man, Locomotive Engineer, Longitudinal Float Machine, Mixermobile, Spreader Machine, Tractor (rubber tired), (using Backhoe), Transverse Finishing Machine, Trenching Machines, Waggoner Compactor & similar -----	4.985	.18	.20	.02
Asphalt Plant Operator, Concrete Plant Op., Concrete Road Paver (dual), Crusher Plant Op., Elevating Grader Op., Euclid Elevating Loader, Front End & Overhead Loaders & sim. machines (over 4 yds to & incl. 6 yds), Generator Plant Operator-Mechanic (diesel electric), Power Shovels & Draglines (under 1 yd.), Pumpcrete, Refrigeration Plant Op., Road Roller (finishing high type pavement), Sub Grader -----	5.125	.18	.20	.02

SCHEDULE #5

SOUTHWESTERN IDAHO: LOWER PART OF IDAHO COUNTY, ALL OF ADAMS, VALLEY, WASHINGTON,
PAYETTE, GEM, BOISE, CANYON, ADA, ELMORE, AND OWYHEE COUNTIES.

JOB CLASSIFICATION	BASIC HOURLY (Fringe Benefits)				
	WAGE	H & W	PENSION	APPR.	OTHER
<u>BUILDING & HIGHWAY CONSTRUCTION:</u>					
Asbestos Workers -----	\$ 5.81	.21	.25		
Boilermaker, Field -----	5.90	.30	.40	.02	.30 Vac.
Helpers -----	5.60	.30	.40	.02	.30 Vac.
Glaziers -----	4.50				.14 Vac.
Painters, Brush, Paperhangers -----	4.90	.16			
Preparatory work for painting -----	4.90	.16			
Spray gun & sandblasting -----	5.37	.16			
Pot tenders -----	5.37	.16			
Painters, Brush, Steel (Bridges, steel towers, tanks on legs, steeples, stacks, all structural steel incl. any and all pipes and conduit that might be attached or separate) -----	4.90	.16			
Painters, application of toxic chemical materials &, but not restricted to, such materials as Bitumastic coatings--	5.37	.16			
Sign Painters -----	5.02	.16			
Perfa Tapers -----	4.70	.16			
Bazooka Operator -----	4.90	.16			
Roller Operator, Pressure -----	5.37	.16			
(All swing stage work or work above 30' in height, and up to 50', the rate of pay will be 35¢ above scale, up to 100', \$1.00 above scale and 50¢ per 50' above 100')					
Plasterers -----	4.75				
Electrician-Cable Splicer -----	6.33	.15	.1%		
Journeyman-----	5.75	.15	.1%		
(Hazard rate will be 10% above existing rates)					
Electrician Line Construction over 34.5 KV					
Journeyman Lineman, Certified Welder----	5.28	.15	.1%	.1%	
Equipment Operator -----	4.83	.15	.1%	.1%	
Groundman -----	3.99	.15	.1%	.1%	
Cable Splicer 10% above Journeyman rate					
Electrician Line Construction under 34.5KV					
Journeyman Lineman, Certified Welder----	5.10	.15	.1%	.1%	

JOB CLASSIFICATION

BASIC HOURLY	(Fringe Benefits)			
	WAGE	H & W	PENSION	APPR. OTHER

BUILDING & HIGHWAY CONSTRUCTION (Cont.)

Equipment Operator -----	\$ 4.59	.15	.1%	.1%	
Groundman -----	3.94	.15	.1%	.1%	
Soft Floor Layer, Carpet & Linoleum -----	4.65				
Lathers -----	4.75				
Plumbers, Journeyman -----	5.40	.20	.20	.03	
Steamfitters, detailed man, pipe-bender, Processing Piping, Materialman, Layoutman -----	5.75	.20	.20	.03	
Iron Workers-Struct., ornamental, reinforcing, machinery mover, rigger & machinery erectors, welder, fence erector, sheeter -----	5.54	.25	.15	.01	
Carpenters -----	5.00	.15	.15	.02	
Floor layer, shingler, drywall applicator & installer of metal studs, metal framing, accoustical material, metal partitions, porcelain, enamel & metal panels, marlite & rigid or flexible plastics, laminatus, weather stippling, and insulation -----	5.00	.15	.15	.02	
Saw Filer -----	5.15	.15	.15	.02	
Stationary Mach. Operator -----	5.15	.15	.15	.02	
Piledriver Boomman -----	5.25	.15	.15	.02	
Millwright & Machine erector -----	5.25	.15	.15	.02	
Piledriver, bridgemen, Wharf Bldr. -----	5.15	.15	.15	.02	
Cement Mason -----	4.82	.15			
Gunnite operator & comp. floor layer; power trowel and Power grinder (Oper.)--	4.97	.15			
Sheet Metal -----	5.03	.22			.20 Vac.
Bricklayer, brick masons, tile setters, marble mason, block layers, terrazzo workers -----	5.40	.20			
Roofers, (Journeyman & Kettlemen) -----	4.40	.13	.10		
Coal Tar & Pitch Pro. -----	5.90	.13	.10		

GENERAL SITE RECONSTRUCTION PROJECT
FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL, CANYON COUNTY, IDAHO

SPECIAL SPECIFICATIONS

SECTION 5.01. GENERAL.

A. Scope. The Contractor shall furnish all labor, materials, and equipment necessary or required to complete the work in all respects as shown on the Plans, as hereinafter specified, or both. Each section hereinafter is divided, where applicable, into sections consisting of: A, Scope; B, Materials; C, Workmanship; and D, Measurement and Payment. This method is employed to facilitate the work of the Contractor in preparing his Proposal and in following the Specifications during construction.

All references to the form ASTM refer to Standard Specifications or Methods of the American Society for Testing Materials. The number following the abbreviation refers to the serial number of the pertinent ASTM Specification. The abbreviation AASHTO refers to the American Association of State Highway Officials, and the number following the abbreviation refers to the serial number of the pertinent AASHTO Specification. Unless otherwise noted, references to these Standard Specifications are to be the latest revision of said Specification.

B. Progress of Construction. It is the intention of these Contract Documents to insure that the progress of the work shall proceed in a systematic manner so that a minimum of inconvenience will result to the public, the Owner and other contractors in the course of construction.

The Contractor should pay special attention to the special time limits given in the Bidder's Proposal on Bid Items Nos. 1, 2 and 3, and Alternate Bid Items Nos. 1a, 2a, and 3a concerning the demolition and removal of the existing row shelter complexes since the contractor's failure to comply with these time limits will seriously affect the Building Contractor's completion date as determined in another construction contract. Therefore, the Contractor hereby agrees that the special time limits are reasonable and can be adhered to and that failure to do so will automatically impose the same liquidated damage clause as inserted in Section 1 of these Specifications for project completion.

Backfilling of the trench shall be accomplished so no section of approved pipe shall be left open longer than twenty-four (24) hours except by permission of the Engineer. Complete backfill and cleanup shall be accomplished after each section of the pipe has been inspected and approved.

The Engineer reserves the right to withhold line and grade on any storm sewer or irrigation line when, in his opinion, excessive trench is being opened ahead of the pipe laying; backfilling behind the pipe laying is not proceeding satisfactorily; manhole installation is lagging more than five (5) calendar days behind; the backfilling, cleanup, and restoration of all physical properties are lagging; and pipe testing, as outlined herein, is not satisfactory.

C. Interfering Structures and Utilities. The Contractor shall exercise all possible caution to prevent damage to existing structures and utilities, whether aboveground or underground. An attempt has been made to show these structures and utilities on the Plans. While the information has been compiled from the best available sources, its completeness and accuracy cannot be guaranteed, and it is presented simply as a guide to possible difficulties. The Contractor shall notify all utility offices concerned at least forty-eight (48) hours in advance of construction operations in which a utility's facilities may be involved. This shall include, but not be limited to irrigation, water, telephone, electric, oil and gas.

It shall be the responsibility of the Contractor to locate and expose all existing underground structures and utilities in advance of the trench excavation. Any structure or utilities damaged by the work shall be repaired or replaced in a condition equal to or better than the condition prior to the damage. Such repair or replacement shall be accomplished at the Contractor's expense without additional compensation from the Owner.

The Contractor shall remove and replace such small miscellaneous structures as fences, catch basins, drain pipe, culverts, mailboxes, and signposts at his own expense without additional compensation from the Owner. The Contractor shall replace these structures in a condition as good or better than their original conditions.

Interfering utility poles that are to be relocated as shown on the Plans will be relocated by the corresponding utility company, but it shall be the Contractor's responsibility to contact said utility companies and make the necessary arrangements.

The Contractor shall remove, relocate, protect, and/or replace all existing buildings, drainage ways, all drainage and irrigation structures, fire hydrants, trees, or other improvements and similar items that interfere with the proposed site improvements at his own expense without additional compensation from the Owner unless specifically provided for as a pay item of work by the Specifications or as otherwise provided for on the Plans. Replacement or relocation shall be in a manner and in a condition at least equivalent to, or better than, the original condition.

If the Contractor encounters existing structures which will prevent the construction of the pipelines or street network and which are not properly shown on the Plans, he shall notify the Engineer before continuing with the construction in order that the Engineer may make such field revisions as necessary to avoid conflict with the existing structures. The cost of waiting or "down" time during such field revision shall be borne by the Contractor without additional cost to the Owner. If the Contractor shall fail to notify the Engineer when an existing structure is encountered, but shall proceed with the construction despite this interference, he shall do so at his own risk. In particular, when the location of the new construction will prohibit the restoration of existing structures to their original conditions, the Contractor shall notify the Engineer so a field relocation may be made if possible to avoid the conflict.

D. Field Relocation. During the progress of construction, it is possible that minor relocations may be necessary. Such relocations shall be made only by direction of the Engineer. Unforeseen obstructions encountered as a result

of such relocations will not be subjects for claims for additional compensation by the Contractor to any greater extent than would have been the case had the obstruction been encountered along or in the original location.

E. Public Safety and Convenience. The Contractor shall comply with all rules and regulations of the City, County, and State authorities regarding the closing of public streets or highways to the use of public traffic. No road shall be closed by the Contractor to the public except by express permission of the Engineer. Traffic must be kept open on roads and streets where a detour is impossible. The Contractor shall, at all times, conduct his work so as to assure the least possible obstruction to traffic. All obstructions within traveled roadways shall be protected by approved signs, barricades, and lights where necessary or ordered by the Engineer for the safety of the traveling public. The convenience of the general public and residents along the sewer and the protection of persons and property is of prime importance and shall be provided for by the Contractor in an adequate and satisfactory manner.

The Contractor shall use every reasonable precaution to safeguard the persons and property of the traveling public. Failure of the Engineer to notify the Contractor to maintain barricades, barriers, lights, flares, danger signals, or watchmen shall not relieve the Contractor from his responsibility. All barricades and obstructions shall be protected at night by signal lights which shall be suitably distributed across the roadway and kept burning from sunset to sunrise.

Whenever the Contractor's operations create a hazardous condition, he shall furnish flagmen and guards as necessary or as ordered by the Engineer to give adequate warning to the public of any dangerous conditions to be encountered. He shall furnish, erect, and maintain approved fences, barricades, lights, signs, and any other devices that may be necessary to prevent accidents and to avoid damage and injury to the public. Flagmen and guards, while on duty and assigned to give warning to the public, shall be equipped with approved red wearing apparel and a red flag which shall be kept clean and in good repair.

The Contractor will be required to confine construction operations within the dedicated rights of way for public thoroughfares or within areas for which construction easements have been obtained unless he has made special arrangements with the affected property owners in advance. The Contractor will be required to protect stored materials, cultivated crops and trees, and other items located adjacent to the site improvements.

F. Easements. A portion of the irrigation lines will be located on private property. Easements and permits have been obtained by the Owner. Easements shall provide for the use of property for construction purposes to the extent indicated on the easements. Copies of these easements and permits are available at the offices of the Engineer for inspection by the Contractor. The Contractor shall confine his construction operations to within the easement limits or make special arrangements with the property owners for the additional area required. Any damage to private property, either inside or outside the limits of the easements provided by the Owner, shall be the responsibility of the Contractor. Before final payment will be authorized by the Engineer at the completion of the construction, the Contractor shall obtain from the permit or easement grantors a release indicating that the work of restoration has been satisfactorily completed in accordance with the terms of the permit or easement. Should it be found impossible for the Contractor to obtain any of the required

releases, either because of the absence of the grantors or because of impractical demands by the grantors, then the Engineer may waive this requirement, if, in his opinion, the Contractor has fulfilled his obligations.

SECTION 5.02. DEMOLITION AND SITE REMOVAL.

A. Scope. This section covers the work necessary for demolition and site removal of items that are to be abandoned or removed for proposed site improvements, including but not limited to the removal and disposal of all major items listed on Sheet 3 of the Plans and miscellaneous items such as irrigation structures, trees and other similar items; clean-up; and all incidental and related work.

The limits of this work have been included in more than one bid item.

B. Materials.

1. Demolition. Adequate equipment to perform the work within the prescribed time limits will be essential.

2. Removal and Disposal. The majority of the concrete removal work will have to be hauled and stockpiled at an existing rock quarry located approximately one-quarter mile east of the northeast corner of the Labor Camp Site and adequate equipment to perform this work will be required.

C. Workmanship.

1. Demolition. Concrete floor slabs shall be broken into small enough units to allow present and future handling. Wood structures and trees may be burned on the Labor Camp Site but shall in no case be burned in any location that would endanger trees, other buildings or other property. The Contractor shall at all times take special precautions to prevent fire from spreading to areas beyond the limits of the cleared areas, and shall have available at all times suitable equipment and supplies for use in preventing uncontrolled fires. All burning shall be done in accordance with any and all Federal, State, and local laws applicable to burning and/or securing burning permits. All other noncombustible items shall be hauled away from the site.

2. Removal and Disposal. The stockpiling of concrete in the rock quarry shall be arranged to utilize as small a space as is reasonably possible and the quarry shall be left in an orderly condition.

Burning areas shall be cleaned of all unburned materials and these materials hauled off.

The concrete structures extending three feet or more below grade that are to be removed may be removed to three feet below grade and used as backfill for the remaining structure below this elevation. Approved backfill will be used above this elevation and all fills shall be compacted and left in a neat graded condition.

D. Measurement and Payment.

Payment for demolition and site removal shall be a lump sum or unit price per item removed as set forth in the Bidder's Proposal - Schedule of Items and Prices.

SECTION 5.03 UTILITY RELOCATION. .

A. Scope. This section covers the work necessary for relocation of existing utilities and related items, including but not limited to relocating fire hydrants, fire hose cart shelters, and irrigation structures and ditches.

B. Materials. The Contractor shall be responsible for furnishing any and all materials and equipment necessary to make the necessary relocations. All materials added shall be equal to or better than the existing materials.

C. Workmanship. The Contractor shall use qualified personnel suited to every utility relocation. The work shall be done in a workmanlike manner and the Contractor shall cooperate with other contractors and subcontractors to maintain a minimum of job interference.

The area shall be left in a neat condition and all relocations shall be in as good or better condition than the existing.

D. Measurement and Payment. Payment for utility relocations shall be a lump sum bid as set forth in the Bidder's Proposal - Schedule of Items and Prices.

SECTION 5.04. STREET, ALLEY, PARKING LOT, AND ASPHALT CURB CONSTRUCTION.

A. Scope. This section covers the work necessary for the construction of all streets, alleys, parking lots, asphalt curbs, and any other bituminous covered items.

B. Materials.

1. Stripping and Excavation. The Contractor must furnish the necessary equipment to strip any area of vegetation that would exist within the limits of this work and to excavate to subgrade where required.

2. Backfill. All backfill required to raise the existing ground to subgrade may be three-inch minus pit run gravel.

3. Base Course. Base course shall be three-inch minus pit run gravel.

4. Leveling Course. Leveling course shall be 3/4-inch minus well graded crushed gravel.

5. Plant Mix Asphalt Mat. The plant mix asphalt mat shall consist of an MC 70 liquid asphalt prime coat, and bituminous surface composed of mineral aggregate and an MC 70 asphaltic road material, mixed in an approved central plant, as specified in Sections 402-"Prime Coat" and 405-"Plant Mix Pavement" of the 1967 Edition of the State of Idaho Standard Specifications for Highway Construction.

6. Asphalt Curbs - The asphalt curbs shall be extruded and shall have aggregate and asphalt materials conforming to Section 615.02 of the said 1967 Edition of the State of Idaho Standard Specifications for Highway Construction.

C. Workmanship.

1. Stripping and Excavation. The proposed streets are to be wider than the existing streets, thus encroaching on areas with grass and vegetation. These narrow side strips and any other grass areas that are located under proposed bituminous surfacing shall be stripped to a minimum depth of three inches.

Excavation to subgrade shall be required in areas where the natural ground or stripped ground, if required, is above subgrade and the existing road surface is above the proposed top of base course. The Contractor will have the option to scarify the existing street to act as the base course if this existing street elevation is below the top of base course elevation. In any case the Contractor may salvage any existing base course and surfacing for later use in the proposed base course if he so desires.

2. Backfill. All areas in which the natural ground is lower than the subgrade elevation shall be filled according to the same specifications herein used for base course.

3. Base Course and Leveling Course. The base course and leveling course material as above specified shall be placed, mixed, compacted and shaped in accordance with Sections 303.04, 303.05(c) and 303.06 of the said 1967 Edition

of the State of Idaho Standard Specifications for Highway Construction, to the depths and grades shown on the Plans.

4. Prime Coat. The prime coat shall be applied at a rate of 0.3 gallons per square yard of surface area in accordance with Section 402.01 through Section 402.08 of the 1967 Edition of the State of Idaho Standard Specifications for Highway Construction.

5. Plant Mix Pavement. The plant mix pavement shall be compacted to the depth called for on the Plans and installed in accordance with Section 405.01 through Section 405.17 of the 1967 Edition of the State of Idaho Standard Specifications for Highway Construction.

6. Asphalt Curbs - Type D. All asphalt curbs shall be constructed according to Section 615 of the 1967 Edition of the State of Idaho Standard Specifications for Highway Construction, and to the size, shape and location as specified in the Plans.

D. Measurement and Payment.

1. Stripping, Excavation, Backfill and Base Course. Measurement and payment for stripping, excavation, backfill and base course shall be combined in a unit price per square yard, complete as set forth in the Bidder's Proposal - Schedule of Items and Prices.

2. Leveling Course and Prime Coat. Measurement and payment for the leveling course and prime coat shall be included in a unit price per square yard in place as set forth in the Bidder's Proposal - Schedule of Items and Prices.

3. Plant Mix Asphalt. Measurement and payment for plant mix asphalt shall be included in a unit price per square yard for a 0.15 foot compacted mat in place as set forth in the Bidder's Proposal - Schedule of Items and Prices.

4. Asphalt Curbs. Measurement and payment for asphalt curbs shall be included in a unit price per linear foot as set forth in the Bidder's Proposal - Schedule of Items and Prices.

SECTION 5.05. IRRIGATION SYSTEM.

A. Scope. This section covers work and materials necessary for constructing an irrigation system including, but not limited to excavation and backfill, irrigation pipe, irrigation risers, irrigation gate, irrigation valves, irrigation weir and irrigation overflow siphon.

B. Materials.

1. Excavation and Backfill.

a. Excavation. All excavation is unclassified. The Contractor shall complete all excavation of every description regardless of the character, nature, or condition of the material encountered.

b. Selected Backfill Material. Selected backfill material in the initial backfill zone for sewer pipe shall contain no piece of material larger than three inches for all sizes of pipe.

c. Water to Backfill. It will be the Contractor's responsibility to make all necessary arrangements for a source of water during all periods of construction and to make all arrangements for delivery of the water to the trench side.

2. Irrigation Pipe.

a. Nonreinforced Concrete Pipe. Nonreinforced concrete sewer pipe and fittings shall conform to the requirements of ASTM C 14-63. All pipe shall be standard strength with rubber gasket-type joints.

b. Joints. Joints for concrete pipe shall be of the rubber-gasketed type and equal to the Brant, Tylox, or Stanton-Cornelius type joint. They shall conform to the requirements of ASTM C 443-63T, with the following additional provisions.

(1) Gasket Quality. Gaskets made with vulcanized joints shall be capable of withstanding 100 per cent stretch across the joint held for one (1) minute with no visible damage occurring.

Gasket and lubricant material shall be stored in a cool, clean place protected from sunlight and contaminants until ready for installation on the pipe.

(2) Lubricant. There shall be furnished a bentonite or vegetable soap lubricant in sufficient quantity for installing the pipe furnished.

3. Irrigation Risers. Irrigation risers shall have a Waterman #8 lawn valve or equal and a concrete riser pipe conforming to the above Specifications.

4. Irrigation Headgate. The irrigation headgate shall be a precast concrete 12-inch headgate as constructed by Idaho Concrete Pipe Company, Inc., or equal.

5. Irrigation Valves. All irrigation in line gate valves shall be "Pohl Line Gate Valves", or equal, as supplied by Idaho Concrete Pipe Company, Inc.

6. Irrigation Weir. The irrigation weir shall conform to the Black Canyon Irrigation Company Standards.

7. Overflow Siphon. The overflow siphon shall be constructed as shown on the Plans and the gate valve shall be a Stockham B105 three-inch rising stem gate valve with a standard cast iron volve box and cover to the surface.

C. Workmanship.

1. Excavation and Backfill.

a. Clearing the Right of Way. Where clearing of the right of way is necessary, it shall be completed prior to the start of the trenching. Brush shall be cut as near to the surface of the ground as practicable and removed to an approved disposal area. The Contractor shall observe all Federal and State laws relating to hauling permits and local regulations relating to burning and/or otherwise disposing of such materials. Under no conditions shall excavated materials be permitted to cover brush prior to clearing and removing same.

b. Obstructions. This item shall refer to obstructions which may be removed and do not require replacement. Obstructions to the construction of the trench such as but not limited to tree roots, stumps, abandoned concrete structures, and debris of all types shall be removed by the Contractor at his own expense without additional compensation from the Owner. The Engineer will, if requested by the Contractor, make changes in alignment to avoid major obstructions if such alignment changes can be made without adversely affecting the intended functioning of the facility. The Contractor shall pay all additional costs to the Owner resulting from such alignment changes.

c. Removal of Topsoil. In all cases where trenches cross cultivated fields, garden areas, or other areas on which topsoil exists, the topsoil shall first be removed for a depth of 12 inches for the full width of the trench to be excavated. This topsoil shall be stockpiled to one side of the right of way and not mixed with the remaining excavated material. The topsoil shall be replaced in the top one foot of the backfilled trench.

The surface of the trench and other disturbed areas shall be brought to a true and even grade to match the adjacent lawn or cultivated areas. All rocks, debris, roots, clods, and deleterious material unearthed or encountered shall be removed and disposed of. The finished surface shall be free from humps, depressions, and other irregularities.

d. Grass Reseeding and Fertilization. The reseeding and fertilization of trenches and adjacent areas disturbed by trench excavation within the easement or rights of way limits shall be done by the property owners unless otherwise shown on the Plans. This does not relieve the Contractor of the responsibility of leaving the trench and adjacent areas in a condition equivalent to the original surface.

e. Trenches. Trench excavation shall be to line and grade as established by conventional practice or as ordered by the Engineer. The bottom width of the trench shall not be less than 12 inches or more than 24 inches wider than the outside diameter of the pipe to be laid.

f. Location of Excavated Materials. During trench excavation, the Contractor shall locate the excavated material so it will not completely obstruct a traveled roadway or street. Unless otherwise approved by the Engineer, all streets and roadways shall be kept open to at least one-way traffic.

g. Initial Backfill. After the pipe lengths have been jointed and jointing material has properly set to the Engineer's approval for backfilling, the bell holes and sides of the pipe shall be carefully backfilled and thoroughly compacted with approved tampers, supplemented by "walking in", and with approved backfill material of sand or earth in layers not to exceed six inches in thickness. The initial backfill shall be continued in layers of not to exceed six inches in thickness until the backfill is 12 inches above the top of the pipe using approved backfill material of sand or earth. Under no conditions will puddling be permitted for this initial backfill.

h. Trench Backfill. After initial backfill, trenches may be backfilled with the material excavated provided rocks and other deleterious material, if present in the excavated material, are removed. Material containing frost shall not be used for backfill. The first one foot of backfill above the initial backfill shall be given careful attention as to composition. The entire backfill is to be puddled or firmly compacted as hereinafter stipulated or by other methods if approved by the Engineer.

i. Puddling. All trench backfill for this project shall be puddled. Puddling shall be accomplished by first backfilling the trench grade of the travel way, then water shall be added to the trench for its entire length until it is evident that the backfill material is saturated with water. Additional backfill material is to be added to the trench to compensate for the settlement incurred by the puddling in such an amount so as to bring the final backfill material to within 12 inches of the finished surface of the travel way. The excess excavated material remaining alongside the trench is to be removed from the public right of way and disposed of by the Contractor. The remaining 12 inches of the unfilled trench is to be backfilled in accordance with street surface repair as hereinafter specified or with topsoil material where street surface repair is not required.

j. Excess Excavated Material. All excess excavated materials from excavation and backfill operations shall be hauled and disposed of by the Contractor at locations approved by the Engineer and/or Owner.

2. Irrigation Pipe.

a. Preparation of Irrigation Pipe. All pipe and fittings shall be carefully inspected before being laid, and no cracked, broken, or defective pipe or fittings shall be used in the work. The ends of the pipe shall be cleaned with a brush, washed, and thoroughly scrubbed where necessary to remove dirt or other foreign material.

Extreme care shall be exercised to insure that the inside surfaces of the bell are smooth and free from any projections which would interfere with the assembly or watertightness of the joint.

b. Handling. Proper implements, tools, and facilities shall be provided and used by the Contractor for the safe and proper protection of the work. When such damaged pipe cannot be repaired to the satisfaction of the

Engineer, it shall not be used in the work. The pipe shall be carefully lowered into the trench to prevent damage to the pipe. Under no circumstances shall pipe be dropped or dumped into trenches. Foreign matter and dirt shall be removed from the inside of pipe before it is lowered into the trench, and it shall be kept clean by approved means during and after laying.

c. Line and Grade. Maximum deviation from true line, as established by the Engineer, shall be one inch. The grade for all irrigation lines shall follow the general grade of the trench surface while providing a minimum cover over the top of the pipe of two feet. However, the Contractor shall disregard any local surface irregularities and lay the pipe on a smooth grade as established by visual inspection. High points along the line shall be reduced to a minimum where possible and at the request of the Engineer, the Contractor shall install a riser pipe at these peaks to provide air relief during the initial filling of the line. The Contractor will be paid for any extra riser installations at the same unit price specified in the Bidder's Proposal for proposed risers.

d. Concrete Pipe Jointing. Sufficient pressure shall be applied in making the joint to assure that the joint is home as defined in the standard installation instructions provided by the pipe manufacturer. Sufficient restraint shall be applied to the line to assure that joints, once home, are held so by tamping fill material under and alongside the pipe or otherwise. At the end of the day's work, the end of the last pipe shall be blocked in such a manner as may be required to prevent creep and shall be tightly plugged to prevent entrance of dirt, vermin, or debris into the pipe.

3. Irrigation Risers. The irrigation riser pipes shall be installed by tapping the feeder pipe with a neat clean hole that is at least as large as the inside diameter of the riser pipe but smaller than the outside diameter of the same pipe and by grouting the connection of the two pipes to provide a tight joint at the pressures imposed. Care shall be taken during the backfill operation to insure against breaking this joint. The Waterman # 8 lawn valves shall be grouted to the riser pipe in accordance with the supplier's recommendation and shall be completely sealed when closed and under static pressure.

4. Irrigation Appurtances. The irrigation headgates, inline valves, weir and overflow siphon shall be installed in a workmanlike manner and in accordance with the supplier's specifications.

D. Measurement and Payment.

1. Excavation and Backfill. The work and material required under this item are to be included in the price per linear foot for the various sizes of irrigation pipe in place. This shall include any costs for rock excavation, special pipe bedding, backfill, any other special items of excavation and backfill, and surface repair across the county road but will not include grass reseeding.

2. Irrigation Pipe. Payment for irrigation pipe in place will be based upon the unit price set forth in the Bidder's Proposal - Schedule of Items and Prices for the various types and sizes of pipe required and installed, as shown on the Plans or as directed by the Engineer. Payment for pipe will be on a linear foot basis on the actual number of feet installed, as measured by the Engineer. The pipe will be measured from end to end of the pipe.

3. Irrigation Risers. Payment for irrigation risers will be based on a unit price for each unit installed, in place, as set forth in the Bidder's Proposal - Schedule of Items and Prices.

4. Irrigation Gate, Valves, Weir and Overflow Siphon. Payment for irrigation appurtenances will be based on a unit price installed as set forth in the Bidder's Proposal - Schedule of Items and Prices.

SECTION 5.06. STORM SEWERS.

A. Scope. This section covers all work necessary for installing storm sewers, including but not limited to excavation and backfill, pipe, and catch basins.

All storm sewer pipe shall be subject to the excavation and backfill specifications of Section 5.05 in the Special Specifications.

B. Materials.

1. Concrete Pipe.

a. Nonreinforced Pipe. Nonreinforced concrete sewer pipe and fittings shall conform to the requirements of ASTM C 14-63. All pipe shall be standard strength with rubber gasket-type joints.

b. Joints. Joints for concrete pipe shall be of the rubber-gasketed type and equal to the Brant, Tylox, or Stanton-Cornelius type joint. They shall conform to the requirements of ASTM C 443-63T, with the following additional provisions.

(1) Gasket Quality. Gaskets made with vulcanized joints shall be capable of withstanding 100 per cent stretch across the joint held for one (1) minute with no visible damage occurring.

Gasket and lubricant material shall be stored in a cool, clean place protected from sunlight and contaminants until ready for installation on the pipe.

(2) Lubricant. There shall be furnished a bentonite or vegetable soap lubricant in sufficient quantity for installing the pipe furnished.

2. Asbestos-Cement Pipe.

a. Non-Pressure Pipe. Asbestos-cement non-pressure pipe shall conform to the requirements of ASTM C 428-64T. All asbestos-cement non-pressure pipe shall be Class 1500, nominal size, and be furnished in the manufacturer's standard lengths but not to exceed 13 feet maximum, except shorter random lengths shall be furnished as required.

b. Couplings. Couplings for both pressure and non-pressure pipe shall consist of an asbestos-cement sleeve, machined or otherwise arranged for use with rubber sealing gaskets. The sleeve shall be suitable for the particular size and class of pipe for which it will be used. Sleeves shall be arranged so the rubber rings are self-positioning; the Contractor shall use the manufacturer's recommended procedure to check rubber ring positioning after installation. Rubber sealing rings (gaskets) shall be furnished with the couplings by the pipe manufacturer, and they shall conform to the requirements of ASTM D 1869-63T. Couplings shall be "Ring-Tite", "Fluid-Tite", or other approved pattern standard with the pipe manufacturer. Couplings shall conform to all standards required of the pipe and shall, in each case, be the pipe manufacturer's standard joint assembly.

3. Catch Basins. Catch basins may be precast sections but shall be constructed and installed as shown on the plans.

C. Workmanship.

1. Storm Sewer Pipe. All storm sewer pipe shall be subject to the workmanship specifications of Section 5.05 located in these Special Specifications.

2. Catch Basins. The connections to the proposed catch basins shall be as shown on the Plans. The work shall be performed in a workmanlike manner.

D. Measurement and Payment.

1. Excavation and Backfill. The work and material required under this item are to be included in the price per linear foot for the various sizes and types of sewer pipe in place. This shall include any costs for rock excavation, special pipe bedding, backfill, and any other special items of excavation and backfill with exception to surface repair.

2. Storm Sewer Pipe. Payment for sewer pipe in place will be based upon the unit price set forth in the Contractor's Proposal - Schedule of Items and Prices for the various types and sizes of pipe required and installed, as shown on the Plans or as directed by the Engineer. Payment for pipe will be on a linear foot basis on the actual number of feet installed, as measured by the Engineer. The pipe will be measured from center to center of the manholes or to the end of the pipe.

3. Catch Basins. Payment for catch basins in place will be based on the unit price of each as stated in the Bidder's Proposal - Schedule of Items and Prices.

SECTION 5.07. LANDSCAPING

A. Scope. This section covers the work necessary for the landscaping of proposed lawn areas, including but not limited to berm strips along each edge of proposed paving areas, lawn areas between all row shelter buildings, reseeding lawn areas over proposed irrigation lines, seeding all unseeded areas among the individual houses between their proposed rear fence and street, and seeding the grass playground areas in complexes "F", "G" and "H".

B. Materials.

1. Topsoil. Where required, topsoil shall be natural, fertile, agricultural soil, capable of sustaining vigorous plant growth. The topsoil shall be of uniform composition throughout, without admixtures of subsoil. The topsoil shall be free of stones, lumps, live plants and their roots, sticks, and other extraneous matter, and may be obtained within the Labor Camp Site at no cost to the Contractor. The Owner or Engineer will direct the Contractor to the areas.

2. Grass Seed. The Contractor shall furnish a grass seed mixture as follows:

- 60% Kentucky Bluegrass
- 15% Red Creeping Fescue
- 15% Red Top
- 10% White Dutch Clover

All grass shall be new crop seed of highest quality obtainable and shall be "weatherized" with Arason seed disinfectant.

3. Fertilizer. The Contractor shall furnish and apply commercial fertilizer, the containers of which shall bear the manufacturer's guaranteed statement of analysis and shall meet the following minimum requirements in available form:

- 16% of Nitrogen
- 16% of Phosphoric Acid
- 20% of Potash

4. Equipment. The Contractor shall furnish adequate equipment for excavating, hauling, spreading and grading the topsoil. Further, he shall be equipped to work up existing topsoil and regrade it where required and upon completion of seeding and rolling the landscaped areas, he will be required to furnish the necessary equipment to water certain specified areas until sufficient growth has been obtained to permit floor irrigation.

C. Workmanship.

1. Placing Topsoil. The berms along the edges of all pavement shall extend from the top of the curb down to natural ground within a three-foot

wide strip. The Contractor will be required to form this berm to provide a pleasing appearance and ease in lawn mowing maintenance.

The areas between all row shelter units and individual playground areas shall have a minimum of three inches of topsoil over the existing gravel areas. All areas shall berm up to sidewalk or curb or pavement to permit flood irrigation and minimum lawn maintenance.

The areas over proposed irrigation lines and around the individual houses that are to be seeded will require only enough topsoil to fill local depressions; however, these areas will require complete cultivation to ready the soil for seeding.

2. Surface Preparation for Seeding. The surface of the area to be seeded to grass shall be brought to the finish grades as shown on the Plans and shall then be cultivated to a depth of three inches. All rocks, debris, roots, clods, and deleterious material unearthed or encountered during the cultivation shall be removed from the seed bed and disposed of. The finished surface shall be free from humps, depressions, and other irregularities and provide a seed bed of one inch minimum depth satisfactory for the sowing of lawn grasses.

3. Sowing of Seeds. After the seed bed has been prepared and approved, the grass seed mixture shall be distributed evenly over the ground surface of the lawn areas to be planted at the rate of five pounds of seed to each one thousand square feet of lawn area.

After the seed has been sown, the entire seeded lawn area shall be evenly covered with an application of commercial fertilizer at the rate of 15 pounds to each one thousand square feet of lawn area.

The entire area shall then be raked slightly to cover the seed not more than one-quarter inch, and rolled with an approved lawn roller to prevent wind removal of the seeds.

4. Planting Time. Planting time for grass shall not be done earlier than April 1, 1970, unless special authorization is obtained from the Engineer.

5. Watering Seeded Areas. The Lawn areas between the row shelter buildings and grass playground areas in complexes "F", "G", and "H" will have to be sprinkled until a minimum of one inch growth has been developed with sufficient stand to permit flood irrigation. It will be the Contractor's responsibility to furnish any equipment necessary to sprinkle these areas, but he shall in no case use sprinklers that will cause any surface erosion. The water for sprinkling these areas may be obtained from any fire hydrants near the row shelter complexes. It is also understood that if the necessary growing period should extend beyond the project completion date for less than one month, there will be no charge for liquidated damage; however, other than the one month extension for landscape watering, no extension will be made.

D. Measurement and Payment.

All landscaping to be accomplished around the individual homes shall be combined into a lump sum bid as set forth in the Bidder's Proposal - Schedule of Items and Prices. All other landscaping mentioned herein, including the individual playground areas shall be a separate lump sum bid as set forth in the Bidder's Proposal - Schedule of Items and Prices.

SECTION 5.08. FENCING

A. Scope. This item includes the work necessary for the fencing as shown on the plans, including but not limited to furnishing and installing fencing materials, warning signs, metal and chain gates, and all incidental and related work.

B. Materials.

1. Fence and Gates. Fences and gates shall be constructed according to the plans and as hereinafter specified. Fences shall be constructed in locations shown on the Plans or as designated by the Engineer. The fences shall be constructed of four strands of 12-1/2-gauge galvanized iron wire with 14-gauge GI barbs at a maximum spacing of five inches.

The wire spacing shall be as shown on the Plans. Fence posts shall be standard metal fence posts with anchor device and weighing not less than 1.33 pounds per linear foot excluding the anchor. Maximum spacing of fence posts shall be 16 feet 6 inches, center to center. Strain panels, as shown on the Plans, shall be constructed at intervals of not less than 650 feet.

Metal gates shall be provided in the locations shown on the Plans or as directed by the Engineer. Gates shall be manufactured of galvanized iron tubing of a size not less than 1-3/8 inches in diameter for the frame and shall have at least two vertical braces of the same material. The entire framework shall be covered with a galvanized wire fabric of nine-gauge which shall be affixed to the framework with a galvanized iron wire of the same gauge. Gates shall have one adjustable diagonal truss rod from corner to corner. Hinges for the gates shall be approved rust proof malleable iron or steel and a two-way self-closing latch of the same material shall be provided. Also, a suitable chain and lock shall be provided for locking each gate. The panel bracing, gate posts, hinges and latch, locks, and appurtenances shall be considered as part of the gate for purposes of payment.

Chain gates shall be provided across alleys in the locations shown and shall be constructed as shown on the plans. The gate posts set in concrete, log chain, "D" rings and padlock shall be considered as part of the gate for purposes of payment.

2. Warning Signs. Approved warning signs shall be placed around the lagoon fence with two signs evenly spaced on the north and west sides of the lagoon. One warning sign shall also be placed at the entrance gate.

These signs shall be constructed of exterior grade 1/2-inch thick plywood or metal and shall be painted with weatherproof paint; lettering is to be clear, legible and neatly executed. Signs shall have the word "Warning" in red letters, a minimum of three inches high, underneath which there shall be the words "Sewage Lagoon" in black letters of suitable height. These signs shall also contain, in black letters 1/2-inch high, the following: "No Trespassing by Order of the Caldwell Housing Authority". Background color shall be white.

C. Workmanship. The gates and fencing shall be installed in a workmanlike manner and as recommended by the manufacturer or as directed by the Engineer.

D. Measurement and Payment.

1. Fencing. Payment for this item shall be on a linear foot basis as set forth in the Bidder's Proposal. This unit price shall also include the cost of warning signs. Payment will be made on the actual number of feet installed, as measured by the Engineer.

2. Gates. Payment for these items shall be a unit price for the various sizes and types as set forth in the Bidder's Proposal.

SECTION 5.09. MANHOLES

A. Scope. This item includes the work necessary for the construction of the precast manholes, including but not limited to the additional excavation and backfill required; concrete and forms; furnishing and placing concrete precast sections, concrete cones, pipe, and fittings; cast iron frames and covers; and all appurtenances.

The Contractor may, at his option, use poured-in-place type manholes, provided all details of construction are approved by the Engineer.

B. Materials.

1. Concrete. Concrete used in the construction of the manhole base and other structures specified shall be so proportioned and mixed as to meet a 2,500 psi compression test after 28 days. There shall be a minimum of five sacks of cement per cubic yard of concrete. Water shall be provided by the Contractor.

a. Forms. Forms for manhole bases and portions of structures below grade shall be matched boards, plywood, or other form material approved by the Engineer.

2. Precast Manhole Sections. Precast concrete sections for manholes shall be minimum 48-inch diameter reinforced concrete pipe, Class II, conforming to ASTM C 76-64T, with the added requirement that the reinforcement shall be 4-1/4 inches. Cones shall be concentric with wall thickness and reinforcement similar to that of manhole pipe sections. The tops and bottoms of cones shall be parallel.

3. Mortar Grout. The joints for the precast concrete manholes shall be made with cement mortar or grout consisting of one part cement to two parts of clean, well-graded sand which will pass a 1/8-inch screen. Admixtures may be used not exceeding the following percentages by volume of cement: hydrated lime five per cent; diatomaceous earth or other inert materials, ten per cent. The consistency of the mortar shall be such that it will adhere readily to the pipe. No mortar shall be used when its ingredients have been mixed for a period greater than 30 minutes.

4. Manhole Extensions. The precast concrete grade rings used between the top of the cone and the base of the manhole ring shall have a minimum thickness of two inches and shall be of standard construction. The rings shall be approved by the Engineer before being installed.

In general, manhole extensions having a minimum height of six inches and a maximum height of eight inches will be used on all manholes except in cultivated fields and on very shallow manholes or in other locations where a subsequent change in existing grade may be unlikely.

C. Workmanship

1. Concrete Base. The concrete base for the precast manhole shall be constructed so the first section of the precast manhole has a uniform bearing throughout the full circumference of the manhole wall. Sufficient mortar shall be deposited on the concrete base to provide a watertight seal between the base and the manhole wall.

2. Placing Precast Manhole Sections. The joints for the precast concrete manholes shall be made of cement mortar consisting of one part cement to two parts sand. The walls shall be constructed true to line and grade, as established by the Engineer. Mortar shall be placed on the groove of the lower section of pipe prior to placing the next section of pipe. The entire joint shall be completely filled with mortar and troweled to a smooth finish.

3. Manhole Invert. The invert of the manhole shall be constructed in conformance with details shown on the Plans. The manhole invert shall provide a smooth flow-through characteristic. No sharp edges or rough sections which will tend to obstruct the flow of sewage will be permitted. Where a full section of sewer pipe is laid through the manhole, the top shall be broken out as indicated on the Plans and the exposed edge of the pipe shall be completely covered with mortar. All cement mortar used in the construction of the invert shall be troweled smooth.

4. Manhole Rings and Covers. The cast iron manhole rings and covers shall be installed on the top of the manholes so as to positively prevent any infiltration of surface or groundwater into the manholes. The manhole rings shall be set so the tops of the covers are just flush with the surface of the adjoining pavement or ground surface unless otherwise shown on the Plans or directed by the Engineer. Manholes through cultivated fields shall be so constructed that the manhole ring shall be one foot below the original ground surface or as shown on the Plans.

5. Manhole Extension. The extensions shall be built as shown on the special details for manholes on the Plans and to a height as determined by the Engineer. Extensions shall be added on manholes in existing streets and driveways and where otherwise directed by the Engineer. The actual height of the extensions shall be as determined by the Engineer. All rings shall be laid straight and true. Materials used shall be of the highest quality and equal to similar materials specified in other sections.

D. Measurement and Payment.

1. Standard Manholes. Payment for standard manholes will include payment for all work necessary to construct the manholes of the type directed by the Engineer. Payment for manholes will be based on the price stated in the Bidder's Proposal for manholes. No change will be made from the manhole price regardless of depth.

SECTION 5.10. SEWAGE TREATMENT FACILITIES.

A. Scope.

1. Site Preparation. This item covers the work necessary for clearing the site of all sod, concrete boxes, and other debris, and disposing of this waste material and diverting the existing pressure inlet line during construction.
2. Pond Bottom Compaction. This item covers the work necessary for the compaction of all pond bottom areas and includes sprinkling and aerating where necessary.
3. Embankment. This item covers the work necessary for the earth embankment, including but not limited to furnishing all materials; excavating, hauling, placing, compacting, and grading the pond and dikes; and the leveling and grading of pond bottoms.
4. Pit Run Gravel. This item includes the work necessary for the pit run gravel, including but not limited to furnishing all materials, loading, hauling, and placing the pit run gravel for the outlet pad.
5. Sewer Pipe and Trenching. This item covers the work necessary for the sewer pipelines, including but not limited to furnishing all materials; excavating and backfilling the trench; preparing the trench bottom; laying the pipe and fittings; connecting the pipe; pouring concrete collar blocks; and testing lines.
6. Concrete Structures. This item covers the work necessary for the concrete structures, and outlet pads, including but not limited to the furnishing of all materials, performing all excavation and backfilling; placing reinforcing steel, constructing forms; proportioning, mixing, placing, compacting, furnishing, and curing concrete; installing the fabricated metalwork; installing the lengths of inlet pipe as shown on the Plans; and all incidental work as shown and necessary for a complete installation.
7. Cast Iron Fittings. This item covers the work necessary for the cast iron fittings, including but not limited to furnishing all material, excavating and backfilling, and attaching of valves to eight - inch asbestos-cement pipe.

B. Materials.

1. Site Preparation. The material that is required for this item is equipment to perform the work properly and an eight-inch diversion pipe at the inlet to the existing pond.
2. Pond Bottom Compaction.
 - a. Roller. Rollers used in compacting the pond areas shall be sheepsfoot or pneumatic-tired rollers, weighing not less than 15 tons each, or a vibrator roller capable of compacting the material to the density specified herein. The rollers shall be powered or towed by a tractor of a size suitable to move the roller at optimum speed.
 - b. Water. Water for sprinkling shall be provided by the Contractor

in the amounts necessary to produce optimum moisture content in the earth being worked. The Contractor shall make all arrangements for obtaining and furnishing the water.

c. Water Distributor. The water distributor shall be a tank truck with a spreader bar or splash disk which will spread a uniform spray of water. The tank and valves shall be watertight.

d. Aerating Equipment. Aeration of the material may be accomplished by blading, disking, harrowing, or otherwise aerating the material to hasten drying if the soil is saturated with surface water. This method may also be used to moisten the soil to optimum moisture, if necessary.

3. Embankment.

a. Borrow. Materials for the dikes and pond bottom shall be obtained from higher areas within the ponds. Excess borrow material may be disposed of in areas near the lagoon as directed by the Engineer.

4. Pit Run Gravel. The gravel shall be a six-inch pit run material with at least 25 per cent larger than four inches.

5. Sewer Pipe and Trenching. Concrete pipe and asbestos-cement pipe shall be as specified under Section 5.06 of these Special Specifications. Non-reinforced concrete pipe shall conform to ASTM C-14-57, entitled "Concrete Sewer Pipe" and shall be furnished with rubber-gasket type joints. All pipe shall be standard strength pipe.

The inlet pipe from inlet structure to inlet pad of the Aerated Pond and Pond No. 1 shall be standard strength non-reinforced concrete pipe or asbestos-cement pipe Class 1500 conforming to Section 5.06 of these Special Specifications.

6. Concrete Structures.

a. Concrete and Reinforcing Steel. Concrete and reinforcing steel shall be as specified under Sections 5.12 and 5.13 of these Special Specifications.

b. Fabricated Metalwork Castings.

(1) Submission of Shop Drawings. Prior to ordering fabrication of any steel or aluminum work, the Contractor shall submit to the Engineer for approval complete shop drawings and erection diagrams of the work.

(2) Fabrication. Workmanship and finish of all metalwork specified under this section shall be of the highest grade and equal to the best practice of modern shops for the respective work. Exposed surfaces shall have smooth finish and sharp, well-defined lines. All necessary rabbets, lugs, and brackets shall be provided so that the work can be assembled in a neat, substantial manner. Fastenings shall be concealed where practical. Metalwork shall be drilled and holes countersunk as required for attaching hardware or other materials. Materials shall be welded, except where bolting is shown. Welding shall be done as hereinafter specified. Items requiring special fabrication methods are mentioned herein; fabrication of all other items shall

be of equal quality. Methods of fabrication not otherwise specified or shown on the Plans shall be as directed by the Engineer.

(3) Welding. Welding shall be done by operators who have been previously qualified by tests as prescribed in the American Welding Society standard qualification procedure to perform the type of work required. The technique of welding employed, appearance and quality of weld made, and the method of correcting defective work shall conform to codes for arc and gas welding and building construction of the American Welding Society and to the Standard Specifications of the American Institute of Steel Construction.

(4) Installation. Metalwork shall be installed in accordance with the Plans and Specifications and as directed by the Engineer. The completed installation shall be rigid and substantial and neat in appearance. Commercial manufactured products shall be installed in strict accordance with the manufacturer's recommendations.

(5) Galvanizing. Materials and methods to be used for hot-dip galvanizing shall conform to ASTM A 386. Materials to be galvanized are specified in this section or indicated on the Plans.

c. Pipe Ends. The ends of all pipe exposed within the structures shall be chipped or burred reasonably smooth and even with the interior surfaces of the structures and shall be smoothly covered with mortar.

d. Backfill. Backfill around the structures, including the outlet pad, shall be select, fine-grained soil from the structural excavation, and shall be compacted to 95 percent density at optimum moisture as determined by AASHTO T99, Method A. Compaction shall be accomplished by backfilling in 6 inch lifts and compacting each lift with pneumatic tampers. Water shall be added in the proper amounts to bring the backfill material to optimum moisture content.

e. Concrete Elbows. Elbows shall be shop-fabricated.

f. Precast Manhole Sections. Precast manhole sections shall conform to Section 5.09 of these Special Specifications, except as follows.

Where concrete walls are to be poured inside of precast manhole sections, the surface of the precast manhole section shall be roughened and an epoxy mixture shall be applied to this area to insure a bond with the poured concrete.

7. Cast Iron Fittings.

a. Gate Valves. All gate valves shall conform to Standard AAWA Specification C 500-521, double bronze-mounted, nonrising stem, with O-ring rubber gasket, and with a two-inch square operating nut, opening to the left. Valves shall be similar and equal to List 4 valves as manufactured by the Pacific States Cast Iron Pipe Company. Unless otherwise indicated on the Plans, valves shall be complete with all joint accessories, and a wrench key suitable to reach from the top of the valve box to the valve. The handle shall be a minimum of two feet long.

b. Valve Boxes. Gate valves which are buried in the ground shall be fitted with a cast iron valve box, Clay & Baily Model P-1112 or approved equal. The top of box shall extend six inches above the top of the dike.

C. Workmanship.

1. Site Preparation. The entire surface of the proposed dike site shall be cleared of all unsuitable materials. All sod, concrete boxes, and other deleterious materials shall be removed from the dike sites. The Contractor shall divert the existing six-inch pressure line from above the proposed parshall flume, into the existing pond. The pipe shall be covered to permit access across.

2. Pond Bottom Compaction.

a. Compaction. Only fill areas will have to be compacted. Said compaction shall be by an approved roller to 95% of max. density at optimum moisture content, as determined by AASHTO T99-49 method.

3. Embankment.

a. Embankment. The earth dikes shall be constructed to the lines, grades, and cross sections as shown on the Plans. The earth dikes shall be built up by means of mechanical excavating and hauling equipment and shall be compacted in layers, the thickness of which will be determined by the type of compaction equipment, but not to exceed eight inches in thickness before compaction. Regardless of the method used in constructing the dikes, the fill material shall be carried up approximately level across the entire width of the section and shall be brought out to the required slope. The use of loose material to widen the section will not be permitted. Areas found to be of inadequate width at any time shall be removed and reconstructed to the proper width. The slopes shall be bladed and dressed to the cross sections shown on the Plans. All rock or stones larger than six inches shall be removed from any borrow material prior to placement for compaction.

b. Embankment Compaction. Fill materials shall be placed so that each layer shall be maintained as level as practicable and travel over the dikes shall be directed so as to distribute the compacting effect of the equipment to the best advantage. The layers shall be moistened with water or aerated as required for maximum compaction. The Contractor shall provide compaction equipment as required to obtain compaction specified herein. All embankments shall be compacted to 95 per cent maximum density at optimum moisture content as determined by AASHTO T99, Method A. The number and location of density tests for compaction of the embankment may be made at the option of the Engineer, and deficiencies shall be corrected by the Contractor without additional cost.

c. Pond Bottoms. The pond bottoms shall be leveled and graded to a tolerance of within 0.2 foot of level.

4. Pit Run Gravel. Upon completion of the pond bottom earthwork and compaction, the pit run gravel shall be placed for the outlet pad in the Aerated Pond as shown on the Plans. The pit run gravel shall be placed and worked into an interlocked strata one foot in depth.

5. Sewer Pipe and Trenching. The workmanship shall conform to Section 5.05 of these Special Specifications, except as noted below.

a. Poured Elbows. Before concrete elbows are poured, the pipe shall be thoroughly cleaned by washing to insure a bond with the concrete. The entire elbow shall be made in one pour.

b. Trench Backfill. All trench backfill in or under the dikes and in the pond area shall be placed in eight-inch layers and compacted to 95 per cent maximum density at optimum moisture content as determined by AASHO T99, Method A, for the full depth with suitable mechanical compacting equipment. Water shall be added in proper amounts to bring the backfill material to optimum moisture content.

Pipes within the dikes shall not be laid until the dike has been brought to a compacted elevation two feet over the top of the pipe in its final location or to finish grade if less than two feet over the top of the sewer pipe. The trench shall then be excavated and the pipe laid. The backfill shall be as specified above.

Pipes in the pond area shall not be laid until all grading and earth-work is compacted.

6. Concrete Structures.

a. Concrete and Reinforcing Steel. Concrete and reinforcing steel shall be as specified under Sections 5.12 and 5.13 of these Special Specifications.

b. Fabricated Metalwork Castings.

(1) Submission of Shop Drawings. Prior to ordering fabrication of any steel or aluminum work, the Contractor shall submit to the Engineer for approval complete shop drawings and erection diagrams of the work.

(2) Fabrication. Workmanship and finish of all metalwork specified under this section shall be of the highest grade and equal to the best practice of modern shops for the respective work. Exposed surfaces shall have smooth finish and sharp, well-defined lines. All necessary rabbets, lugs, and brackets shall be provided so that the work can be assembled in a neat, substantial manner. Fastenings shall be concealed where practical. Metalwork shall be drilled and holes countersunk as required for attaching hardware or other materials. Materials shall be welded, except where bolting is shown. Welding shall be done as hereinafter specified. Items requiring special fabrication methods are mentioned herein; fabrication of all other items shall be of equal quality. Methods of fabrication not otherwise specified or shown on the Plans shall be as directed by the Engineer.

(3) Welding. Welding shall be done by operators who have been previously qualified by tests as prescribed in the American Welding Society standard qualification procedure to perform the type of work required. The technique of welding employed, appearance and quality of weld made, and the method of correcting defective work shall conform to codes for arc and gas welding and building construction of the American Welding Society and to the Standard Specifications of the American Institute of Steel Construction.

(4) Installation. Metalwork shall be installed in accordance with the Plans and Specifications and as directed by the Engineer. The completed installation shall be rigid and substantial and neat in appearance. Commercial manufactured products shall be installed in strict accordance with the manufacturer's recommendations.

(5) Galvanizing. Materials and methods to be used for hot-dip galvanizing shall conform to ASTM A 386. Materials to be galvanized are specified in this section or indicated on the Plans.

c. Pipe Ends. The ends of all pipe exposed within the structures shall be chipped or burred reasonably smooth and even with the interior surfaces of the structures and shall be smoothly covered with mortar.

d. Backfill. Backfill around the structures, including the outlet pad, shall be select, fine-grained soil from the structural excavation, and shall be compacted to 95 per cent density at optimum moisture as determined by AASHTO T99, Method A. Compaction shall be accomplished by backfilling in six-inch lifts and compacting each lift with pneumatic tampers. Water shall be added in the proper amounts to bring the backfill material to optimum moisture content.

e. Clean-up. The Contractor shall remove all form work, excess concrete, and debris from the site. The ground around the structures shall be neatly graded to uniform lines and grades.

7. Cast Iron Fittings.

a. Excavation and Backfill. All excavation and backfill shall conform to Section 5.05 of these Special Specifications.

b. Laying. Proper implements, tools, and facilities shall be provided and used by the Contractor for the safe and convenient prosecution of the work. All fittings and valves shall be carefully lowered into the trench, piece by piece, in such a manner as to prevent damage to the materials and protective coatings and linings. Under no circumstances shall material be dropped or dumped into the trench.

c. Valves and Valve Boxes. A valve box shall be provided for every valve that is to be buried in the ground. The valve box shall not transmit shock or stress to the valve and shall be centered and plumb over the wrench nut of the valve with the box cover flush with the surrounding surface, or such other level as may be directed.

D. Measurement and Payment.

1. Site Preparation. Payment for this item shall be included in the lump sum bid in the Bidder's Proposal for the appropriate bid item.

2. Pond Bottom Compaction. Payment for this item shall be included in the lump sum bid in the Bidder's Proposal for the appropriate bid item.

3. Embankment. Payment for this item shall be included in the lump sum bid in the Bidder's Proposal for the appropriate bid item.

4. Pit Run Gravel. Payment for this item shall be included in the lump sum bid in the Bidder's Proposal for the appropriate bid item.

5. Sewer Pipe and Trenching. Payment for this item shall be included in the lump sum bid in the Bidder's Proposal for the appropriate bid item.

6. Concrete Structures. Payment for this item shall be included in the lump sum bid in the Bidder's Proposal for the appropriate bid item.

7. Cast Iron Fittings. Payment for this item shall be included in the lump sum bid in the Bidder's Proposal for the appropriate bid item.

SECTION 5.11. SURFACE AERATORS

A. Scope. There shall be furnished and located as shown on the Plans, two floating surface aeration units capable of high oxygenation by entraining and dispersing atmospheric oxygen in large quantities with mixing and blending. Aerators shall be of a type which pumps liquid from well beneath the surface of the basin and discharges it radially at the surface with a high velocity impingement pattern.

B. Aerator Description. Each aerator shall consist essentially of a motor, a direct drive impeller driven at a constant speed, and an integral flotation unit which shall support the weight of the aeration unit. The units shall be Model FLTM-2-1 Floating Aqua-Lator surface aerators as manufactured by Welles Products Corporation, Roscoe, Illinois, or approved equal.

The drive motor shall be two horsepower and be connected for 230 volt, one-phase, 60-cycle electrical service. The motor shall be totally enclosed, fan cooled, chemical service type and be suitable for continuous service. The motor shall operate at a constant speed of 1750 rpm.

The impeller shall be cast of corrosion resistant type 304 stainless steel and dynamically balanced within 0.5 inch-ounces.

The flotation unit shall be constructed of polyester resin, reinforced with fiberglass mat and woven glass roving. The flotation unit shall be internally reinforced and filled with high-density polyurethane foam, foamed in place and completely sealed from the external environment. All wetted metal parts shall be of corrosion resisting high-nickel alloys and shall not require painting.

The flotation unit shall be equipped with not less than four stainless steel mooring eyes which shall be directly connected to the internal reinforcing structure.

All fasteners shall be of heavy, type 18-8 stainless steel.

Mooring or anchoring cable shall be 7 x 19 x 1/8 inch diameter aircraft type. Mooring hardware shall be of stainless steel and shall include a stainless steel thimble at each end of the cable and secured by not less than two wire rope clips at each thimble. The connection at the aerator shall be made with an appropriate size anchor shackle or an equivalent removable connector. Connections at the shore (or to suitable anchors, as shown on Plans) shall be by an appropriate ring attachment.

C. Installation. Each aerator shall be located substantially as shown on the drawings. The mooring or anchoring cables shall be installed as recommended by the manufacturer so the aerator will be permitted to rise and fall in a vertical movement, but shall have a minimum of lateral movement.

The electrical motor starters shall be mounted as shown on the Plans. The starters, wiring, and all electrical connections shall be as specified in Section 5.14, Electrical, of these Special Specifications.

D. Measurement and Payment. The floating aerators, all electrical controls and appurtenances shall be combined in a lump sum bid as set forth in the Bidder's Proposal - Schedule of Items and Prices.

Superseal

SECTION 5.12. CONCRETE

A. Scope. This section covers the work necessary for the concrete, complete, including but not limited to furnishing the materials; building and stripping concrete forms; proportioning, mixing, transporting, placing, and compacting, finishing, curing and protecting the concrete; installing construction joints and waterstops; setting the fastening embedded items; and all incidental and related work.

B. Materials.

1. Standard Specifications. Materials shall conform to the Standard Specifications for Reinforced Concrete, bound herewith, except as hereinafter modified.

The item numbers that follow refer to the item numbers of the Standard Specifications and the changes or additions modify and supplement the respective paragraphs.

B-1. Cement. Cement shall be Type II.

B-2. Water. Water shall be furnished by the Contractor from approved sources.

B-7. Concrete Admixtures. Pozzoloth for use in the concrete shall be Pozzoloth (Normal). Pozzoloth (high-early) will not be accepted.

B-12. Copper Waterstop. Not required.

B-13. Rubber Waterstop. Not required.

B-14. Labyrinth Waterstop. Not required.

C. Workmanship.

1. Standard Specifications. Workmanship shall conform to the Standard Specifications for Reinforced Concrete, bound herewith, except that the following Standard Specifications items shall be changed as indicated.

The item numbers which follow refer to the item numbers in the referenced Standard Specifications, and the changes or additions modify and supplement the respective paragraphs.

C-1.2. Proportions. All poured-in-place concrete incorporated in the construction of this plant shall develop a minimum 28-day compressive strength of 3,000 pounds per square inch (psi). As noted in Table I, Pozzoloth will be used in all concrete, added at the rate of 1/4-pound per sack of cement.

The following table indicates the approximate proportions and other details regarding the mix which will be required, based upon the use of local aggregates.

Before beginning any concrete work, the Contractor shall have the concrete mixes designed and the proper proportions of the various ingredients determined as specified hereinafter.

The mix designs shall be prepared at the Contractor's expense by a recognized inspection and testing laboratory approved by the Engineer and shall show the expected strength and corresponding slumps and all ingredient weights and other physical properties necessary to check the design mix. The mix design shall be checked by the laboratory by the preparation of trial batches from each of which four standard test cylinders shall be cast, cured, and tested, as specified for job concrete. Certified copies of all laboratory reports, stating whether the items reported pass Specifications, shall be sent promptly to the Engineer directly from the testing laboratory.

... TABLE I

Minimum 28-day compressive strength -----	3,000
Cement factor (sacks of cement per cubic yard)-----	6
Pozzolith <u>Normal</u> added (per sack of cement)-----	0.25 lb.
Maximum water per 94 pound (lb.) sack of cement (gallons)-----	5-1/2
Fine aggregate, percentage total aggregate by weight (range)-----	35 - 45
Slump range (inches)-----	2 - 4
Maximum size coarse aggregate (inches)-----	1-1/2
Entrained air content (per cent by volume) (range)--	3 - 5

In addition to the strength requirements, the concrete shall be dense and impermeable.

C-1.5. Water Content and Slump Range. All concrete shall be placed with a slump not greater than four inches unless a greater slump is directed by the Engineer.

C-2.2. Volumetric Measurement. Volumetric measurement shall not be used.

C-3.7. Air Entraining Admixture. Air entraining admixture shall be used for all concrete unless exception is specifically approved or directed by the Engineer. The amount and type of admixture used shall be compatible with use of Pozzolith Normal.

C-4. Forms. All concrete surfaces shall be poured against plywood or steel forms. The use of wall panel forms not exceeding two feet in width will be permitted for the tank walls. If panels are used, they shall be properly cleaned after each use and properly aligned and braced prior to start of the pour.

D. Measurement and Payment. Payment for the work under this section shall be included as part of the lump sum bid in the Bidder's Proposal under each appropriate Bid Item.

SECTION 5.13. REINFORCING STEEL

A. Scope. This section covers the work necessary for the reinforcing steel, including but not limited to furnishing all materials, including accessories; providing shop drawings; fabricating, bending, storing, placing, supporting, splicing, tying, and protecting the reinforcing steel.

B. Materials. All reinforcing steel shall conform to the requirements for reinforcing steel as set forth in the Standard Specifications for Reinforced Concrete, bound herewith.

C. Workmanship. The fabrication and placing of the reinforcing steel shall conform in all respects to the Standard Specifications for Reinforced Concrete, bound herewith, unless otherwise shown on the Plans or specified. Where necessary to cut bars for pipe or openings and where not shown otherwise, an equivalent area of steel shall be placed around the pipe or opening and extended on each side sufficient to develop bond in each bar. Where the Contractor desires to locate construction joints at points not shown on the Plans, he may do so provided the reinforcing steel shall be detailed accordingly. Where more construction joints than are shown on the Plans are desired by the Contractor, the extra cost of steel to provide splices at these additional construction joints shall be borne by the Contractor, and no additional payment shall be made by the Owner.

D. Measurement and Payment. Payment for this section shall be included as part of the lump sum bid in the Bidder's Proposal under each appropriate bid item.

SECTION 5.14. ELECTRICAL

A. General Provisions.

1. General.

- a. Section 1 of these Specifications: applies to this section.
- b. Electrical Work: sub-contract
- c. Refer to Bid Schedule: for Items in this Section to be bid as separate items.

2. Codes and Standards.

a. Codes and Permits: the entire installation in strict accord with the latest rules and regulations of the National Fire Protection Association and the electric bureau or inspector and the State of Idaho Electrical Code.

b. Materials and Apparatus: new and bear the inspection label of the Underwriters' Laboratories where applicable; standard catalog and production items unless otherwise specified.

3. Electrical Systems Schedule.

a. Temporary Electrical Services: temporary wiring for construction light and power for the General Contractor or other sub-contractors shall not be included as a part of this section of the work. Refer to the General Requirements regarding payment for the electrical energy used for construction light and power and testing of the new installation.

b. Work Included: a complete system for power as specified herein and/or indicated on the drawings, including furnishing and/or installing materials, apparatus and labor including but not limited to the following:

Secondary Service raceways and conductors.

Power Outlets.

Trenching and backfilling for underground raceways.

Connection of motors and appliances.

Supply, installation and connection of motor starters, push-buttons, and pilot lights, thermal overload switches, relays, etc. to control motors.

Supply, installation, and connection of motor disconnects.

4. Completion of Work and Tests. The entire electrical installation: complete in every detail as specified and/or indicated on the drawings, tested at full power load in the presence of the Engineer, ready for use and clear of all grounds and shorts.

5. Drawings.

a. All Contract Drawings are a part of the electrical work insofar as they apply, as if referred to in full.

6. Excavation and Backfill. Excavation and backfilling of trenches for raceways shall be included under this Section. Refer to the preceding Section pertaining to this type of work for methods to be used.

7. Field Design Changes. No changes in size, location, type, function, brand, finish, etc. shall be made without the specific permission or direction of the Engineer or his representative. Raceways and circuiting: exactly as indicated on the drawings.

8. Guarantee. The guarantees listed in the General Conditions shall apply to the electrical work.

9. Labeling.

a. Bolt Laminated Plastic (black with white core) Labels: on the exterior of disconnect switches, motor starters and controls and similar equipment. Labels to indicate the size and/or function of the equipment. Labels shall have 1/4-inch high engraved letters.

b. Label the Phase of each feeder conductor with plastic labels at each end and in junction or pull boxes.

10. Optional Materials.

a. Where More than One Brand of apparatus or materials are specified or is an approved substitution, the Contractor may use any of these at his option. For any specific item the same brand and model shall be used throughout this project.

b. The Contractor Shall Assume All Risks with regard to installation difficulty, completeness of fabrication, quality, packaging, etc. where those items may vary between the various manufacturers specified and for approved substitutions.

11. Shop Drawings.

a. Shop Drawings: submitted for approval on factory assembled or non-standard apparatus prior to ordering such items. Shop drawings: submitted in sufficient quantity to allow retention of one copy by the Engineer. In lieu of prints a reproducible transparency may be submitted. See General Conditions.

b. Contractor Review: Prior to submittal: mark the drawings in red to correct any discrepancies with the contract drawings and specifications. Each set: signed by the Contractor's representative to indicate they have been reviewed and corrected.

12. Storage and Protection of Materials. The electrician shall provide his own storage space for storage of his materials and apparatus and assume complete responsibility for all losses due to any cause whatsoever.

13. Substitutions. Brand names and catalog numbers: indicate the standards of quality and design required. Substitutions will be considered provided that written application is made at least seven calendar days prior to the bidding date, and written approval is obtained from the Engineer prior to the bidding date. Samples shall be provided where required by the Engineer.

14. Supervision by Contractor. The Contractor shall have a competent electrical superintendent in charge of the work at all times. Any person employed by the Contractor found incompetent: removed at once and replaced by someone satisfactory when requested by the Engineer.

B. Basic Materials and Methods.

1. Raceways and Fittings.

a. Rigid Steel Conduit:

(1) Conduit and Fittings: standard weight galvanized or sheradized steel, 3/4-inch minimum size, unless noted otherwise.

(2) Conduit joints in Concrete, Masonry, or Underground: made watertight with "red lead" or equivalent. Swab all such conduit dry before installing conductors.

(3) Conduit Run Underground and Couplings: cleaned and wrapped with Scotchrap No. 50 tape, or equal, overlapped as recommended by the manufacturer.

b. Rigid Aluminum Conduit:

(1) Rigid Aluminum Conduit, Elbows, and Couplings: conform to Underwriters' Laboratories Specification U/L-6, latest revision and ASA Specification C80.5. Installation: in accordance with manufacturer's recommendations.

(2) Aluminum Conduit: installed as specified above for rigid steel conduit and as noted below.

(3) A suitable petroleum base lubricant containing powdered zinc: applied to all field cut threads before joining or coupling.

(4) Use Round Flexible Fishtapes, Plastic Fishtapes, or Pressure-Propelled Fishing Lines for Fishing Conduit. These fishing devices or hemp or plastic ropes shall be used for pulling conductors. Approved supplementary wire lubricants may be used where necessary for difficult pulling conditions.

2. Conductors.

a. Branch Circuits: Copper, Type TW for No. 8 and smaller.

b. Power Cable: Copper, submersible type, four strand No. 14.

C. Service System.

1. Secondary Service Entrance.

- a. Characteristics: 120/240 volts, single-phase.
 - b. Type: Underground.
 - c. Raceways: as specified.
 - d. Conductors: as specified.
2. Metering. Provide metering facilities as directed by the utility company.
3. Grounding System.
- a. Standards: N.E.C.
 - b. Type: Service and equipment.
 - c. Visibility: All connections: visible.
 - d. System Energization: Not until service ground has been completed.

D. Electric Power Equipment

1. Safety and Disconnect Switches. Provide switches as indicated on the drawings; with fuses where indicated. Switches shall conform to NEMA Standard KS1-1957 Type HD. Enclosures: NEMA Type 3R. Covers shall have releasable (with wrench or screwdriver) interlocks connected to the operating handles. Fuses: provided as indicated on the drawings, Bussman "Fusetron" or equal in Econ or General Electric.

2. Motor Starters.

- a. Supply and Install Motor Starters: as indicated on the drawings for each motor.
- b. Enclosures: Drawn steel NEMA Type 3R or NEMA Type 4 with bolted cover fasteners and padlock hasp.
- c. Single-Phase Starters: Two overload relays (one per line), and two contacts. Overload relays: Set as directed by manufacturer of the motors. Starters shall have ambient temperature correction for overload trip units.
- d. Combination Motor Starters: Shall have a fused switch opening all line conductors. Provide "Fusetrons" for each switch.
- e. Brands: Allen-Bradley, Cutler-Hammer, Square-D, Westinghouse, or Furnas.
- f. Thermal Overload Switches: Surface mounted: Square-D Class 2510 Type AG with neon pilot light.

SECTION 5.15. LIFT STATION MODIFICATIONS.

A. Scope. This section covers the work necessary for modifying the existing lift station and treatment plant, including but not limited to demolition, sewage piping, valves, comminutor box, control building renovation and all incidental and related work necessary.

B. Materials.

1. Demolition. Refer to Section 5.02-B.
2. Sewage Piping. The proposed sewage piping around the lift station shall be standard Class 125 cast iron pipe of the dimensions shown on the Plans, with ends to suit the installation.
3. Valves. The proposed gate valves shall be standard eight-inch Class 125 iron body valves with bronze mounting and non-rising stem, complete with valve and valve box.
4. Comminutor Box. Refer to Section 5.12 for reinforced concrete specifications. Refer to Section 5.16 for comminutor details.
5. Control Building Renovation. The control building materials required for renovation shall include exterior oil base house paint, interior semi-gloss latex paint, all the proposed electrical equipment and all other equipment, tools and items necessary to complete the building renovation.

C. Workmanship.

1. Demolition. The items to be demolished or removed are shown on the Plans. The sludge pump and appurtenances shall be the property of the Owner and after removal shall be delivered to him. Underground piping and valves to be abandoned may be left in place. Should the Owner desire to salvage these items, it shall be accomplished at his expense. Refer to Section 5.02-C for demolition workmanship specifications.
2. Sewage Piping and Valves. The sewage piping and valves shall be installed by acceptable plumbing standards and shall be located according to the Plans.
3. Comminutor Box. The comminutor box shall be constructed in accordance with details shown on the Plans. All outside concrete corners shall be chamfered; also refer to Section 5.12 for reinforced concrete specifications.
4. Control Building Renovation. The entire exterior walls and gables shall be scraped, cleaned and painted with two coats of paint by professional painters. The interior walls and ceilings shall be mended, cleaned and painted with one coat of paint. The existing wall materials may remain, but shall be patched where the chlorine room walls intersect and the ceiling shall be renailed where sagging and patched where required. The proposed metal cover over the wet well opening shall also be primed and painted. All mechanical and electrical work listed on the Plans shall be completed before painting shall commence.

D. Measurement and Payment.

1. Demolition. Measurement and payment for all demolition and removal items outside the limits of the control building shall be included in a lump sum bid with the overall site demolition and removal as set forth in the Bidder's Proposal - Schedule of Items and Prices.

2. Sewage Piping, Valves, Comminutor, Comminutor Box and Control Building Renovation. Measurement and payment for all items other than demolition and site removal (outside the limits of the control building) shall be combined in a lump sum bid as set forth in the Bidder's Proposal - Schedule of Items and Prices.

SECTION 5.16. COMMINUTOR.

A. Scope. This section covers the work necessary for the comminutor, including but not limited to furnishing and installing the comminutor, and all incidental and related work necessary for a complete installation.

B. Materials.

1. Comminutor. The comminutor shall be a motor-driven unit which shall continuously shred solids found in sewage to a size that will pass through 1/4-inch slots in the rotating screen. It shall be capable of passing flows to .45 mgd. The comminutor shall be a Worthington model Size 7 operating continuously in a clockwise direction. The cutters shall be of one-piece design for ease of maintenance, and shall be made of hardened stainless steel. There shall be four rotating cutters and one stationary cutter. All adjustments to maintain initial rubbing fit shall be made on the stationary cutter. The rotating element shall be removable from the casing without disturbing piping connections.

The casing shall be of smooth, close-grained cast iron, and so designed hydraulically that reversing rotation is not necessary. The inlet shall be such that it fits a standard eight-inch 125-lb. ASA flanged inlet pipe. The comminutor shall have overflow ports (shall be fitted to provide for surcharged operation), and access handholes.

2. Gear Motor. The comminutor shall be driven by a 1/3-horsepower vertical gear motor for operating on a one-phase, 60-cycle, 115/230-volt power supply, and shall be weatherproof.

The gear motor shall be mounted directly on the comminutor in the closed-coupled arrangement.

C. Workmanship. The comminutor shall be installed in the location as shown on the Plans and in strict accordance with the manufacturer's recommendations and/or as directed by the Engineer. The manufacturer shall furnish, for approval of the Engineer, shop drawings showing all dimensions for installation, complete descriptive literature, wiring diagrams, etc., prior to installation of the equipment.

D. Measurement and Payment. Measurement and payment for furnishing and installing the comminutor and comminutor box shall be a lump sum bid as set forth in the Bidder's Proposal - Schedule of Items and Prices.

GENERAL SITE RECONSTRUCTION PROJECT
FARM LABOR CAMP
CALDWELL HOUSING AUTHORITY
CITY OF CALDWELL, CANYON COUNTY, IDAHO

DESCRIPTION OF BID ITEMS

SECTION 6.00. NO MISUNDERSTANDING.

The following brief descriptions of bid items are for the purpose of aiding the Bidder and Contractor in comprehending what is intended to be covered under each pay item; however, omission therein or a misunderstanding on the part of the Bidder or the Contractor shall in no event whatsoever constitute grounds for claims for any extra or additional payment beyond the amount shown in the bid item proposal. Bid items that are self-explanatory have no description other than "self-explanatory".

SECTION 6.01. FLOOR SLAB DEMOLITION - COMPLEX "D".

This bid item covers the work necessary to demolish, load, haul and stockpile concrete floor slabs under existing row shelter buildings in Complex "D". In order to give the Owner sufficient time to auction the row shelter buildings for their removal and yet clear the area for new building construction under another contract, a restrictive time limit is imposed. Liquidated damages totaling fifty dollars per day will be imposed for every day's delay beyond the specified completion date.

SECTION 6.01a. ALTERNATE FOR ROW SHELTER BUILDING DEMOLITION - COMPLEX "D".

This bid item covers the work necessary for pushing the existing row shelter buildings to a designated area for burning. All non-combustible materials will have to be hauled off the site and disposed of. This alternate bid item was included in case the buildings are still standing on the specified date for their floor slab removals. Therefore, the same time limit shall be imposed for building demolition as was set forth for floor slab removals.

SECTION 6.02. FLOOR SLAB DEMOLITION - COMPLEX "E".

This bid item description concerns row shelter Complex "E" but is similar to Section 6.01.

SECTION 6.02a. ALTERNATE FOR ROW SHELTER BUILDING DEMOLITION - COMPLEX "E".

This bid item description concerns row shelter Complex "E" but is similar to Section 6.01a.

SECTION 6.03. FLOOR SLAB DEMOLITION - COMPLEX "C".

This bid item description concerns row shelter Complex "C" but is similar to Section 6.01.

SECTION 6.03a. ALTERNATE FOR ROW SHELTER BUILDING DEMOLITION - COMPLEX "C".

This bid item description concerns row shelter Complex "C" but is similar to Section 6.01a.

SECTION 6.04. DEMOLITION AND SITE REMOVAL.

This bid item covers the work necessary to demolish and remove three comfort stations after disconnecting utilities; two existing concrete slabs; eight existing garages; one existing burned house; one existing sewage settling tank; one existing sewage digester; existing sludge drying beds; old car and truck bodies; all existing dead trees on the site; live trees within proposed paved areas; all irrigation culverts, siphons, head walls, cross drains, etc., as located on the street and alley plans; and any other miscellaneous site removals that will interfere with street and alley construction. This bid item does not include utility relocation.

SECTION 6.05. UTILITY RELOCATION.

This bid item covers the work necessary for relocating all utilities within proposed street, alley, and parking areas that will interfere with construction. The Contractor will be responsible for consulting the respective design drawings and making a site inspection to familiarize himself with the work. The Idaho Power Company will relocate all street light and service poles within these areas.

SECTION 6.06. STRIPPING, EXCAVATION, BACKFILL AND BASE COURSE.

This bid item covers the work necessary on all streets, alleys and parking lots with four inches of base course for construction below the leveling course.

SECTION 6.07. STRIPPING, EXCAVATION, BACKFILL AND BASE COURSE.

This bid item covers the work necessary on all paved areas with three inches of base course for construction below the leveling course.

SECTION 6.08. LEVELING COURSE.

This bid item is self-explanatory.

SECTION 6.09. PLANT MIX ASPHALT.

This bid item is self-explanatory.

SECTION 6.10. ASPHALT CURBS.

This Bid Item is self-explanatory.

SECTION 6.11. TWELVE-INCH CONCRETE IRRIGATION PIPE.

This Bid Item is self-explanatory.

SECTION 6.12. TEN-INCH CONCRETE IRRIGATION PIPE.

This Bid Item is self-explanatory.

SECTION 6.13. EIGHT-INCH CONCRETE IRRIGATION PIPE.

This Bid Item is self-explanatory.

SECTION 6.14. SIX-INCH IRRIGATION RISERS.

This Bid Item is self-explanatory.

SECTION 6.15. TWELVE-INCH STANDARD CONCRETE HEADGATE.

This Bid Item is self-explanatory.

SECTION 6.16. EIGHT-INCH IRRIGATION GATE VALVES.

This Bid Item is self-explanatory.

SECTION 6.17. IRRIGATION WEIR.

This Bid Item covers the work necessary for installing an irrigation weir in an open ditch. The Contractor shall consult the Black Canyon Irrigation District in Notus, Idaho for type and specifications.

SECTION 6.18. IRRIGATION OVERFLOW SIPHON.

This Bid Item is self-explanatory.

SECTION 6.19. EIGHTEEN-INCH STORM SEWER PIPE.

This Bid Item is self-explanatory.

SECTION 6.20. TEN-INCH STORM SEWER PIPE.

This Bid Item is self-explanatory.

SECTION 6.21. EIGHT-INCH STORM SEWER PIPE.

This Bid Item is self-explanatory.

SECTION 6.22. STANDARD CATCH BASIN.

This Bid Item is self-explanatory.

SECTION 6.23. INDIVIDUAL HOME LANDSCAPING.

This Bid Item covers the work necessary for grass seeding around the 47 individual houses in areas between the proposed rear fence and the proposed street in front where no lawn exists at present.

SECTION 6.24. OTHER LANDSCAPING.

This Bid Item covers the work necessary for seeding all proposed landscape areas other than immediately around the individual homes. Specified areas shall be watered by the Contractor.

SECTION 6.25. FOUR-STRAND FENCE.

This Bid Item is self-explanatory.

SECTION 6.26. TWENTY-FOUR-INCH METAL GATE.

This Bid Item is self-explanatory.

SECTION 6.27. TWELVE-FOOT METAL GATES.

This Bid Item is self-explanatory.

SECTION 6.28. CHAIN GATES.

This Bid Item is self-explanatory.

SECTION 6.29. CLOTHES LINE POLES.

This Bid Item is self-explanatory.

SECTION 6.30. CLOTHES LINE WIRE.

This Bid Item is self-explanatory.

SECTION 6.31. STANDARD MANHOLES.

This Bid Item is self-explanatory.

SECTION 6.32. SEWAGE LAGOONS.

This Bid Item covers the work necessary to complete the basic earthwork required on the sewage lagoon ponds but does not include concrete structures and lagoon appurtenances.

SECTION 6.33. LAGOON INLET STRUCTURE.

This Bid Item is self-explanatory.

SECTION 6.34. TRANSFER STRUCTURE NO. 1.

This Bid Item is self-explanatory.

SECTION 6.35. TRANSFER STRUCTURE NO. 2.

This Bid Item is self-explanatory.

SECTION 6.36. TRANSFER STRUCTURE NO. 3.

This Bid Item is self-explanatory.

SECTION 6.37. OUTLET STRUCTURE.

This Bid Item is self-explanatory.

SECTION 6.38. EIGHT-INCH DRAIN VALVE.

This Bid Item is self-explanatory.

SECTION 6.39. SIX-INCH DRAIN VALVE.

This Bid Item is self-explanatory.

SECTION 6.40. EIGHT-INCH INLET PIPE.

This Bid Item is self-explanatory.

SECTION 6.41. INLET PAD AND SUMP.

This Bid Item is self-explanatory.

SECTION 6.42. FLOATING AERATORS.

This Bid Item covers the work necessary to install two, 2-horsepower floating aerators complete with all Mechanical and Electrical appurtenances.

SECTION 6.43. METAL FRAME AND ANCHOR POSTS.

This Bid Item is self-explanatory.

SECTION 6.44. CHLORINE DISCHARGE RENOVATION.

This Bid Item covers the work necessary to disconnect the existing outlet facilities from the chlorine discharge pipe, revise the outlet facilities to accommodate the lagoon expansion and reconnect the chlorine discharge pipe into the revised facilities.

SECTION 6.45. CONTROL BUILDING RENOVATION.

This Bid Item covers the work necessary to update the existing lift station control building and yard piping and valves to facilitate an in-line comminutor. This Bid Item does not include the comminutor, comminuter box and controls, manhole or exterior demolition.

SECTION 6.46. COMMINUTOR.

This Bid Item covers the work necessary to furnish and install the in-line comminutor, comminutor box, and all electrical controls and wiring.

STANDARD SPECIFICATIONS

for

REINFORCED CONCRETE

STANDARD SPECIFICATIONS
FOR
REINFORCED CONCRETE

Reference herein is made to standards, tests, methods, and specifications of research and technical organizations, as follows:

ASTM American Society for Testing Materials
AASHO American Association of State Highway Officials

<u>Item</u>	<u>Standard Specification, Test, or Method Designation</u>	
	<u>ASTM</u>	<u>AASHO</u>
B-1. Cement	C 150	
B-3. Concrete Aggregates	C 33, C 87	
B-5. Steel Reinforcement	A 305, A 15, A 185, A 82	
B-7. Air-Entraining Admixture	C 260	
B-8. Asphalt		M 18-52, M 115-42
B-9. Rubber Asphalt Seal	D 1190	
B-10. Premoulded Joint Filler	D 994, D 544	M 33-48, M 153-54
B-12. Copper Waterstop	B 152	
C-7. Tests of Concrete	C 31, C 39	

B. Materials.

B-1. Cement. Cement used shall conform to the ASTM C 150, except that the total alkali content, when determined as the mixed sulphates of sodium and potassium and calculated to sodium oxide, shall not be greater than 0.6 to 1 percent. Unless otherwise specified in the Special Specifications or authorized by the Engineer, Type I cement shall be furnished unless the Type I cement normally produced by the mill furnishing the cement does not meet the above alkali content requirements in which case Type II cement shall be furnished.

B-2. Water. Water for concrete shall be clean and free from injurious amounts of oil, acid, alkali, organic matter, or other deleterious substances. Water furnished by the Owner will be considered as meeting the above requirements.

B-3. Concrete Aggregates. Concrete aggregates shall conform to ASTM C 33, or to the applicable specifications of the State Highway Department for Bridge Construction of the state in which the work is to be performed. Fine aggregate, when tested in accordance with ASTM C 87, shall develop a compressive strength at 7 and 28 days of not less than 85 percent of that developed by the

mortar specified in that method as the basis of comparison. The size of coarse aggregate shall be that specified in the Special Specifications.

B-4. Nonshrinking Aggregate. The nonshrinking aggregate or admixture shall be a metallic material which will reduce shrinkage and shall be similar to "Embeco" manufactured by Master Builders Company.

B-5. Steel Reinforcement. Reinforcement shall be plain or deformed steel bars or cold-drawn steel wire, or fabricated forms of these materials as required by the Plans or the Specifications, or both. Bar reinforcing shall conform to ASTM A 15 and A 305. Cold-drawn steel wire and welded wire fabric shall conform to ASTM A 82 and A 185, respectively. Deformed bars shall be intermediate grade, unless otherwise specified under the Special Specifications.

B-6. Forms. Plywood or steel forms shall be used on all exposed wall surfaces and shall extend to a minimum of six inches below finished grade on exterior surfaces or the normal water line on the inside of uncovered basins unless otherwise specified. Lumber used in forms for surfaces where plywood is not required shall be dressed to a uniform thickness and shall be free from loose knots or other defects. Upon approval by the Engineer, steel or plywood panel forms may be used to form walls of structures, including those of circular shape.

B-7. Air-Entraining Admixture. The cement dispersion of air-entraining admixture furnished shall be approved by the Engineer and shall conform to ASTM C 260 or U. S. Army Corps of Engineers Specification CRD 13-54.

B-8. Asphalt. Where specified on the Plans, surfaces of concrete at joints shall be painted with asphalt meeting AASHTO M 115-42.

Asphalt used in the sealing of expansion joints with copper or rubber waterstops shall be of such grade that it will hold its position in sloping joints but will remain permanently pliable. An asphalt primer shall be used with the sealing asphalt. Poured asphalt filler shall conform to AASHTO M 18-52 and shall have a specific gravity greater than one.

B-9. Poured Rubber-Asphalt Joint Sealing Material. Poured rubber-asphalt joint sealing material shall conform to Federal Specification SS-S-164 and ASTM D 1190.

B-10. Premoulded Joint Filler. Premoulded joint filler shall be a bituminous type conforming to AASHTO M 33-48 and ASTM D 994. Bituminous cellular types conforming to AASHTO M 153-54, Type III, and ASTM D 544, Type III, may be used in dry interior locations. Where sponge rubber type is shown on the Plans, it shall be cement color conforming to AASHTO M 153-54, Type I, and ASTM D 544, Type III.

B-11. Steel Waterstop for Construction Joints. Steel waterstops in construction joints shall be 16-gauge, hot-dip galvanized sheet metal. Width shall be six inches unless otherwise noted on the Plans.

B-12. Copper Waterstop. Copper waterstop as called for on the Plans shall be carefully formed of cold-rolled sheet copper not lighter than 18 ounces, in accordance with the details given on the Plans. The copper sheet

used shall be light, cold-rolled strip conforming to ASTM B 152.

B-13. Rubber Waterstop. Rubber waterstop shall be moulded or extruded and shall be fabricated from a high-grade, tread-type compound. Waterstops shall be similar and equal to Gates Type C. Intersection pieces shall be furnished to provide a continuous seal.

B-14. Labyrinth Waterstop. Labyrinth-type waterstop shall be of size shown on the Plans and shall be Harza Labyrinth-Type waterstop as supplied by Water Seals, Inc.

B-15. Plastic Waterstop. Plastic waterstop shall be compounded from polyvinyl chloride and shall have the following properties:

Minimum ultimate elongation	250 percent
Minimum tensile strength	2,000 psi
Brittle temperature	-23 degrees C.
Shore Durometer Type "A" hardness	80, approximately

Plastic waterstop shall be resistant to alkalies, acids, salt water, fungi, petroleum products, sewage and organic compounds. Specific gravity shall be approximately 1.37. Waterstop shall be uniform in dimensions, homogeneous, and free from porosity. Minimum thickness shall be 3/16 inch and minimum width 6 inches for ordinary conditions. Where joint translation or separation in excess of 1/4 inch is anticipated, minimum thickness shall be 1/4 inch. Other sizes may be indicated on the Plans or in the Special Specifications. Acceptable waterstops include the following: Multi-Seal, Tecon Products, Inc.; Nervastral, Rubber & Plastics Compound Company, Inc.; Plastigrip (standard), Progress Unlimited, Inc.; Flex-Bulb, Water Seals, Inc.; Polyvinyl Dumbell, Servicised Products Corp. The Engineer will consider use of waterstops other than those listed if the Contractor submits samples of the waterstop he proposes to use, but all waterstops shall be straight in cross section with a number of parallel ribs or bulbs on each side of the center of the strip. Corrugated type waterstops are not acceptable.

B-16. Floor Hardener (Surface-Applied). Floor hardener shall be colorless, aqueous solution of zinc and/or magnesium fluosilicate, or of sodium silicate. Each gallon of the fluosilicate solution shall contain not less than 2 pounds of crystals. The sodium silicate solution shall be 32 percent by volume of 42-degree Baume sodium silicate. An approved proprietary hardener such as Saniseal as manufactured by the Master Builders Company may be used provided the solution is delivered ready for use in the manufacturer's original containers.

C. Workmanship.

C-1. Proportioning.

C-1.1. Submission of Samples of Materials. Immediately upon receipt of notification to begin work and upon request of the Engineer, the Contractor shall submit to the Engineer samples of the aggregate which he proposes to use in the construction, together with samples of the cement and air-entraining or cement-dispersion admixtures which he plans to use.

C-1.2. Proportions. Proportions indicated in Table I of the Special Specifications will provide the basis for estimating the type of mixture and the materials and methods necessary for placing the concrete and are based on the use of aggregates available locally in the vicinity of the work. The actual proportions to be used will be based on tests made on samples of the aggregate, cement, and admixture submitted by the Contractor. The Engineer will make the necessary test and design the mixture. The Owner will bear the expense of the tests necessary to design the concrete mixture for one set of aggregate samples. Should the Contractor desire tests run or mixtures designed for additional samples of aggregate, such tests shall be made by the Engineer but shall be at the expense of the Contractor. Acceptance by the Engineer of a given aggregate on the basis of preliminary tests shall not prevent the Engineer from later rejecting aggregate from the same source if subsequent tests indicate that the aggregate no longer meets the requirements for grading and quality given herein.

The cement factor specified is that required for concrete of the desired strength using local aggregates. The Contract is to be based on this cement factor and the other proportions specified. If the subsequent mix design indicates a change from the specified cement content is necessary, the Engineer may order such change, and the Contract price shall be increased or diminished accordingly in proportion to the increase or reduction of cement and the current market price of cement in the locality unless otherwise provided for in the Proposal. This price adjustment shall be made on the basis of cost to the Contractor of cement only, without allowance for overhead, profit, anticipated profits or other indirect costs. If the Contractor chooses to use other than local aggregate, and greater or less cement than that specified for local aggregate is required to obtain the desired strength, or if he elects to increase the cement factor to correct for shortages of fines in the aggregate, no adjustment of the Contract price will be made. Strength determinations will be made as specified under Item C-7.

C-1.3. Cement Factor. The cement factor given in the Special Specifications indicates the number of 94-pound sacks of cement per cubic yard of concrete when the concrete is in a freshly mixed condition. The volume of the freshly mixed concrete shall be assumed to be the absolute volume of the cement, plus the volume of the mixing water, plus the displaced volumes of the saturated, surface-dry aggregates. The quantity of mixing water to be used in this calculation shall not include water absorbed by the aggregates.

C-1.4. Variations in Proportions. In order to obtain proper workability and a smooth, dense, homogeneous, plastic mixture, free from segregation, the percentage of fine aggregate may be varied during the progress of the work with the approval of the Engineer.

C-1.5. Water Content and Slump Range. The maximum quantity of water per 94 pounds of cement specified in the Specifications shall include the free water in the aggregates; however, moisture absorbed by the aggregates shall not be included. The slump range indicated in the Special Specifications is intended as a guide to the Contractor for the determination of placing and compacting procedures and equipment. Within the range specified, the slump shall be as directed by the Engineer. If the concrete has a greater slump than the maximum indicated, the proportion of water shall be reduced to meet the slump requirements. If the concrete has a smaller slump than the minimum indicated, changes in the mixture shall be made as specified in

Item C-1.4 or water may be added with the approval of the Engineer.

C-2. Measurement of Materials.

C-2.1. Weight Measurement. Materials shall be measured by weighing. The apparatus provided for weighing the aggregates and cement shall be suitably designed and constructed for this purpose. Each size of aggregate and the cement shall be weighed separately. The accuracy of all weighing devices shall be such that successive quantities can be measured to within one percent of the desired amount. Cement in standard packages (sack) need not be weighed. The mixing water shall be measured by volume or by weight. The accuracy of the water measuring device shall be within 0.5 percent of the capacity of the tank. All measuring devices shall be subject to approval.

C-2.2. Volumetric Measurement. Where volumetric measurements are authorized by the Engineer, the weight proportions shall be converted to equivalent volumetric proportions. In such case, suitable allowance shall be made for variations in the moisture condition of the aggregates, including the bulking effect in the fine aggregate.

C-2.3. Measurement of Air-Entraining Admixture. Accurate means of measuring the amount of air-entraining admixture shall be provided, and the mix shall be carefully controlled to maintain an entrained air content of not less than three percent nor more than six percent.

C-3. Mixing.

C-3.1. Equipment. The mixing equipment shall be capable of combining the aggregates, cement, and water within the specified time into a thoroughly mixed and uniform mass and of discharging the mixture without segregation.

C-3.2. Machine Mixing (at Site or at Central Mixing Plant). Unless otherwise authorized by the Engineer, the mixing of concrete shall be done in a batch mixer of approved type. The equipment at the mixing plant shall be so constructed that all materials (including the water) entering the drum can be accurately proportioned and be under control. The entire batch shall be discharged before recharging. The volume of the mixed material per batch shall not exceed the manufacturer's rated capacity of the mixer. Except as qualified in Items C-3.3 to C-3.5, mixing of each batch shall continue for the periods indicated below, during which time the drum shall rotate at a peripheral speed of about 200 feet per minute. The mixing periods shall be measured from the time when all of the solid materials are in the mixer drum, provided that all of the mixing water shall be introduced before one-fourth of the mixing time has elapsed.

Mixing time shall be as follows:

- (1) for mixers of a capacity of 1 cubic yard or less, 1-1/2 minutes; and,
- (2) for mixers of capacities larger than 1 cubic yard, the time of mixing shall be increased 15 seconds for each additional half cubic yard capacity or fraction thereof.

C-3.3. Truck Mixing. Truck mixers shall be watertight and, unless otherwise authorized by the Engineer, shall be of the revolving drum type. All solid materials for the concrete shall be accurately measured in accordance with Item C-2 and charged into the drum at the proportioning plant. The mixing water may be added directly to the batch, but all truck mixers shall be equipped with a tank for carrying mixing water. When water is to be added subsequent to dry charging at the plant, only the prescribed amount of water shall be placed in the tank unless the tank is equipped with a device by which the quantity of water added can be readily verified. The maximum size of batch in truck mixers shall be in accordance with the specified rating. Truck mixing shall be continued for not less than fifty revolutions after all ingredients, including the water, are in the drum. The speed shall not be less than 4 rpm nor more than a speed resulting in a peripheral velocity of the drum of 225 feet per minute. Not more than 150 revolutions of mixing shall be at a speed in excess of 6 rpm. Mixing shall begin within 30 minutes after the cement has been added either to the water or aggregate.

C-3.4. Partial Mixing at Central Plant. When a truck mixer or an agitator provided with adequate mixing blades is used for transportation, the mixing time at the stationary machine mixer may be reduced to 30 seconds and the mixing completed in a truck mixer or agitator. The mixing time in the truck mixer or agitator equipped with mixing blades shall be as specified for truck mixing in Item C-3.3.

C-3.5. Time of Hauling Ready-Mixed Concrete. Concrete transported in a truck mixer, agitator, or other transportation device shall be discharged at the job within 1-1/2 hours after the cement has been added to the water or the aggregates. The maximum volume of mixed concrete transported in an agitator shall be in accordance with the specified rating.

C-3.6. Retempering. The rettempering of concrete or mortar which has partially hardened--that is, mixing with or without additional cement, aggregate, or water--will not be permitted.

C-3.7. Air-Entraining Admixture. The air-entraining admixture shall be added to the mixer at the time of mixing in such a manner as to insure uniform distribution of the admixture throughout the batch. Air-entraining admixture shall not be used unless suitable means for determining air content in the freshly mixed concrete are available. At the option of the Engineer, entrained air may be eliminated in interior slabs on ground and at other locations where appearance may be of greater importance than additional durability and strength.

C-4. Forms.

C-4.1. General. Forms shall conform to the shape, lines, grades, and dimensions of the concrete as called for on the Plans, unless otherwise approved by the Engineer. Lumber once used in forms shall have nails withdrawn and surfaces to be in contact with concrete thoroughly cleaned before being used again. Reuse of forms and form lumber will be permitted only when the condition of forms or form lumber is approved by the Engineer.

Suitable moldings or fillets shall be placed in the tops of the forms and in the crotch of the forms to bevel all concrete edges. Moldings shall also be placed on all discontinuous edges. Bevels shall be approximately 3/4 inch

in depth. All bevels and fillets, except where especially detailed on the Plans, shall be the same size. Where the tops of walls are given a trowel finish, an edging tool may be used instead of fillets.

C-4.2. Design. Forms shall be sufficiently tight to prevent leakage of mortar. They shall be properly braced or tied together so as to maintain the desired position and shape during and after placing concrete. Bolts and rods shall preferably be used for internal ties. Ties for water-holding structures and on walls exposed to weather or earth shall have the conical or spherical type heads and shall be so constructed that when the forms are removed no metal shall be within 5/8 inch of any surface. The Engineer may direct the use of one type of head where appearance is important. Flat, washer type heads may be used on concealed walls which are to receive a finish coat of stucco, plaster, or wallboard. In general, openings shall be provided such that concrete is dropped no farther than six feet in walls eight inches or less in width and not more than twelve feet otherwise. Temporary openings shall be provided at the base of wall forms and at other points where necessary to facilitate cleaning and inspection immediately before depositing concrete.

C-4.3. Oiling. The inside of forms shall be coated with non-staining mineral oil or other approved material. Where oil is used, it shall be applied before the reinforcement is placed.

C-4.4. Removal of Forms. The removal of forms shall not be started until the concrete has attained the necessary strength to support its own weight and any construction live loads as well as strength to prevent cracking or chipping when the forms are removed. Forms and shoring for aboveground slabs or beams shall remain in place a minimum of 14 days or until the concrete has reached a compressive strength equal to 2/3 the specified 28-day compressive strength as determined by test cylinders (See Item C-7).

C-5. Steel Reinforcement.

C-5.1. Storage. Steel reinforcement not placed in the work shall be stored under cover to prevent rusting and shall be placed on blocking such that no steel touches any ground surface.

C-5.2. Fabrication. The Contractor shall submit detailed placing drawings and bending lists in triplicate for the Engineer's approval before the reinforcement is fabricated. The details shall, in general, follow the Manual of Standard Practice for Detailing Reinforced Concrete Structures of the American Concrete Institute. The Contractor is not required to use the exact arrangement of reinforcement shown, provided the same area and perimeter of reinforcement are provided at all sections and any changes in the Plans are approved by the Engineer. Reinforcement shall be accurately formed to the dimensions indicated on the Plans and the bending details. Bends for bars other than hooks, stirrups, and ties shall be made around a pin having a diameter not less than six times the minimum thickness of the bar. All bars shall be bent cold.

C-5.3. Cleaning. Metal reinforcement, before being positioned, shall be free from loose mill scale, rust, oil, earth, and from any coatings. After positioning, the reinforcement shall be free of any coating which will destroy or reduce the bond, including oil, dirt, ice, or old concrete. Where

there is a delay in depositing concrete, reinforcement shall be reinspected and cleaned when necessary.

C-5.4. Straightening and Rebending. Metal reinforcement shall not be straightened or rebent in a manner that will injure the material. Bars with kinks or bends not shown on the Plans shall not be used. Heating of the reinforcement will be permitted only when the entire operation is approved by the Engineer.

C-5.5. Placing Reinforcement.

C-5.5.1. Positioning. Metal reinforcements shall be accurately positioned and secured against displacement by using annealed iron wire ties or suitable clips at intersections, or by welding, and shall be supported by concrete or metal supports, spacers, or metal hangers. Where concrete block supports are used, such blocks shall be of concrete of the same strength and density as required for the structural concrete. Galvanized metal chairs shall be used to support reinforcement in exposed concrete slab ceilings.

C-5.5.2. Spacing. The minimum clear distance between parallel bars, except in columns, shall be equal to the nominal diameter of the bars, but in no case shall the clear spacing between the bars be less than one inch nor less than one and one-third times the maximum size of the coarse aggregate. Where reinforcement in beams or girders is placed in two or more layers, the clear distance between layers shall be not less than one inch, and the bars in the upper layers shall be placed directly above those in the bottom layer.

C-5.5.3. Protection. At those surfaces of footings, walls, and other principal structural members in which the concrete is deposited directly against the ground or gravel backfill, metal reinforcement shall have a minimum covering of three inches of concrete. At other surfaces of concrete exposed to the ground or to the weather, metal reinforcement shall be protected by not less than two inches of concrete for bars 5/8 inch or more in diameter and one and one-half inches of concrete otherwise. In other cases, protection shall be not less than three-fourths inch for slabs and walls and not less than one and one-half inches for beams, girders, and columns, but in no case less than the diameter of the bar.

C-5.5.4. Splicing. When it is necessary to splice reinforcement at points other than shown on the Plans, the character of the splice shall be determined by the Engineer. In all splices, the bars shall be placed in contact and wired and the lap shall be at least 24 times the diameter of the bar and a minimum of 12 inches, unless otherwise shown on the Plans. Splices in adjacent bars shall be staggered.

C-5.5.5. Reinforcement Around Openings. Where necessary to cut bars for pipe or openings and where not shown otherwise, an equivalent area of steel shall be placed around the pipe or opening and extended on each side sufficiently to develop bond in each bar.

C-5.5.6. Placing Wire Mesh. Wire mesh reinforcement used in slabs shall be placed at the depth shown on the Plans. The fabric shall extend to within two inches of the edges of the slab, and splices shall be lapped at least one and one-half courses and a minimum of 6 inches. The

fabric shall be carefully pulled into position as the concrete is placed by means of hooks, and concrete worked under the steel to insure that it is placed at the proper distance above the bottom of the slab. Laps and splices of the fabric shall be tied together with annealed wire at least every 24 inches.

C-6. Placing Concrete.

C-6.1. General. Before beginning placement of concrete, hardened concrete and foreign materials shall be removed from the inner surface of the mixing and conveying equipment. Before depositing concrete, debris shall be removed from the space to be occupied by the concrete; forms, if constructed of lumber, shall be thoroughly wetted (except in freezing weather) or oiled. Reinforcement shall be thoroughly secured in position and approved by the Engineer before concrete is placed.

C-6.2. Removal of Water. Except when the tremie method is specified, water shall be removed from the space to be occupied by the concrete before it is deposited, unless otherwise directed by the Engineer. Any flow of water into an excavation shall be diverted through proper side drains to a sump or be removed by other approved methods which will avoid washing the freshly deposited concrete.

C-6.3. Handling. Concrete shall be handled from the mixer or, in the case of ready-mixed concrete, from the transporting vehicle to the place of final deposit as rapidly as practicable by methods which shall prevent the separation or loss of the ingredients. Under no circumstances shall concrete that has partially hardened be deposited in the work. Concrete shall be deposited in the forms as nearly as practicable in its final position to avoid rehandling. It shall be so deposited as to maintain, until the completion of the unit, a plastic surface approximately horizontal. During a pour, vertical lifts or layers greater than one and one-half feet in depth shall not be allowed in pouring wall sections. Total vertical lifts made in a single pour shall not exceed 10 feet in height unless otherwise shown on the Plans or approved by the Engineer. Forms for walls or thin sections of considerable height shall be provided with openings or other devices that will permit the concrete to be placed in a manner preventing segregation and accumulations of hardened concrete on the forms or metal reinforcement above the level of the concrete. Concrete shall be dropped no farther than six feet in walls eight inches or less in width, unless approved by the Engineer, and in no case more than twelve feet unless chutes or trunks are used. Where concrete is dropped more than two feet vertically, the buggy, the bucket, or the lower end of the chute from which the concrete is discharged shall be so positioned that the concrete is released within two feet horizontally of its final position. When deposited in the forms, concrete shall have the required quality, regardless of the type of transporting vehicle.

C-6.4. Chuting. When concrete is conveyed by chutes, the equipment shall be of such size and design as to insure a continuous flow in the chute. The slope shall not be less than one vertical to two horizontal and shall be such as to prevent the segregation of the ingredients. The discharge end of the chute shall be provided with a baffle plate to prevent segregation. When the operation is intermittent, the chute shall discharge into a hopper. The chute shall be thoroughly cleaned before and after each run, and the debris and any water used shall be discharged outside the forms.

C-6.5. Compacting. Concrete, during and immediately after depositing, shall be worked into place and thoroughly compacted by mechanical vibration. The concrete shall be thoroughly worked around the reinforcement and into the corners of the forms. Accumulations of water on the surface of the concrete due to water gain, segregation, or other causes during placement and compacting shall be prevented as far as possible by adjustments in the mixture. Provision shall be made for the removal of such water as may accumulate so that under no circumstances will concrete be placed in such accumulations. The number and type of vibrators shall be subject to the approval of the Engineer. Internal vibrators shall be used. Vibration will not be applied through the reinforcement, either directly or indirectly. Vibration shall not be applied to layers of concrete which have hardened to the extent the concrete is no longer plastic. Vibration shall be continued at each point of application until a decrease in volume is no longer apparent and all trapped air has been removed but shall not be continued to the extent that localized areas of grout are formed. Vibration shall be applied at evenly spaced points not farther apart than the radius over which vibration is visibly effective such that the entire volume of concrete receives vibration. Vibration shall not be used to make concrete flow in the forms over distances so great as to cause segregation.

C-6.6. Depositing Continuously. Concrete shall be deposited continuously or in layers of such thickness that no concrete will be deposited on concrete which has hardened sufficiently to cause the formation of seams and planes of weakness within the section. If a section cannot be placed continuously, construction joints may be located at points as provided for in the Plans or approved by the Engineer.

C-6.7. Bonding. Before depositing new concrete on or against concrete which has hardened, the forms shall be retightened. The surface of the hardened concrete shall be roughened as required by the Engineer in a manner that will not leave loosened particles of aggregate or damaged concrete at the surface. It shall be thoroughly cleaned of foreign matter and laitance and saturated with water. In case oil has been spilled on the surface to be bonded, this oil must be removed by chipping out the oil-saturated concrete. To insure an excess of mortar at the juncture of the hardened and the newly deposited concrete, the cleaned and saturated surfaces, including vertical and inclined surfaces, shall first be thoroughly covered with a coating of mortar against which the new concrete shall be placed before the grout has attained its initial set. On horizontal construction joints, at least two inches of grout shall be provided. The proportions of sand and cement in the grout shall be the same as those for sand and cement in the concrete mixture, and only sufficient water to provide a consistency similar to that of thick cream shall be used.

C-6.8. Depositing in Cold Weather. Adequate equipment shall be provided for heating the concrete materials and protecting the concrete during freezing or near-freezing weather. No frozen materials or materials containing ice shall be used. All concrete materials and all reinforcement, forms, fillers, and ground with which the concrete is to come in contact shall be free from frost.

Whenever the temperature of the surrounding air is below 40 degrees Fahrenheit, all concrete, when placed in the forms, shall have a temperature of between 50 and 90 degrees Fahrenheit and shall be maintained at a

temperature of not less than 45 degrees Fahrenheit for at least 72 hours for normal concrete or 24 hours for high-early-strength concrete, or for as much more time as is necessary to insure proper rate of curing of the concrete. The housing, covering, or other protection used in connection with curing shall remain in place and intact at least 24 hours after the artificial heating is discontinued. No dependence shall be placed on salt or other chemicals for the prevention of freezing. Manure, when used for protection, shall not be allowed to come into contact with the concrete. Calcium chloride in amounts not exceeding 2 percent by weight of cement may be used to accelerate setting and reduce the period of protection required to a minimum of 24 hours, but under no circumstances is the calcium chloride to be considered an "antifreeze."

C-7. Tests of Concrete. During the progress of construction, the Engineer will make or have tests made to determine whether the concrete as being produced complies with the standard specified. The Contractor shall cooperate in the making of such tests to the extent of allowing free access to the work for the selection of samples and storage of specimens, assistance in casting cylinders, and in affording protection to the specimens against injury or loss through his operations. Specimens shall be made, cured, and tested in accordance with ASTM C 31 and C 39.

The Engineer will verify strengths by laboratory tests made during the progress of the work. When a ratio between 7-day and 28-day strengths has been established by these tests or by preliminary tests, the 7-day strengths may be taken as a satisfactory indication of the 28-day strengths. Field strength shall be assumed as equal to 85 percent of the strength of laboratory-cured cylinders. The required compressive strength of concrete proportioned in accordance with Table I of the Special Specifications is the field strength.

C-8. Finish.

C-8.1. General. Concrete which requires finishing shall not be poured until the materials, tools, and labor necessary for finishing the wet concrete are on the job and approved by the Engineer. All horizontal surfaces shall be steel troweled unless otherwise specified.

C-8.2. Ordinary Wall Finish. Immediately after removal of the forms, all rock pockets, form tie holes, and other irregularities shall be pointed up with a dry, tamped-in mixture of sand and cement as specified in C-10, then cured as specified under C-9. After the pointings have set sufficiently, all form marks and pointing shall be ground or rubbed to give a smooth surface nearly even with the flat wall surface.

C-8.3. Rubbed Wall Finish.

C-8.3.1. Class I. The rubbing shall be done immediately after the patching of rock pockets and form tie holes have set sufficiently. In all cases, except where it is structurally impossible to remove the forms within five days, the rubbing shall be done preferably the day following the pour, and in no case more than five days after the pour has been completed. Immediately after removal of the forms, all rock pockets, form tie holes, and other irregularities shall be pointed up with a dry, tamped-in mixture of sand and cement in the proportions of the original pour as specified in Item C-10. After the pointings have set sufficiently to permit working on the surface,

the entire surface shall be thoroughly saturated with water for a period of three hours and rubbed until a uniform surface is obtained, either by hand with a carborundum stone of medium-coarse grade, or an abrasive of equal quality, or a mechanically operated carborundum stone. A small amount of mortar shall be used on the face of the stone. The mortar shall be a mixture of cement and fine sand in proportions used in the concrete being finished. If a mechanically operated carborundum stone is to be used, its type shall be approved by the Engineer before the concrete has been poured. The paste formed by rubbing, as described above, may be finished by carefully striking with a clean brush, or it may be spread uniformly over the surface and allowed to take a reset, after which it may be finished by floating with a canvas, carpet face, or cork float, or rubbed down with dry burlap. Brushing shall be done in the long direction of the surface being finished.

C-8.3.2. Class II. Rubbed wall finish, Class II, shall conform to the requirements for Class I, above, except that the paste obtained from the described rubbing shall be allowed to set at least 24 hours. After thoroughly saturating with water, the surface shall then be painted with a mixture of 85 percent cement and 15 percent lime with sufficient water to give a creamy consistency. This mixture shall be rubbed into the surface with a coarse carborundum stone and brushed with a damp brush. Brushing shall be done in the long direction of the surface being finished.

C-8.4. Monolithic Floor Finish. Slabs and floors shall be thoroughly compacted by vibration or tamping, screeded to a straight and true surface, and floated with a wood float or by mechanical means. The surface shall not be troweled until it has begun to harden. Excessive troweling shall be avoided and in no case shall free water be allowed to accumulate on the surface. Dry cement shall not be used in troweling. On the floors where floor drains are indicated, the surface shall be sloped to the drain at 1/4 inch per foot unless otherwise specified. Discontinuous edges shall be rounded off with a suitable steel edging tool. The finished surface shall not vary more than 1/8 inch under a 10-foot straightedge.

C-8.5. Two Course Floor Finish. Two-course floors shall be poured in two layers.

C-8.5.1. Base Course. The base course shall conform to the requirements of Item C-8.4. This base course shall be accurately finished to the slope shown on the Plans and shall be given a rough, broom finish as directed by the Engineer.

C-8.5.2. Topping Course. The topping course shall be composed of 94 pounds of cement to approximately 180 pounds of fine aggregate conforming to Item B-3 hereof and 195 pounds of coarse aggregate of 1/2-inch maximum size conforming to Item B-3 and graded within the following limits:

Passing 1/2-inch sieve	100%
Passing 3/8-inch sieve	95 to 100%
Passing No. 4 sieve	40 to 60%
Passing No. 8 sieve	0 to 5%

The amount of mixing water per sack of cement shall not exceed five gallons per 94-pound sack, including the surface moisture on the aggregate. The topping course shall be mixed in accordance with the provisions of Item C-3

hereof. The consistency of the freshly mixed topping shall be extremely dry, such that, when packed into a ball with the hands, there is just sufficient water to stain the hands. When the mixture is tightly compressed by hand into a ball and then broken into two pieces, the break shall be clean.

The topping course shall be placed in accordance with the following procedure: Wooden blocks at about 10-foot intervals in each direction shall be grouted into position at the proper elevation of the finished slab surface. These blocks shall be used for leveling and truing the surface. The base slab shall be brushed with a stiff-bristle broom before the concrete has completely hardened, removing all laitance and scum and providing a mechanical bond for the topping course. The base slab shall be allowed to cure for at least five days before the topping is applied. Before application of the topping, the base course shall be thoroughly cleaned by scraping with a stiff brush and clean water or chipping where the foreign material will not brush off. The base slab shall then be thoroughly wetted for a period of six hours before the topping is applied. Any free water shall then be brushed off the surface of the base slab, and a slush coat of cement and water mixed to the consistency of thick paint shall be brushed on the base slab immediately prior to applying the topping. The topping material, mixed to the consistency specified above, shall then be placed and raked by hand to the approximate finished surface. A straightedge shall then be used between the grouted wood blocks previously placed to check the surface, and the surface shall be brought to the proper grade with a steel-edged screed. The top course shall then be rolled with a steel roller weighing not less than 500 pounds. After rolling, the surface shall again be checked with a straightedge, and any irregularities in the surface corrected. The surface shall then be floated with a mechanical float, troweled with a mechanical steel trowel and finished by steel troweling by hand. The wood blocks used for truing the surface shall be removed and holes packed with concrete before troweling. No water, dry cement or any other material will be added to the surface of the concrete during finishing. Direct rays of the sun shall be prevented from striking the finished surface until the topping course has taken its initial set. Immediately after the topping course has taken its initial set, the surface shall be sprayed with a fine water spray and kept damp in this manner for 12 hours, following which the surface will be cured for 7 days according to one of the methods outlined in Item C-9.1 hereof.

C-8.6. Sidewalk Finish. After the concrete has been deposited in place, it shall be compacted and the surface shall be struck off by means of a strike board and floated with a wooden or cork float. Joints shall be provided as specified in Item C-12.2. An edging tool shall be used on all edges and at all expansion joints. The surface shall not vary more than 1/8 inch under a 10-foot straightedge. The surface shall have a granular or matted texture which will not be slick when wet, or it shall be broomed at right angles to the direction of traffic. Walks shall slope 1/4 inch per foot away from structures unless otherwise shown on the Plans.

Sidewalk surfaces shall be laid out in blocks with an approved grooving tool as shown on the Plans or as directed by the Engineer.

C-9. Curing of Concrete.

C-9.1. Moisture Loss. Protection against loss of moisture from the surface of the concrete shall be accomplished by keeping the surface continuously

wet for seven days where normal portland cement is used or three days when high-early-strength cement is used. Subject to approval by the Engineer, one of the following methods shall be followed:

WALLS.

a. Concrete surfaces shall remain in contact with wood forms and the forms kept sufficiently damp at all times to prevent opening of the joints and drying of the concrete; or

b. An approved curing compound shall be applied immediately after removal of forms except where finishing is required. In this case, forms will be kept damp as required above until removed. Where rubbed finish is required, curing compound shall be applied immediately upon completion of finishing, and the unfinished, exposed surfaces shall be kept wet by sprinkling until finishing begins. When ordinary wall finish is required, curing compound shall be applied immediately after removal of the forms and the compound chipped off or otherwise removed where patching or pointing is required. Compound shall not be applied to surfaces which are to later be bonded to new concrete; or

c. Exposed surfaces shall be continuously sprinkled.

SLABS.

a. Protect surface by ponding; or

b. Cover with burlap or cotton mats kept continuously wet; or

c. Cover with one-inch layer of wet sand, earth, or sawdust, and keep continuously wet; or

d. Continuously sprinkle the exposed surfaces.

C-9.2. Protection in Cold Weather. (See Item C-6.8.)

C-10. Patching. After removal of the forms, all imperfections, rock pockets, holes left after the removal of form ties, broken corners and edges shall be chipped out to solid concrete. The surface of the cavity to be patched shall be thoroughly wet before the patching mixture is applied. This mixture shall ordinarily consist of one part cement and two parts fine sand, mixed with only sufficient water to form a dry, crumbling mass. For water-holding basins and where otherwise specified, this patching mixture shall consist of one part cement, one part fine sand and one part nonshrinking aggregate (See Item B-4), or it shall be of the proportions of the original pour where uniform color is desired. The mixture shall be tamped solidly into the cavity to be patched and shall then be cured. (See Item C-9)

Where pull-out type ties are used, the holes shall be filled as recommended by the manufacturer of the ties.

C-11. Hardener Application. Floors to receive hardener shall be thoroughly cured, cleaned, and perfectly dry with all work above them completed. Zinc and/or magnesium fluosilicate shall be applied evenly, using three coats, allowing 24 hours between coats; the first coat shall be 1/3 strength, second coat 1/2 strength, and third coat 2/3 strength; each coat shall be applied so

as to remain wet on the concrete surface for 15 minutes. Sodium silicate shall be applied evenly, using three coats, allowing 24 hours between coats; the material shall be applied full strength at the rate of 1/3 gallon per 100 square feet. Approved proprietary hardeners shall be applied in conformance with the manufacturer's instructions. After the final coat is completed and dry, surplus hardener shall be removed from the surface by scrubbing and mopping with water.

C-12. Construction and Expansion Joints.

C-12.1. Construction Joints.

C-12.1.1. Location. Joints not indicated on the Plans shall be so made and located as to least impair the strength of the structure and shall be approved by the Engineer prior to construction.

C-12.1.2. Time Between Pours. At least two hours must elapse after depositing concrete in the columns or walls before depositing in beams, girders, or slabs supported thereon. Beams, girders, brackets, column capitals, and haunches shall be considered as part of the floor system and shall be placed monolithically therewith.

C-12.1.3. In Floors. Construction joints in floors shall be located near the middle of the spans of slabs, beams, or girders, unless a beam intersects a girder at this point, in which case the joints in the girders shall be offset a distance equal to twice the width of the beam. In this last case, provision shall be made for shear by use of inclined reinforcement.

C-12.2. Premoulded Joints. Premoulded joint filler shall be placed in the forms in the proper position before concrete is poured, and nails at about one foot on centers shall be driven through the filler so as to extend into the concrete when it is poured and hold the filler in position. Premoulded joint filler shall be installed in all walks to provide expansion and contraction joints at not more than 40-foot intervals and at all changes in direction or intersections.

C-12.3. Waterstops in Construction Joints. All construction joints in concrete liquid or gas-holding basins shall be provided with steel waterstops unless otherwise noted (See Item B-11). Vertical waterstops shall be rigidly held in place in the forms, and concrete shall be thoroughly worked around the metal. Horizontal waterstops shall be placed immediately after the pour is completed and before concrete has begun to set. Each side shall be puddled to level the concrete and then the waterstop properly embedded. After the concrete has set to the point where the surface can be cut with a broom or a stream of water, the surface shall be cut off to a rough finish with all laitance removed and the concrete left clean. Metal strips for waterstops shall be provided in the maximum length practicable; and, where strips are spliced, they shall be lapped at least twelve inches.

Labyrinth-type waterstops shall be installed in strict accordance with the manufacturer's directions. Splices and intersections shall be jointed by heat to make a continuous, strong, watertight seal.

C-12.4. Expansion Joints with Copper Waterstop. Copper expansion joints shall be accurately bent to shape and placed in position as shown on

the Plans. Adjacent strips shall be lapped and soldered to make watertight joints. All joints shall be protected from damage at all times. Special joint pieces as shown on the Plans shall be used at intersections. In the fabrication of these joint pieces, the first piece fabricated of each type shall be carefully checked in its relation to adjoining pieces to insure that there is no error in either the Plans or the builder's pattern. Any errors found shall be corrected before additional pieces are fabricated. All joints, both shop and field, shall be lapped not less than one-half inch and continuously soldered on each edge of the lap in order that no break may occur to allow leakage.

C-12.5. Expansion Joints with Rubber Waterstop. The rubber waterstop shall be installed in accordance with the details shown on the Plans and the instructions of the manufacturer. Corner and intersection pieces shall be provided as required and shall be field spliced to insure a continuous, watertight seal at the joints. Field splices shall be made with cement, gum, and a field vulcanizer capable of supplying sufficient heat to vulcanize the joint. The method of splicing followed shall be similar to that specified by the Bureau of Reclamation and shall be in strict accordance with the manufacturer's instructions. The completed splice shall develop a strength of at least 50 percent of the strength of the continuous factory-molded or extruded shape.

C-12.6. Expansion Joints with Plastic Waterstop. The plastic waterstop shall be installed in accordance with the details shown on the Plans and the instructions of the manufacturer. Corner and intersection pieces shall be made up by field splicing. Ends to be spliced shall be carefully cut with a sharp knife so that the two pieces will match as exactly as possible. Both ends shall be pressed together vertically on a heated metal plate until the plastic melts around the edges. When the ends are melted, the waterstop shall be pulled straight up and two heated ends placed on a flat surface so that they meet in a straight line. The ends shall be pressed together and held firmly for about one minute to allow the plastic to fuse while it cools. At least 10 minutes shall be allowed before the new splice shall be pulled or strained in any way. The finished splices shall provide a cross section that is dense and free of porosity with tensile strength of not less than 75 percent of the unspliced material.

The waterstop shall be correctly positioned in the forms so that the center of the waterstop is centered on the joint. In cases where preformed expansion joint material is used in conjunction with the waterstop, allowance shall be made for equal waterstop embedment on each side in the concrete. Waterstop shall be held in place in forms by use of split form or other approved method that will positively hold the waterstop in correct position. The waterstop may be held in place in the forms by driving nails at about 12-inch intervals adjacent to but not through the waterstop. Nails may be driven into the form and then bent over the waterstop strip to hold it in position. During any concrete pour around the waterstop, the half which is being embedded in the concrete shall be rigidly supported in an approved manner so that the final position of the waterstop will be in a straight line. Concrete being placed around waterstops shall be well vibrated in order to obtain impervious concrete in the vicinity of all joints. In horizontal joints, extreme care shall be taken during the placing of concrete to insure that the area below the waterstop in horizontal joints is completely filled with concrete. The method of installation of the waterstop and the method to hold

the waterstop in proper position during and after the pouring of concrete shall meet with the Engineer's approval before the concrete pour is begun.

C-12.7. Poured Asphalt Filler. Poured asphalt filler shall not be placed until all other concrete has been poured. Before placing filler, all joints in copper waterstops shall be checked and resoldered where necessary. Joints shall be thoroughly cleaned, dry and primed before pouring asphalt filler.

C-12.8. Poured Rubber-Asphalt Filler. Poured rubber-asphalt filler shall be placed in strict accordance with the manufacturer's instructions. Joints shall be thoroughly cleaned and dry, free of dust or powder, and primed before pouring rubber-asphalt filler.

C-13. Blockouts for Pipe and Conduit. Where pipe or conduit passes into or through concrete walls, floors, or roof slabs, the Contractor may, to facilitate proper alignment, leave holes through the concrete and pour the concrete opening after the pipe or conduit is in place. The size of such openings shall be two inches larger than the outside diameter of the bell, flange or coupling and shall conform to the special details for pipe openings shown on the Plans. When the piping or conduit is entirely placed and securely anchored, the concrete openings through the walls will be poured in accordance with the requirements for bounding new concrete to old as set forth in Item C-6.7 hereof. Concrete used to pour the openings shall consist of one part cement, one part fine aggregate, one part nonshrinking aggregate and one and one-half parts coarse aggregate of maximum size of 1/2 inch when the concrete is part of a basin which must hold liquids. Otherwise, the nonshrinking aggregate in these proportions shall be replaced by fine aggregate. Concrete poured in these openings shall be thoroughly vibrated or rodded to insure a watertight joint between the new and old concrete and the new concrete and the pipe or conduit. The form for the closure shall be constructed with a pouring funnel. A plug of concrete shall be left in the pouring funnel. After the concrete has taken its initial set, the plug shall be removed and the exposed, broken face ground smooth. Pouring of block-out holes shall be done from the pressure side wherever possible. Such joints shall be thoroughly cured by keeping them constantly wet for not less than seven days.

Where approved by the Engineer, block-out holes may be dry packed using a grout consisting of one part cement, one part fine sand, and one part non-shrinking aggregate for basins which must hold liquid. Otherwise, the non-shrinking aggregate shall be replaced with sand. Only sufficient water shall be added to make a dry, crumbling mass. When the mixture is pressed tightly together into a ball with the hands, there should not be sufficient water in the mixture to stain the hands and when such a ball is broken, it should crumble. This mixture shall be tamped or rodded solidly into the space, preferably from the pressure side. A backing board or stop shall be provided at the back side of this space against which the dry mixture can be tamped.

C-14. Screeded Finish on Clarifier Slabs. The concrete topping for the floor of clarifier tanks shall not be placed until the equipment for the tanks has been completely installed in working order. All laitance shall be removed from the surface of the concrete with a wire brush and the surface shall then be thoroughly cleaned and washed. The concrete base shall be kept constantly wet for a period of 24 hours and then hand-swept with grout as specified under Item C-6.7 before placing the concrete topping. After placing the concrete

topping, it shall be swept by the collector mechanism until the surface conforms accurately to the profiles of the blades on the raking arm and, if necessary, shall be troweled with a steel trowel to a smooth, even surface. The topping shall be kept wet using a hose with fine spray, and as soon as the concrete topping is sufficiently hard, the tank shall be filled with water to a sufficient height to cover the entire floor for a period of seven (7) days. This topping coat shall consist of one part standard portland cement, and two parts of sand as specified in Item B-3 of these Standard Specifications for Reinforced Concrete.

C-15. Grouting Machinery Foundations. Where machinery is to be secured by anchor bolts set in concrete and supported on foundations which are to be grouted in place, the original concrete pour shall be blocked out or finished off a sufficient distance below the bottom of the machinery foundation to provide for the thickness of grout specified on the Plans. After the machinery has been set in position and wedged to the proper elevation by steel wedges, the space between the bottom of the machinery foundation and the original pour of concrete shall be caulked with a dry, tamped-in mixture of sand and cement. The mortar mixture to be used for this grouting shall consist of one part cement and two parts sand with only sufficient water to make a dry, crumbling mass; or one part sand and one part nonshrinking aggregate may be used in lieu of two parts sand. When the mixture is pressed tightly together into a ball with the hands, there should not be sufficient water in the mixture to stain the hands; and when such ball is broken, it should crumble. This dry mixture shall be tamped or rodded solidly into the space between the machinery foundation and the original concrete. A backing board or stop shall be provided at the back side of this space against which the dry mixture can be tamped.

C-16. Leakage Tests. After the final pour of concrete on basins which are to be subjected to leakage tests has been cured for 14 days, and before backfill or brick facing or other work which will cover the exposed faces of the walls of the basins has been completed, the basins specified in the Special Specifications to be subjected to leakage tests shall be filled with water to the normal liquid level line. Unless otherwise specified in the Special Specifications, water for this test shall be provided by the Contractor. After the basin has been kept full for 48 hours, it will be assumed for the purposes of the test that the absorption of moisture by the concrete in the basin is complete. All valves and gates to the structure shall then be closed and the change in water surface measured for a 24-hour period. During the test period, all exposed portions of the structure shall be examined and any leaks or damp spots shall be marked and such leaks or damp spots shall be later patched or corrected in any case. If the drop in water surface in the 24-hour period exceeds one-tenth of one percent of the normal volume of liquid contained in the basin, the leakage shall be considered excessive. If the leakage is excessive, the water surface shall be dropped by stages and the leakage measured at each stage until the area in which the leakage occurs has been isolated. The basin shall then be drained, all leaks previously marked shall be patched, and the necessary repairs made in the area where leakage is indicated. The basin shall then be refilled and again tested for leakage. This process shall be continued until the drop in water surface in a 24-hour period with the basin full is less than one-tenth of one percent of the volume of liquid held in the basin. If the cause of excessive leakage is found to be faulty workmanship or materials, the cost of repairs and subsequent tests shall be borne by the Contractor. If the leakage is found to be due to causes not under the Contractor's control, the cost of repairs and subsequent tests after the first shall be paid for by the Owner as extra work.