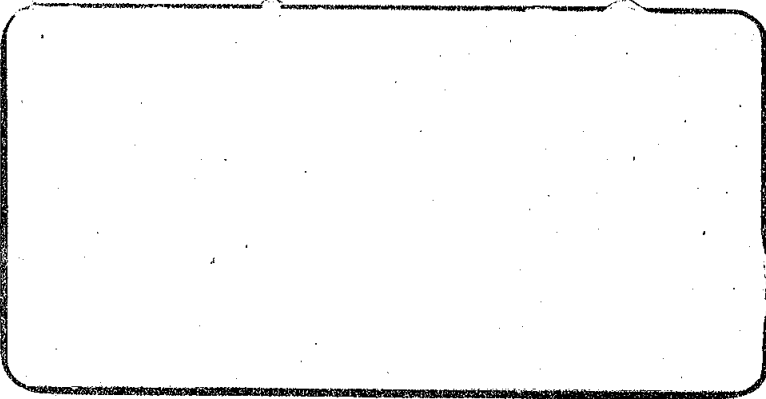
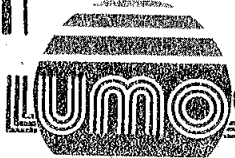


VANN



CONFORMED COPY



**& ASSOCIATES, INC.** ● Civil Engineers ● Surveyors ● Materials Testing  
625 Fairview Dr., Suite 102, Carson City, NV 89701 (702) 883-7077  
3670 Grant Dr., Suite 102, Reno, NV 89503 (702) 827-6111

BID DOCUMENTS, CONTRACT DOCUMENTS,  
AND  
SPECIAL PROVISIONS  
CITY OF RENO  
PARADISE POND OUTFALL AND IMPROVEMENTS  
CONTRACT NO. 665

FOR  
CITY OF RENO  
NEVADA

ENGINEER:

LUMOS & ASSOCIATES, INC.  
3670 GRANT DRIVE, SUITE 102  
RENO, NEVADA 89509  
(702) 827-6111

MARCH 1989  
JOB NO. 070-04-806

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NOTICE TO CONTRACTORS  
INVITATION TO BID  
CITY OF RENO  
PARADISE POND OUTFALL AND IMPROVEMENTS  
CONTRACT NO. 665

NOTICE is hereby given that sealed proposals will be received by City of Reno, at the office of the City Clerk, Room 209, 490 South Center Steet, Reno, Nevada 89502, until 2:00 p.m., on May 1st, 1989, for construction of the Paradise Pond Outfall from Paradise Pond to the Truckee River. Sealed proposals received will be publicly opened and read aloud beginning at 2:15 p.m. of the same date at the above address.

Said construction shall consist of clearing and grubbing, pipeline construction, asphalt removal, excavation and embankment, surplus material disposal, aggregate base and asphalt surface construction, rip-rap construction, manholes, inlet and outlet structures, water, gas, electric service, sewer and storm drain relocation, and various other incidental work appurtenant to the pipeline construction.

Plans and Specifications will be available for inspection at the following locations:

City of Reno Public Works Department  
450 Sinclair Street  
Reno, Nevada 89502

Lumos & Associates, Inc.  
3670 Grant Drive, Suite #102  
Reno, Nevada 89509

Reno Builders Exchange  
500 Ryland  
Reno, Nevada 89502

Plans, specifications, and proposal form to be used for bidding on this project can only be obtained at the office of Lumos & Associates, Inc., located at 3670 Grant Drive, Suite #102, Reno, Nevada 89509. A non-refundable fee of \$50.00 is required for each set of plans and specifications obtained. In addition, copies will be mailed at the bidder's request upon receipt of the \$50.00 fee plus a \$5.00 mailing fee. Prospective bidders must be contractors presently licensed under the Nevada State Law for the type of work specified herein.

Every proposal shall be accompanied by a Surety Company Bid Bond, cash, Certified Check or Cashier's Check made payable to City of Reno Treasurer in the amount of not less than five percent (5%) of the proposal, said amount to be forfeited to City of Reno should the bidder to whom the contract is awarded fail to enter into a contract in accordance with his bid and other contract

documents within ten (10) calendar days after the receipt of notice of such award.

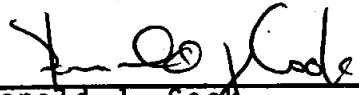
The Contractor shall begin construction no later than June 5th, 1989 and the work shall be prosecuted diligently so as to be completed within one hundred twenty (120) working days from date of commencement of the contract.

Prevailing wage rates for the Northern Nevada area shall be paid to all classifications of labor as required by the laws of the State of Nevada.

All bidders are REQUIRED to attend a pre-bid conference to be held at Paradise Park Activities Center, 2750 Paradise Drive, Reno, Nevada, at 10:00 a.m., on April 18th, 1989.

The right is reserved to reject any and all proposals or accept the proposal which is deemed by the City to be in the best interest of City of Reno. The City also reserves the right to waive any irregularities and/or informalities in the submitted bond forms.

DIRECT ALL QUESTIONS TO LUMOS & ASSOCIATES, ATTN: CHARLES MACQUARIE, AT 883-7077.

  
\_\_\_\_\_  
Donald J. Cook  
City Clerk

Adv. Reno Gazette Journal  
2 Proofs  
Do Not Zinc

## INSTRUCTIONS TO BIDDERS

Proposals, to be entitled to consideration, must be made in accordance with the following instructions:

1. Proposals shall be made in and on the original blank book form provided therefor in these Specifications, and all applicable blank spaces in the form shall be filled; number for item bid shall be stated both in writing and in figures; the signatures of all persons shall be in longhand; and the completed form shall be without interlineation, alteration or erasure. The form shall be enclosed and sealed in an envelope which is to be marked, "Proposal for Paradise Pond Outfall Improvements," and it shall be addressed to the Mayor and City Council, City Hall, Reno, Nevada.
2. Proposals shall not contain any recapitulation of the work to be done. No oral, telegraphic or telephonic proposals or modifications will be considered.
3. Bids will be accepted only on the complete project as outlined in the Scope of Work. No partial bids will be accepted.
4. Should a bidder find inconsistencies in, or omissions from, the drawings or documents, or should he be in doubt as to their meaning, he should at once notify the Engineer, who will send a written instruction to all bidders. Neither Owner nor Engineer will be responsible for any oral instructions.
5. Any written instructions, bulletins or drawings issued to bidders by the Engineer during the course of bidding shall be covered in the proposal and in closing a contract they will become a part thereof.
6. The Agreement Form attached thereto will be used in executing a contract for this work.
7. A certified check, cashier's check, bid bond, or cash, in an amount equal to at least five percent (5%) of the total amount of bid must accompany each proposal, as a guarantee that if awarded the contract, the bidder will execute the contract, give the two (2) bonds required and present evidence of required liability insurance and is licensed under the provisions of Chapter 4.01 of the Reno Municipal Code. Said check shall be made payable to the City of Reno and said bond executed by an approved surety, if used, to be conditioned to the effect that should the bidder to whom the contract is awarded fail to enter into the contract in accordance with his proposal, give the two (2) bonds required by said contract, and present evidence of required liability insurance and being licensed under the provisions of Chapter 4.01 of the Reno Municipal Code within ten (10)

calendar days after notice of such award, said surety company shall forthwith pay to the City of Reno the sum set forth in the bid bond.

8. Performance Bond in an amount equal to one hundred percent (100%) of the total contract sum, and a Payment Bond of not less than Fifty Percent (50%) of the total contract sum, shall be provided by the successful contractor. Said bonds shall be in favor of "City of Reno, a political subdivision of the State of Nevada."
9. Prior to submitting a proposal, bidders shall carefully examine the site of the work contemplated and the proposed drawings, specifications, and contract forms therefor, and thoroughly familiarize himself with all existing conditions before submitting his bid. No increase in cost or extension in performance time will be considered for failure to know the conditions to be encountered as to the character, quality, and quantity of work to be performed, the materials to be furnished, and as to the requirements of the specifications.
10. A list showing all subcontractors to be used on the project shall be submitted with the bid. All subcontractors shall be licensed as required by the State of Nevada Statutes.
11. Contractor shall carry liability insurance as specified in Section 107.07 of the General Provisions. This shall be a one million dollar (\$1,000,000.00) single limit policy.
12. The contractor shall furnish the City a policy or certificate of liability insurance in which the City is the named insured or is named as an additional insured with the contractor.
13. A minimum wage to be paid for labor on this contract shall not be less than the prevailing wage scale for Washoe County as determined by the Labor Commissioner of the State of Nevada. (Nevada Revised Statutes, Section 338.010, 338.100, wages, hours and employment.)
14. The bidder's attention is especially directed to NRS 338.125 and NRS 613.250.
15. The attention of bidders is directed to the State Contractor's License Law requirement (NRS 624.230, as amended to date) that a contractor hold a valid license of a class corresponding to the work to be done and that no bid will be accepted from a bidder to whom a proposal form has not been issued by the City Engineer.
16. If awarded the contract, contractor shall procure all permits and licenses incidental to the award at no cost to



the City of Reno, and shall give all notices necessary and incidental to the due and lawful prosecution of the work.

17. The City Council of the City of Reno, Nevada, reserves the right to reject any and all proposals and to waive any formalities in the proposal.

  
\_\_\_\_\_  
Steve Varela, P.E.  
City Engineer

CITY OF RENO  
DIVISION OF PUBLIC WORKS  
ENGINEERING DEPARTMENT

PROPOSAL

Proposal of GRANITE CONSTRUCTION COMPANY  
Name

of P. O. Box 900, Watsonville, California 95077

to furnish and deliver all materials except those specified to be furnished by the City of Reno and to do and perform all work

"PARADISE POND OUTFALL AND IMPROVEMENTS"  
CONTRACT NO. 665

together with incidental items necessary to complete the work to be constructed in accordance with the Special Provisions, Plans and Contract annexed hereto and also in accordance with the "Standard Specifications for Public Works Construction," and "General Provisions," as adopted into the Reno Municipal Code, Chapter 12.04, and revisions to date.

TO THE HONORABLE MAYOR AND THE CITY COUNCIL OF RENO, NEVADA:

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm or corporation; that he has carefully examined the location of the proposed work, the annexed proposed form of contract and the special provisions, plans and specifications therein referred to and made a part thereof; he proposes and agrees if this proposal is accepted, that he will contract with the City of Reno, in the form of contract prescribed, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract and annexed special provisions, plans and specifications, in the manner and time prescribed and according to the requirements of the Engineer as therein set forth, it being understood and agreed that the quantities shown herein are approximate only and are subject to increase or decrease, and that he will accept in full payment therefor the following unit prices:

BASE BID

SCHEDULE OF PRICES

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
1.	Lump Sum	Clear, Grub, and Site Preparation, complete for the entire project including pipeline, inlet and outlet structures and pond improvements at <u>ONE HUNDRED THIRTY-SEVEN THOUSAND ONE HUNDRED SIXTY-FIVE DOLLARS AND FIFTY CENTS</u> Lump sum.	\$137,165 <sup>50</sup>	\$137,165 <sup>50</sup>
2.	Lump Sum	Site grading, including Paradise Pond parking lot and berm construction, at <u>FORTY-THREE THOUSAND DOLLARS</u> Lump sum.	\$43,000 <sup>00</sup>	\$43,000 <sup>00</sup>
3.	2,050 L.F.	Fifty-four inch (54") diameter reinforced concrete pipe storm drain, Class III, in existing roadway, STA 37+75 to STA 40+30 and STA 42+16 to STA 60+11, complete in place at <u>ONE HUNDRED AND SIXTY DOLLARS</u> per lineal foot.	\$160 <sup>00</sup>	\$328,000 <sup>00</sup>
4.	320 L.F.	Fifty-four inch (54") diameter reinforced concrete pipe storm drain, Class III, outside existing roadway, STA 36+75 to STA 37+75 and STA 60+11 to STA 62+31, complete in place, at <u>ONE HUNDRED AND FORTY DOLLARS</u> per lineal foot.	\$140 <sup>00</sup>	\$44,800 <sup>00</sup>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
5.	40 L.F.	Fifty-four inch (54") diameter reinforced concrete pipe storm drain, Class IV, STA 10+17 to STA 10+57, complete in place, at <u>ONE HUNDRED AND EIGHTY DOLLARS</u> per lineal foot.	<u>\$ 180<sup>00</sup></u>	<u>\$ 7,200<sup>00</sup></u>
6.	89 L.F.	Fifty-four inch (54") diameter reinforced concrete pipe storm drain, Class V, STA 14+20 to STA 15+09, complete in place, at <u>TWO HUNDRED AND SEVENTY-FIVE DOLLARS</u> per lineal foot.	<u>\$ 275<sup>00</sup></u>	<u>\$ 24,475<sup>00</sup></u>
7.	1,712 L.F.	Fifty-four inch (54") diameter reinforced concrete pipe storm drain, Class 2,600-DO.01, STA 15+09 to STA 32+21, complete in place, at <u>TWO HUNDRED AND SEVENTY DOLLARS</u> per lineal foot.	<u>\$ 270<sup>00</sup></u>	<u>\$ 462,240<sup>00</sup></u>
8.	363 L.F.	Fifty-four inch (54") diameter reinforced concrete pipe storm drain, bored and jacked, under Galletti Way, STA 10+57 to STA 14+20, complete in place at <u>SEVEN HUNDRED AND TWENTY DOLLARS</u> lump sum.	<u>\$ 720<sup>00</sup></u>	<u>\$ 261,360<sup>00</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
9.	172 L.F.	Fifty-four inch (54") diameter reinforced concrete pipe storm drain, bored and jacked, under Southern Pacific Railroad, STA 32+21 to STA 33+93, complete in place, at <u>SEVEN HUNDRED AND TWENTY DOLLARS</u> lump sum.	<u>\$ 720<sup>00</sup></u>	<u>\$ 123,840<sup>00</sup></u>
10.	282 L.F.	Fifty-four inch (54") diameter reinforced concrete pipe storm drain, bored and jacked under Interstate 80, STA 33+93 to STA 36+75, complete in place, at <u>SEVEN HUNDRED AND TWENTY DOLLARS</u> lump sum.	<u>\$ 720<sup>00</sup></u>	<u>\$ 203,040<sup>00</sup></u>
11.	186 L.F.	Reinforced concrete box, six feet (6 ft) wide by three feet (3 ft) deep, STA 40+30 to STA 42+16, complete in place at <u>TWO HUNDRED AND THIRTY DOLLARS</u> per lineal foot.	<u>\$ 230<sup>00</sup></u>	<u>\$ 42,780<sup>00</sup></u>
12.	96 20 L.F.	Thirty inch (30") diameter reinforced concrete pipe storm drain, Class III, at approximately STA 46+65, complete in place, at <u>NINETY DOLLARS</u> per lineal foot.	<u>\$ 90<sup>00</sup></u>	<u>\$ 8,640<sup>00</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
13.	26 L.F.	Twelve inch (12") diameter reinforced concrete pipe storm drain, Class III, at approximately STA 46+65, complete in place at <u>SIXTY DOLLARS</u> per lineal foot.	<u>\$ 60<sup>00</sup></u>	<u>\$ 1,560<sup>00</sup></u>
14.	50 L.F.	Ten inch (10") diameter ductile iron pipe storm drain at approximately STA 53+35, complete in place, at <u>THIRTY-FIVE DOLLARS</u> per lineal foot.	<u>\$ 35<sup>00</sup></u>	<u>\$ 1,750<sup>00</sup></u>
15.	130 L.F.	Remove and replace twenty-four inch (24") diameter corrugated metal pipe irrigation line, at approximately STA 13+90 to approximately STA 15+09, complete in place, at <u>SEVEN DOLLARS AND FIFTY CENTS</u> per lineal foot.	<u>\$ 7<sup>50</sup></u>	<u>\$ 975<sup>00</sup></u>
16.	500 L.F.	Remove and replace thirty inch (30") diameter corrugated metal pipe irrigation line, at approximately STA 15+10 to approximately STA 20+10, complete in place, at <u>EIGHT DOLLARS AND FIFTY CENTS</u> per lineal foot.	<u>\$ 8<sup>50</sup></u>	<u>\$ 4,250<sup>00</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	PRICE	PRICE
17.	393 L.F.	Ten inch (10") diameter polyvinylchloride (PVC) pipe sanitary sewer, complete in place, at <u>THIRTY - SEVEN DOLLARS</u> per lineal foot.	<u>\$ 37<sup>00</sup></u>	<u>\$14,541<sup>00</sup></u>
18.	189 L.F.	Eight inch (8") diameter polyvinylchloride (PVC) pipe sanitary sewer, complete in place, at <u>TWENTY - EIGHT DOLLARS</u> per lineal foot.	<u>\$ 28<sup>00</sup></u>	<u>\$5,292<sup>00</sup></u>
19.	254 L.F.	Six inch (6") diameter polyvinylchloride (PVC) pipe sanitary sewer, complete in place, at <u>EIGHTEEN DOLLARS</u> per lineal foot.	<u>\$ 18<sup>00</sup></u>	<u>\$4,572<sup>00</sup></u>
20.	190 L.F.	Two inch (2") diameter polyvinylchloride (PVC) pipe water line, complete in place, at <u>TEN DOLLARS</u> per lineal foot.	<u>\$ 10<sup>00</sup></u>	<u>\$ 1,900<sup>00</sup></u>
21.	770 L.F.	One and one-half inch (1-1/2") diameter polyvinylchloride (PVC) irrigation line, complete in place at <u>SIX DOLLAR</u> per lineal foot.	<u>\$ 6<sup>00</sup></u>	<u>\$ 4,620<sup>00</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	PRICE	PRICE
22.	Lump Sum	<del>Remove and replace thirty-six inch (36") diameter steel pipe water main, at approximately STA 41+25, complete in place, at _____ _____ Lump sum.</del>	<b>DELETED</b>	\$ _____ \$ _____
23.	Lump Sum	<del>Remove and replace twenty-four inch (24") diameter steel pipe water main, at approximately STA 41+39, complete in place, at _____ _____ Lump sum.</del>	<b>DELETED</b>	\$ _____ \$ _____
24.	Lump Sum	<del>Remove and replace twenty-inch (20") diameter steel pipe water main, at approximately STA 59+67, complete in place, at _____ _____ Lump sum.</del>	<b>DELETED</b>	\$ _____ \$ _____
25.	Lump Sum	<del>Remove and replace twelve inch (12") diameter steel pipe water main, at approximately STA 41+74, complete in place, at _____ _____ Lump sum.</del>	<b>DELETED</b>	\$ _____ \$ _____
26.	Lump Sum	<del>Remove and replace eight inch (8") diameter transite pipe water main, at approximately STA 52+50, complete in place, at _____ _____ Lump sum.</del>	<b>DELETED</b>	\$ _____ \$ _____



ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
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27. Lump Sum

~~Remove and replace eight inch (8") diameter cast iron pipe water main, at approximately SIA 47+90, complete in place, at~~

~~\_\_\_\_\_ lump sum.~~

**DELETED**

\$ \_\_\_\_\_ \$ \_\_\_\_\_

28. 3 EA

~~Remove and replace four inch (4") diameter water main at approximately STA 43+15, STA 44+75 and STA 46+77, complete in place, at~~

~~\_\_\_\_\_ per each.~~

**DELETED**

\$ \_\_\_\_\_ \$ \_\_\_\_\_

29. 2 EA

~~Remove and replace two inch (2") diameter water services, at approximately STA 48+80 and SIA 50+92, complete in place, at~~

~~\_\_\_\_\_ per each.~~

**DELETED**

\$ \_\_\_\_\_ \$ \_\_\_\_\_

30. Lump Sum

~~Remove and replace 105 lineal feet of four inch (4") diameter polyethylene gas main at approximately STA 14+30, complete in place, at~~

~~\_\_\_\_\_ lump sum.~~

**DELETED**

\$ \_\_\_\_\_ \$ \_\_\_\_\_

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
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31. 3 EA ~~Remove and replace two inch (2") diameter gas main, at approximately STA 49+36, STA 52+50, and STA 59+67, complete in place, at \_\_\_\_\_ per each.~~

**DELETED**

\$ \_\_\_\_\_ \$ \_\_\_\_\_

32. 2 EA ~~Remove and replace one inch (1") and three-quarter inch (3/4") diameter gas service lines at approximately STA 50+18 and STA 50+40, complete in place, at \_\_\_\_\_ per each.~~

**DELETED**

\$ \_\_\_\_\_ \$ \_\_\_\_\_

33. 1 EA ~~Furnish and install 32 pound anode on two (2) inch gas service at STA 49+36, complete in place, at \_\_\_\_\_ per each.~~

**DELETED**

\$ \_\_\_\_\_ \$ \_\_\_\_\_

34. <sup>6 JOM</sup>  
<sub>8 EA</sub> Storm Drain Manhole, less than eleven feet (11 ft) deep to invert, with reinforced concrete base, including excavation, backfill, cone or top slab, frame, cover, steps, grouting and all work necessary for complete installation, in place at FIFTY THREE HUNDRED DOLLARS per each.

\$5,300<sup>00</sup> \$31,800<sup>02</sup>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
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35. 1 EA Storm Drain Manhole, less than eleven feet (11 ft) deep to invert, with 10-inch diameter Ductile Iron Pipe Sanitary Sewer cast into base, reinforced concrete base, including excavation, backfill, cone or top slab, frame, cover, steps, grouting and all work necessary for complete installation, in place at ELEVEN HUNDRED DOLLARS per each.

\$1,100<sup>00</sup> \$1,100<sup>00</sup>

36. 6 EA Storm Drain Manhole, greater than eleven feet (11 ft) deep to invert, with reinforced concrete base, 60-inch diameter barrel, including excavation, backfill, cone or top slab, frame, cover, steps, safety rail, grouting and all work necessary for complete installation, in place at NINETY-SIX HUNDRED DOLLARS per each.

\$9,600<sup>00</sup> \$57,600<sup>00</sup>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
37.	1 EA	Sanitary Sewer Drop Manhole, 48-inch diameter, including excavation, backfill, cone, frame, cover, grouting and all work necessary for complete installation, in place, at <u>ONE THOUSAND ONE HUNDRED AND FIFTY DOLLARS</u> per each.	<u>\$1,150<sup>-</sup></u>	<u>\$1,150<sup>-</sup></u>
38.	1 EA	Sanitary Sewer Manhole, 48-inch diameter, including excavation, backfill, cone, frame, cover, grouting and all work necessary for complete installation, in place at <u>ELEVATION</u> <u>THOUSAND DOLLARS</u> per each.	<u>\$1,100<sup>-</sup></u>	<u>\$1,100<sup>-</sup></u>
39.	Lump Sum	Reinforced concrete outfall structure on 54-inch diameter RCP at the Truckee River, including excavation, backfill, drain rock, forming, pouring, finishing, grouting, check valve and all work necessary for complete installation, in place, at <u>THIRTY-EIGHT THOUSAND DOLLARS</u> lump sum.	<u>\$38,000<sup>00</sup></u>	<u>\$38,000<sup>00</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
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40. Lump Sum Reinforced concrete inlet structure on 54-inch diameter RCP at Paradise Pond, including excavation, backfill, drain rock, forming, pouring, finishing, frames, covers, steps, trash rack, grouting and all work necessary for complete installation, at THIRTY-THREE THOUSAND DOLLARS lump sum.

\$33,000<sup>00</sup> \$33,000<sup>00</sup>

41. Lump Sum Reinforced concrete inlet structure on existing 12-inch RCP at Paradise Pond, including excavation, backfill, drain rock, forming, pouring, finishing, frames, covers, steps, trash rack, grouting and all work necessary for complete installation, at TWELVE THOUSAND DOLLARS lump sum.

\$12,000<sup>00</sup> \$12,000<sup>00</sup>

42. Lump Sum Reinforced concrete structure on existing 36-inch diameter storm drain at station 33+93 +, including excavation, backfill, forming, pouring, finishing, manhole base, 60-inch diameter manhole barrel, frame, cover, steps, grouting, and all work necessary for complete installation, in place, at TWELVE THOUSAND DOLLARS lump sum.

\$12,000<sup>00</sup> \$12,000<sup>00</sup>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
43.	Lump Sum	Reinforced concrete siphon inlet structure, including excavation, backfill, forming, pouring, finishing, grade rings, frame, cover, grouting and all work necessary for complete installation, in place at <u>FIFTEEN THOUSAND DOLLARS</u> Lump sum.	\$15,000 <sup>00</sup>	\$15,000 <sup>00</sup>
44.	Lump Sum	Reinforced concrete siphon outlet structure, including excavation, backfill, forming, pouring, finishing, grade rings, frame, cover, grouting and all work necessary for complete installation, in place, at <u>FIFTEEN THOUSAND DOLLARS</u> Lump sum.	\$15,000 <sup>00</sup>	\$15,000 <sup>00</sup>
45.	1 EA	Reinforced concrete cut-off wall, including excavation, forming, pouring, furnishing and all work necessary for complete installation in place, at <u>TWO THOUSAND DOLLARS</u> per each.	\$2,000 <sup>00</sup>	\$2,000 <sup>00</sup>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
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46.	Lump Sum	Reinforced concrete boat ramp at Paradise Pond, including excavation, backfill, drain rock, forming, pouring, finishing, expansion joints and all work necessary for complete installation, in place, at <u>SIXTEEN THOUSAND DOLLARS</u> lump sum.		
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\$16,000<sup>00</sup>    \$16,000<sup>00</sup>

47.	1 EA	Reinforced concrete headwall for thirty inch (30") diameter reinforced concrete pipe at Paradise Pond, including excavation, backfill, drain rock, forming, pouring, finishing, grouting and all work necessary for complete installation, in place, at <u>TWO THOUSAND, FIVE HUNDRED DOLLARS</u> per each.		
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\$2,500<sup>00</sup>    \$2,500<sup>00</sup>

48.	3 EA	Remove existing 36-inch diameter storm drain manhole frame and cover and replace with bolt down, watertight frame and cover, complete in place, at <u>THREE HUNDRED AND FIFTY DOLLARS</u> per each.		
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\$350<sup>00</sup>    \$1,050<sup>00</sup>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
49.	2 EA	One and one-half inch (1-1/2") diameter in-line irrigation valve with fittings in a 14" x 19" valve box with cover, and all work necessary for complete installation, in place, at <u>TWO HUNDRED AND TWENTY-FIVE DOLLARS</u> per each.	<u>\$ 225<sup>00</sup></u>	<u>\$ 450<sup>00</sup></u>
50.	3 EA	Three-quarter inch (3/4") diameter irrigation angle drain valve, with fittings, in a 9" diameter round valve box with cover and all work necessary for complete installation, in place, at <u>ONE HUNDRED AND TEN DOLLARS</u> per each.	<u>\$ 110<sup>00</sup></u>	<u>\$ 330<sup>00</sup></u>
51.	2 EA	One inch (1") diameter quick coupling valve with fittings, 9" diameter round valve box with cover and all work necessary for complete installation, in place, at <u>ONE HUNDRED AND SEVENTY DOLLAR</u> <del>DOLLARS</del> per each. (12)	<u>\$ 170<sup>00</sup></u>	<u>\$ 340<sup>00</sup></u>



ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
52.	1 EA	One and one-half inch (1-1/2") diameter reduced pressure backflow preventer assembly with fittings, and all work necessary for complete installation, in place, at <u>SEVEN HUNDRED AND TWENTY DOLLARS</u> per each.	<u>\$ 720<sup>00</sup></u>	<u>\$ 720<sup>00</sup></u>
53.	1 EA	One and one-half inch (1-1/2") diameter in-line vu-flow filter with fittings, 14" x 19" valve box with cover, and all work, necessary for complete installation, in place, at <u>TWO HUNDRED AND EIGHTY-FIVE DOLLARS</u> per each.	<u>\$ 285<sup>00</sup></u>	<u>\$ 285<sup>00</sup></u>
54.	19 EA	Drip irrigation bubbler system with two (2) drip lines per tree, complete in place at <u>TWO DOLLARS AND FIFTY CENTS</u> per each.	<u>\$ 2<sup>50</sup></u>	<u>\$ 47<sup>50</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
55.	Lump Sum	Replace traffic system interconnect and traffic detector loops as necessary, including sawcutting, conductor, installation, splices, "lead-in" wire, sealant, and all work necessary for complete installation, in place, at <u>TWENTY THOUSAND AND FOUR HUNDRED DOLLARS</u> Lump sum.		<u>\$20,400<sup>00</sup></u> <u>\$20,400<sup>00</sup></u>
56.	390 S.F.	Aggregate base, Type II, Class B, four inches (4") thick, complete in place at <u>ONE DOLLAR</u> per square foot.	<u>\$ 1<sup>00</sup></u>	<u>\$ 390<sup>00</sup></u>
57.	73,800 S.F.	Aggregate base, Type II, Class B, six inches (6") thick, complete in place at <u>FIFTY CENTS</u> per square foot.	<u>\$ 0<sup>50</sup></u>	<u>\$36,900<sup>00</sup></u>
58.	33,000 S.F.	Aggregate base, Type II, Class B, eight inches (8") thick, complete in place at <u>THIRTY-FIVE CENTS</u> per square foot.	<u>\$ 0<sup>35</sup></u>	<u>\$11,550<sup>00</sup></u>
59.	60,000 S.F.	Aggregate base, Type II, Class B, each additional two (2) inches of thickness needed to match existing roadway section in trench areas, complete in place at <u>EIGHT CENTS</u> per square foot.	<u>\$ 0<sup>08</sup></u>	<u>\$ 4,800<sup>00</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
60.	72,050 S.F.	Asphalt Concrete, two and one-half inches (2-1/2") thick, including tack coat, seal coat, complete in place at <u>SIXTY CENTS</u> _____ per square foot.	<u>\$ 0<sup>60</sup></u>	<u>\$ 43,230<sup>00</sup></u>
61.	33,000 S.F.	Asphalt Concrete pavement patch, five inches (5") minimum thickness, including tack coat, seal coat, complete in place at <u>TWO DOLLARS AND FIFTEEN CENTS</u> _____ per square foot.	<u>\$ 2<sup>15</sup></u>	<u>\$ 70,950<sup>00</sup></u>
62.	50,000 S.F.	Asphalt Concrete pavement patch, each additional one (1) inch thickness required to match existing pavement thickness, including tack coat, seal coat, complete in place at <u>FORTY CENTS</u> _____ per square foot.	<u>\$ 0<sup>40</sup></u>	<u>\$ 20,000<sup>00</sup></u>
63.	635 L.F.	Concrete curb and gutter, Type 1, including expansion and contraction joints, complete in place at _____ <u>ELEVEN DOLLARS</u> _____ per lineal foot.	<u>\$ 11<sup>00</sup></u>	<u>\$ 6,985<sup>00</sup></u>
64.	730 L.F.	Concrete vertical curb, including expansion and contraction joints, complete in place at _____ <u>TWELVE DOLLARS</u> _____ per lineal foot.	<u>\$ 12<sup>00</sup></u>	<u>\$ 8,760<sup>00</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
65.	500 S.F.	Concrete valley gutter, six inches (6") thick, including expansion and contraction joints, complete in place at <u>THREE DOLLARS &amp; NINETY CENTS</u> per square foot.	<u>\$ 3<sup>90</sup></u>	<u>\$ 1,950<sup>00</sup></u>
66.	570 S.F.	Concrete sidewalk and slab, four inches (4") thick, including expansion and contraction joints, complete in place at <u>TWO DOLLARS &amp; SIXTY CENTS</u> per square foot.	<u>\$ 2<sup>60</sup></u>	<u>\$ 1,482<sup>00</sup></u>
67.	1,012 C.Y.	Rock rip rap, twelve inches (12") thick, including keyways and filter fabric, complete in place at <u>TWENTY DOLLARS</u> per cubic yard.	<u>\$ 20<sup>00</sup></u>	<u>\$ 20,240<sup>00</sup></u>
68.	6,070 S.F.	Decomposed granite, four inches (4") thick, compacted, complete in place at <u>EIGHTY CENTS</u> per square foot.	<u>\$ 0<sup>80</sup></u>	<u>\$ 4,856<sup>00</sup></u>
69.	5 EA	Replace Nevada Department of Transportation monuments, complete in place at <u>TWO HUNDRED AND SEVENTY-FIVE DOLLARS</u> per each.	<u>\$ 275<sup>00</sup></u>	<u>\$ 1,375<sup>00</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
70.	7 EA	Galvanized steel barrier posts, six inches (6") in diameter, removable, complete in place at <u>FIVE HUNDRED</u> _____ per each.	<u>\$ 500<sup>00</sup></u>	<u>\$ 3,500<sup>00</sup></u>
71.	Lump Sum	Floating debris barrier number one (1), including flotation log, cable, chain, curtain, anchor posts and all work necessary for complete installation, in place at <u>THREE THOUSAND AND ONE HUNDRED DOLLARS</u> lump sum.	<u>\$ 3,100<sup>00</sup></u>	<u>\$ 3,100<sup>00</sup></u>
72.	Lump Sum	Floating debris barrier number two (2), including flotation log, cable, chain, curtain, anchor posts and all work necessary for complete installation, in place at <u>THREE THOUSAND AND ONE HUNDRED DOLLARS</u> lump sum.	<u>\$ 3,100<sup>00</sup></u>	<u>\$ 3,100<sup>00</sup></u>
73.	Lump Sum	Floating debris barrier number three (3), including flotation log, cable, chain, curtain, anchor posts and all work necessary for complete installation, in place at <u>ONE THOUSAND AND SEVEN HUNDRED DOLLARS</u> lump sum.	<u>\$ 1,700<sup>00</sup></u>	<u>\$ 1,700<sup>00</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
74.	1 EA	Remove existing sanitary sewer manhole frame and cover and replace with bolt-down, watertight frame and cover, complete in place at <u>SIX HUNDRED DOLLARS</u> _____ per each.	<u>\$ 600<sup>00</sup></u>	<u>\$ 600<sup>00</sup></u>
75.	19 EA	Tree, fifteen (15) gallon size, including staking and bedding, complete in place at <u>TWO HUNDRED AND SIXTY DOLLARS</u> _____ per each.	<u>\$ 260<sup>00</sup></u>	<u>\$ 4,940<sup>00</sup></u>
76.	6,200 S.F.	Wood chips, four inches (4") thick, complete in place at <u>FIFTY CENTS</u> _____ per square foot.	<u>\$ 050</u>	<u>\$ 3,100<sup>00</sup></u>
77.	1 EA	Redwood sign, four feet (4') high by eight feet (8') wide, including posts and all work necessary for complete installation, in place at <u>TWELVE HUNDRED DOLLARS</u> _____ per each.	<u>\$ 1,200<sup>00</sup></u>	<u>\$ 1,200<sup>00</sup></u>

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
78.	Lump Sum	Striping, complete in place, at <u>TWENTY-FOUR HUNDRED DOLLARS</u> Lump sum.	<u>\$2,400<sup>00</sup></u>	<u>\$2,400<sup>00</sup></u>
79.	FORCE ACCT	Miscellaneous work set by the Engineer, at Two Hundred Thousand and 00/100 Dollars.	<u>\$ F.A.</u>	<u>\$200,000</u>
TOTAL BASE BID			<u>\$ 2,441,981<sup>00</sup></u>	

ADDITIVE ALTERNATE BID SCHEDULE A

SCHEDULE OF PRICES

ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
A1.	Lump Sum	Remove and replace eight inch (8") diameter transit pipe water main, at approximately STA 52+50, complete in place, at <u>FOUR THOUSAND, ONE HUNDRED AND TWENTY DOLLARS</u> Lump sum.	<u>\$4,120<sup>00</sup></u>	<u>\$4,120<sup>00</sup></u>
A2.	Lump Sum	Remove and replace eight inch (8") diameter cast iron pipe water main, at approximately STA 47+90, complete in place, at <u>FOUR THOUSAND, ONE HUNDRED AND TWENTY DOLLARS</u> Lump sum.	<u>\$4,120<sup>00</sup></u>	<u>\$4,120<sup>00</sup></u>
A3.	3 EA	Remove and replace four inch (4") diameter water main at approximately STA 43+15, STA 44+75 and STA 46+77, complete in place, at <u>FOUR THOUSAND AND SEVENTY DOLLARS</u> per each.	<u>\$4,070<sup>00</sup></u>	<u>\$12,210<sup>00</sup></u>
A4.	2 EA	Remove and replace two inch (2") diameter water services, at approximately STA 48+80 and STA 50+92, complete in place, at <u>EIGHT HUNDRED AND THIRTY-FIVE DOLLARS</u> per each.	<u>\$835<sup>00</sup></u>	<u>\$1,670</u>



ITEM NO.	APPROX. QUANTITY	DESCRIPTION OF WORK AND UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
A5.	Lump Sum	Remove and replace 105 lineal feet of four inch (4") diameter polyethylene gas main at approximately STA 14+30, complete in place, at <u>ONE THOUSAND, FIVE HUNDRED AND EIGHTY DOLLARS</u> lump sum.	<u>\$1,580<sup>00</sup></u>	<u>\$1,580<sup>00</sup></u>
A6.	3 EA	Remove and replace two inch (2") diameter gas main, at approximately STA 49+36, STA 52+50, and STA 59+67, complete in place, at <u>THREE HUNDRED AND FORTY DOLLARS</u> per each.	<u>\$340<sup>00</sup></u>	<u>\$1,020<sup>00</sup></u>
A7.	2 EA	Remove and replace one inch (1") and three-quarter inch (3/4") diameter gas service lines at approximately STA 50+18 and STA 50+40, complete in place, at <u>FIVE HUNDRED AND SIXTY-FIVE DOLLARS</u> per each.	<u>\$585<sup>00</sup></u>	<u>\$1,170<sup>00</sup></u>
A8.	3 EA	Furnish and install 32 pound anode on two (2) inch gas service at STA 49+36, and on eight (8) inch gas main at STA 41+56, complete in place, at <u>TWO HUNDRED DOLLARS</u> per each.	<u>\$200<sup>00</sup></u>	<u>\$600<sup>00</sup></u>
TOTAL ALTERNATE BID SCHEDULE A			<u>\$26,490<sup>00</sup></u>	

BID BOND

Unit prices for all items, all extensions and total amount of bid must be shown. In event of discrepancy between words and figures, the words shall prevail.

The proposal submitted shall be in effect for sixty (60) days after the opening of bids.

If this proposal shall be accepted and the undersigned fail to contract as aforesaid and to give a Performance Bond in the amount not less than the full contract amount, One Hundred Percent (100%), and a Payment Bond of not less than Fifty Percent (50%) of the contract amount with surety satisfactory to the City of Reno and present evidence of required liability insurance and licensed under the provisions of Chapter 4.01 of the Reno Municipal Code within ten (10) calendar days after the bidder has received notice from the City Engineer that the contract has been awarded, the Mayor and the City Council may, at its option, determine that the bidder has abandoned the contract, and thereupon this proposal and acceptance thereof shall be null and void, and the forfeiture of such security accompanying this proposal and the same shall be the property of the City of Reno.

Accompanying this proposal is a deposit in the form of a \_\_\_\_\_

BIDDER'S BOND

(Insert words-certified check, cashier's check, bid bond, or cash)

in the amount of \$ 5 % of total bid which amount is not less than five percent (5% of total bid).

The undersigned holds valid Contractors' License No. 8079

and City of Reno Business License No. 09547

BIDDER: GRANITE CONSTRUCTION COMPANY

ADDRESS: \_\_\_\_\_ PHONE: 408 724-1011

P. O. Box 900, Watsonville, California 95077 ZIP CODE: \_\_\_\_\_

BY: A. V. OTJEN, VICE PRESIDENT TITLE \_\_\_\_\_

(Printed name of person authorized to sign this bid)

SIGNATURE: *[Handwritten Signature]*

GENERAL CONTRACTOR

GRANITE CONSTRUCTION COMPANY  
(Firm Name)

8079

(Nevada Contractor's License #)


A. V. OTJEN, VICE PRESIDENT is authorized to enter into this  
(Name of Officer)  
contract for the above listed firm.

The firm is: (check one)

a corporation     a partnership     sole proprietorship

Principal Officers:

<u>Name</u>	<u>Title</u>	<u>Signature</u>
<u>DAVID H. WATTS, PRESIDENT &amp; CEO</u>		
<u>F. D. MOLLER, VICE PRESIDENT, CFO &amp; SECRETARY</u>		
<u>A. V. OTJEN, VICE PRESIDENT</u>		
<u>WILLIAM G. DOREY, VICE PRESIDENT</u>		
<u>R. E. HALLBRITTON, TREASURER</u>		
Owners Not Listed Above:		
<u>SEE ATTACHED</u>		

I  A. V. OTJEN certify that the above list includes all  
(Name of Officer)  
officers, owners and financial partners of the above-mentioned  
firm-corporate structure to the best of my knowledge.

GRANITE CONSTRUCTION COMPANY

The common stock is held as follows:

ESOT & Co. (Employee Stock Ownership Plan)	5,099,086 shares
Richard C. Solari, as Trustee of a Trust, U/A dated 11/05/74 entitled "Trust Agreement"	2,430,000 shares
Richard C. Solari, as Trustee of the "Solari-Lane Trust" U/A dated 11/05/74	2,430,000 shares
Paul V. Facchina	769 shares
Robert E. Green	273 shares
Donn E. Sawyer	215 shares
Michael U. McElroy	39,657 shares



PROPOSED LIST OF SUBCONTRACTORS

Listed hereinafter are the names and addresses of all sub-contractors who will be employed and the segregation of the work each will perform if the contract is awarded to the party or parties herein bidding. (This form must be completed.)

KIND OF WORK	NAMES AND ADDRESSES	LICENSE NO.
1. <del>CONCRETE</del>	<del>LUCKY CONCRETE</del> <del>SPARKS, NV</del>	<del>018395</del>
2. <u>PIPE WORK</u>	<u>TW CONSTRUCTION</u> <u>SPARKS, NV</u>	<u>001B20D</u>
3. <u>LANDSCAPE</u>	<u>EARTH SCAPES</u> <u>RENO, NV</u>	<u>23541</u>
4. <u>ELECTRICAL</u>	<u>HARKER - HARKER</u> <u>RENO, NV</u>	<u>1054C</u>
5. <u>FENCE</u>	<u>TROLL FENCE</u> <u>SPARKS, NV</u>	<u>54938A</u>
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____

AFFIDAVIT OF NON-COLLUSION

STATE OF CALIFORNIA )  
 ) SS  
COUNTY OF SANTA CRUZ )

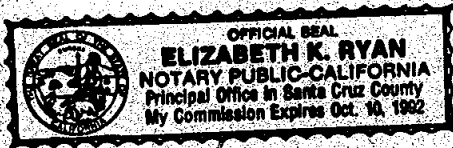
I, **A. V. OTJEN** (name of party signing this affidavit and the Proposal Form), VICE PRESIDENT (title), being duly sworn do depose and say: That GRANITE CONSTRUCTION COMPANY (name of person, firm, association, or corporation) has not, either directly or indirectly, entered into this agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this contract.

GRANITE CONSTRUCTION COMPANY

*[Signature]*  
Signature

A. V. OTJEN, VICE PRESIDENT  
Title

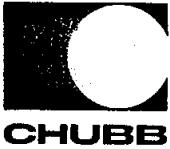
Sworn to before me this 1st day of MAY, 1989



*Elizabeth K. Ryan*  
Signature  
NOTARY PUBLIC  
Title

(SEAL)





# CHUBB GROUP OF INSURANCE COMPANIES

15 Mountain View Road, P.O. Box 1615, Warren, NJ 07061-1615

## PACIFIC INDEMNITY COMPANY

### BID BOND

Bond No.

Amount \$ 5% of total amount bid

### Know All Men By These Presents,

APPROVED AS TO  
LEGAL FORM

CITY ATTORNEY

That we, GRANITE CONSTRUCTION COMPANY, A California Corporation

(hereinafter called the Principal),

as Principal, and the PACIFIC INDEMNITY COMPANY, Los Angeles, California, a corporation duly organized under the laws of the State of California, (hereinafter called the Surety), as Surety, are held and firmly bound unto

City of Reno

(hereinafter called the Obligee),

in the sum of Five percent (5%) of the total amount of the bid

Dollars

(\$ -----), for the payment of which we, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated this 12th day of April 19 89

Whereas, the Principal has submitted a bid, dated May 1, 19 89, for Paradise Pond Outfall and Improvements Contract No. 665

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a contract with the Obligee in accordance with such bid and give bond with good and sufficient surety for the faithful performance of such contract, or in the event of the failure of the Principal to enter into such contract and give such bond, if the Principal shall pay to the Obligee the difference, not to exceed the penalty hereof, between the amount specified in said bid and the amount for which Obligee may legally contract with another party to perform the work covered by said bid, if the latter amount be in excess of the former, then this obligation shall be null and void, otherwise to remain in full force and effect.

GRANITE CONSTRUCTION COMPANY

Principal

BY: A.V. Otjen, Vice President

PACIFIC INDEMNITY COMPANY

BY: Kathleen Kenan, Attorney-in-fact



**POWER OF ATTORNEY**

Know all Men by these Presents, That the **PACIFIC INDEMNITY COMPANY**, Los Angeles, Cal., a California Corporation, has constituted and appointed, and does hereby constitute and appoint **A. V. Otjen, L. H. Lovejoy, Kathleen Kenan, Paul R. Foster and Sandra S. Ryther** of Watsonville, California each its true and lawful Attorney-in-Fact to execute--- under such designation in its name and to affix its corporate seal to and deliver for and on its behalf as surety thereon or otherwise, bonds on behalf of Granite Construction Company and/or Granite Construction Company in Joint Ventures---in connection with bid, proposals or contracts to or with the United States of America, any State or political subdivision thereof or any person, firm or corporation.

And the execution of such bonds or obligation by such Attorney-in-Fact in this Company's name and on its behalf as Surety thereon or otherwise, under its corporate seal, in pursuance of the authority hereby conferred shall, upon delivery thereof be valid upon this Company.

In Witness Whereof, the said **PACIFIC INDEMNITY COMPANY** has, pursuant to its By-Laws, caused these presents to be signed by its Vice-President and Assistant Secretary and its corporate seal to be hereto affixed this 20th day of June 19 88

Corporate Seal



*Richard D. O'Connor*  
Richard D. O'Connor  
Assistant Secretary

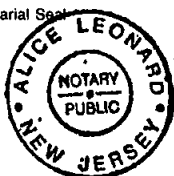
**PACIFIC INDEMNITY COMPANY**  
By

*Daniel F. Randolph*  
Daniel F. Randolph  
Vice-President

STATE OF NEW JERSEY }  
County of Somerset } ss.

On this 20th day of June 19 88, before me personally came Richard D. O'Connor to me known and by me known to be Assistant Secretary of the **PACIFIC INDEMNITY COMPANY**, the corporation described in and which executed the foregoing Power of Attorney, and the said Richard D. O'Connor being by me duly sworn, did depose and say that he is Assistant Secretary of the **PACIFIC INDEMNITY COMPANY** and knows the corporate seal thereof; that the seal affixed to the foregoing Power of Attorney is such corporate seal and was thereto affixed by authority of the By-Laws of said Company, and that he signed said Power of Attorney by like authority; and that he is acquainted with Daniel F. Randolph and knows him to be the Vice President of said Company, and that the signature of said Daniel F. Randolph subscribed to said Power of Attorney is in the genuine handwriting of said Daniel F. Randolph and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



STATE OF NEW JERSEY }  
County of Somerset } ss.

Acknowledged and Sworn to before me  
on the date above written.  
*Alice Leonard*

Notary Public  
**ALICE LEONARD**  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires June 28, 1988

**CERTIFICATION**

I, the undersigned, Assistant Secretary of the **PACIFIC INDEMNITY COMPANY**, do hereby certify that the following is a true excerpt from a resolution as adopted by the Board of Directors of the Company on the 8th day of February, 1926, and that the same has not since been amended or rescinded, to wit:

"RESOLVED, that the Attorneys-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company, and all bonds, recognizances, contracts of indemnity and other writings obligatory in the nature of a bond, recognizance or conditional undertaking, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed by the President and sealed and attested by the Secretary; and be it further

RESOLVED, that the Attorneys-in-Fact are hereby authorized to verify any affidavit required to be attached to bonds, recognizances or contracts of indemnity, policies of insurance and all other writings obligatory in the nature thereof."

I further certify that the following is an excerpt from the By-Laws of said Company as adopted by its Board of Directors and most recently amended on May 14, 1986, and that this By-Law is in full force and effect.

**"ARTICLE VIII.**

Section 5. All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman of the Board or the President or a Vice President or an Assistant Vice President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signatures of such officers may be engraved, printed or lithographed. The signature of each of the following officers: Chairman, Vice Chairman, President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached."

And I further certify that said **PACIFIC INDEMNITY COMPANY** is duly licensed to transact fidelity and surety business in each of the States of the United States of America, and District of Columbia and is also duly licensed to become sole surety on bonds, undertakings, etc., permitted or required by law.

I, the undersigned Assistant Secretary of **PACIFIC INDEMNITY COMPANY**, do hereby certify that the foregoing Power of Attorney is in full force and effect.

Given under my hand and the seal of said Company at Warren, N.J., this 12th day of April 19 89

Corporate Seal



*S. J. Mackley*  
Assistant Secretary

ATTENTION BIDDERS

P L E A S E - A F F I X  
P R O P O S A L G U A R A N T Y  
T O T H I S P A G E

RECEIVED

MAY 17 1989

CONTRACT

SPARKS

THIS AGREEMENT, made and entered into this 8th day of May, 1989, in Reno, Nevada, by and between the City of Reno, hereinafter called the City, Party of the First Part, and GRANITE CONSTRUCTION COMPANY, Party of the Second Part, hereinafter called the Contractor.

WITNESSETH, that the Contractor agrees with the City, for the consideration and Agreements hereinafter mentioned and contained to be made and performed by the City, and under the conditions expressed in two (2) bonds bearing even date with these presents, approved by the City Attorney and hereunto annexed, that he, the Contractor, shall and will at his own proper cost and expense, do all the work and furnish all the materials, necessary for the substantial construction and completion and to the satisfaction of the City, "PARADISE POND OUTFALL AND IMPROVEMENTS", Contract No. 665, together with incidental items necessary to complete the work in strict conformity, in every part and particular, with the annexed plans, special provisions and standard specifications which are made a part hereof, and in full compliance with the terms of this agreement.

And the Contractor hereby further agrees to receive and accept the prices set forth in the Proposal Schedule of Prices hereto annexed and hereby made a part of this agreement, as full compensation for furnishing all materials and labor, and the doing of all work, to the satisfaction of the Engineer and in the manner and under the conditions hereinafter specified.

The City hereby promises and agrees with the Contractor, to employ, and does hereby employ, the Contractor to provide the materials and to do all the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the said Contractor at the time, in the manner, and upon the conditions set forth in the General Provisions; and the said parties themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.

The Contractor further agrees that no moneys payable under this contract shall be assigned by power of attorney, or otherwise, except upon written consent of the City.

The Contractor covenants and agrees to conform to and comply with all requirements contained in Wage, Labor, and Equal Opportunity Requirements hereto annexed and hereby made a part of this Agreement.

The Contractor further agrees that he shall promptly repair, replace, restore or rebuild, as the City may determine, any finished work in which defects of materials or workmanship may

appear or to which damage may occur, because of such defects, during a one-year period subsequent to the date of final acceptance.

It is further expressly agreed, by and between the parties hereto, that should there be any conflict between the terms of this instrument and the bid or proposal of said Contractor, then this instrument shall control and nothing herein shall be considered an acceptance of the said terms of said proposal conflicting therewith.

And the said Contractor hereby further agrees that the payment of the final amount due under this contract shall release the City of Reno from any and all claims or liability on account of work performed under this contract other than such claims, if any, as may be specifically excepted by the Contractor in writing at the time final payment is made.

IN WITNESS WHEREOF, the parties to these presents have hereunto set their hands and seals the year and date first above written.

ATTEST:

[Signature]  
City Clerk of the  
City of Reno



CITY OF RENO, NEVADA

[Signature]  
MAYOR  
(First Party)

GRANITE CONSTRUCTION COMPANY  
CONTRACTOR

By [Signature]  
(Second Party)  
A. V. Otjen, Vice President

I hereby certify that I have examined the written contract and find the same to be in accordance with the Reno Municipal Code.

By [Signature]  
Attorney of the City of Reno,  
Nevada



LABOR AND MATERIAL BOND

Bond # 8123-63-83  
Premium included in the  
Performance Bond

KNOW ALL MEN BY THESE PRESENTS:

That WHEREAS, the City of Reno in the State of Nevada has awarded to GRANITE CONSTRUCTION COMPANY, hereinafter designated as the "Principal," a contract for construction of the "PARADISE POND OUTFALL AND IMPROVEMENTS," Contract No. 665,

and WHEREAS, said Principal is required under the terms of said contract to furnish a Bond for the labor and materials used in said Contract;

NOW, therefore, we, the Principal and PACIFIC INDEMNITY COMPANY, as surety, are held and firmly bound unto the City of Reno in the State of Nevada, in the penal sum of One million two hundred twenty-two thousand four hundred Dollars (\$1,222,490.50), lawful money of the United States, being not less than fifty percent (50%) of the estimated contract cost of the work, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents. ninety and 50/100

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounden principal, his or its heirs, executors, administrators, successors, or assigns, shall fail to pay for any materials, provisions, supplies, implements or machinery used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Compensation Law with respect to such work or labor, as required by the provisions of NRS 612, and provided that the claimant shall have complied with the provisions of said law, the Surety hereon will pay for the same within thirty (30) calendar days an amount not exceeding the sum specified in this bond, and the above obligation shall then be null and void. Otherwise it shall remain in full force and account. In case suit is brought upon this Bond the said Surety agrees to pay a reasonable attorney's fee to be fixed by the Court.

As a condition precedent to the satisfactory completion of the said contract, the above obligation shall hold good for a period of one (1) year after the completion and acceptance of the said work, during which time if the above bounden principal, his or its heirs, executors, administrators, successors or assigns shall fail to make full, complete and satisfactory repair and replacements or totally protect the said City of Reno in the State of Nevada from loss or damage made evident during said period of one (1) year from the date of acceptance of said works,







**POWER OF ATTORNEY**

Know all Men by these Presents, That the **PACIFIC INDEMNITY COMPANY**, Los Angeles, Cal., a California Corporation, has constituted and appointed, and does hereby constitute and appoint **A. V. Otjen, L. H. Lovejoy, Kathleen Kenan, Paul R. Foster and Sandra S. Ryther** of Watsonville, California each its true and lawful Attorney-in-Fact to execute--- under such designation in its name and to affix its corporate seal to and deliver for and on its behalf as surety thereon or otherwise, bonds on behalf of Granite Construction Company and/ or Granite Construction Company in Joint Ventures---in connection with bid, proposals or contracts to or with the United States of America, any State or political subdivision thereof or any person, firm or corporation. And the execution of such bonds or obligation by such Attorney-in-Fact in this Company's name and on its behalf as Surety thereon or otherwise, under its corporate seal, in pursuance of the authority hereby conferred shall, upon delivery thereof be valid upon this Company.

In Witness Whereof, the said **PACIFIC INDEMNITY COMPANY** has, pursuant to its By-Laws, caused these presents to be signed by its Vice-President and Assistant Secretary and its corporate seal to be hereto affixed this **20th** day of **June** 19 **88**

Corporate Seal



*Richard D. O'Connor*  
Richard D. O'Connor  
Assistant Secretary

**PACIFIC INDEMNITY COMPANY**  
By

*Daniel F. Randolph*  
Daniel F. Randolph  
Vice-President

STATE OF NEW JERSEY }  
County of Somerset } SS.

On this **20th** day of **June** 19 **88**, before me personally came Richard D. O'Connor to me known and by me known to be Assistant Secretary of the **PACIFIC INDEMNITY COMPANY**, the corporation described in and which executed the foregoing Power of Attorney, and the said Richard D. O'Connor being by me duly sworn, did depose and say that he is Assistant Secretary of the **PACIFIC INDEMNITY COMPANY** and knows the corporate seal thereof; that the seal affixed to the foregoing Power of Attorney is such corporate seal and was thereto affixed by authority of the By-Laws of said Company, and that he signed said Power of Attorney by like authority; and that he is acquainted with Daniel F. Randolph and knows him to be the Vice President of said Company, and that the signature of said Daniel F. Randolph subscribed to said Power of Attorney is in the genuine handwriting of said Daniel F. Randolph and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



STATE OF NEW JERSEY }  
County of Somerset } SS.

Acknowledged and Sworn to before me  
on the date above written.

*Alice Leonard*

Notary Public

CERTIFICATION

**ALICE LEONARD**  
**NOTARY PUBLIC OF NEW JERSEY**  
My Commission Expires June 28, 1988

I, the undersigned, Assistant Secretary of the **PACIFIC INDEMNITY COMPANY**, do hereby certify that the following is a true excerpt from a resolution as adopted by the Board of Directors of the Company on the 8th day of February, 1926, and that the same has not since been amended or rescinded, to wit:

"RESOLVED, that the Attorneys-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company, and all bonds, recognizances, contracts of indemnity and other writings obligatory in the nature of a bond, recognizance or conditional undertaking, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed by the President and sealed and attested by the Secretary; and be it further RESOLVED, that the Attorneys-in-Fact are hereby authorized to verify any affidavit required to be attached to bonds, recognizances or contracts of indemnity, policies of insurance and all other writings obligatory in the nature thereof."

I further certify that the following is an excerpt from the By-Laws of said Company as adopted by its Board of Directors and most recently amended on May 14, 1966, and that this By-Law is in full force and effect.

"ARTICLE VIII.

Section 5. All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman of the Board or the President or a Vice President or an Assistant Vice President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signatures of such officers may be engraved, printed or lithographed. The signature of each of the following officers: Chairman, Vice Chairman, President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached."

And I further certify that said **PACIFIC INDEMNITY COMPANY** is duly licensed to transact fidelity and surety business in each of the States of the United States of America, and District of Columbia and is also duly licensed to become sole surety on bonds, undertakings, etc., permitted or required by law.

I, the undersigned Assistant Secretary of **PACIFIC INDEMNITY COMPANY**, do hereby certify that the foregoing Power of Attorney is in full force and effect.

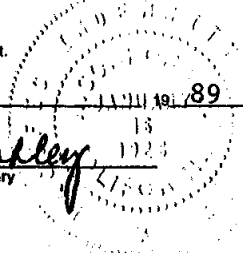
Given under my hand and the seal of said Company at Warren, N.J., this 16th day of May 1989

Corporate Seal



Form 2 (Rev. 4-87) BLANK

*J. D. Malley*  
Assistant Secretary



PERFORMANCE BOND

Bond # 8123-63-83  
Premium: \$15,673.00\*

KNOW ALL MEN BY THESE PRESENTS:

That WHEREAS, the City of Reno in the State of Nevada has awarded to GRANITE CONSTRUCTION COMPANY hereinafter designated as the "Principal," a contract for construction of the "PARADISE POND OUTFALL AND IMPROVEMENTS," Contract No. 665;

and WHEREAS, said Principal is required under the terms of said contract to furnish a Bond for the faithful performance of said contract;

NOW, therefore, we, the Principal and PACIFIC INDEMNITY COMPANY, as surety, are held and firmly bound unto the City of Reno in the State of Nevada, in the penal-sum of Two million four hundred forty-four thousand nine hundred eighty-one and Dollars (\$2,444,981.00), lawful money of the United States, 00/100 being not less than one hundred percent (100%) of the estimated contract cost of the work for the payment of which sum well and truly to be made, we find ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounden principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and faithfully perform the covenants, conditions and agreements in the said contract and any alterations made as therein provided, on his or its part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning; and shall indemnify and save harmless the City of Reno in the State of Nevada, its officers and agents, as therein stipulated; then this obligation shall become null and void. Otherwise, it shall be and remain in full force and virtue.

The Bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under NRS 339, so as to give a right of action to them or their assigns in any suit brought upon this Bond.

\* The premium shown on this bond may be subject to adjustment in accordance with the provisions of California law recently adopted by ballot initiative.

PERFORMANCE BOND

IN WITNESS WHEREOF the above bounden parties have executed this instrument under their seals this 16th day of May, 1988, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

APPROVED AS TO  
LEGAL FORM  
*Elizabeth K Ryan*  
Dep. **CITY ATTORNEY**  
California  
STATE OF NEVADA )  
COUNTY OF Santa Cruz )

\_\_\_\_\_  
GRANITE CONSTRUCTION COMPANY  
Principal  
By *AW*  
A. V. Otjen, Vice President

) SS.

On this 16th day of May, 1988, personally appeared before me, a Notary Public in and for said county and state, A. V. Otjen, who acknowledged that he executed the above instrument.



*Elizabeth K Ryan*  
Notary Public

\_\_\_\_\_  
PACIFIC INDEMNITY COMPANY

*Kathleen Kenan*  
Surety

By \_\_\_\_\_  
Kathleen Kenan, Attorney-in-Fact

California  
STATE OF NEVADA )  
COUNTY OF Santa Cruz )

) SS.

On this 16th day of May, 1988, personally appeared before me, a Notary public in and for said county and state, Kathleen Kenan, who acknowledged that she executed the above instrument.



*Elizabeth K Ryan*  
Notary Public

*Laura L Peri* 6/6/89  
Countersigned by Laura L. Peri for  
Alpine Ins. Assoc. Reno, NV



# CERTIFICATE OF INSURANCE

SET TAB STOPS AT ARROWS

ISSUE DATE (MM/DD/YY)

5/22/89

PRODUCER

McSHERRY & HUDSON  
 P. O. BOX 1019  
 WATSONVILLE, CA 95077  
 (408) 724-3841

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

### COMPANIES AFFORDING COVERAGE

COMPANY LETTER **A** AMERICAN CASUALTY COMPANY

COMPANY LETTER **B**

COMPANY LETTER **C** APPROVED AS TO LEGAL FORM

COMPANY LETTER **D** *Robert G. Gordon*

COMPANY LETTER **E** Dep. CITY ATTORNEY

INSURED

GRANITE CONSTRUCTION COMPANY  
 P. O. BOX 900  
 WATSONVILLE, CA 95077

### COVERAGES

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS, AND CONDITIONS OF SUCH POLICIES.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIABILITY LIMITS IN THOUSANDS		
					EACH OCCURRENCE	AGGREGATE	
A	<b>GENERAL LIABILITY</b>	CCP 900-1605179	10/1/88	10/1/89	BODILY INJURY	\$	\$
	<input checked="" type="checkbox"/> COMPREHENSIVE FORM				PROPERTY DAMAGE	\$	\$
	<input checked="" type="checkbox"/> PREMISES/OPERATIONS UNDERGROUND EXPLOSION & COLLAPSE HAZARD				BI & PD COMBINED	\$ 2,000	\$ 2,000
	<input checked="" type="checkbox"/> PRODUCTS/COMPLETED OPERATIONS				PERSONAL INJURY		\$ Include
	<input checked="" type="checkbox"/> CONTRACTUAL						
	<input checked="" type="checkbox"/> INDEPENDENT CONTRACTORS						
	<input checked="" type="checkbox"/> BROAD FORM PROPERTY DAMAGE						
A	<b>AUTOMOBILE LIABILITY</b>	CCP 900-1605179	10/1/88	10/1/89	BODILY INJURY (PER PERSON)	\$	
	<input checked="" type="checkbox"/> ANY AUTO				BODILY INJURY (PER ACCIDENT)	\$	
	<input type="checkbox"/> ALL OWNED AUTOS (PRIV. PASS.)				PROPERTY DAMAGE	\$	
	<input type="checkbox"/> ALL OWNED AUTOS (OTHER THAN PRIV. PASS.)				BI & PD COMBINED	\$ Included	
	<input checked="" type="checkbox"/> HIRED AUTOS						
	<b>EXCESS LIABILITY</b>				BI & PD COMBINED	\$	\$
	<input type="checkbox"/> UMBRELLA FORM						
	<b>WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY</b>				STATUTORY		
					\$	(EACH ACCIDENT)	
					\$	(DISEASE-POLICY LIMIT)	
					\$	(DISEASE-EACH EMPLOYEE)	
	<b>OTHER</b>						

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

JOB #160084 PARADISE POND OUTFALL

### CERTIFICATE HOLDER

CITY OF RENO  
 P. O. BOX 1900  
 RENO, NV 89505

### CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT. ~~BY ANY OTHER MEANS. SUCH NOTICE SHALL BE DEEMED TO HAVE BEEN GIVEN TO THE CERTIFICATE HOLDER BY MAIL 30 DAYS BEFORE THE DATE OF CANCELLATION.~~

AUTHORIZED REPRESENTATIVE

*Deann Corneil*

McSHERRY &amp; HUDSON

ADDITIONAL INSURED

NAME OF PERSON OR ORGANIZATION

THE CITY OF RENO

COVERED OPERATIONS

JOB #16-084

PARADISE POND OUTFALL

THE "PERSONS INSURED" PROVISION IS AMENDED TO INCLUDE AS AN INSURED THE PERSON OR ORGANIZATION NAMED ABOVE (HEREINAFTER CALLED "ADDITIONAL INSURED") BUT ONLY WITH RESPECT TO LIABILITY ARISING OUT OF OPERATIONS PERFORMED FOR THE ADDITIONAL INSURED BY THE NAMED INSURED AND SUBJECT TO COVERAGE AFFORDED BY I.S.O. STANDARD LIABILITY INSURANCE FORM #G39008-A.

This endorsement is a part of your policy and takes effect on the effective date of your policy, unless another effective date is shown below.

<i>Must Be Completed</i>	
ENDT. NO.	POLICY NO.
CH306	OCP 900-1605179

<i>Complete Only When This Endorsement Is Not Prepared with the Policy Or Is Not to be Effective with the Policy</i>	
ISSUED TO	EFFECTIVE DATE OF THIS ENDORSEMENT
GRANITE CONSTRUCTION COMPANY	5/22/89 ra

**CNA**  
For All the Commitments You Make®

McSHERRY & HUDSON

Countersigned by *Dennis Carney*  
Authorized Representative



# CERTIFICATE OF INSURANCE

SET TAB STOPS AT ARROWS  
ISSUE DATE (MM/DD/YY)

5/23/89

## PRODUCER

Bayly, Martin & Fay, Inc.  
3801 Barham Blvd.  
Los Angeles, CA 90068-1094

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

## COMPANIES AFFORDING COVERAGE

COMPANY LETTER **A** United Fire & Casualty Company

COMPANY LETTER **B**

COMPANY LETTER **C** APPROVED AS TO  
LEGAL FORM

COMPANY LETTER **D** *Albert G. Brewer*

COMPANY LETTER **E** *Dep.* CITY ATTORNEY

## INSURED

Granite Construction Company  
P.O. Box 900  
Watsonville, CA 95077

## COVERAGES

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS, AND CONDITIONS OF SUCH POLICIES.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIABILITY LIMITS IN THOUSANDS		
						EACH OCCURRENCE	AGGREGATE
	<b>GENERAL LIABILITY</b>						
	<input type="checkbox"/> COMPREHENSIVE FORM				BODILY INJURY	\$	\$
	<input type="checkbox"/> PREMISES/OPERATIONS UNDERGROUND EXPLOSION & COLLAPSE HAZARD				PROPERTY DAMAGE	\$	\$
	<input type="checkbox"/> PRODUCTS/COMPLETED OPERATIONS				BI & PD COMBINED	\$	\$
	<input type="checkbox"/> CONTRACTUAL				PERSONAL INJURY		\$
	<input type="checkbox"/> INDEPENDENT CONTRACTORS						
	<input type="checkbox"/> BROAD FORM PROPERTY DAMAGE						
	<input type="checkbox"/> PERSONAL INJURY						
	<b>AUTOMOBILE LIABILITY</b>						
	<input type="checkbox"/> ANY AUTO				BODILY INJURY (PER PERSON)	\$	
	<input type="checkbox"/> ALL OWNED AUTOS (PRIV. PASS.)				BODILY INJURY (PER ACCIDENT)	\$	
	<input type="checkbox"/> ALL OWNED AUTOS (OTHER THAN PRIV. PASS.)				PROPERTY DAMAGE	\$	
	<input type="checkbox"/> HIRED AUTOS				BI & PD COMBINED	\$	
	<input type="checkbox"/> NON-OWNED AUTOS						
	<input type="checkbox"/> GARAGE LIABILITY						
	<b>EXCESS LIABILITY</b>						
	<input type="checkbox"/> UMBRELLA FORM				BI & PD COMBINED	\$	\$
	<input type="checkbox"/> OTHER THAN UMBRELLA FORM						
	<b>WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY</b>				STATUTORY		
						\$	(EACH ACCIDENT)
						\$	(DISEASE-POLICY LIMIT)
						\$	(DISEASE-EACH EMPLOYEE)
	<b>OTHER</b>						
<b>A</b>	<b>ALLRISK BUILDERS' RISK</b>	UIM 460144	05/01/89	05/01/90			AMOUNT: \$2,444,981.00

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS  
JOB #16-084 PARADISE POND OUTFALL

## CERTIFICATE HOLDER

CITY OF RENO  
P.O. BOX 1900  
RENO, NV 89505

## CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, AND WILL RETURN TO THE COMPANY THE ORIGINAL POLICY.

AUTHORIZED REPRESENTATIVE

Blair Smith *Blair Smith*

THIS SHOULD BE FRAMED AND MUST BE CONSPICUOUSLY DISPLAYED

STATE OF CALIFORNIA  
DEPARTMENT OF INDUSTRIAL RELATIONS

OFFICE OF THE DIRECTOR

NUMBER 1933

# CERTIFICATE OF CONSENT TO SELF-INSURE

THIS IS TO CERTIFY, That GRANITE CONSTRUCTION COMPANY (a California corporation) has complied with the requirements of the Director of Industrial Relations under the provisions of Sections 3700 to 3705, inclusive, of the Labor Code of the State of California and is hereby granted this Certificate of Consent to Self-Insure.

This certificate may be revoked at any time for good cause shown.

EFFECTIVE:

THE 1st DAY OF January, 1980



*Richard S. Anderson*  
RICHARD S. ANDERSON,  
MANAGER

DEPARTMENT OF INDUSTRIAL RELATIONS  
OF THE STATE OF CALIFORNIA  
*Donald Vial*  
DONALD VIAL,  
DIRECTOR

\* Revoked. \* Revoke. \* A certificate of consent to self-insure may be revoked by the Director of Industrial Relations at any time for good cause after a hearing. Good cause includes, among other things, the impairment of the solvency of such employer, the inability of the employer to fulfill his obligations, or the practice by such employer or his agent in charge of the administration of obligations under this division of any of the following: (a) Habitually and as a matter of practice and custom inducing claimants for compensation to accept less than the compensation due or making it necessary for them to resort to proceedings against the employer to secure the compensation due; (b) Discharging his compensation obligations in a dishonest manner; (c) Discharging his compensation obligations in such a manner as to cause injury to the public or those dealing with him." (Section 3702 of Labor Code.) The Certificate may be revoked for noncompliance with Title 8, California Administrative Code, Group 2—Administration of Self-Insurance.

SPECIAL PROVISIONS



## SPECIAL PROVISIONS

### SECTION 1 DOCUMENTS

#### 1.01 STANDARD SPECIFICATIONS

All materials furnished and work performed shall be done in accordance with the 1978 edition of the "Standard Specifications for Public Works Construction," sponsored and distributed by Washoe County, City of Sparks, City of Reno, Carson City, and Douglas County, and the General Provisions which were adopted into the Reno Municipal Code, Chapter 12.04, effective January 1, 1982, insofar as the above mentioned specifications be applicable and in accordance with the Plans and Special Provisions.

The City of Reno "General Provisions" supersedes and shall be used in place of Part I (General Provisions) of "Standard Specifications for Public Works Construction."

#### 1.02 SPECIAL PROVISIONS

The requirements set forth in the "Special Provisions" shall be used in addition to those set forth in the "General Provisions" and the "Standard Specifications."

In the event of conflict between the specifications hereinbefore mentioned and these Special Provisions, the Special Provisions shall take precedence over and be used in lieu of such conflicting portions.

#### 1.03 STANDARD DETAILS

All construction shall be performed in accordance with the latest edition of the "Standard Details for Public Works Construction," sponsored and distributed by City of Reno, Washoe County, Carson City, Douglas County, and six other Nevada governmental agencies, except as modified by the plans and/or these Special Provisions.

#### 1.04 CONTRACT DOCUMENTS

The contract documents shall consist of The Contract Drawings entitled "PARADISE POND OUTFALL", Notice to Contractors, Instructions to Bidders, Bid Proposal, "Standard Specifications for Public Works Construction", the City of Reno "General Provisions", and the "Standard Details for Public Works Construction."

## SECTION 2

### 2.01 SCOPE OF WORK

The work consists of constructing a 54-inch diameter outfall pipe from Paradise Pond to the Truckee River, along with related improvements including but not limited to the following:

Clearing and grubbing, asphalt removal and disposal, excavation and grading, excess material disposal, pipeline installation, pipe boring and jacking, base and asphalt paving, manholes, inlet and outlet structures, storm drain and sanitary sewer relocation, special structures, rock rip-rap and appurtenant items necessary for the completion of the project.

### 2.02 PREQUALIFICATION OF BIDDERS

Delete Section 102.02 of the General Provisions and add the following:

The City Engineer may accept those contractors as being prequalified who have previously qualified with the State of Nevada, Department of Highways and/or have been licensed by the State of Nevada, State Board of Contractors. The extent of prequalification shall be to the maximum contract amount and class of work as determined by the City Engineer.

### 2.03 PLAN DEPOSIT

Plans, specifications, and Special Provisions may be inspected at City of Reno Public Works, 450 Sinclair Street, Reno, Nevada; The Reno Builders Exchange, 500 Ryland, Reno, Nevada, or may be seen and obtained at the offices of Lumos & Associates, 3760 Grant Drive, Suite 102, Reno, Nevada, at a cost of \$50.00 per set. This charge is not refundable. Copies of the "Standard Specifications for Public Works Construction" and "Standard Details for Public Works Construction" can be purchased at City of Fallon Public Works, Fallon, Nevada.

### 2.04 CODES AND PERMITS

It shall be the responsibility of the Contractor to acquire all necessary permits prior to commencement of work and to comply with all applicable City, County, State and Federal laws, regulations, and codes.

2.05 ADDENDA AND/OR BULLETINS

Signed copies of all addenda and/or bulletins issued to prospective bidders shall be enclosed with the Bid Proposal. Failure of bidder to enclose said addenda or bulletins may be considered grounds for rejection of the bid.

2.06 EXECUTION OF CONTRACT

City of Reno reserves the right to reject any or all bids, to waive informalities, or to accept the proposal which is deemed by City of Reno Public Works to be in the best interest of City of Reno.

City of Reno reserves the right to hold the bids for thirty (30) days before awarding the contract.

Upon receiving notice that the contract has been awarded, the successful bidder will have a maximum of ten (10) calendar days to sign and return the contract, together with the contract bonds. Failure by the successful bidder to execute the contract within ten (10) calendar days after receiving notice of award of the contract shall be just cause for annulment of the award and forfeiture of the proposal guaranty which shall become the property of the City, not as penalty, but as liquidation of damages sustained. Award may then be made to the next lowest bidder or the work may be re-advertised and constructed under contract or otherwise, as the City may decide.

If the contract is not executed within thirty (30) calendar days after receiving signed contract and bonds from the Contractor, the Contractor shall have the right to withdraw his bid without penalty. No contract shall be considered as effective until it has been finally executed by all parties thereto and approved.

2.07 PRE-CONSTRUCTION CONFERENCE

After the execution of the contract, but prior to the commencement of any work, a pre-construction conference between the Contractor and the City will be held at a mutually acceptable time and place. The Contractor shall be represented by a principal of the firm and the superintendent for this project.

2.08 PROGRESS SCHEDULE AND ORDER OF WORK

After being awarded the contract, the Contractor shall prepare and submit to the Engineer for approval a progress schedule showing the order in which the Contractor proposes to carry out the work within the contract time and showing the beginning times and completion times for

the several salient features of the work provided in the contract. The progress schedule shall be in the form of an arrow network, precedence diagram, or other similar schedule developed under a critical path method. The schedule shall outline in sufficient detail the proposed operations, the interrelations of the various operations, and the order of performance so that the progress of the work can be evaluated accurately at any time during the performance of the contract. The network will reflect activity durations in a working day time frame and the schedule shall not reflect winter shutdown or free time. The progress schedule shall be submitted to the Engineer in triplicate at least ten (10) days in advance of the commencement of work. The schedule must be approved by the Engineer prior to beginning work.

The Contractor shall construct the section of 54 inch pipeline, starting at Station 37+20 and proceeding north along El Rancho Drive to Station 60+20, together with all necessary sewer, water and gas relocations as the first order of work.

The Contractor's attention is directed to the limited time period for construction of the outfall structure in the Truckee River. Construction of the outfall structure at the Truckee River shall take place between July 1st and October 31st. No construction activities may occur in the river from November 1st through June 30th.

#### 2.09 NOTICE TO PROCEED AND TIME OF COMPLETION

The Contractor shall not commence the work, nor incur any expense therewith, before he is notified to proceed with the work. The Owner will notify the Contractor in writing to proceed with the work and this "Notice to Proceed" will state the date on which the contract time will begin. Unless stated otherwise in the "Notice to Proceed" the start of construction date will be June 5, 1989.

The Contractor shall begin construction no later than the date set forth in the "Notice to Proceed" and shall diligently prosecute the same to completion before the expiration of one hundred twenty (120) working days from the date of commencement of the contract time.

#### 2.10 PARTIAL PAYMENTS

Partial payments will be made once each month as the work satisfactorily progresses. If in the judgement of the Engineer, the work is not proceeding in accordance with the provisions of the contract, or when in his judgement the value of work done since the last estimate amounts to less than Five Hundred Dollars (\$500.00), no such estimate or payment shall be required to be made. The progress



estimate shall be based on materials in place, or on the job site and invoiced, and labor expended thereon.

From the total amount ascertained will be deducted ten percent (10%) of the whole, which will be retained by the Owner until after completion of the entire contract in an acceptable manner; and the balance or an amount equivalent to ninety percent (90%) of the whole, adjusted for all previous payments, shall be certified for payment, provided that any time after fifty percent (50%) of the work has been completed, the Engineer may, if he finds that satisfactory progress is being made, make any of the remaining partial payments in full. The money retained by the Owner shall be held until the end of the statutory lien period or until such liens or claims are resolved after final completion and acceptance of the work.

## 2.11 LIQUIDATED DAMAGES

If the Contractor refuses or fails to complete all of the work called for under the contract within the time specified, including authorized extensions, it is agreed by the parties to the contract that damage will be sustained by the Owner and that it is and will be impractical to determine accurately the total actual damage which the Owner will sustain in the event of and by reason of such delay. Therefore, the Contractor shall pay to the Owner the sum of Eight Hundred Dollars (\$800.00) for each and every working day subsequent to the time specified and until the work is completed and accepted, and the Owner shall further have the right to charge to the Contractor, his heirs, assigns, or sureties and to deduct from the final payment for work or any part as it may deem proper to the actual cost of engineering, inspection, superintendence, and legal fees or other overhead expenses which are directly chargeable to the contract and which accrue during the period of such extension. This payment shall not be considered as penalty, but as liquidated damages suffered by the Owner because of failure of the Contractor to complete the work within the time limit of the contract.

## 2.12 INSURANCE

The Contractor shall not commence any work nor permit a subcontractor to commence work on this project until satisfactory proof has been presented to the Owner that all insurance requirements as outlined below have been met. The requirements supercede the requirements set forth in the General Conditions.

The Contractor shall furnish the Owner a policy or certificate of liability insurance in which the Owner and his Engineer are the named insured or are named as

additional insured with the Contractor. Notwithstanding any inconsistent statement in the policy or any subsequent endorsement attached thereto, the Owner and his Engineer shall be the insured or named as additional insured covering all operations of the Contractor, whether liability is attributable to the Contractor or the Owner.

The Contractor may file with the Owner a satisfactory "blanket coverage" policy of insurance. The policy shall insure the Owner, its officers, employees, and agents while acting within the scope of their duties, against all claims arising out of or in connection with the work. The policy shall provide the following minimum limits:

Bodily Injury . . . . .	\$1,000,000 each person
	\$1,000,000 each accident
	\$1,000,000 aggregate products
Property Damage . . . . .	\$1,000,000 each accident
	\$1,000,000 each aggregate operations
	\$1,000,000 each aggregate protective
	\$1,000,000 each aggregate products
	\$1,000,000 each aggregate contractual

All liability insurance policies shall bear an endorsement or shall have attached a rider whereby it is provided that, in the event of expiration or proposed cancellation of such policies for any reason whatsoever, the Owner shall be notified by registered mail not less than 30 days before expiration or cancellation is effective. The cost of this insurance shall be absorbed in the Contractor's bid.

#### Property Insurance.

The Contractor shall purchase and maintain property insurance upon the entire Work at the site to the full insurable value thereof. This insurance shall include the interests of the Owner, the Contractor, Subcontractors and Subsubcontractors in the Work and shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief.

#### Workman's Compensations and Nevada State Industrial Insurance System.

Before the agreement between the Owner and the Contractor is entered into, the Contractor will submit written

evidence that he and all subcontractors have obtained for the period of the contract full workman's compensation insurance (Chapter 616 of Nevada Revised Statutes) coverage for all persons whom they employ in carrying out the work under this contract.

## 2.13 SANITARY FACILITIES

The Contractor shall provide and maintain in a neat, sanitary condition, accommodations for the use of his employees as may be necessary to comply with the requirements and regulations of the Nevada Department of Health or other bodies having local jurisdiction.

Sewage flows shall not be interrupted. Should the Contractor disrupt existing sewer facilities, sewage shall be conveyed in closed conduits and disposed of in a sanitary sewer system. Sewage will not be allowed to flow in trenches or be covered by backfill.

## 2.14 CONTRACTOR'S RESPONSIBILITY

Attention is directed to Section 108.11 of the General Provisions and to the following:

Before submitting a proposal, bidders should carefully examine the drawings and specifications, visit the site, fully inform themselves as to all existing conditions and limitations and shall include in the proposal a sum to cover the cost of all items included in the contract. It shall be the responsibility of the Contractor to examine the site, to be familiar with these plans and specifications for the work contemplated, and to thoroughly acquaint himself with the physical conditions to be encountered.

Should bidder find inconsistencies in, or omissions from, the drawings or contract documents, or should he be in doubt as to their meaning, he should at once notify the Engineer, who may send written instructions to all bidders.

The site shall be maintained in a neat and safe manner and not present a nuisance or hazard to the public. No excavation shall be left unprotected overnight, on weekends, or unattended. The Contractor shall place a six (6) foot high chain link fence round all excavations on State Mental Health Institute Property, round all excavations adjacent to the Truckee River, and round all excavations on the vacant lot at Kietzke Lane and 'B' Street. Open trenches on El Rancho Drive, Prater Way and Kietzke Lane shall be protected by moveable concrete barriers. Any other measures needed to maintain a safe,

nuisance-free condition shall be the responsibility of the Contractor.

The Contractor, upon completion of all work required by this contract, shall remove all equipment and materials from the site. The Contractor shall remove all surplus excavated material, clean the site, level the ground to its original natural surface, and perform all other work necessary to provide a finished result.

The Contractor shall warrant equipment, material, and workmanship to be of first quality and shall guarantee that the quality of material and workmanship used in the job will be satisfactory for a period of one year after final acceptance of the work. Any defects occurring during the guarantee period shall be corrected in a manner satisfactory to the Engineer. In event repairs cannot be made without undue difficulty, the Contractor or his surety shall be responsible to the City for any damages determined reasonable and consistent with the circumstances and acceptable to the City.

#### 2.15 PERSONNEL

All of the Contractor's personnel shall be highly qualified for the work they are assigned. If any of the Contractor's personnel are not acceptable to the Engineer, they shall be replaced at the Engineer's request.

#### 2.16 SUPERINTENDENCE

The Contractor shall keep on the project an experienced, capable superintendent satisfactory to the Engineer. The job superintendent shall be present whenever actual construction, development or testing work is being done. The superintendent shall not be changed except with the consent of the Engineer, unless the superintendent proves to be unsatisfactory to the Contractor or ceases to be in his employ. If the superintendent proves to be unsatisfactory to the Engineer, the Contractor shall provide a different acceptable superintendent. The superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor. Directions shall be confirmed to the Contractor.

#### 2.17 MINIMUM WAGE

The minimum wages to be paid shall be as specified in Section 017.01B of the General Provisions. Certified copies of all payroll sheets shall be submitted to the Engineer bi-weekly and before final payment request. A copy of the minimum wage rates shall be posted on the project site in accordance with NRS 338.020.



## 2.18 INTENT OF THE PLANS AND SPECIFICATIONS

The intent of the plans and specifications is to give a thorough description of work to be performed under the contract. The Contractor shall perform the work in accordance with the plans and specifications and to the acceptance of the Engineer. If the Contractor discovers any error or omission in the plans or specifications, he shall immediately call it to the attention of the Engineer.

## 2.19 COOPERATION WITH OTHER CONTRACTORS

The Contractor shall cooperate with other Contractors who may be employed by the Owner on construction of other work adjacent to or in the proximity of the location of the project.

## 2.20 DISPOSAL OF EXCESS AND WASTE MATERIALS

Trash, construction debris, cleared vegetation, and excess excavated material shall be removed by the Contractor and disposed of at a location selected by the Contractor and approved by the Engineer.

## 2.21 PROTECTION OF EXISTING UTILITIES

The location of existing utilities shown on the plans are not guaranteed, but indicates generally their location according to the best knowledge of the Engineer.

The Contractor shall call 1-800-227-2600 and notify Sierra Pacific Power Company, Westpac Utilities, TCI of Reno, Nevada Bell Telephone Company, City of Reno Public Works and City of Sparks Public Works, not less than five (5) working days prior to the start of construction to verify the location and depths of utilities.

The Contractor shall inform himself of the exact location of all conduits, ducts, cables, pipe systems, etc., and shall protect all utilities encountered in the process of excavation. Any damage of said utilities or pipelines caused by operation of the Contractor shall be repaired by the Contractor at his own expense.

## 2.22 LIMITS OF CONTRACTOR'S OPERATIONS

The Contractor will confine his operations within the limitations of construction easements or limits as shown on the drawings. If the Contractor's operations result in damage to any privately owned facility outside the limitations of the construction easement, the Contractor

shall, at his expense, repair such damage or indemnify the owner of the damaged property.

If the Contractor negotiates with property owners for the use of land for construction operations outside the limits of the construction easements, he shall do so at his own risk and the Owner will assume no liability for such use of private property. All agreements between the Contractor and private property owners shall be in writing and the Owner will be furnished copies of such agreements.

## 2.23 CLEANUP

Cleanup and dust control throughout all phases of construction, including suspension of work, and until final acceptance of the project shall be the Contractor's responsibility, and he shall keep the work site clean and free from rubbish and debris. The Contractor shall also abate dust nuisance by cleaning, sweeping, and sprinkling with water, or other means as necessary. The use of water resulting in mud on public streets will not be permitted as a substitute for sweeping or other methods.

All construction procedures shall conform to Washoe County Air Pollution Standards.

Materials and equipment shall be removed from the site as soon as they are no longer necessary; and upon completion of the work and before final inspection, the entire worksite shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. All cleanup costs shall be absorbed in the Contractor's bid.

Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.

Excess excavated material from trenches, manholes or similar structures in public streets shall be removed from the site immediately. Sufficient material may remain for use as backfill, but shall not remain during non-working hours. Forms and form lumber shall be removed from the site as soon as practicable after stripping. No screening of excavated material will be allowed in the street.

Earth dams will not be permitted at catch basin openings, local depressions, or elsewhere, except in time of emergency. Temporary dams of sand bags, asphaltic concrete or other acceptable material may be permitted when necessary to protect the work, provided their use does not create a hazard or nuisance to the public. Such dams shall be removed from the site as soon as their use is no longer necessary.

Failure of the Contractor to comply with the Engineer's cleanup orders may result in an order to suspend work until the condition is corrected. No additional compensation will be allowed as a result of such suspension. No extension of contract time will be allowed as a result of such suspension.

If the contract time expires before cleanup has been completed, liquidated damages, as specified in these specifications, will be imposed.

## 2.24 FAIR EMPLOYMENT PRACTICES

Attention is directed to Subsection 107.01 of the City of Reno General Provisions and to NRS Chapter 338, Section 338.125.

Contracts negotiated between Contractors and the State, or any of its political subdivisions, shall contain the following contractual provisions:

"In connection with the performance of work under this contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin or sex. Such agreement 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 further agrees to insert this provision in all sub-contracts hereunder, except subcontracts for standard commercial supplies or raw materials.

Any violation of such provision by a Contractor shall constitute a material breach of contract.

## 2.25 MAINTENANCE OF TRAFFIC

Attention is directed to Section 104.05 of the General Provisions and the requirements set forth herein.

All traffic control and maintenance will comply with the requirements of the latest edition, including supplements of the "Manual on Uniform Traffic Control Devices" (M.U.T.C.D.).

Traffic control for 54 inch pipeline work shall be as shown on the plans. The Contractor shall submit separate traffic control plans for water main, gas main, sanitary sewer and storm drain relocations.

An approved traffic control plan will be required prior to any construction. The first item of work to be performed will be installation of signs warning of and designating the construction zone.

During the course of construction, the Contractor will provide and maintain a minimum of two (2) travel lanes, each at least twelve (12) feet wide, dust, rut and hummock free, and open at all times.

Where controlled traffic is necessary for protection of the work or for the safety of public travel, it shall be accomplished by use of flagmen provided by the Contractor. The Contractor shall also provide and maintain in a safe condition, temporary approaches or crossings and intersections with roads, streets, businesses, parking lots, residences, garages, and hospitals. Snow removal, however, will not be required of the Contractor. The Contractor shall bear all expense of maintaining the roadway over the section of road undergoing improvement and of construction and maintaining such approaches, crossings, intersections, and other features as may be necessary without direct compensation.

When a detour is requested by the Contractor, he shall make a written request to the Engineer for the establishment of a detour around all or certain designated sections of work. The request shall include a drawing showing all proposed sign locations, sign configurations, colors, lighting, and traffic flow patterns. The Engineer may deny the detour or approve the detour subject to the following conditions.

1. The Contractor shall provide and maintain the necessary route marking signs.
2. The Contractor shall construct and maintain in good condition such a detour. If the Contractor fails to maintain the detour in such a condition satisfactory to the Engineer, the Owner will make or cause to be made such repairs as is deemed suitable and will deduct the cost thereof from money due or to become due to the Contractor.
3. All of the above work will be at the sole expense of the Contractor.

Prior to commencement of work, the Contractor shall submit a traffic control plan to the Engineer for his approval. This plan shall show all signing, lane markings, phasing for transferring the two thru-lanes, and all other traffic control items. Upon approval, and prior to beginning construction, the Contractor shall notify and submit a

copy of the approved traffic control plan to the City of Sparks Police Department, city of Sparks Fire Department, and any other emergency service as directed by the Engineer.

The storage of construction materials and equipment within the public streets and alleys during nighttime and weekend periods is prohibited.

The closure of any two adjacent parallel streets at the same time is prohibited.

A minimum of two working days written notification to adjacent residents, businesses, police and fire departments, and the Engineer of planned street closures and parking restrictions is required.

Flagmen shall be used during working hours to control traffic flows in accordance with said Manual and as directed by the Engineer.

A street will be considered closed to through traffic if it is barricaded or a closed sign is posted on any portion of the street, including intersections of crossing streets.

In the context of this contract, alleys will not be considered city streets. Alleys shall not be used as detour routes for traffic control.

Type I or Type II barricades will not be permitted for use to prevent vehicle traffic from entering a closed portion of roadway. Type III barricades only will be used in all such instances. Type III barricades used for this purpose will be placed a maximum four (4) feet apart. All barricades shall have flashing yellow warning lights mounted on them.

Exact locations of signs and barricades will be determined in the field by the Engineer.

The Contractor shall not proceed with any construction until the proper traffic control has been provided to the satisfaction of the Engineer. Any days lost due to improper traffic control will be charged against the Contractor's allowable working days.

## 2.26 CONSTRUCTION STAKES

Construction stakes will be set by the Engineer to mark the general location, alignment, elevation and grade of work.

Stakes to be provided:

One set of each:

- Pipeline:** Stakes will be provided at manhole and other structure locations, at 100 ft stations on straight runs and at 50 ft. stations on curves. Stakes will also be set at B.C., E.C., and P.R.C.'s. Two stakes will be provided at each jacking pit location. Stakes will be offset and marked with the cut to pipe invert elevation.
- Pond Improvements:** Offset stakes will be provided at 50' stations on straight runs, 25' stations on curves and at B.C., E.C., and P.R.C.'s for construction of the berm. Cut or fill will be marked to top of berm. Stakes will be provided at manholes, inlet structures and boat ramp.
- Monument Replacement:** Two straddler stakes will be provided at each monument or right-of-way marker to be reset. The Contractor shall set the monument can or concrete post. The Engineer will set the monument disc.
- NDOT Fence Replacement:** Stakes will be provided at angle points, at 100 ft stations on straight runs and at 50 ft stations on curves.

The Contractor shall assume full responsibility for dimensions and elevations, measured from such stakes. He shall exercise care in the preservation of stakes set for his use and the use of the Engineer, and if he displaces, loses, or removes them during his operations, the Engineer will reset them at the Contractor's expense.

## 2.27 MATERIALS

### 2.27A Testing

Testing and inspection will be provided by the Engineer. All samples shall be furnished by the Contractor without cost to the Owner. City of Reno may waive sampling and testing if adequate information, properly certified, is available to indicate that materials comply with the terms of specifications. Specific testing requirements are specified in the Technical Provisions. Any retests due to faulty workmanship or materials shall be paid for by the Contractor.

### 2.27B Portland Cement Concrete

The Contractor shall submit in writing for approval a concrete mix design prepared by a materials testing laboratory for all classes of concrete to be used on the project. Concrete-mix designs shall be submitted two (2) weeks prior to the placement of any concrete on the project. Each mix design submitted by the Contractor shall be accompanied by compression tests indicating compressive strengths twenty percent (20%) in excess of specified strength based on a coefficient of variation of thirteen percent (13%). Each trial mix shall consist of a set of at least six (6) test cylinders in accordance with ASTM C192, three (3) to be compression tested at seven (7) days and three (3) at twenty-eight (28) days. The mix design shall also include a detailed listing of the proportions of the mix including cement, unit weight of coarse and fine aggregate (measured dry rodded and damp loose), specific gravity, fineness modulus, percentage of moisture, air content, water-cement ratio and consistency of the trial batch in terms of slump. Should field tests fall below specified compression strengths, the Engineer may direct changes in the mix design, including addition of cement, at no additional cost to the Agency. No change shall be made in the mix design without approval of the Engineer.

All Portland Cement concrete, unless otherwise indicated, shall have a coarse aggregate gradation conforming to Size No. 67 in Subsection 200.05.03, shall have a 1 to 4 inch slump and 5 to 7 percent entrained air. The minimum 28 day compressive strength shall be 4000 psi. Maximum water-cement ratio shall be 0.45. Cement shall be Type II.

PORTLAND CEMENT CONCRETE COMPRESSIVE STRENGTH PENALTY

In the event any class of Portland cement concrete is placed and is shown by test to be below the specified twenty-eight (28) day compressive strength, a determination shall be made by the Engineer as to whether the concrete shall be removed and replaced or allowed to remain in place. This determination shall be based on an evaluation of the durability and other qualities of the concrete necessary to the integrity of the structure. If the concrete is allowed to remain in place, it is agreed by the parties to the contract that a penalty shall be applied at a rate of five (5) percent of the contract unit bid price for each fifty (50) p.s.i. or portion thereof

below the specified minimum compressive strength, to a maximum of twenty five (25) percent, as set forth in the following example for the class of concrete shown:

<u>Specified 28 Day Compressive Strength-p.s.i.</u>	<u>Penalty (Per Unit Bid Price) Percent</u>
4,000	0
3,999-3,950	5
3,949-3,900	10
3,899-3,850	15
3,849-3,800	20
3,799-3,750	25

The reduced price shall apply to all concrete represented by the strength tests below the specified minimum compressive strength.

When a compressive strength test falls below the specified twenty-eight (28) day compressive strength, the Engineer may determine that an alternate strength test is required or the Contractor may request such a test. When the Engineer determines that an alternate strength test is required, the Contractor will not be liable for the cost of such test. In case the Engineer has not determined that an alternative strength test is necessary and the Contractor elects to have an alternate strength test made, the Engineer will then make such a test; however, should this test fail to indicate that the twenty-eight (28) day compressive strength requirements have been met, the cost thereof shall be deducted from any money due or to become due the Contractor. Concrete removed will not be paid for and the removal thereof will be made at the Contractor's expense.

#### 2.27C Bituminous Plant Mix Surface

The Contractor shall submit in writing for approval a job-mix formula prepared by an approved materials testing laboratory conforming to the requirements of Section 200.02 - aggregates for bituminous concrete of the Standard Specifications for Public Works Construction, 1978. The job mix formula shall have single values for:

- a. the percentage of aggregate passing each specified sieve



- b. the percentage of bitumen to be added (to 0.1 percent)
- c. Marshall stability, pounds
- d. voids, total mix, percent
- e. flow
- f. percent voids filled with asphalt.

The mix design shall be performed in accordance with ASTM D 1559. The mix design shall be submitted with design curves indicating relationships between various asphalt contents and stability, unit weight, voids, voids filled, and flow. The recommended asphalt content shall be an average of oil content at maximum stability, maximum unit weight, voids in total mix, and 80% voids filled with asphalt.

The Contractor shall not proceed until the job-mix formula is approved for this project. The bituminous mixture placed in the field shall conform to the approved job-mix formula within the following range of tolerances:

Aggregate passing the No. 4 sieve and larger sieves	+ 7%
Aggregate passing the No. 8 to No. 100 sieves	+ 4%
Aggregate passing the No. 200 sieve	+ 2%
Bitumen content	+ 0.55% batch weight of aggregate

The Asphalt Cement to be used on this project shall be AR-4000. The Contractor shall also submit temperature-viscosity curves for the asphalt cement to be used in this project for review by the Engineer. The actual batching and lay down temperatures will be selected based on the temperature-viscosity curve. The Contractor shall be so notified with the approval of the job-mix formula.

DENSITY REQUIREMENTS:

The completed paved surface of trench patch shall be cored every 500 feet to determine the thickness and the density of the bituminous roadway. The Paradise Pond parking lot shall have one set of cores per 800 tons of asphalt paving, or portion thereof. The following table shall be used as a basis of payment for these items. Each core shall

represent the material on each side of the core, halfway to the next core. Contractor, at his expense, may request additional cores.

RELATIVE COMPACTION

DEDUCTION

96.0% and above	0%
95.0% to 95.9%	2%
94.0% to 94.9%	5%
92.0% to 93.9%	10%
90.0% to 91.9%	20%
89.9% and below	Remove or no payment (at Engineer's option)

THICKNESS PERCENTAGE

DEDUCTION

95% and above	-0-
90% to 94.9%	20%
89.9% and below	Remove or no payment (at Engineer's option)

2.27D Bituminous Pavers

The following items shall be in addition to the requirements contained in Section 310.03.03 of the Standard Specifications.

Hydraulic Strike-off Screed Extensions:

Hydraulic strike-off screed extensions shall only be used for tapered sections and odd-shaped areas. The plantmix bituminous pavement for all uniform roadway sections shall be placed, spread, and compacted only by that portion of the paver equipped with a vibratory screed equipped with screed heaters.

2.28 CONSTRUCTION WATER

The use of potable water from the Public Water System for Construction purposes is prohibited. Construction water used for compaction and dust control shall be obtained from the Reno-Sparks Sewage Treatment Plant at 8500 Kimlick Lane, Reno, Nevada, or another approved source.

2.29 CERTIFICATE OF COMPLIANCE

A Certificate of Compliance shall be furnished prior to use of the materials listed below and other materials as

specified in the Standard Specifications or Special Provisions. The Certificate of Compliance shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved comply in all respects with the requirements of the specifications for this project. A Certificate of Compliance shall be furnished with each lot of material delivered to the work and the lot so certified shall be clearly identified in the certificate.

Materials Requiring Certificate of Compliance

1. Reinforced Concrete Pipe
2. Reinforced Concrete Box
3. Polyvinylchloride (PVC) Sewer Pipe
4. Polyvinylchloride (PVC) Water Pipe
5. Steel Water Pipe
6. Ductile Iron Pipe (DIP)
7. Black Iron Gas Pipe
8. Corrugated Metal Pipe
9. Galvanized Steel Sections
10. Reinforcing Steel
11. Asphalt Cement
12. Cement
13. Manhole and Catchbasin Castings and Appurtenances
14. Precast Manhole Sections
15. Joint Sealant Material
16. Expansion Joint Material
17. Concrete Curing Compound
18. Waterline Valves
19. Waterline Fittings
20. Gasline Valves
21. Gasline Fittings
22. Tideflex Check Valve
23. Traffic Signal Detector Loop Wire

**2.30 SATURDAY, SUNDAY, HOLIDAY AND OVERTIME WORK**

The Contractor shall not perform any contract work on Saturdays, Sundays, legal holidays and outside of the 8-hour regular working day except as directed and/or approved by the Engineer.

If the Contractor plans to perform work outside the 8-hour regular working day, the Contractor shall first obtain approval from the Engineer at least 24 hours prior to commencing such "overtime work." If the Contractor plans to perform work on Saturday or Sunday, he shall obtain approval the Thursday preceding the Saturday or Sunday for which work is planned. If the Contractor plans to perform work on a legal holiday, he shall first obtain approval from the Engineer at least 48 hours in advance.

The Contractor will be charged for all Engineer's employee time spent for overtime, Saturday, Sunday or holiday work based on the employee's hourly rate billed to the City of Reno. The Contractor will be notified of the costs incurred and if payment is not made, such costs will be deducted from payment due the Contractor.

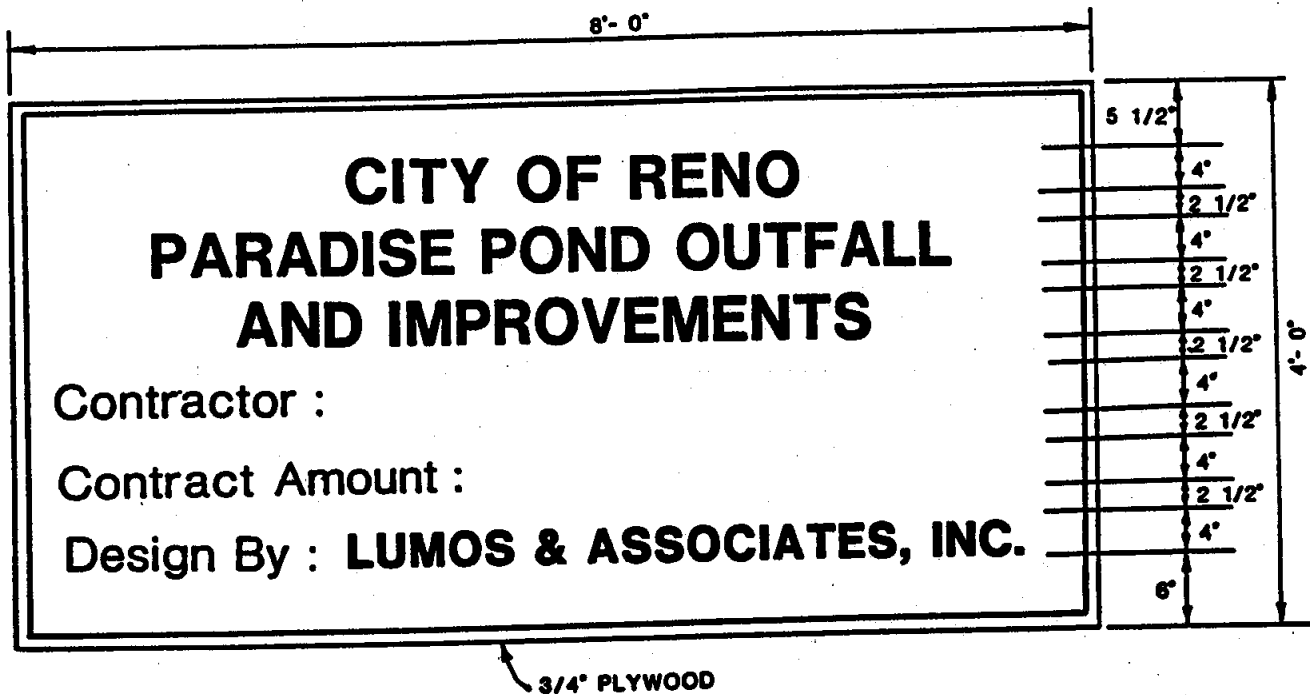
2.31 PUBLIC RELATIONS

It shall be the Contractor's responsibility to notify, in writing, all residents adjacent to this project of the construction working hours and proposed duration of this contract.

2.32 PROJECT SIGN

A four foot by eight foot (4' x 8') project sign(s) shall be furnished and erected by the Contractor as directed by the Engineer (No Direct Payment).

# PROJECT SIGN DETAIL



- NOTE :**
- 1. Signs to be furnished and erected by the Contractor ( No Direct Payment ) as directed by the Engineer.**
  - 2. All letters shall be Navy Blue on White background  
1 1/2" wide border to be Navy Blue.**
  - 3. Signs to be mounted on a moveable PVC frame or 4"x4"x10' wooden posts (as directed by the Engineer)**

**SECTION 3**  
**TECHNICAL SPECIFICATIONS**  
**and**  
**BID ITEM CLARIFICATION**

**BID ITEM 1 CLEAR, GRUB, AND SITE PREPARATION**

Clearing, grubbing, and site preparation shall consist of removing all natural and artificial objectionable material from construction areas, including but not limited to the removal of all organic growth and objectional materials such as sod, trees, logs, stumps, existing improvements including sawcutting and removal of asphalt pavement, concrete curb and gutter, sidewalk, storm drains, sanitary sewers, pipes, headwalls, and all other objectionable materials that are encountered within the limits of construction. This work will also include the removal of large trees within the limits of construction, and where shown on the plans, and maintenance of traffic as described in Section 2.25 of these Special Provisions.

Sawcutting for asphalt pavement patching in El Rancho Drive, Prater Way, 'B' Street and Kietzke Lane shall be done in compliance with Section 301 of the Standard Specifications and shall include two (2) sawcuts on each side of all trenches. The first sawcut shall be at the edge of the excavated trench. Prior to patching the trench, a second sawcut shall be made nine (9) inches outside the edge of the trench cut or as directed by the engineer to remove any broken paving and provide a clean edge to the pavement patch.

All existing street and regulatory signs within the limits of clearing shall be removed, salvaged and reinstalled or stored as directed by the Engineer.

All existing fences within the limits of clearing shall be removed and replaced with the same fence type as the original fence.

All abandoned conduits shall be either removed or plugged.

Payment for CLEAR, GRUB, AND SITE PREPARATION shall be made at the bid lump sum price which shall be deemed full compensation for all labor, equipment, and materials necessary to completely prepare the site for construction, including removal and disposal off-site of all objectional material, traffic control, and all other work not specifically itemized but necessary for the completion of the project as intended.

**BID ITEM 2 SITE GRADING**

Grading shall include, but not be limited to all berm and parking lot excavation, fill, backfill, subgrade preparation, grading, excess material disposal off-site, and/or imported material, as necessary. It shall also include regrading of certain areas between Station 22+20 and Station 30+50 as shown on the drawings, or as directed by the Engineer, and the re-establishment of all irrigation ditches to current lines and grades. All excavation, fill and grading

shall be performed in compliance with Sections 302, 303, and 304 of the Standard Specifications.

Construction will require the following approximate quantities of excavation, fill and import material and require subgrade preparation in the following areas:

	<u>Exc</u>	<u>Fill</u>	<u>Import</u>	<u>Subgrade Preparation</u>
Paradise Pond Berm	---	1,700 CY	1,700 CY	10,400 SF
Paradise Pond Parking Area	150 CY	3,250 CY	3,100 CY	63,400 SF

Trench excavation material may be used as import fill with the approval of the Engineer, and provided it meets the requirements of Section 304 of the Standard Specifications.

Disposal of surplus material will be made on sites only with the written approval of the Owner and as approved by the Engineer. Determination of the disposal sites and acquisition of the Owner's approval is the Contractor's responsibility.

The quantity of material shown above is an estimate only and that estimate represents the material at its compacted density. The Contractor shall satisfy himself that the approximate quantity shown is accurate and if he disagrees with the quantity, he should adjust his bid price accordingly to compensate.

Payment for SITE GRADING shall be made at the lump sum price which shall be deemed full compensation for all labor, equipment, and materials necessary to excavate, transport, place, compact, water, trim, finish, dispose of excess material, and incidental work necessary to complete all earthwork on this project.

BID ITEMS 3, 4, 5, 6, 7, 11, 12, 13 AND 14 STORM DRAIN PIPE

Work to be performed under these items include trenching, stock piling, bedding, pipe laying, backfilling, joint sealing, compaction as shown in the details, excess material disposal off-site, and all work necessary to complete the installation as shown, and in compliance with the requirements of Sections 305 and 306 of the Standard Specifications.

The Contractor shall verify all inverts and make exploratory excavations as required to locate all possible conflicting utilities and notify the Engineer in writing of all conflicts prior to commencement of underground construction.

It is anticipated that storm, surface and possible ground or other waters will be encountered at various times during the work herein contemplated. The Contractor, by submitting a bid, acknowledges that he has investigated the risks arising from such waters and has prepared his bid accordingly, and the Contractor by submitting a bid assumes all of said risk.

The Contractor shall conduct his operation in such a manner that storm or other waters may proceed uninterrupted along their existing street and drainage courses. Drainage of water from the existing catch basins and inlets shall be maintained at all times. Diversion of water for short reaches to protect construction in progress will be permitted if public or private properties are not damaged, or in the opinion of the Engineer, are not subject to probability of damage. If public or private property becomes damaged by flood or other waters because of the Contractor's operations, the Contractor shall repair such damage to the satisfaction of the appropriate property owner at his own expense. The Contractor shall obtain written permission from the applicable public agency or property owner before any diversion of water will be permitted by the Engineer. Wherever necessary in order to provide proper drainage, the Contractor shall, at his own expense, furnish and operate all necessary pumping equipment, drainage sumps, wellpoint systems and other drainage facilities.

When trenching occurs in existing paved areas, the trench width shall be kept to a minimum due to possible existing underground utility conflicts. The Contractor shall pay special attention to this requirement. All conflicting utilities shall be supported in the trench section or removed and replaced.

The Contractor will not be responsible for the removal or relocation of overhead electric facilities and telephone facilities, except as otherwise noted herein. This work will be performed by the appropriate utility agencies or their contractors. However, the Contractor must coordinate with these agencies to ensure the scheduling of relocation work does not conflict with the Contractor's construction schedule.

Bedding materials shall be placed to the limits specified in the Standard Details and as shown on the plans. Bedding material shall be Class 'A' or Class 'C' backfill unless the storm drain construction is below the water table, in which case Class 'C' backfill material shall be used. Bedding material shall be compacted to 96% of maximum dry density. Compaction by jetting will not be permitted.

Backfill materials shall be placed to the limits specified in the Standard Details and as shown on the plans. Backfill material shall be Class 'E' backfill. Backfill material shall be compacted to 90% of maximum dry density. Compaction by jetting will not be permitted.

The Contractor's attention is directed to the limited cover condition over storm drains and other utilities in some areas. Special care shall be taken to protect all utilities, and any damage caused during construction shall be repaired by the Contractor at his own expense. It is the Contractor's responsibility to proceed with construction in such a manner as necessary to insure pipe integrity.

Except by permission of the Engineer, the maximum length of open trench in existing paved areas between intersections shall be five hundred feet (500'). For work across intersections the maximum length of open trench shall be one hundred feet (100'). The length of time the intersection is closed to traffic must be kept to a minimum.



Temporary pavement patching will be permitted, but it must be replaced by the permanent asphalt concrete pavement patch within three (3) weeks of the temporary patch being installed.

Reinforced Concrete Pipe shall comply with Section 203.09 of the Standard Specifications, and with ASTM C-76. The class of pipe shall be as indicated on the plans.

Reinforced Concrete Box shall comply with ASTM C-789.

Fifty-four inch (54") diameter pipe and Reinforced Concrete Box shall have watertight joints that meet the hydrostatic test requirements of Section 334.03.07 of the Standard Specifications for a hydrostatic head of seven (7) feet above the top of the pipe. As an alternative to testing a complete pipe reach from manhole to manhole, the Contractor may test each individual pipe joint as construction proceeds. The test shall be made after the pipe has been bedded to pipe springline and any trench shield being used has been removed from the section of trench containing the pipe being tested, unless otherwise directed by the Engineer.

Each joint shall be pressurized to a hydrostatic head of seven (7) feet of water above the top of the pipe for a period of one minute. If no leakage is visible on the pipe joint surface and the hydrostatic pressure remains above six (6) feet for the duration of the one minute test period, then the joint shall be considered to have passed the test.

If the joint shows leakage, or the hydrostatic pressure drops below six (6) feet, then the joint shall be considered to have failed the test, and the pipe must be removed. One attempt to reinstall and retest a failed joint will be allowed. If the joint fails the second test the pipe must be removed and repaired prior to being used again on the project.

The joint testing alternative also requires hydrostatic pipe testing at the manufacturing facility or a location in Reno acceptable to the Engineer.

Pipes to be tested shall be filled with water and allowed to stand for a period not to exceed six (6) hours following which a seven foot (7') hydrostatic head above the top of the pipe shall be maintained for a period of at least one (1) hour or for such a length of time as may be necessary to satisfy the Engineer. The maximum allowable leakage in each pipe shall not exceed 500 gallons per mile per day per inch of diameter of pipe.

Pipes in the first production run and in subsequent production runs that occur after a seven (7) day or greater interruption in manufacturing shall be tested until ten percent (10%) have been tested satisfactorily with no failures. All other pipes shall be tested on a basis of one test for each reach between manholes. Any pipe that fails the test shall be rejected, unless it can be repaired and satisfactorily retested.

Ductile Iron pipe shall conform to AWWA C151 and shall be Thickness Class 50. Joints may be push-on or mechanical joint.

Payment for the applicable storm drain pipe as itemizing in the proposal shall be paid for at the respective bid unit price per lineal foot for the actual length of pipe in place, which shall be deemed full compensation for all labor, equipment, and materials necessary to complete installation, including pipe (size and class as specified), excavation, bedding, backfill, compaction, connection to existing structures, hydrostatic testing, and incidentals.

**BID ITEMS 8, 9 AND 10    BORED AND JACKED STORM DRAIN PIPE**

Work to be performed under these items includes boring and/or jacking, jacking pit construction, joint sealing, pressure grouting and all work necessary for complete installation in compliance with Sections 305 and 306 of the Standard Specifications.

Reinforced Concrete Pipe shall comply with Section 203.09 of the Standard Specifications, and with ASTM C-76. The class of pipe shall be as indicated on the plans. Any increase in pipe strength in order to withstand jacking loads shall be the responsibility of the Contractor. There shall be a minimum of 2 grout holes per length of pipe. Grout holes shall be 1-1/2 inches in diameter. Shop drawings showing proposed grout hole locations shall be submitted to the Engineer.

Jacked pipe shall have watertight joints that meet the hydrostatic test requirements outlined under Bid Items 3, 4, 5, 6, 7, 11, 12, 13 and 14.

For bid items 9 and 10 the concrete pipe shall be jacked directly and no casing shall be permitted. For bid item 8 the Contractor shall have the option of jacking the concrete pipe or jacking a steel casing.

If a steel casing is used on bid item 8 it shall be smooth wall carbon steel pipe, new and unused, jointed together with a full circumference, full depth weld. Weld by the shielded metal-arc process, using covered electrodes and in accordance with procedures established and qualified per ANSI B31.2. Each welder and welding operator shall be qualified for the ANSI procedures as evidenced by a copy of a certified ANSI B31.2 qualification test report. Contractor shall conduct the ANSI qualification tests. In addition, submit each welder's assigned number, letter, or symbol used to identify the work of the welder. Affix symbols immediately upon completion of welds. Welders making defective welds after passing a qualification test shall be given a re-qualification test and, upon failing to pass this test, shall not be permitted to work this contract.

The size and wall thickness of steel casing shall be at the Contractor's option, except that it shall have a minimum nominal wall thickness of 5/8 inch, and shall have an inside diameter not less than six (6) inches larger than the outside diameter of the 54 inch RCP. The Contractor shall be fully responsible for the sufficiency of the casing provided.

Insert the following paragraph after paragraph five on this page.

**"The contractor shall obtain a Contractor's Right of Entry Permit from Southern Pacific Transportation Company for bid item 9 and shall comply with provisions outlined in this permit, a copy of which is enclosed with Supplemental Notice to Bidders No. 3. The contractor shall pay for the cost of full-time inspection by a Southern Pacific Transportation Company Inspector for the juration of the jack and bore operation under the railroad."**

If steel casing is used, Contractor shall submit details of proposed skid arrangement and proposed method of backfilling voids between casing and concrete pipe.

The Contractor's attention is directed to the bore logs and trial pit logs, and the fact that large cobbles were encountered in trial pit No. 1.

Concrete conduit and steel casing shall be jacked true to line and grade and the Contractor shall modify the manner in which he is conducting the jacking operation to correct any deviation. The Contractor will be permitted a tolerance from exact grade or alignment of one (1) inch per three hundred (300) feet.

Once the jacking operation has commenced, the Contractor shall have the option of jacking continuously until the jacking operation has been completed, or of working in shifts. If the Contractor elects to work in shifts, bentonite slurry must be used to prevent the pipe from "freezing" and a bulkhead must be installed at the face of the shield whenever the jacking operation is interrupted. Bulkheads must be braced and sealed with hay or other suitable material to prevent any soil from leaking through.

Upon completion of the jacking operations, all voids around the outside face of the conduit shall be filled by pressure grouting.

Payment for each complete boring and jacking operation as itemized in the proposal shall be made at the bid item lump sum price, which shall be deemed full compensation for all labor, equipment, and materials necessary for complete installation, including pipe, jacking and boring, joint sealing, pressure grouting, casing (if used), backfill, compaction, testing and incidentals.

#### BID ITEMS 15 AND 16 IRRIGATION PIPE

Work to be performed under these items include removal and offsite disposal of existing corrugated metal pipe, trenching, stockpiling, bedding, pipe laying, backfilling, joint sealing and all work necessary to complete the installation as shown, and in compliance with the requirements of Sections 305 and 306 of the Standard Specifications. Replacement of any irrigation diversion structures that are removed or damaged is also included under this bid item.

Corrugated metal pipe shall conform to the requirements of Section 203.02 of the Standard Specification. Pipe wall thickness shall be 14 gauge. Jointing shall be by connecting bands. Pipe and bands shall have a bituminous coating inside and out.

Bedding materials shall be placed to the limits specified in the Standard Details and as shown on the plans. Bedding material shall be Class 'A' or Class 'C' backfill unless the storm drain construction is below the water table, in which case Class 'C' backfill material shall be used. Bedding material shall be compacted to 95% of maximum dry density. Compaction by jetting will not be permitted.

Payment for the applicable irrigation pipe as itemized in the proposal shall be paid for at the respective bid unit price per lineal foot for the actual length of pipe in place, which shall be deemed full compensation for all labor, equipment, and materials necessary for complete installation, including pipe, excavation, bedding, backfill, compaction, connection to existing diversion structures, replacement of diversion structures as necessary, and incidentals.

#### BID ITEMS 17, 18 AND 19 SANITARY SEWER PIPE

Work to be performed under these items include trenching, stock piling, bedding, pipe laying, backfilling, lateral pipe connections, joint sealing, concrete encasement, testing, compaction as shown in the details, and all work necessary to complete the installation as shown, and in compliance with the requirements of Sections 305 and 306 of the Standard Specifications.

Gravity Sewer Pipe. PVC gravity sewer pipe shall conform to ASTM D 3034 SDR 35. Pipe shall be made of PVC plastic having a cell classification of 12454-B or 12454-C or 13364-B (with a minimum tensile modulus of 500,000 psi) as defined by ASTM D 1784.

Pipe Joints. The pipe shall be joined with an integral bell, bell-and-spigot type rubber gasketed joint. Each integral bell joint shall consist of a formed bell complete with a single rubber gasket. Gaskets shall conform to ASTM F 477.

#### INSTALLATION:

General. All laying, jointing and testing for defects and leakage shall be performed in the presence of the Engineer and shall be subject to his approval before acceptance. Materials found during construction to have defects will be rejected and the Contractor shall promptly remove such defective material from the site.

The Contractor shall verify all inverts and make exploratory excavations as required to locate all possible conflicting utilities and notify the Engineer in writing of all conflicts prior to commencement of underground construction.

Trenching, Bedding and Backfill. Requirements for trenching, bedding and backfill shall be as specified in Section 305 of the Standard Specifications. Bedding material shall be Class 'A' or Class 'C' backfill, unless the sewer construction is below the water table, in which case Class 'C' backfill material shall be used.

Bedding material shall be compacted to 96% of maximum dry density. Compaction by jetting will not be permitted.

Backfill materials shall be placed to the limits specified in the Standard Details and as shown on the plans. Backfill material shall be Class 'E'

backfill. Backfill material shall be compacted to 90% of maximum dry density. Compaction by jetting will not be permitted.

Pipe shall be laid on a shaped trench foundation or shaped bedding as required and with properly dug bell or coupling holes. Supporting pipe on blocks or mounds of earth or bedding material will not be permitted.

When trenching occurs in existing paved areas, the trench width shall be kept to a minimum due to possible existing underground utility conflicts. The Contractor shall pay special attention to this requirement. All conflicting utilities shall be supported in the trench section or removed and replaced.

Handling. Pipe, fittings and accessories shall be handled in a manner that will insure installation in a sound, undamaged condition. Equipment, tools and methods used in unloading, reloading, hauling and laying pipe and fittings shall be such that the pipe and fittings are not damaged. Hooks inserted in ends of pipe shall have broad, well padded contact surfaces. No unpadded hooks or wire brushes shall be permitted to contact plastic lining. Pipe and fittings in which lining has been broken, split or loosened shall be replaced by and at the expense of the Contractor. Where damaged areas are small and readily accessible, the Contractor may be permitted to repair the lining in accordance with the manufacturer's instructions.

Cutting. Cutting and machining of pipe shall be accomplished in accordance with the pipe manufacturer's standard recommendations. Pipe shall not be cut with a cold chisel, flame, standard iron pipe cutter, nor any other method that may fracture the pipe, produce ragged, uneven edges or split the pipe end. Cut ends shall be machined smooth to the proper dimensions.

Pipe Laying. The pipe shall be laid to the lines and grades shown on the plans and specified herein and the sections shall be closely jointed to form a smooth flow line. Immediately before placing each section of pipe in final position, the bedding shall be checked for firmness and uniformity of surface.

Proper implements, tools, and facilities as recommended by the pipe manufacturer's standard printed installation instructions shall be provided and used by the Contractor for safe and efficient execution of the work. All pipe, fittings, and accessories shall be carefully lowered into the trench by means of derrick, ropes, or other suitable equipment in such a manner as to prevent damage to pipe and fittings. Under no circumstances shall pipe or accessories be dropped or dumped into the trench.

The pipe and accessories shall be inspected for defects prior to lowering into the trench. Any defective, damaged or unsound pipe shall be repaired or replaced. All foreign matter or dirt shall be removed from the interior of the pipe before lowering into position in the trench. Pipe shall be kept clean during and after laying. All openings on the pipe line shall be closed with watertight expandable type sewer plugs or test plugs at the

end of each day's operation or whenever the pipe openings are left unattended. The use of burlap, wood, or other similar temporary plugs will not be permitted.

Connections to manholes or other structures shall be made using an approved adaptor designed to provide a watertight seal between the structure and the pipe and to provide flexibility at the junction. A short length of pipe shall be provided outside each connection, as shown on the drawings.

Jointing. Each pipe joint shall be joined with an integral bell with one rubber gasket.

The gasket and the gasket seat inside the bell shall be wiped clean before the gasket is inserted. At this time a thin film of lubricant shall be applied to the gasket and to the outside of the clean pipe end. Lubricant other than that furnished with the pipe shall not be used. The end of the pipe shall be then forced into the bell to complete the joint. The assembly of the joint shall be made in accordance with the printed recommendations of the manufacturer.

Connection to Existing Manholes. Pipe connections to existing manholes shall be as shown. Where holes are broken in existing manhole barrels, same shall be carefully done. After insertion the annular space shall be tightly packed with a "dry" cement mortar. Surfaces to be in contact with the mortar shall be thoroughly moistened and then scrubbed with Portland cement paste. Inside of manhole barrel shall be neatly finished. Manhole bottom shall be rechannelized as necessary to provide smooth transitions with good hydraulic properties. Work of connection to existing manholes shall be scheduled in advance with the Engineer.

#### TESTING FOR LEAKAGE:

Test. After laying, backfilling and compacting both main and service laterals, all sewers shall be tested for leakage. The Contractor shall furnish all labor, tools and equipment necessary to make the tests and to perform any work incidental thereto. The Contractor shall take all necessary precautions to prevent any joints from drawing while the pipelines or their appurtenances are being tested. He shall, at his own expense, correct any excess leakage and repair any damage to the pipe and its appurtenances or to any structures resulting from or caused by these tests. At the option of the Contractor either the hydrostatic or air test may be used.

- a. Hydrostatic Test. Perform hydrostatic tests per Section 334.03.07 of the Standard Specifications.
- b. Air Test. Air test shall be applied to length between adjacent manholes, and procedure shall be as follows:

Pressurize the test section to 3.5 psi and hold above 3.0 psi for not less than 5 minutes. Add air if necessary to keep the pressure

above 3.0 psi. At the end of this 5 minute saturation period, note the pressure (must be 3.0 psi minimum) and begin the timed period. If the pressure drops 0.5 psi in less than the time given in the following table, the section of pipe shall not have passed the test.

<u>Size</u>	<u>Minimum Time in Seconds</u>	<u>Minutes</u>
4 inch	125	2
6 "	185	3
8 "	245	4
10 "	310	5
12 "	370	6
15 "	460	7-1/2
18 "	555	9

If the time for the pressure to drop 0.5 psi is 125% or less of the time indicated, the line shall immediately be re-pressurized to 3.0 psig and the test repeated.

If the test is not passed, the leak shall be found and repaired to the satisfaction of the Engineer, and the section retested.

When the prevailing ground water is above the line being tested, air pressure shall be increased 0.43 psi for each foot the water table is above the invert of the line.

The pressure gauge used shall be supplied by the Contractor, shall have minimum divisions of 0.10 psi, and shall have an accuracy of 0.04 psi. Accuracy and calibration of the gauge shall be certified by a reliable testing firm when requested by the Engineer or at six (6) month intervals.

- c. Deflection Test. Mandrel tests shall be conducted by the Contractor on all polyvinyl chloride sanitary sewer pipe with the Engineer in attendance not less than thirty (30) days after and between the eleventh and twelfth months following installation of said pipe. The thirty (30) day test shall pass a mandrel with a diameter of ninety-five (95) percent of the pipe's inside diameter. The eleventh-twelfth month test shall pass a mandrel with a diameter of ninety-two and one-half (92-1/2) percent of the pipe's inside diameter.

Mandrels used shall be of the fixed diameter type with an uneven number of vanes.

The Contractor's attention is directed to the limited clearance between sanitary sewer lines and other utilities. Special care shall be taken to protect all utilities, and any damage caused during construction shall be repaired by the Contractor at his own expense. It is the Contractor's



responsibility to proceed with construction in such a manner as necessary to insure pipe integrity.

Payment for the applicable sanitary sewer pipe as itemized in the proposal shall be paid for at the respective bid unit price per lineal foot for the actual length of pipe in place which shall be deemed full compensation for all labor, equipment, and materials necessary for complete installation, including pipe, excavation, bedding, backfill, compaction, connection to existing manholes, concrete encasement, testing, and incidentals.

**BID ITEMS 20 AND 21 PVC WATER PIPE**

Work to be performed under these items include trenching, stock piling, bedding, pipe laying, backfilling, joint sealing, compaction as shown in the details, fittings, connections, testing, disinfection, and all work necessary to complete the installation as shown, and in compliance with the requirements of Sections 305 and 307 of the Standard Specifications.

The Contractor shall verify all inverts and make exploratory excavations as required to locate all possible conflicting utilities and notify the Engineer in writing of all conflicts prior to commencement of underground construction.

When trenching occurs in existing paved area, the trench width shall be kept to a minimum due to possible existing underground utility conflicts. The Contractor shall pay special attention to this requirement. All conflicting utilities shall be supported in the trench section or removed and replaced.

Bedding materials shall be placed to the limits specified in the Standard Details and as shown on the plans. Bedding material shall conform to the requirements for Class A. Bedding material shall be compacted to 96% of maximum dry density. Compaction by jetting will not be permitted.

Backfill materials shall be placed to the limits specified in the Standard Details and as shown on the plans. Backfill material shall be Class 'E' backfill. Backfill material shall be compacted to 90% of maximum dry density. Compaction by jetting will not be permitted.

The Contractor's attention is directed to the limited clearance cover over other utilities in some areas. Special care shall be taken to protect all utilities, and any damage caused during construction shall be repaired by the Contractor at his own expense. It is the Contractor's responsibility to proceed with construction in such a manner as necessary to insure pipe integrity.

PVC pipe less than four inches (4") in diameter shall be Schedule 40 PVC conforming to ASTM D-1785 unless indicated otherwise on the drawings.

Fittings shall be Schedule 40 PVC conforming to ASTM D-2466 unless indicated otherwise on the drawings.

Solvent cements shall conform to the requirements of ASTM D-2564.

Payment for the applicable water pipe as itemized in the proposal shall be paid for at the respective bid unit price per lineal foot for the actual length of pipe in place which shall be deemed full compensation for all labor, equipment, and materials necessary to complete installation, including pipe, fittings (size and class as specified), connections, excavation, bedding, backfill, compaction, disinfection, testing, and incidentals.

**BID ITEMS 22,23,24,25,26,27,28 AND 29 REMOVE AND REPLACE WATER MAINS**

Work to be performed under these items shall include trenching, stock piling, bedding, pipe dewatering, pipe laying, backfilling, compaction, disinfection, and testing as shown in the drawings. Work shall be complete and in accordance with Sections 305, 307 and 311 of the Standard Specifications except as stated below.

Steel Water Pipe. Steel water pipe 12-inch diameter and larger will be furnished by Westpac utilities complete with couplings and butt straps. Pipe shall be cement mortar lined and coated. AWWA (American Water Works Association) Standards C200-86, C205-85 (including Appendix A), C206-82 and Manual M 11-85 shall apply to pipe fabrication and installation. Contractor shall unload pipe furnished by Westpac.

Ductile Iron Water Pipe. Ductile iron pipe and fittings shall be furnished by the Contractor for relocations smaller than 12-inch diameter. Mechanical joint fittings with retainer glands by EBAA Iron, Inc., shall be used. Polyethylene encasement shall be used. AWWA Standards C104-85, C105-82, C110-87, C150-86, C151-86, C153-84 and C600-87 shall apply to pipe and installation.

Valves. Tapping valves shall be furnished with a mechanical joint end and two-inch square operating nut, Mueller H-667 as normally supplied to Westpac by local suppliers. Valve to include 6-inch riser pipe and valve box marked "Water."

Tapping Sleeves. Tapping sleeves shall be furnished as shown on the plans, with Class D 150 lb flange, Ford FTSC-760 as normally supplied to Westpac by local suppliers.

General. All work shall be coordinated with the Westpac Utilities field inspector at 689-4356. Advance scheduling shall begin at least seven days in advance to establish shutdown procedures and customer notification. Only Westpac personnel will open or close valves on gas or water pipes.

All laying, jointing and testing for defects and leakage shall be performed in the presence of the Inspector and shall be subject to his approval before acceptance. Materials found during construction to have defects will be rejected and the Contractor shall promptly remove such defective material from the site.

The Contractor shall verify all inverts and make exploratory excavations as required to locate all possible conflicting utilities and notify the Inspector in writing of all conflicts prior to commencement of underground construction.

All pipe removed that is surplus shall become the property of the Contractor.

Trenching, Bedding and Backfill. Requirements for trenching, bedding and backfill shall be as specified in Section 305 of the Standard Specifications. Bedding material shall be Class 'A' backfill.

Bedding material shall be compacted to 95% of maximum dry density. Compaction by jetting will not be permitted.

Backfill materials shall be placed to the limits specified in the Standard Details and as shown on the plans. Backfill material shall be Class 'E' backfill screened to a maximum size of three inches. Backfill material shall be compacted to 90% of maximum dry density. Compaction by jetting will not be permitted.

Pipe shall be laid on compacted bedding as required and with properly dug bell or coupling holes. Supporting pipe on blocks or mounds of earth or bedding material will not be permitted.

When trenching occurs in existing paved areas, the trench width shall be kept to a minimum due to possible existing underground utility conflicts. The Contractor shall pay special attention to this requirement. All conflicting utilities shall be supported in the trench section or removed and replaced.

Prior to the final phase of backfilling, metallic early-warning tape furnished by the Contractor shall be placed in the trench at a minimum of 12" deep and a maximum of 24" deep.

Excavations left open during non-working hours shall be plated, but if too wide shall be protected with concrete barriers, signing and warning lights.

Pipe Dewatering. Pipe dewatering and disposal of the water shall be the responsibility of the Contractor. It shall be accomplished in the shortest time practical. All activities shall be coordinated with the Westpac inspector.

Pipe Installation. Pipe shall be installed as shown on the drawings and in accordance with AWWA C205-85 Appendix A, C206-82, M-11, and C600-87. The pipe shall be fully supported by compacted bedding before connecting to existing piping. Cutting existing pipes shall be done in a manner approved by the manufacturer of that type of pipe as approved by the inspector.

Every section of pipe, including cut ends of existing pipe shall be thoroughly cleaned of all dirt and debris before installing and kept clean thereafter.

Bolted connections and retainer glands shall be uniformly tightened as recommended by the manufacturer. Steel couplings and bolts shall be protected by a complete coating of mastic.

Welded connections shall be made by welders certified by Westpac Utilities and familiar with Westpac General Construction Specifications. A list of certified welders and information on gaining certification are available by calling 689-4260.

The cement-mortar coating and lining of steel pipe shall be repaired after welding is complete using sand-cement mortar outside and AllCrete 20-minute set mortar or approved equal on the inside.

Once the 36-inch main at STA 41+25 has been turned off for dewatering, work shall progress continuously without stopping until the main is refilled.

Disinfection. All new pipe and exposed existing water pipe shall be disinfected in accordance with AWWA C651-86 as a minimum. Pipe shall be re-cleaned during final installation and the interior sprayed with a one percent solution of sodium hypochlorite. Additionally, each section of 12-inch diameter or smaller pipe shall be tabbed with calcium hypochlorite tablets. Granules of the same material shall be used in larger-diameter pipe.

Flushing. After filling each pipeline with water under the direction of the Inspector and allowing time for disinfection, flushing shall be accomplished. Pipelines shall be returned to service as rapidly as possible consistent with disinfection and flushing requirements.

Pressure Testing. An ultrasonic leak detector shall be used on all pipe connections where possible. Line pressure shall be used to detect any leaks. The Contractor is responsible for correcting any leaks and damage caused as a result.

Water Services. Water service relocation, if necessary, will be accomplished in a manner similar to that used for water mains. Materials shall be the same as the existing service, but transition to polybutylene may be approved by the Inspector.

Compaction Testing. Compaction testing shall be made on each relocation, once on bedding and once on backfill. Locations for tests shall be determined by the Inspector. The Contractor shall select the testing laboratory, subject to Westpac approval, and shall pay for all tests. Results of each test shall be furnished to the Inspector verbally at the time of testing, if possible, and confirmed in writing within 24 hours.

Payment. Payment for water pipe relocation shall be based on the bid prices itemized on the bid proposal and the quantity actually completed. Payment shall be deemed full compensation for all labor, equipment, and materials necessary for complete installation. Westpac will provide steel water pipe due to long delivery times.

**BID ITEMS 30, 31, 32 AND 33 REMOVE AND REPLACE GAS MAINS AND SERVICES**

Work to be performed under these items shall include trenching, stockpiling, bedding, pipe removal, furnishing materials, pipe laying, backfilling, compaction, and testing as shown on the drawings. Section 305 of the Standard Specifications shall apply except as stated below.

Pipe Materials. All materials shall be furnished by the Contractor. Plastic pipe and fittings shall be 3408 polyethylene, Driscopipe 8000, SDR 11, no substitutions. Transition fittings shall have one weld end and one fusion end. All items shall be normal Westpac stock items as furnished by local suppliers. The existing 4-inch pipe at STA 14+30 may be reused if recovered in good condition as determined by the Westpac inspector.

General. All work shall be coordinated as required for water mains.

Trenching, Bedding and Backfill. Requirements for trenching, bedding and backfill are the same as for water mains except backfill material in unpaved areas shall be compacted to 80% of maximum dry density.

Pipe Installation. Pipe shall be installed as shown on the drawings with a minimum cover depth of 30 inches under pavement and 36 inches in unpaved areas.

Welded connections on steel pipe and fusions on polyethylene pipe shall be made by welders and fusion mechanics that are certified by Westpac Utilities and familia with Westpac General Construction Specifications. A list of certified people and information on gaining certification are available by calling 689-4260.

Any damaged coatings on steel gas pipe shall be properly cleaned, primed and wrapped.

A tracer wire consisting of No. 12 TW wire with white insulation shall be laid with all polyethylene gas pipe. It shall be taped to the pipe at 15-foot intervals and shall be bonded to existing tracer wires and to steel pipe where cut. Connections shall be by cadweld.

Anodes shall be installed as shown on the drawings and as required by Westpac General Construction Specifications furnished by the inspector.

Only qualified workers who are experienced with polyethylene and steel gas pipeline construction shall install or direct work on gas pipelines.

Testing. Gas pipe at STA 14+30 shall be pressure tested using air at 135 psig against temporary end caps. All other fusions and welds shall be soap-tested at line pressure.

Gas Services. Gas services shall be relocated in the same manner as mains. Those services with adequate separation from the storm drain, as determined by the Westpac inspector, will not require relocation.

Compaction Testing. All compaction testing shall be accomplished as required for water mains.

Payment. Payment for gas pipe relocation shall be based on the bid price itemized in the bid proposal and the quantity actually completed. Payment shall be deemed full compensation for all labor, equipment and materials necessary for complete installation.

#### BID ITEMS 34, 35 AND 36 STORM DRAIN MANHOLES

Work to be performed under these items include excavation, backfill, reinforced concrete base, 60 inch diameter barrel sections, cone or top slab, frame, cover, steps, grouting, excess material disposal off site, testing and all work necessary to complete the installation as shown on the plans and in compliance with Sections 204 and 305 of the Standard Specifications.

Manhole shafts shall conform in materials and design to applicable portions of ASTM C-478.

Precast manhole sections, other than grade rings, shall be joined with flexible plastic gasket material such as "Ram-Nek" or equal. Joints shall be primed and the gasket placed and heated. Excess Ram-Nek shall be removed and the joint area made smooth. Special precautions shall be taken to see that the entire joint space is filled with Ram-Nek and is watertight. Installation shall be in strict accordance with manufacturer's instructions.

All castings for manhole covers shall be tough gray iron, free from cracks, holes, swells and cold sheets and be of workmanlike finish. The cast iron shall meet the requirements of ASTM A-48, Class 25. All manhole covers which do not fit neatly and bear firmly in the ring will be rejected. Manhole frames and covers shall be Neenah Foundry Company #R-1915-N or approved equal. Frame and lids must be watertight. Bearing surfaces shall be sealed with a neoprene gasket. The lid shall be fastened to the frame with countersunk stainless steel hexagonal-head cap screws and shall be furnished with a concealed pickhole. Shop drawings shall be submitted for approval on all castings.

Steps shall be required in all manholes five (5) feet or more in depth. Steps shall be "MA" manhole steps by Main Industries or approved equal.

A fall prevention system shall be required in all manholes eighteen (18) feet or deeper to invert. Fall prevention system shall be Research and Trading Corporation complete RTC-2000 stainless steel system or approved equal. System

shall be installed as per manufacturer's recommendations. The System shall also include an extension kit (for manhole opening) and all accessories.

All cast in place concrete shall be Class DA which shall have a coarse aggregate gradation conforming to Size No. 67 in Subsection 200.05.03, shall have between 6 and 8 sacks of cement per cubic yard, a maximum of 5 gallons of water added per sack of cement, a 1 inch to 4 inch slump, 5 to 7 percent entrained air, and have a minimum 28 day compressive strength of 4,000 psi. The Contractor's mix design shall be submitted to the Engineer for approval 10 working days prior to any concrete construction.

Excavation shall be as nearly vertical as possible (sheet and shore if soil conditions require), in existing street sections, alley sections and confined areas such as limited easements or adjacent to structures. Natural angle of repose will be allowed in all other areas.

All manholes shall be constructed on a non-yielding firm bed. When water is encountered or in the opinion of the Engineer existing conditions are such that the excavated ground at the base of the manhole is not firm, a minimum of six inches of crushed rock will be required prior to manhole base construction.

Pre-manufactured manhole risers made as an integral part of a pipe length will be considered as an option for storm drain manhole numbers 8, 11, 12 and 13. These units must be manufactured at the pipe production plant and shall be warranted by the manufacturer. If the Contractor chooses to select this option he shall notify the Engineer in writing, and shall submit shop drawings to the Engineer.

Manhole Testing. After completion of manhole construction, and prior to backfilling, all manholes shall be vacuum tested for leakage. The Contractor shall furnish all labor, tools and equipment necessary to make the tests and to perform any work incidental thereto. he shall, at his own expense, correct any excess leakage and repair any damage to the pipe and its appurtenances or to any structures resulting from or caused by these tests.

Each manhole shall be tested by plugging all lift holes with an approved non-shrink grout, and inserting plugs in all inlet and outlet pipes, taking care to securely brace plugs to prevent them from being drawn into the manhole.

The test head shall be placed at the inside of the top of the cone section or top slab and the seal inflated in accordance with the manufacturer's recommendations.

A vacuum of 10 inches of mercury shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to drop to 9 inches. the manhole shall pass if the time is greater than 60 seconds for 48 diameter, 75 seconds for 60", and 90 seconds for 72" diameter manholes.

If the manhole fails the initial test, necessary repairs shall be made with a non-shrink grout while the vacuum is still being drawn. Retesting shall proceed until a satisfactory test is obtained.

Alternative methods of manhole testing will be considered by the Engineer.

Payment shall be made as itemized in the proposal at the applicable bid unit price per each which shall be deemed to be full compensation for all labor, equipment, and materials necessary to complete installation, including excavation, backfill, crushed baserock (where necessary), existing sanitary sewer removal and replacement (where necessary), reinforced concrete base, form work, reinforcing steel, 60-inch diameter barrel, cone or top slab, frame, cover, steps, grouting, fall prevention system (where necessary), excess material disposal off site, perpetuation of existing flows as necessary, adjustments to final grade, concrete collars, testing and incidentals.

#### BID ITEMS 37 AND 38 SANITARY SEWER MANHOLES

Work to be performed under these items include excavation, backfill, concrete base, 48 inch diameter barrel sections, cone or top slab, frame, cover, steps, grouting, excess material disposal off site, perpetuation of existing flows as necessary, testing and all work necessary to complete the installation as shown on the plans and in compliance with Sections 204 and 305 of the Standard Specifications.

Manhole shafts shall conform in materials and design to applicable portions of ASTM C-478.

Precast manhole sections, other than grade rings, shall be joined with flexible plastic gasket material such as "Ram-Nek" or equal. Joints shall be primed and the gasket placed and heated. Excess Ram-Nek shall be removed and the joint area made smooth. Special precautions shall be taken to see that the entire joint space is filled with Ram-Nek and is watertight. Installation shall be in strict accordance with manufacturer's instructions.

Steps shall be required in all manholes five (5) feet or more in depth. Steps shall be "MA" manhole steps by Main Industries or approved equal.

All castings for manhole covers shall be tough gray iron, free from cracks, holes, swells and cold sheets and be of workmanlike finish. The cast iron shall meet the requirements of ASTM, A-48, Class 25. All manhole covers which do not fit neatly and bear firmly in the ring will be rejected. Manhole frames and covers shall be Pinkerton #A-107 with "Sanitary Sewer" stamped on the cover, or approved equal.

All cast in place concrete shall be Class DA which shall have a coarse aggregate gradation conforming to Size No. 67 in Subsection 200.05.03, shall have between 6 and 8 sacks of cement per cubic yard, a maximum of 5 gallons of water added per sack of cement, a 1 inch to 4 inch slump, 5 to 7 percent entrained air, and have a minimum 28 day compressive strength of 4,000 psi. The Contractor's mix design shall be submitted to the Engineer for approval 10 working days prior to any concrete construction.



Excavation shall be as nearly vertical as possible (sheet and shore if soil conditions require), in existing street sections, alley sections and confined areas such as limited easements or adjacent to structures. Natural angle of repose will be allowed in all other areas.

All manholes shall be constructed on a non-yielding firm bed. When water is encountered or in the opinion of the Engineer existing conditions are such that the excavated ground at the base of the manhole is not firm, a minimum of six inches of crushed rock will be required prior to manhole base construction.

All manholes shall be tested as specified under BID ITEMS 34,35 AND 36, STORM DRAIN MANHOLES.

Payment shall be made as itemized in the proposal at the applicable bid unit price per each which shall be deemed to be full compensation for all labor, equipment, and materials necessary to complete installation, including excavation, backfill, crushed baserock (where necessary), existing sanitary sewer removal and replacement (where necessary), concrete base, 48-inch diameter barrel, cone or top slab, frame, cover, steps, grouting, excess material disposal off site, perpetuation of existing flows as necessary, adjustments to final grade, concrete collars, testing and incidentals.

#### BID ITEMS 39,40,41,42,43,44,45,46 AND 47 REINFORCED CONCRETE STRUCTURES

Work to be done under these items shall include the construction of all outfalls, headwalls, cut-off walls, boat ramp, and reinforced concrete structures. The work shall include all concrete, excavation, backfill, dewatering, subgrade preparation, aggregate base, drain rock, form work, reinforcing steel, frames, covers, grouting, grates, racks, steps, valves and finish work required for complete installation of the concrete structures as shown on the plans. All work shall be performed in accordance with the requirements of Section 311 of the Standard Specifications.

Excavation and backfill shall conform to the requirements of Section 305 of the Standard Specifications. Where drain rock is shown as a bedding for structures it shall be either Class 'C' or Class 'D' backfill. Structural backfill below the water table shall be Class 'C' backfill, except at the Truckee River outfall structure where 2 foot nominal diameter river rocks shall be placed adjacent to the structure as shown on the plans.

All concrete shall be Class DA which shall have a coarse aggregate gradation conforming to Size No. 67 in Subsection 200.05.03, shall have between 6 and 8 sacks of cement per cubic yard, a maximum of 5 gallons of water added per sack of cement, a 1 inch to 4 inch slump, 5 to 7 percent entrained air, and have a minimum 28 day compressive strength of 4,000 psi. All external angles of concrete shall have a 3/4" bevel. The Contractor's mix design shall be submitted to the Engineer for approval 10 working days prior to any concrete construction.

Frame and Lid Castings for bid items 40, 41, 42, 43 and 44 shall be as specified under bid items 34, 35 and 36 in these Special Provisions.

Steps shall be as specified under bid items 34, 35 and 36.

Manhole barrel sections, cone, and steps in bid item 42 shall be as specified under bid items 34, 35 and 36. This item shall be tested for leakage as specified under bid items 34, 35 and 36.

Ductile iron pipe in bid item 40 shall be flanged, Class 150, conforming to the requirements of Section 203.05 for water pipe.

The 18 inch diameter plug drain valve shall be a Cloaw Eddy-Iowa Plug Drain Valve #F-3085 or approved equal. The body shall be ductile iron. Stem, stem nut, disc ring and seat ring shall be bronze. Bolts and nuts shall be stainless steel. It shall have an extension stem with a nut end. The extension stem shall have a stainless steel support bracket cast into the top slab of the inlet structure. The support bracket shall allow the item to turn freely. Shop drawings for drain valve and support bracket shall be submitted for approval.

The Tideflex check valve at the outfall structure at the Truckee River shall be a Series TF-2 Tideflex Check Valve as manufactured by Red Valve Company, Inc., of Carnegie, PA, or approved equal.

The check valve shall be all rubber and of the flow operated check type with a slip-on end connection. Inlet port area shall be 100% of the mating pipe port size. The port area shall contour down to a duckbill which shall allow passage of flow in one direction while preventing reverse flow. The check valve is designed to slip over the specified pipe outside diameter. The flexible duckbill sleeve shall be one piece rubber construction with fabric reinforcement. The check valve shall have a protective EPDM exterior wrapping for protection against sunlight attack. Check valves shall be attached to the pipe outside diameter by means of vendor furnished clamps and a minimum of four (4) dowels or bolts. Company name, plant location, and valve size and serial number shall be bonded to the check valve.

The check valve shall open to allow flow into the river when the differential head is six inches (6") of water column or less. The maximum head loss through the valve at a flow of 60 cubic feet per second shall be twelve inches (12") of water column.

If the Tideflex check valve is not installed and operational, the outfall structure at the Truckee River, shall have a temporary waterproof plug placed in the end of the 54 inch diameter RCP. This plug shall remain in place until the 54 inch pipeline, manholes and 54 inch inlet structure have been completed and tested, or until the Tideflex check valve is installed and operational.

The disturbed area around the outfall structure shall be reseeded with native vegetation.

Water containing silt or sediment shall NOT be allowed to enter the Truckee River. If silt or sediment laden water is produced during the course of the dewatering operation at the 54 inch outlet structure, it shall be removed from

the site or pumped to a temporary sedimentation basin where the sediment can settle out. Failure to comply with this requirement will result in an order to stop work until adequate measures have been taken to prevent silt or sediment entering the Truckee River.

Construction of the outfall structure at the Truckee River shall take place between July 1st and October 31st. No construction activities may occur in the river from November 1st through June 30th.

Payment shall be made as itemized in the proposal at the applicable bid unit price per each which shall be deemed to be full compensation for all labor, equipment, and materials necessary to complete installation, including existing structure removal (when necessary), excavation, dewatering, connection to new and existing pipes, perpetuation of existing flows as necessary, concrete, reinforcing steel, formwork, manhole barrel, cone, grade rings, steps, grates, frames, covers, racks, valves, grouting, compacted backfill, drain rock, adjustment to final grade, concrete collars, testing and incidentals.

**BID ITEMS 48 AND 74    BOLT DOWN MANHOLE COVERS**

Work to be performed under these items includes removal of existing manhole frame and cover and replacement with a bolt down, watertight frame and cover, concrete collar, grouting and all work necessary for complete installation.

All castings for manhole covers shall be tough gray iron, free from cracks, holes, swells and cold sheets and be of workmanlike finish. The cast iron shall meet the requirements of ASTM A-48, Class 25. All manhole covers which do not fit neatly and bear firmly in the ring will be rejected. Manhole frames and covers shall be Neenah Foundry Company #R-1915 Series or approved equal. Frame and lids must be watertight. Bearing surfaces shall be sealed with a neoprene gasket. The lid shall be fastened to the frame with countersunk stainless steel hexagonal-head cap screws and shall be furnished with a concealed pickhole. Sanitary Sewer Covers shall have "Sanitary Sewer" stamped on the cover. Shop drawings shall be submitted for approval on all castings.

All concrete shall be Class DA which shall have a coarse aggregate gradation conforming to Size No. 67 in Subsection 2200.05.03, shall have between 6 and 8 sacks of cement per cubic yard, a maximum of 5 gallons of water added per sack of cement, a 1 inch to 4 inch slump, 5 to 7 percent entrained air, and have a minimum 28 day compressive strength of 4,000 psi. The Contractor's mix design shall be submitted to the Engineer for approval 10 working days prior to any concrete construction.

Payment shall be made as itemized in the proposal at the applicable bid unit price per each which shall be deemed full compensation for removal of the existing frame and cover and complete installation of the new watertight frame and cover, concrete collar, grouting and incidentals.

**BID ITEMS 49, 50 AND 51 IRRIGATION VALVES**

Work to be performed under these items includes excavation, backfill, valve box, extensions, lid, valve, fittings, connections and all work necessary to complete the work as shown on the plans and in compliance with Section 307 of the Standard Specifications.

Valve boxes shall be by Carson Industries, Brooks Products, Inc., or an approved equal. Boxes shall be plastic. Round boxes shall be 9 inches in diameter. Rectangular boxes shall be 14" x 19". Extensions shall be as required.

Item 49, in-line irrigation valve, shall be a 1-1/2 inch diameter manual rising stem valve. Valve shall be Champion Model #150 RS or approved equal.

Item 50, irrigation drain valve, shall be a 3/4 inch diameter, manual, rising stem, angle valve. Valve shall be by Champion or approved equal. Valves shall have a 3 cubic foot sump filled with 3/4 inch gravel.

Item 51, quick coupling valve, shall be a 1 inch diameter Rainbird Model #44RC or approved equal.

Shop drawings for all valves shall be submitted for approval.

Payment for irrigation valves as itemized in the proposal shall be at the bid unit price per each which shall be deemed full compensation for all labor, equipment, and materials necessary for complete installation, including excavation, backfill, valve box, extensions, lid, valve, fittings, connections and incidentals.

**BID ITEM 52 IRRIGATION BACKFLOW PREVENTER**

Work to be performed under this item includes excavation, backfill, reduced pressure backflow preventer assembly with fittings, connections, concrete thrust blocks and all work necessary to complete the work as shown on the plans and in compliance with Section 307 of the Standard Specifications.

The reduced pressure backflow preventer assembly shall be Febco Model #825Y, 1-1/2 inch diameter or approved equal.

Shop drawings shall be submitted for approval.

Payment for this bid item shall be made at the bid unit price per each which shall be deemed to be full compensation for all labor, equipment and materials necessary to complete the installation, including excavation, backfill, backflow preventer assembly, fittings, thrustblocks, connections and incidentals.

**BID ITEM 53 IRRIGATION FILTER**

Work to be performed under this item includes excavation, backfill, Vu-Flow filter with fittings, screen, connections, valve box, lid, and all work necessary to complete the work as shown on the plans and in compliance with Section 307 of the Standard Specifications.

The filter shall be by Vu-Flow, 1-1/2 inch diameter with 150 mesh screen, or approved equal. Shop drawings shall be submitted for approval.

Payment for this bid item shall be made at the bid unit price per each,, which shall be deemed to be full compensation for all labor, equipment and materials necessary to complete the installation, including excavation, backfill, valve box, lid, filter, screen, fittings, connections and incidentals.

**BID ITEM 54 DRIP IRRIGATION BUBBLER**

Work to be performed under this item includes excavation, backfill, bubbler, bubbler tubing, fittings, connections, and all work necessary to complete the work as shown on the plans and in compliance with Section 307 of the Standard Specifications.

The bubbler shall be Pepco Quadra Bubbler Model #9633 with two (2) P-QB tubes per bubbler, tube clamp plate, plugs and insect plugs as required or approved equal.

Payment for this bid item shall be made at the bid unit price per each, which shall be deemed to be full compensation for all labor, equipment and materials necessary to complete the installation, including excavation, backfill, bubbler, bubbler tubes, fittings, connections and incidentals.

**BID ITEM 55 REPLACE TRAFFIC SIGNAL DETECTOR LOOPS**

This item of work shall include all work necessary to install traffic signal detector loops in accordance with Nevada Department of Transportation Standard Specifications, Section 623.

Work shall include the replacement of all pull boxes, detector loops, "lead-in" wire from pull box to pull box and loop to loop, electrical service to traffic signals and electroliers, and traffic signal interconnect cable that is destroyed or damaged as a result of the construction operation.

All traffic signals must remain in operation continuously and electric service and the traffic signal interconnect in El Rancho Drive must be maintained at all times.

Traffic signal detector loops must be replaced and operational within one (1) week of the pavement being replaced at the loop location. If any individual loop

in a group of loops is destroyed, the entire group of detector loops shall be replaced.

Payment for REPLACE TRAFFIC SIGNAL DETECTOR LOOPS shall be made at the Lump Sum price which shall be deemed full compensation for all sawed slots, "Lead-in" conductors, conductor wire, interconnect cable and conduit, electric service cable and conduit, installation, sealing, and all other materials, labor, equipment and tools necessary for complete installation of detector system.

**BID ITEMS 56, 57, 58 AND 59 TYPE II CLASS B AGGREGATE BASE**

Work under these items includes subgrade trimming and re-compaction if necessary, and furnishing, placing, and compacting aggregate base coarse material for asphalt paving, asphalt pavement patch, curbs, gutters, sidewalks, driveway aprons, valley gutters, and other miscellaneous areas.

The quantity and size of all materials shall conform to the requirements in Subsection 200.01 for Type 2, Class B Aggregate Base.

The eight (8) inch thick aggregate base is to be constructed under asphalt concrete pavement patch in El Rancho Drive, Prater Way, 'B' Street and Kietzke Lane. If more than eight inches is required to match the existing aggregate base thickness, the additional thickness will be paid for under bid item 59.

The six (6) inch thick aggregate base is to be constructed under curbs, driveway aprons, gutters, valley gutters, and paving where itemized.

The four (4) inch thick aggregate base is to be constructed under sidewalk and raised concrete areas as shown on the plans.

Payment for TYPE 2 CLASS B AGGREGATE BASE shall be at the bid unit price per square foot for the thickness as itemized in the proposal and measured to neat lines as shown on the plans, which payment shall be deemed full compensation for all labor, equipment, and materials, including subgrade preparation and compaction, material delivery and placement, watering and compaction to at least ninety-six (96) percent relative compaction (ASTM D1557-C), trimming, finishing, maintenance prior to further construction and incidentals necessary to complete the work as specified and in strict compliance with the requirements of Section 308 of the Standard Specifications.

**BID ITEMS 60, 61 AND 62 ASPHALT CONCRETE**

Work under this item shall include the mixing, delivery, placement, trimming and compaction of asphalt concrete as itemized in the proposal on a prepared aggregate base including tack coat(s) (as required) and fog seal coat.

All work shall be performed in accordance with Sections 315, 316, 317 and 319 of Standard Specifications, except as modified herein.

When more than one course of asphalt concrete is placed, the surface of the first course shall be treated with a tack coat of emulsified asphalt diluted with forty (40) percent water, Grade SS-1h, applied at the rate of 0.05 to 0.10 gallons per square yard. Tack coat shall also be applied to all cold pavement joints, gutters, manholes, and the like. Tack coat shall be placed in accordance with Section 316 of the Standard Specifications.

Fog seal coat shall be emulsified asphalt, Type SS-1h, diluted with forty (40) percent water, applied at the rate of between 0.08 and 0.12 gallons per square yard. Fog seal shall be placed in accordance with Section 317 of the Standard Specifications.

Asphalt concrete shall be constructed in compliance with the requirements of Section 319 of Standard Specifications. Type 2 Plantmix Aggregate shall be used. Asphalt cement material shall be AR-4000. The asphalt concrete shall be compacted to not less than 96% of its Marshall maximum density. The Contractor shall submit a job-mix formula for approval and shall not proceed with asphalt concrete construction until the job-mix formula is approved (See Section 2.27 of these Special Provisions).

If more than five (5) inches of asphalt concrete pavement patch is required to match the exiting pavement section in El Rancho Drive, Prater Way, 'B' Street or Kietzke Lane, the additional thickness shall be paid for under bid item 62.

Payment for ASPHALT CONCRETE as itemized shall be made at the bid unit price per square foot which shall be deemed full compensation for all labor, materials, and equipment, including mixing, delivery, placement, compaction, tack coat, fog seal coat, mix design, and incidentals necessary to complete the work as specified.

#### BID ITEMS 63, 64, 65 AND 66 CONCRETE CURBS, GUTTERS AND SIDEWALKS

Work to be performed under these items shall include forming, reinforcing, pouring, and finishing curb, gutters, sidewalks, slabs, valley gutters and all work necessary to complete the installation as shown on the plans.

The base material under curbs, gutters, sidewalks, slabs and valley gutters is NOT included in these items, but is covered under other bid items.

All concrete shall be Class DA which shall have a coarse aggregate gradation conforming to Size No. 67 in Subsection 200.05.03, shall have between 6 and 8 sacks of cement per cubic yard, a maximum of 5 gallons of water added per sack of cement, a 1 inch to 4 inch slump, 5 to 7 percent entrained air, and have a minimum 28 day compressive strength of 4,000 psi. The Contractor's mix design shall be submitted to the Engineer for approval 10 working days prior to any concrete construction.

Payment for concrete curbs, gutters, sidewalks, valley gutters, and other "flatwork" shall be as itemized in the proposal which shall be deemed full

compensation for the work as specified and in strict compliance with the requirements of Section 312 of the Standard Specifications.

**BID ITEM 67    ROCK RIP-RAP**

Work to be performed under this item includes excavation to subgrade, surface preparation, filter fabric, filter fabric placement, rip-rap, rip-rap placement, miscellaneous finish grading and all work necessary for complete installation as shown on the plans.

Filter fabric shall be Mirafi 140NS or approved equal. It shall be placed with a minimum of one (1) foot overlap between edges.

Rip-rap individual stones shall have a minimum dimension of not less than three (3) inches. Not more than ten (10) percent of the stones shall weigh more than fifty (50) pounds each and not more than fifty (50) percent of the stones shall weigh less than twenty-five (25) pounds each.

The largest dimension of any rip-rap stone shall be no larger than three (3) times the smallest dimension.

Rip-rap stone shall conform to the following requirements:

<u>Source Requirement Tests</u>	<u>Test Method</u>	<u>Requirements</u>
Percentage of Wear (500 Rev.)	Nev. T233	45 Percent Max.
Specific Gravity	Nev. T111	2.5 Min.

The bed for the rip-rap shall be properly trimmed and shaped. Excavations for trenches, footings, cutoff walls, etc., shall conform to the requirements of Section 305. Gradation and compaction requirements on structure backfill will not apply.

Rip-rap may be placed by mechanical means provided it does not puncture or tear the filter fabric and will produce a well graded, uniform rock blanket in close conformity with the typical section shown on the plans as approved by the Engineer. Interstices between stones shall be chinked with spalls firmly rammed into place.

Payment for rock rip rap shall be made at the bid unit price per cubic yard which shall be deemed full compensation for all labor, equipment and materials including rip-rap rock, filter fabric, excavation, placement, finishing and miscellaneous work necessary to complete this item as specified.

**BID ITEM 68    DECOMPOSED GRANITE**

Work to be performed under this item includes furnishing, delivery, placement, compaction, finish grading and all work necessary for complete installation as shown on the plans.



Decomposed granite shall be 3/8 inch minus material from a source approved by the Engineer. A sample shall be provided to the Engineer for approval two (2) weeks prior to the material being brought onto the site. Decomposed granite shall be compacted to 90% of maximum dry density.

Payment for decomposed granite shall be made at the bid unit price per square foot and shall be deemed full compensation for all labor, equipment, and materials necessary to excavate, transport, place, compact, water, trim, finish, and incidental work necessary to complete installation as shown on the plans.

#### BID ITEM 69 NDOT MONUMENTS

Work to be performed under this item includes all work necessary to install Nevada Department of Transportation right-of-way and reference monuments that are destroyed by excavation. All work shall conform to Nevada Department of Transportation Standard Plans and Standard Specifications, Section 621.

Offset stakes will be provided by the Engineer, and the brass reference disc will be grouted into place by the Engineer.

Payment for right-of-way and reference monuments shall be made at the bid unit price per each, which shall be deemed full compensation for all labor, equipment and materials necessary for complete installation as specified.

#### BID ITEM 70 REMOVABLE BARRIER POST

Work to be performed under this item includes excavation, backfill, galvanized pipe, cap, welded flat stock for locking device, painting, reflecting tape, concrete base and all work necessary for complete installation as shown on the plans.

Galvanized steel pipe shall be Schedule 40.

Payment for REMOVABLE BARRIER POST shall be made at the bid unit price per each which shall be deemed full compensation for all labor, equipment and materials, including excavation, backfill, galvanized pipe, cap, flat stock, welding, painting, reflecting tape, concrete base and incidental work necessary to complete installation as shown on the plans.

#### BID ITEMS 71, 72 AND 73 FLOATING BARRIERS

Work to be performed under these items includes excavation, backfill, galvanized anchor posts with caps, floating barrier assembly, and all work necessary for complete installation as shown on the plans.

GENERAL: Provide a floating baffle curtain which is custom fabricated from a durable vinyl coated polyester reinforced material designed to withstand

chlorine, petroleum products, ultraviolet radiation, extreme temperatures, rips, abrasion and hydraulic shock.

The curtains shall be custom designed for the specific length, depth and side slope configuration as shown on the drawings. The vertical position of the curtain shall be maintained by the flotation collar at the surface and ballast chain in the lower hem.

#### FLOTATION

Unicellular plastic foam logs having a buoyance of a minimum 55 lbs/cu ft dielectrically sealed into the flotation collar. The flotation collar shall be sized as required to adequately support the curtain and minimize sail area.

#### CABLE SLEEVE

A dielectrically welded sleeve shall be provided beneath and adjacent to the flotation collar. A 1/4" galvanized cable coated to 5/16" with vinyl shall be supplied in the sleeve.

#### BALLAST

The curtain shall be weighted with a 1/4" hot-dip galvanized steel proof coil chain dielectrically sealed into the ballast collar. The chain shall extend from the end of the curtain a distance of 6'. The chain is to be used in the shore anchoring of the curtain.

#### SHORE ATTACHMENT UNIT

The ends of the floating baffle attaching to the shore anchors shall be 4 plies of material dielectrically sealed together. 1/4" inch thick stainless steel end plates shall be bolted to the reinforced area. The flotation log, 1/4 inch cable and 1/4 inch chain shall be attached to the 4 inch galvanized steel pipe in such a manner that the baffle assembly can move freely up and down with changes in water level.

Floating baffles shall be manufactured by Biasco Inc., Lexington, S.C.; Environetics, Inc., Bridgeview, IL; or approved equal. Installation shall be as recommended by the manufacturer. The floating baffle curtain material and workmanship shall be warrantied for a period of twelve (12) months from the date of installation.

Payment shall be made as itemized in the proposal at the applicable bid lump sum price per each which shall be deemed to be full compensation for all labor, equipment, and materials necessary to complete installation, including excavation, backfill, anchor posts, floating barrier assembly and incidentals.

**BID ITEM 75 TREES**

Work to be performed under this item includes excavation, backfill, tree, staking, fine mulch, tree wrap and all work necessary for complete installation as shown on the plans and in compliance with the requirements of Section 331 of the Standard Specifications.

Trees shall be fifteen (15) gallon size with a minimum caliper of one (1) inch. Species shall be Idaho Locust (Robinia "Idahoensis") and Raywood Ash (Fraxinus Oxycarpa "Raywood"). There shall be an equal number of each species.

If trees are installed prior to the irrigation system being operational, they shall be watered daily until the irrigation system is in place and operational. The Contractor shall be responsible for caring for and maintaining the trees for a period of three months after planting has been completed in conformance with Section 331 of the Standard Specifications. Any tree that is not healthy at the end of this maintenance period shall be replaced by the Contractor at his expense.

Payment for TREES shall be made at the bid unit price per each which shall be deemed to be full compensation for all labor, equipment, and materials necessary to complete installation, including excavation, backfill, tree, staking, fine mulch, tree wrap and incidentals.

**BID ITEM 76 WOOD CHIPS**

Work to be performed under this item includes wood chips and all work necessary for complete installation as shown on the plans.

Wood chips shall be clean and free of dirt, or other objectional material. Wood chips shall be supplied by the City of Reno Parks Department. The Contractor shall load and haul the chips from the Parks Department Yard at Telegraph and Gregg Streets to the project site. The Contractor shall contact Jim Ross at the Parks Department to make hauling arrangements.

Payment for WOOD CHIPS shall be made at the bid unit price per square foot which shall be deemed full compensation for all labor, equipment and materials necessary to complete installation, including loading, hauling and incidentals.

**BID ITEM 77 REDWOOD SIGN**

Work to be performed under this item includes excavation, backfill, sign, posts, concrete bases and all work necessary for complete installation.

The sign overall dimensions shall be eight (8) feet wide by four (4) feet high by three and one-half (3-1/2) inches thick. The sign shall be made up of laminated Clearheart Redwood two (2) by four (4) timbers. The 2 by 4 timbers shall be glued and doweled. The surface of the sign shall be sanded smooth.

Wording, as shown on the drawings shall be sandblasted into the front face of the sign. Letters shall be a minimum of one-half (1/2) inch deep. Letters shall be painted white.

Payment for REDWOOD SIGN shall be made at the bid unit price per each which shall be deemed full compensation for all labor, equipment and materials necessary to complete installation, including sign, posts, concrete bases, bolts and incidentals.

**BID ITEM 78 STRIPING**

Work to be performed under this item includes all parking lot striping and markings, replacing street striping and markings that are damaged or destroyed by the construction operation with the same type of markings as currently exist, or as directed by the Engineer, and all work necessary for complete installation in conformance with Section 322.04 of the Standard Specifications.

Parking lot striping and marking shall include marking handicapped spaces, "no parking" areas and cross hatched "island" areas. Street striping and marking shall include restriping and remarking all striping and markings that are obliterated by construction in paved areas, and as directed by the Engineer.

Payment for STRIPING shall be made at the bid lump sum price which shall be deemed full compensation for furnishing all labor, materials, tools and equipment and for doing all work involved in, or appurtenant to, the painting of all traffic striping or markings as shown on the Plans, indicated in the Special Provisions, or as directed by the Engineer.

All costs for temporary pavement painting for the convenience of the Contractor, including costs for sandblasting of existing lines and markings, shall be at his sole expense.

## CITY OF RENO

## SUPPLEMENTAL NOTICE TO BIDDERS NO. 3

REFERENCE IS MADE TO CONTRACT NO. 665, PARADISE POND OUTFALL AND IMPROVEMENTS UPON WHICH BIDS ARE REQUESTED FOR OPENING AT 2:00 P.M. PACIFIC STANDARD TIME ON MAY 1, 1989.

THE FOLLOWING MODIFICATIONS ARE TO BE MADE:

## A. SPECIFICATIONS

Page P-4 Base Bid Schedule of Prices included in Supplemental Notice to Bidders No. 1. Bid Item 12.

Revise quantity of 30" diameter reinforced concrete pipe to 96 lineal feet. The additional footage is located at the NW corner of Paradise Pond.

Page P-9 Base Bid Schedule of Prices included in Supplemental Notice to Bidders No. 1. Bid Item 34.

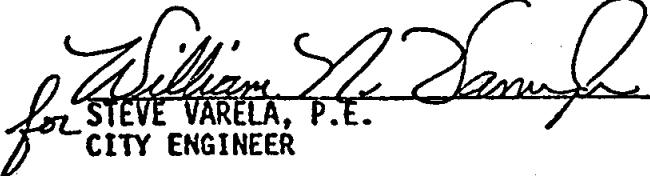
Revise quantity of Storm Drain Manholes to 6 each. The additional manhole is at the NW corner of Paradise Pond.

Page SP-27 Bored and Jacked Storm Drain Pipe

Insert the following paragraph after paragraph five on this page.

"The contractor shall obtain a Contractor's Right of Entry Permit from Southern Pacific Transportation Company for bid item 9 and shall comply with provisions outlined in this permit, a copy of which is enclosed with Supplemental Notice to Bidders No. 3. The contractor shall pay for the cost of full-time inspection by a Southern Pacific Transportation Company Inspector for the juration of the jack and bore operation under the railroad."

PLEASE SIGN BOTH COPIES, ONE TO BE INSERTED AND INCLUDED WITH THE BID PROPOSAL AND THE OTHER COPY TO BE RETURNED TO LUMOS & ASSOCIATES, INC., PRIOR TO BID OPENING.

  
for STEVE VARELA, P.E.  
CITY ENGINEER

Enclosures: Southern Pacific Transportation Co.  
Right of Entry Permit Requirements

Receipt of Supplemental Notice No. 3:

GRANITE CONSTRUCTION CO.  
Company

  
Name

04-28-89  
Date



## INSERT

### LIABILITY

Contractor agrees to and shall indemnify and hold harmless Railroad, its officers, agents, and employees from and against any and all claims, demands, losses, damages, causes of action, suits, and liabilities of every kind (including reasonable attorneys' fees, court costs, and other expenses related thereto) for injury to or death of a person or for loss of or damage to any property, arising out of or in connection with any work done, action taken or permitted by Contractor, its subcontractors, agents or employees under this contract.

IT IS THE EXPRESS INTENTION OF THE PARTIES HERETO, BOTH CONTRACTOR AND RAILROAD, THAT THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH INDEMNIFIES RAILROAD FOR ITS OWN NEGLIGENCE, WHETHER THAT NEGLIGENCE IS ACTIVE OR PASSIVE, OR IS THE SOLE OR A CONCURRING CAUSE OF THE INJURY, DEATH OR DAMAGE; PROVIDED THAT SAID INDEMNITY SHALL NOT PROTECT RAILROAD FROM LIABILITY FOR DEATH, INJURY OR DAMAGE ARISING SOLELY OUT OF THE CRIMINAL ACTIONS OF RAILROAD, ITS OFFICERS, AGENTS AND EMPLOYEES.

**COMPREHENSIVE GENERAL AND AUTOMOBILE LIABILITY ENDORSEMENT**

Attached to certificate of insurance for and hereby certified to be part of the following policy or policies having the following expiration dates:

Policy No.	Company Providing Policy	Expiration Date
------------	--------------------------	-----------------

The scope of the insurance afforded by the policy(ies) designated in the attached certificate is not less than that which is afforded by the Insurance Service Organizations or other "Standard Provisions" forms in use by the insurance company in the territory in which coverage is afforded.

Such Policy(ies) provide for or are hereby amended to provide for the following:

1. The named insured is \_\_\_\_\_
2. \_\_\_\_\_ ("Railroad")\* is included as an additional insured with respect to liability arising out of the hazards or operations under ALL AGREEMENTS entered into between the named insured and Railroad, whether or not liability is attributable to negligence of the named insured or Railroad. In the event it is intended that this endorsement is applicable to only one agreement, the agreement is described as follows:

The insurance provided hereunder applies as though separate policies are in effect for both the named insured and Railroad. Nothing herein shall increase limits of liability set forth in the policy(ies)

3. The limits of liability under the policy(ies) are not less than those shown on the certificate to which this endorsement is attached.
4. Cancellation or material reduction of this coverage will not be effective until thirty (30) days following written notice to:

Address

By registered or certified mail

5. Contractual liability coverage for liability assumed by this insured under said agreement or agreements with Railroad.
6. This insurance is primary and insurer is not entitled to any contribution from insurance in effect for Railroad.
7. All policy or endorsement limitations relating specifically to operations on or near railroad property are eliminated.
8. Broad Form Property Damage endorsement.
9. So-called X, C and U (or similar) limitations are not effective as respects operations by or for the named insured on or adjacent to Railroad's property.
10. In the event of reduction or exhaustion of the applicable aggregate limit or limits of liability under the primary policy or policies referred to in the attached certificate of insurance solely by reason of losses paid thereunder on a count of occurrences during the policy period, the excess policy, if any, referred to herein shall (i) in the event of reduction, apply as excess of the reduced limit of liability thereunder; and (ii) in the event of exhaustion, continue force as though it were primary insurance.

The term "Railroad" includes successors, assigns and affiliated companies of Railroad and affiliates thereof, and other railroad company operating upon or over Railroad's tracks with Railroad's permission, and the officers, employees and agents of any of the foregoing.

\_\_\_\_\_  
Insurance Company

Date: \_\_\_\_\_, 19\_\_\_\_

By \_\_\_\_\_  
Signature of Authorized Representative



4. Prior to the start of work or occupancy of premises under this agreement, Contractor agrees to procure and maintain, at its sole cost and expense, the following kinds of insurance with an insurer or insurers and form satisfactory to Railroad:

Comprehensive general and automobile liability insurance with contractual liability endorsement and products and completed operations hazards included, which shall provide coverage for limits of not less than \$2,000,000 bodily injury liability and property damage liability, combined single limits.

Contractor agrees to furnish Railroad with a certificate of insurance to which will be attached an endorsement, the form of which is included as a separate part of this agreement, marked Exhibit "A". Liability of Contractor under Section 3 hereof shall not be limited to coverage provided under said insurance policies.

5. Contractor shall deposit with Railroad the sum of \_\_\_\_\_

Dollars (\$\_\_\_\_\_) representing the estimated expense to be incurred by Railroad in connection with said work.

If there is no amount indicated in the blank space provided above for the deposit to be made by Contractor, in lieu of such deposit Contractor shall cause the attached surety bond to be executed by a reliable surety acceptable to Railroad, condition upon the faithful performance of the provisions of this agreement.

6. The permission herein given shall not be assigned by Contractor without the prior written consent of Railroad, except in the case of subcontractors who shall be deemed agents of Contractor subject to the terms of this agreement.

7. No vehicular crossing over Railroad's track shall be installed or used by Contractor without prior written permission of Railroad.

8. No work shall be done between the hours of 6:00 p.m. and 6:00 a.m., nor on Saturdays, Sundays or legal holidays without prior written permission of Railroad.

9. At request of Railroad, Contractor shall remove from Railroad premises any employee of Contractor or any subcontractor who fails to conform to the instructions of Railroad's representative in connection with work on Railroad premises, and any right of Contractor to enter upon Railroad premises shall be suspended until such request of Railroad is met. Contractor shall indemnify Railroad against any claim arising from the removal of any such employee from Railroad premises.

~~IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed in duplicate.~~

10. Section 3 hereof was revised and the "Liability" insert was attached prior to execution of this instrument by Contractor.

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

\_\_\_\_\_  
RAILROAD

By \_\_\_\_\_  
(TITLE)

\_\_\_\_\_  
CONTRACTOR

By \_\_\_\_\_  
(TITLE)

## CITY OF RENO

## SUPPLEMENTAL NOTICE TO BIDDERS NO. 1

REFERENCE IS MADE TO CONTRACT NO. 665, PARADISE POND OUTFALL AND IMPROVEMENTS UPON WHICH BIDS ARE REQUESTED FOR OPENING AT 2:00 P.M. PACIFIC STANDARD TIME ON MAY 1, 1989.

THE FOLLOWING MODIFICATIONS ARE TO BE MADE:

A. PRE-BID CONFERENCE

All bidders are REQUIRED to attend a pre-bid conference. For those bidders that did not attend the pre-bid conference on April 18, 1989, there will be another pre-bid conference at 11:00 A.M. on April 28, 1989, in the Engineering Conference Room, 2nd Floor, City Hall Annex, 450 Sinclair Street, Reno, Nevada.

B. PLANS

- Sheet 2: 1. Trench and Backfill Notes, Note 3:  
Class "C" backfill is deleted and replaced by Class "F" backfill.
- Sheet 3: 1. STA 13+90 to STA 14+60 Realign 4" Gas Line:  
Delete profile note "Const. 100 LF 42" deep trench only. Westpac will lay pipe." Replace with "Const. 105LF 4" Gas Line."
- Sheet 6: 1. STA 41+25.5 Relocate Ex 36" Water Line:  
This item is deleted from the contract.
2. STA 41+39 Relocate Ex 24" Water Line:  
This item is deleted from the contract.
3. STA 41+74 Relocate Ex 12" Water Line:  
This item is deleted from the contract.
4. STA 41+55.5 Ex 8" Gas Line:  
Add note, "Attach 2 32# Anodes to gas Line. Bury at bottom of RCB trench (Alt. A)." This will be an alternate bid item.
5. STA 43+17 Relocate Ex 4" Water Line:  
This item will become an alternate bid item.
6. STA 44+75 Relocate Ex 4" Water Line:  
This item will become an alternate bid item.
7. STA 46+78 Relocate Ex 4" Water Line:

8. STA 47+89.4 Relocate Ex. 8" Water Line:  
This item will become an alternate bid item.
9. STA 48+80 Relocate Ex 2" water service if necessary:  
This item will become an alternate bid item.
10. STA 49+36 Attach 32# Anode to Ex gas Line:  
This item will become an alternate bid item.
11. STA 50+18 Relocate Ex 1" gas service if necessary:  
This item will become an alternate bid item.
12. STA 50+40 Relocate Ex 3/4" gas service if necessary:  
This item will become an alternate bid item.
13. STA 50+92 Relocate Ex 2" water service if necessary:  
This item will become an alternate bid item.

- Sheet 7:
1. STA 52+49.6 Relocate Ex 8" water and 2" gas:  
This item will become an alternate bid item.
  2. STA 59+78.3 Relocate Ex 20" water Line:  
This item is deleted from the contract.
  3. STA 59+78.3 Relocate Ex 2" gas line:  
This item will become an alternate bid item.

**C. SPECIFICATIONS**

1. Bid Schedule of Prices, pages P-2 through P-22: This bid schedule is deleted and replaced by the enclosed "Base Bid - Schedule of Prices" and "Additive Alternate Bid Schedule A". All bids must be submitted on the new bid schedules. The changes in the bid schedules are summarized below:

Page P-7: Delete bid items 22 through 26 from the base bid. Bid item 26 will be included in Alternate Bid Schedule A.

Page P-8: Delete bid items 27 through 30 from the base bid. These bid items will be included in Alternate Bid Schedule A.

Page P-9: Delete bid items 31 through 33 from the base bid. These items will be included in Alternate Bid Schedule A.

2. Page SP-18: Add section 2.27E:

2.27E Class F Backfill:

Class F backfill shall be graded gravel which has been scalped over a 3/8" screen. The material need not be washed but shall be free of any organic impurities, clay lumps, or unstable substances.

The material shall be graded from 1 to 3/8 inch conforming to the following gradation:

<u>Sieve Sizes</u>	<u>Percentage by Weight Passing Sieve</u>
1 inch	100
3/4 inch	90-100
3/8 inch	0-5

Test Requirements:

<u>Test</u>	<u>Test Method</u>	<u>Requirements</u>
LA Rattler (500 Rev)	Nev T233	45 Maximum

3. Page SP-24, 4th paragraph:

Class 'C' backfill is deleted and replaced by Class 'F' backfill.

4. Page SP-27, 3rd paragraph:

Add "This one (1) inch tolerance shall not be exceeded at any point within a 300 foot section of jacked pipe. On each occasion where the allowed tolerance is exceeded the Contractor shall be assessed a penalty as follows:

<u>Amount of deviation from exact grade or alignment in excess of permitted one inch tolerance</u>	<u>Penalty for each 0.25 inch out of tolerance</u>
0 - 0.50 inches	\$ 1,000
0.51 - 1.00 inches	\$ 1,200
1.01 - 1.50 inches	\$ 1,400
1.51 - 2.00 inches	\$ 1,600
2.01 inches or greater	\$ 2,000

5. Page SP-27, last paragraph:

Class 'C' backfill is deleted and replaced by Class 'F' backfill.

6. Page SP-28, Trenching, Bedding and Backfill, first paragraph:

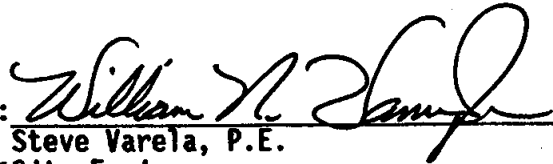
Class 'C' backfill is deleted and replaced by Class 'F' backfill.

7. Page SP-33 Remove and Replace Water Mains:

- (a) Change "BID ITEMS 22,23,24,25,26,27,28 AND 29" to read "BID ITEMS A1, A2, A3, AND A4."
- (b) All references to removing and replacing the 36 inch main at STA 41+25, the 24-inch main at STA 41+39, the 12-inch main at STA 41+74 and the 20-inch main at STA 59+78 are deleted.

8. Page SP-36 Remove and Replace gas mains and services:  
Change "BID ITEMS 30,31,32 AND 33" to read "BID ITEMS A5, A6, A7 AND A8."

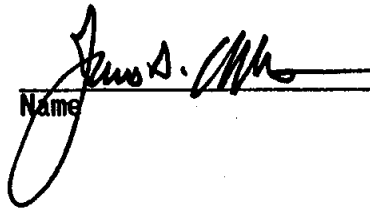
PLEASE SIGN BOTH COPIES, ONE TO BE INSERTED AND INCLUDED WITH THE BID PROPOSAL AND THE OTHER COPY TO BE RETURNED TO LUMOS & ASSOCIATES, INC., PRIOR TO BID OPENING.

BY:   
for Steve Varela, P.E.  
City Engineer

Enclosures: Revised Base Bid Schedule  
Additive Alternate Bid Schedule A

Receipt of Supplemental Notice No. 1:

GRANITE CONSTRUCTION CO.  
Company

  
Name

04-26-09  
Date

CITY OF RENO

SUPPLEMENTAL NOTICE TO BIDDERS NO. 2

REFERENCE IS MADE TO CONTRACT NO. 665, PARADISE POND OUTFALL AND IMPROVEMENTS UPON WHICH BIDS ARE REQUESTED FOR OPENING AT 2:00 P.M. PACIFIC STANDARD TIME ON MAY 1, 1989.

THE FOLLOWING MODIFICATIONS ARE TO BE MADE:

A. SPECIFICATIONS

Page SP-25:

Delete paragraphs five, six and nine.

Add the following paragraphs after paragraph four:

"The joint test may be an air test or a hydrostatic test. Joint testing equipment shall be subject to inspections, testing, and calibration by the engineer, and shall be approved by the engineer before use."

"If an air test is used, each joint shall be pressurized to a gauge pressure of three (3) psig greater than the average back pressure of any groundwater that may submerge the pipe. The inflow of pressurized air shall then be stopped off and the air supply disconnected. If the pressure falls one (1) psig or more in fifteen (15) seconds, the joint will be considered to have failed."

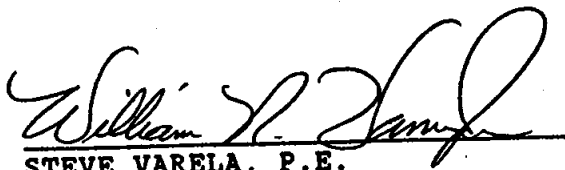
"If a hydrostatic joint test is used, each joint shall be pressurized to a hydrostatic head of seven (7) feet of water above the top of the pipe for a period of one minute. The amount of water needed to be added to maintain that seven (7) feet of head for one (1) minute shall be recorded. If that amount of water is one-quarter (1/4) gallon or more, the joint will be considered to have failed. In addition any leakage which is visually detected shall also be cause for rejection of the joint."

"If a joint fails either of the above tests, the pipe must be removed. One attempt to reinstall and retest a failed joint will be allowed. If the joint fails the second test, the pipe must be removed and repaired to the satisfaction of the engineer prior to being used again on the project."

B. PLANS

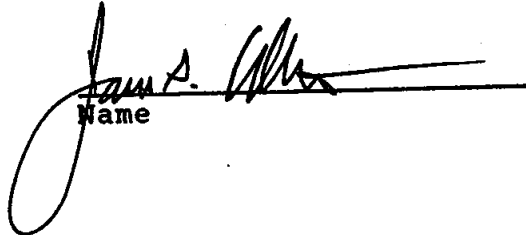
Sheet 11: Trash Rack Detail: Change width of trash rack from 84" to 142" (each end)

PLEASE SIGN BOTH COPIES, ONE TO BE INSERTED AND INCLUDED WITH THE BID PROPOSAL AND THE OTHER COPY TO BE RETURNED TO LUMOS & ASSOCIATES, INC. PRIOR TO BID OPENING.

*for*   
STEVE VARELA, P.E.  
CITY ENGINEER

Receipt of Supplemental Notice No. 2:

GRANITE CONSTRUCTION CO.  
Company

  
Name

04-26-89  
Date

WASHOE COUNTY

PREVAILING WAGE RATES

FOR

PUBLIC WORKS

STATE OF NEVADA

INCLUDING CHANGES DATED (DEC. 15 & 28, 1988)

10/1/88

through

9/30/89

Robert Miller  
Governor

F. T. MacDonald  
Labor Commissioner



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WASHOE COUNTY

BASE RATE FRINGE BENEFITS TOTAL

ALARM INSTALLERS

Journeyman----- 10.67 0.00 10.67

AIR BALANCE TECHNICIANS

Journeyman----- 19.21 5.60 24.81

Foreman----- 20.475 5.60 26.075

General Foreman----- 20.75 5.60 26.35

ASBESTOS WORKERS (INSULATORS)

HAZARDOUS MATERIAL APPLICATION AND REMOVAL

Mechanic----- 24.60 8.16 32.76

Foreman----- 25.60 8.16 33.76

General Foreman----- 26.60 8.16 34.76

Removal refers to removal of hazardous material from mechanical systems.

BOILERMAKERS

Boilermaker - Blacksmith----- 22.60 3.50 26.10

Assistant Foreman----- 23.10 3.50 26.60

Foreman----- 23.85 3.50 27.35

BRICKLAYER

Journeyman----- 16.15 2.91 19.06

Foreman----- 17.40 2.91 20.31

CARPENTERS \*

ADD	Carpenter-----	18.10	2.25	20.35
ZONE	Carpenter Foreman-----	20.58	2.25	22.83
RATES	Pile Driver-----	22.53	8.53	31.06
	Pile Driver Foreman-----	24.03	8.53	32.56

SEE ZONE RATES ON PAGE 14.

\* Correction - Effective December 13, 1988.

WASHOE COUNTY

BASE      FRINGE  
RATE      BENEFITS      TOTAL

CEMENT MASONS

ADD	Cement Mason-----	16.50	3.53	20.03
ZONE	Foreman-----	17.50	3.53	21.03
RATES	Epoxy Floors, Mastic, Magnesite and all composition Masons-----	17.00	3.53	20.53
	SEE CEMENT MASON ZONE RATES ON PAGE 15.			

DRYWALLERS \*\*

ADD ZONE RATES	Drywaller-----	18.10	2.25	20.35
	SEE ZONE RATES ON PAGE 14.			

ELECTRICIANS

	Wireman & Technician-----	20.99	5.01	26.00
	Cable Splicer-----	23.12	5.07	28.19
	Foreman-----	23.12	5.07	28.19
	General Foreman-----	25.25	5.14	30.39

ELECTRICIANS - LINE

	Lineman-----	20.99	5.01	26.00
	Line Equipment Operator-----	18.86	4.95	23.81
	Cable Splicer-----	23.12	5.07	28.19
	Groundman-----	13.54	4.79	18.33

ELECTRICIANS - NEON SIGN

	Journeyman-----	15.30	1.15	16.45
	Foreman & Truck Foreman-----	15.55	1.15	16.70
*	Helper----- (Nevada overtime law may apply.)	3.35	1.15	4.50

\* Corrected 11-4-88.  
\*\* Corrected 12-13-88.

EFFECTIVE 10/1/88 TO 9/30/89

WASHOE COUNTY

	<u>BASE</u> <u>RATE</u>	<u>FRINGE</u> <u>BENEFITS</u>	<u>TOTAL</u>
<u>ELEVATOR CONSTRUCTORS</u>			
Mechanic-----	31.73	7.32	39.05
Mechanic in Charge-----	35.70	7.64	43.34
Helper-----	22.21	6.11	28.32
Probationary Helper-----	15.865	5.73	21.595
<u>FLOOR COVERERS</u>			
Floor Coverer-----	18.89	1.68	20.57
Foreman-----	20.78	1.68	22.46
<u>GLAZIERS</u>			
Glazier-----	18.26	4.93	23.19
Foreman-----	19.90	4.93	24.83
<u>HOD CARRIERS - BRICK MASON TENDERS</u>			
Hod Carrier - Brick Mason Tender---	14.36	3.50	17.86
Foreman-----	14.86	3.50	18.36
<u>HOD CARRIERS - PLASTERER TENDERS</u>			
Hod Carrier - Plasterer Tender ---	16.26	3.40	19.66
Foreman - Hod Carrier-----	16.86	3.40	20.26
Hod Carrier Working with Gun-----	16.86	3.40	20.26
Hod Carrier Mixing on TM-30 Machine	17.11	3.40	20.51
Foreman - TM-30 Machine-----	17.36	3.40	20.76
<u>IRON WORKERS</u>			
Reinforcing, Ornamental & Structural-----	19.55	10.25	29.80
Fence Erector-----	18.66	10.25	28.91
Foreman-----	\$1.50 ABOVE HIGHEST PAID JOURNEYMAN SUPERVISED.		

WASHOE COUNTY

BASE RATE      FRINGE BENEFITS      TOTAL

LABORERS

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Landscaper-----	9.56	3.55	13.11
Group 1-----	14.47	3.55	18.02
Group 1A-----	11.35	3.55	14.90
Group 2-----	14.57	3.55	18.12
Group 3-----	14.72	3.55	18.27
Group 4-----	14.97	3.55	18.52
Group 5-----	15.27	3.55	18.82
Group 6			
Gunite Foreman-----	15.67	3.55	19.22
Gunman-----	14.97	3.55	18.52
Nozzleman, Rodman-----	15.27	3.55	18.82
Reboundman-----	14.62	3.55	18.17

SEE BUILDING CONSTRUCTION ZONE RATES ON PAGE 15.  
SEE HEAVY & HIGHWAY ZONE RATES ON PAGE 16.

MILLWRIGHTS

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Millwright-----	21.06	4.00	25.06
Welder-----	21.41	4.00	25.41
Foreman-----	22.78	4.00	26.78
Foreman over Welder-----	23.16	4.00	27.16
General Foreman-----	24.67	4.00	28.67
General Foreman over Welder-----	25.09	4.00	29.09

SEE ZONE RATES ON PAGE 16.

WASHOE COUNTY

		<u>BASE</u> <u>RATE</u>	<u>FRINGE</u> <u>BENEFITS</u>	<u>TOTAL</u>
<b><u>OPERATING ENGINEERS - Regular Shift</u></b>				
A D D  Z O N E  R A T E S  A D D  Z O N E  R A T E S	Foreman -----	19.61	9.14	28.75
	Group 1 -----	12.48	9.14	21.62
	Group 1A -----	15.24	9.14	24.38
	Group 2 -----	15.77	9.14	24.91
	Group 3 -----	16.04	9.14	25.18
	Group 4 -----	16.78	9.14	25.92
	Group 5 -----	17.08	9.14	26.22
	Group 6 -----	17.25	9.14	26.39
	Group 7 -----	17.50	9.14	26.64
	Group 8 -----	18.09	9.14	27.23
	Group 9 -----	18.41	9.14	27.55
R A T E S	Group 10 -----	18.76	9.14	27.90
	Group 10A -----	18.95	9.14	28.09
	Group 11 -----	19.19	9.14	28.33
	Group 11A -----	20.83	9.14	29.97
	Group 11B -----	21.64	9.14	30.78

**OPERATING ENGINEERS - Second Shift**

A D D  Z O N E  R A T E S	Foreman-----	20.94	9.14	30.08
	Group 1-----	13.32	9.14	22.46
	Group 1A-----	16.27	9.14	25.41
	Group 2-----	16.84	9.14	25.98
	Group 3-----	17.13	9.14	26.27
	Group 4-----	17.92	9.14	27.06

WASHOE COUNTY

BASE      FRINGE  
RATE      BENEFITS      TOTAL

OPERATING ENGINEERS - Second Shift - Continued

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Group 5-----	18.24	9.14	27.38
Group 6-----	18.42	9.14	27.56
Group 7-----	18.69	9.14	27.83
Group 8-----	19.32	9.14	28.46
Group 9-----	19.66	9.14	28.80
Group 10-----	20.04	9.14	29.18
Group 10A-----	20.24	9.14	29.38
Group 11-----	20.50	9.14	29.64
Group 11A-----	22.25	9.14	31.39
Group 11B-----	23.12	9.14	32.26

OPERATING ENGINEERS CLASSIFICATIONS FOR STEEL FABRICATORS & ERECTORS - Regular Shift

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Group 1-----	26.89	9.14	36.03
Group 1 Truck Crane Oiler-----	21.27	9.14	30.41
Group 1 Oiler-----	19.53	9.14	28.67
Group 2-----	25.52	9.14	34.66
Group 2 Truck Crane Oiler-----	21.07	9.14	30.21
Group 2 Oiler-----	19.33	9.14	28.47
Group 3-----	24.40	9.14	33.54
Group 3 Truck Crane Oiler-----	20.87	9.14	30.01
Group 3 Hydraulic Oiler-----	20.57	9.14	29.71
Group 3 Oiler-----	19.13	9.14	28.27
Group 4-----	22.83	9.14	31.97
Group 5-----	21.84	9.14	30.98

EFFECTIVE 10/1/88 TO 9/30/89



WASHOE COUNTY

BASE FRINGE  
 RATE BENEFITS TOTAL

OPERATING ENGINEERS CLASSIFICATIONS FOR STEEL FABRICATORS & ERECTORS -  
 Second Shift\*

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Group 1 -----	28.60	9.14	37.74
Group 1 Truck Crane Oiler -----	22.61	9.14	31.75
Group 1 Oiler -----	20.76	9.14	29.90
Group 2 -----	27.14	9.14	36.28
Group 2 Truck Crane Oiler-----	22.40	9.14	31.54
Group 2 Oiler -----	20.55	9.14	29.69
Group 3 -----	25.95	9.14	35.09
Group 3 Truck Crane Oiler -----	22.19	9.14	31.33
Group 3 Hydraulic Oiler -----	21.86	9.14	31.00
Group 3 Oiler -----	20.33	9.14	29.47
Group 4 -----	24.27	9.14	33.41
Group 5 -----	23.22	9.14	32.36

OPERATING ENGINEERS CLASSIFICATIONS FOR PILEDRIVERS - Regular Shift

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Group 1-----	26.39	9.14	35.53
Group 1 Truck Crane Oiler-----	21.02	9.14	30.16
Group 1 Oiler-----	19.28	9.14	28.42
Group 2-----	25.02	9.14	34.16
Group 2 Truck Crane Oiler-----	20.82	9.14	29.96
Group 2 Oiler-----	19.08	9.14	28.22
Group 3-----	23.70	9.14	32.84
Group 3 Truck Crane Oiler-----	20.62	9.14	29.76
Group 3 Oiler-----	18.88	9.14	28.02
Group 4-----	22.33	9.14	31.47
Group 5 -----	20.32	9.14	29.46
Group 6 -----	18.58	9.14	27.72

WASHOE COUNTY

		<u>BASE</u> <u>RATE</u>	<u>FRINGE</u> <u>BENEFITS</u>	<u>TOTAL</u>
<b><u>OPERATING ENGINEERS CLASSIFICATIONS FOR</u></b>				
<b><u>PILEDRIVERS - Second Shift*</u></b>				
A D D Z O N E R A T E S	Group 1-----	28.07	9.14	37.21
	Group 1 Truck Crane Oiler -----	22.35	9.14	31.49
	Group 1 Oiler -----	20.49	9.14	29.63
	Group 2 -----	26.60	9.14	35.74
	Group 2 Truck Crane Oiler -----	22.13	9.14	31.27
	Group 2 Oiler -----	20.28	9.14	29.42
	Group 3 -----	25.20	9.14	34.34
	Group 3 Truck Crane Oiler -----	21.92	9.14	31.06
	Group 3 Oiler -----	20.06	9.14	29.20
	Group 4 -----	23.74	9.14	32.88
	Group 5 -----	21.60	9.14	30.74
	Group 6 -----	19.74	9.14	28.88

SEE ZONE RATES ON PAGE 17.

\*SECOND SHIFT RATES APPLY WHEN TWO SHIFTS ARE USED.

PAINTERS

Brush & roller-----	17.72	2.45	20.17
Brush - Steel and/or Brush-swing stage, up to 40 feet---	17.97	2.45	20.42
Decorator, Roof Painter, Sandblaster, Spray painter, Paperhangers-----	18.22	2.45	20.67
Spray-swing stage up to 40 feet and Spray Steel -----	18.47	2.45	20.92
Steeplejack - brush over 40 feet with open space below -----	18.72	2.45	21.17

WASHOE COUNTY

BASE      FRINGE  
RATE      BENEFITS      TOTAL

PAINTERS - Continued

Steeplejack - taper over 40 feet  
with open space below----- 19.47      2.45      21.92

Steeplejack - spray over 40 feet  
with open space below, taper----- 18.97      2.45      21.42

Foreman A - 2 to 4 men supervised = \$.50 per hour above  
highest paid journeyman supervised

Foreman B - 5 to 8 men supervised = \$.75 per hour above  
highest paid journeyman supervised

Foreman C - 9 or more men supervised = \$1.00 per hour  
above highest paid journeyman supervised

If working with special coatings, epoxy and/or toxic  
materials = \$.60 per hour above listed rate.

PLASTERERS

Plasterer----- 16.52      3.79      20.31

Foreman----- 17.84      3.79      21.63

PLUMBERS

Plumber----- 21.90      3.45      25.35

Helper----- 5.85      1.95      7.80

Foreman----- 23.76      3.45      27.21

General Foreman----- 25.62      3.45      29.07

PLUMBERS - UTILITY

Plumber----- 21.09      3.25      24.34

Helper----- 5.85      1.75      7.60

Foreman----- 22.87      3.25      26.12

General Foreman----- 24.65      3.25      27.90

WASHOE COUNTY

	<u>BASE RATE</u>	<u>FRINGE BENEFITS</u>	<u>TOTAL</u>
<u>PLUMBERS - IRRIGATION</u>			
Landscape Sprinkler Installer-----	13.80	2.75	16.55
<u>REFRIGERATION</u>			
Journeyman Installer-----	18.03	3.15	21.18
<u>ROOFERS</u>			
Rofer-----	14.85	3.00	17.85
Foreman-----	16.34	3.00	19.34
<u>SHEET METAL WORKERS</u>			
Sheet Metal Worker-----	19.21	5.60	24.81
Pre-Apprentice-----	6.72	1.25	7.97
Foreman-----	20.475	5.60	26.075
General Foreman-----	20.75	5.60	26.35
<u>SPRINKLER FITTERS</u>			
Sprinkler Fitter-----	22.75	3.75	26.50
Foreman-----	24.00	3.75	27.75
<u>TEAMSTERS</u>			
<u>DUMP TRUCKS (SINGLE OR MULTIPLE UNITS INCLUDING SEMI'S &amp; DOUBLE TRANSFER UNITS), DUMPCRETES AND BULK CEMENT SPREADER</u>			
Under 4 yds. (water level)-----	13.42	5.80	19.22
4 yds. & under 8 yds. (water level)-----	13.64	5.80	19.44
8 yds. & under 18 yds. (water level)-----	13.85	5.80	19.65
18 yds. & under 25 yds. (water level)-----	14.02	5.80	19.82

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EFFECTIVE 10/1/88 TO 9/30/89

WASHOE COUNTY

BASE RATE FRINGE BENEFITS TOTAL

TEAMSTERS - Continued

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25 yds. & under 60 yds. (water level)-----	14.44	5.80	20.24
60 yds. & under 75 yds. (water level)-----	14.46	5.80	20.26
75 yds. & under 100 yds. (water level)-----	14.62	5.80	20.42
100 yds. & over (water level)-----	14.79	5.80	20.59
<u>TRANSIT MIX</u>			
Under 8 yds.-----	13.85	5.80	19.65
8 yds. & including 12 yds.-----	13.96	5.80	19.76
Over 12 yds.-----	14.18	5.80	19.98
<u>TRANSIT MIX (USING BOOM)</u>			
Under 8 yds.-----	13.975	5.80	19.775
8 yds. & including 12 yds.-----	14.085	5.80	19.885
Over 12 yds.-----	14.305	5.80	20.105
<u>WATER TRUCKS &amp; JETTING TRUCKS</u>			
Up to 2,500 gallons-----	13.64	5.80	19.44
2,500 gallons & over-----	13.85	5.80	19.65
<u>DW 20's &amp; 21's &amp; OTHER SIMILAR CAT TYPE</u>			
Terra Cobra LeTourneau pulls, Tournerocker, Euclid & similar type equipment when pulling Aqua/Pak, water tank trailers & fuel and/or grease tank trailer, or other miscellaneous trailers (except as defined under dump trucks)-----	14.13	5.80	19.93

WASHOE COUNTY

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	BASE RATE	FRINGE BENEFITS	TOTAL
<b><u>TEAMSTERS - Continued</u></b>			
<u>HEAVY DUTY TRANSPORT (High Bed)-----</u>	14.02	5.80	19.82
<u>HEAVY DUTY TRANSPORT (Gooseneck Low Bed)-----</u>	14.02	5.80	19.82
<u>TILTBED OR FLATBED PULL TRAILERS----</u>	14.02	5.80	19.82
<u>BOOTMAN (Combination &amp; road oiler)--</u>	13.91	5.80	19.71
<u>ROAD OIL TRUCKS OR BOOTMAN-----</u>	13.58	5.80	19.38
<u>FLAT RACK &amp; INDUSTRIAL LIFT TRUCK WITH MECHANICAL TAILGATE</u>			
Single Unit, 2 axles-----	11.74	5.80	17.54
Single Unit, 3 axles-----	11.74	5.80	17.54
<u>BUS &amp; MANHAUL DRIVERS</u>			
Up to 18,000 lbs. (single unit)---	13.47	5.80	19.27
18,000 lbs. & over (single unit)--	13.58	5.80	19.38
<u>HELICOPTER PILOT</u> (When transporting men or materials)-----	14.46	5.80	20.26
<u>LIFT JITNEYS &amp; FORK LIFT-----</u>	13.69	5.80	19.49
<u>WINCH TRUCK &amp; "A" FRAME DRIVERS</u>			
Under 18,000 lbs.-----	13.58	5.80	19.38
18,000 lbs. and over-----	13.69	5.80	19.49
<u>WAREHOUSEMEN SPOTTERS TEAMSTERS-----</u>	13.53	5.80	19.33
<u>WAREHOUSE CLERK-----</u>	13.64	5.80	19.44
<u>TIRE REPAIRMAN-----</u>	13.85	5.80	19.65
<u>TRUCK REPAIRMAN-----</u>	14.18	5.80	19.98

WASHOE COUNTY

BASE      FRINGE  
RATE      BENEFITS      TOTAL

TEAMSTERS - Continued

	<u>PICK-UP TRUCK &amp; PILOT CARS (Jobsite)</u>	11.54	5.80	17.34
	<u>PICK-UP TRUCK &amp; PILOT CARS (Over the road)</u> -----	13.53	5.80	19.33
ADD				
ZONE	<u>TRUCK OIL &amp; GREASER</u> -----	13.58	5.80	19.38
RATES	<u>FUEL TRUCK DRIVER, FUEL MAN &amp; FUEL ISLAND MAN</u> -----	13.58	5.80	19.38

FOREMAN/LEADMAN ADD 40 CENTS TO RATE.

SEE ZONE RATES ON PAGE 13.

TILE & TERRAZZO WORKERS

	Tile Setter-----	17.44	2.87	20.31
	Helper-----	10.38	2.87	13.25
	Foreman - Supervising 3 or less---	17.815	2.87	20.685
	Foreman - Supervising 4 or more---	18.19	2.87	21.06

WELL DRILLERS

	Driller-----	9.12	0.00	9.12
	Pumpman-----	8.37	0.00	8.37
	Helper-----	6.69	0.00	6.69

CARPENTERS & DRYWALLERS ZONE RATES

BUILDING & CONSTRUCTION ONLY

In addition to the Carpenter rates on Page 1 and Drywaller rates on Page 2, for Building & Construction only (not Highway or Dam projects), add the following applicable amounts:

Zone 1 - Free zone within 35 road miles from the County Courthouse of: Carson City, Lovelock, Elko, Minden, Ely, Winnemucca, Fallon, Yerington, Hawthorne, Battle Mountain, Reno, Virginia City, Eureka.

Free zone with 35 road miles of the employee's permanent residence in the State of Nevada

Zone 2 - Beyond the free zone.

= \$2.50 per hour.

HIGHWAY & DAM PROJECTS

In additions to the Carpenter rates on Page 1 and the Drywaller rates on Page 2, for Highway and Dam projects only (not Building and Construction), add the following applicable amounts:

Area #1 - 0 to 50 road miles from the Carson City Courthouse = Free Zone  
- 0 to 50 road miles from the Washoe County Courthouse = Free Zone  
- Within 35 miles of the employee's permanent residence in the State of Nevada = Free Zone.

Area #2 - 50 to 150 road miles from the Washoe County Courthouse = \$1.25 per hour

Area #3 - 150 to 300 road miles from the Washoe County Courthouse = \$1.75 per hour

Area #4 - In excess of 300 road miles from the Washoe County Courthouse = \$2.50 per hour



CEMENT MASONS ZONE RATES

In addition to the Cement Mason rates listed on Page 2, for all construction, add the following applicable amounts:

Free Zones - Reno Main Post Office (within 15 road miles)  
Carson City Main Post Office (within 7 road miles)  
Employees permanent residence (within 15 road miles)

Free Zone to 50 road miles from the Free Zone center = \$.75 per hour

In excess of 50 road miles from the Free Zone center = \$3.00 per hour

All work in the Lake Tahoe Area = \$1.75 per hour

LABORERS ZONE RATES

BUILDING CONSTRUCTION ONLY

In addition to the Laborers rates listed on Page 4, for Building Construction only (not Highway or Dam projects), add the following applicable amounts:

Zone #1:

Reno - Free Zone within 15 road miles from the city limits  
Carson City - Free Zone within 10 road miles from the city limits  
Elko - Free Zone within 10 road miles from the city limits  
Ely - Free Zone within 10 road miles from the city limits  
Fallon - Free Zone within 10 road miles from the city limits  
Hawthorne - Free Zone within 10 road miles from the city limits  
Lovelock - Free Zone within 10 road miles from the city limits  
Minden - Free Zone within 10 road miles from the city limits  
Tonopah - Free Zone within 10 road miles from the city limits  
Winnemucca - Free Zone within 10 road miles from the city limits  
Yerington - Free Zone within 10 road miles from the city limits

Zone #2 - Free Zone to 20 road miles from Zone #1 city limits =  
\$1.25 per hour

Zone #3 - 20 to 40 miles from Zone #1 city limits = \$1.75 per hour

Zone #4 - Over 40 miles from Zone #1 city limits = \$2.50 per hour

LABORERS ZONE RATES - CONTINUED

HEAVY & HIGHWAY ONLY

In addition to the Laborers rates listed on Page 4, for Highway and Dam projects only (not Building & Construction), add the following applicable amounts:

- Area #1 - 0 to 50 road miles from the Carson City Courthouse = Free Zone  
- 0 to 50 road miles from the Washoe County Courthouse = Free Zone
- Area #2 - 50 to 150 road miles from the Washoe County Courthouse = \$1.50 per hour
- Area #3 - 150 to 300 road miles from the Washoe County Courthouse = \$2.00 per hour
- Area #4 - In excess of 300 road miles from the Washoe County Courthouse = \$3.00 per hour

MILLRIGHTS ZONE RATES

In addition to the rates listed on Page 4, for all construction, add the following applicable amounts:

- Zone #1 - 0 to 14 miles from the Washoe County Courthouse = Free Zone
- Zone #2 - 15 to 35 miles from the Zone #1 Courthouse = \$1.50 per hour
- Zone #3 - In excess of 35 miles from the Zone #1 Courthouse = \$3.25 per hour

OPERATING ENGINEERS ZONE RATES

In addition to the Operating Engineers rates listed on Page 5 through Page 8, for all construction, add the following applicable amounts:

- Area #1 - 0 to 50 road miles from the Carson City Courthouse = Free Zone  
- 0 to 50 road miles from the Washoe County Courthouse = Free Zone
- Area #2 - 50 to 150 road miles from the Washoe County Courthouse = \$1.50 per hour
- Area #3 - 150 to 300 road miles from the Washoe County Courthouse = \$2.00 per hour
- Area #4 - In excess of 300 road miles from the Washoe County Courthouse = \$3.00 per hour

TEAMSTERS ZONE RATES

In addition to the Teamsters rates listed on Pages 10 through 13, for all construction, add the following applicable amounts:

- Area #1 - 0 to 50 road miles from the Carson City Courthouse = Free Zone  
- 0 to 50 road miles from the Washoe County Courthouse = Free Zone
- Area #2 - 50 to 150 road miles from the Washoe County Courthouse = \$1.25 per hour
- Area #3 - 150 to 300 road miles from the Washoe County Courthouse = \$1.75 per hour
- Area #4 - In excess of 300 road miles from the Washoe County Courthouse = \$2.50 per hour

## LABORERS CLASSIFICATIONS

### GROUP 1

All cleanup work of debris, grounds, and building including  
windows & tile  
Dumpmen or Spotter (other than asphalt)  
Handling and Servicing of Flares  
General Laborer  
Limber, Brushloader and Piler

### GROUP 1A

Flagmen

### GROUP 2

Choker setter or Rigger (clearing work only) Pittsburgh  
Chipper and similar type brush shredders  
Concrete worker (wet or dry) all concrete work not listed in Group 3  
Crusher or Grizzly Tender  
Greasing Dowels  
Guinea Chaser (Stakemen)  
Panel Forms (wood or metal) handling, cleaning and stripping of  
Loading and unloading, Carrying and handling of all rods and  
material for use in reinforcing concrete  
Railroad Trackmen (maintenance, repair or builders)  
Sloper  
Semi-Skilled Wrecker (salvaging of building materials other than  
those listed in Group 3)

### GROUP 3

Asphalt Workers (Ironers, Shovelers, Cutting Machine)  
Buggymobile  
Chainsaw, Faller, Logloader and Bucker  
Compactor (all types)  
Concrete Mixer under 1/2 yard  
Concrete Pan Work (Broadpan type), handling, cleaning, stripping  
Concrete Saw, Chipping, Grinding, Sanding, Vibrator  
Cribbing, Shoring, Lagging, Trench Jacking, Hand-Guided Lagging  
Hammer  
Curbing or Divider machine  
Curb Setter (precast or cut)  
Ditching Machine (hand-guided)  
Drillers Helper, Chuck Tender

LABORERS - CONTINUED

GROUP 3 - CONTINUED

Form Raiser, Slip Forms  
Grouting of Concrete Walls, Windows and Door Jams  
Headerboardmen  
Jackhammer, Pavement Breaker, Air Spade  
Mastic Worker (wet or dry)  
Pipewrapper, Kettlemen, Potmen, and men applying asphalt,  
creosote and similar type materials  
All Power Tools (air, gas, or electric) not listed in Group 5,  
Pipejacking  
Posthole Digger (air, gas, or electric), Post Driver  
Riprap-Stonepaver and RockSlinger, including placing of  
sack concrete wet or dry  
Rototiller  
Rigging and Signaling in connection with Laborers' work  
Sandblaster, Potmen, Gunmen or Nozzlemen  
Vibra-screed  
Skilled Wrecker (removing and salvaging of sash, windows, doors,  
plumbing and electrical fixtures)

GROUP 4

Burning and Welding in connection with Laborers' work  
Joy Drill Model TWM-2A, GardnerDenver Model DN143 and similar type  
drills and Track Drillers, Diamond Core Drillers, Wagon  
Drillers, Mechanical Drillers on Multiple Units  
High scalers  
Concrete pump operator  
Heavy Duty Vibrator with Stinger 5" diameter or over  
Pipelayer, Caulker and Bander  
Pipelayer-waterline, Sewerline, Gasoline, Conduit  
Asphalt Rakers

GROUP 5

Foremen  
Blasters and Powdermen, all work of loading, placing, and blasting  
of all powder and explosives of any type, regardless of method  
used for such loading and placing, asbestos removal

OPERATING ENGINEERS CLASSIFICATIONS

GROUP 1

Engineer Assistant

GROUP 1A

Boiler Tender

ALL BELOW ARE ASSISTANT TO ENGINEER

Brakeman

Deckhand

Fireman

Heavy Duty Repairman Helper

Oiler

Partsman (heavy duty repair shop partsroom when needed)

Switchman

Tar Pot Fireman

GROUP 2

Compressor Operator

Material Loader and/or Conveyor Operator  
(handling building materials)

Pump Operator

Tar Pot Fireman (power agitated)

GROUP 3

Bobcat or similar loader, 1/4 cubic yard or less

Box Operator (Bunker)

Concrete Curing Machines (streets, highways, airports, canals)

Conveyor Belt Operator (tunnel)

Fireman Hot Plant

Forklift (under 20 ft.)

Engineer Generating Plant (550 K.W.)

Hydraulic Monitor

Mixer Box Operator (concrete plant)

Motorman

Rodman/Chainman

Rotomist Operator

Screedman (except asphaltic or concrete paving)

Oiler (truck crane)

OPERATING ENGINEERS - CONTINUED

GROUP 4

Ballast Jack Tamper  
Ballast Regulator  
Ballast Tamper Multi-Purpose  
Boxman (asphalt plant)  
Concrete Mixer Operator, Skip type  
Dinky Operator (Assistant to Engineer required)  
Forklift (20' and over) or Lumber Stacker  
Line Master  
Ross Carrier  
Skip Loader Operator (under one [1] cubic yard)  
Tie Spacer

GROUP 5

Concrete Mixers (over one [1] cubic yard)  
Concrete Pumps or Pumpcrete Guns  
Elevator and Material Hoist (one [1] drum)  
Screedman (Barber-Greene and similar)(asphaltic or concrete paving)  
Shuttle Car  
Signalman

GROUP 6

Auger type drilling equipment up to and including 30 ft.  
depth digging capacity m.r.c.  
Boom Truck or Dual Purpose A-Frame Truck  
B.L.H. Lima Road Pactor or similar  
Chip Box Spreader (Flaherty type or similar)  
Concrete Batch Plant (wet or dry)  
Concrete Saws (highways, streets, airports, canals)  
Highline Cableway Signalman  
Locomotives (over thirty [30] tons)  
Lubrication and Service Engineer (mobile and grease rack)  
Maginnis International Full Slab Vibrator  
(airports, highways, canals & warehouses)  
Mechanical finishers (concrete) (Clary, Johnson,  
Bidwell Bridge deck or similar types)  
Mechanical Burn, Curb and/or Curb and Gutter Machine  
(concrete or asphalt)  
Pavement Breaker, Truck Mounted, with compressor combination  
(Assistant to Engineer required)

OPERATING ENGINEERS - CONTINUED

GROUP 6 - Continued

Pavement Breaker or Tamper (with or without compressor combination)  
Power Jumbo Operator (setting slip-forms, etc., in tunnels)  
Roller Operator (except asphalt)  
Self-Propelled Tape Machine  
Self-Propelled Compactor (single engine)  
Slip-Form Pump (power-driven by hydraulic, electric, air, gas, etc.,  
lifting device for concrete forms)  
Small Rubber-Tired Tractors  
Snooper Crane, Paxton-Mitchell or similar  
Stationery Pipe Wrapping, Cleaning and Bending Machine Operator

GROUP 7

Auger type drilling equipment over 30 ft. depth digging capacity  
m.r.c. (Assistant to Engineer or Mechanic/Welder required)  
Bit Sharpener  
Compressor (Over 2)  
Concrete Conveyor or Concrete Pump, truck or equipment mounted  
(any assistance required shall be performed by an  
Assistant to Engineer) Boom length to apply  
Concrete Conveyor, Building Site  
Deck Engineer  
Drilling and Boring Machinery, vertical and horizontal  
(not to apply to waterliners, wagon drills or jack hammers)  
(Assistant to Engineer or Mechanic/Welder required)  
Crusher Plant Engineer  
Generators  
Instrument Man  
Kolman Loader  
Material Hoist (two [2] or more drums)  
Mechanical Finishers or Spreader Machine (asphalt, Barber-Greene  
and similar) (Screedman required)  
Mine or Shaft Hoist  
Pipe Bending Machines (pipeline only)  
Pipe Cleaning Machines (tractor-propelled and supported)  
Pipe Wrapping Machines (tractor-propelled and supported)  
Portable Crushing and Screening Plants  
(Assistant to Engineer required)  
Post Driller and/or Driver  
Pumps (over 2)  
Refrigeration Plant  
Roller Operator (Asphalt)  
Self-propelled Boom-type lifting Device (center mount)  
(on ten [10] ton capacity or less)



OPERATING ENGINEERS - CONTINUED

GROUP 7 - Continued

Slusher Operator  
Surface Heater and Planer Operator  
Trenching Machine (maximum digging capacity three [3] ft. depth)  
(Assistance in the operation, if needed, shall be performed by  
an Assistant to Engineer)  
Truck-type Loader  
Welding Machines (gasoline or diesel)

GROUP 8

Asphalt Plant Engineer  
Asphalt Milling Machine  
Car Passer  
Cast-in-place Pipe-laying Machine  
Combination Slusher and Motor Operator  
Concrete Batch Plant (multiple units)  
Dozer Operator  
Drill Doctor  
Elevating Grader Operator  
Gradesetter, Grade Checker  
Grooving and Grinding Machine (highways)  
Heavy Duty Repairman and/or Welder  
Ken Seal Operator  
Loader (up to and including two and one-half [2-1/2] cubic yards)  
Mechanical Trench Shield  
Mixermobile  
Push Cats  
Road Oil Mixing Machine Operator Wood-Mixer  
(and other similar Pugmill equipment)  
Rubber-Tired Earthmoving Equipment (up to and including  
thirty-five [35] cubic yards "struck" m.r.c.,  
Euclids, T-Pulls, DW10, 20, 21 and similar)  
Self-Propelled Compactors with Dozer;  
Hyster 450, Cat 825 or similar  
Sheepfoot  
Small Tractor (with broom)  
Soil Stabilizer (P & H or equal)  
Timber Skidder (rubber-tired) or similar equipment  
Tractor-Drawn Scraper  
Tractor Operator  
Tractor-Mounted Compressor Drill Combination  
(Assistant to Engineer required)

OPERATING ENGINEERS - CONTINUED

GROUP 8 - CONTINUED

Trenching Machine Operator (over three [3] feet depth)  
(Assistant to Engineer required)  
Tri-Batch Paver (Assistant to Engineer required)  
Tunnel Badger or Tunnel Boring Machine Operator  
(Assistant to Engineer required)  
Tunnel Mole Boring Machine (Assistant to Engineer required)  
Vermeer T-600B Rock Cutter

GROUP 9

Chicago Boom  
Combination Backhoe and Loader  
(up to and including 3/8 cubic yard)  
(Assistant to Engineer required when more than two hundred  
degree on swing)  
Combination Mixer and Compressor (gunite)  
Lull Hi-Lift (twenty [20] feet or over)  
Mucking Machine (Assistant to Engineer required)  
Sub-Grader (Gurries or other types) (Assistant to Engineer required)  
Tractor (with boom) (D6 or larger)  
Track-Laying-Type Earthmoving Machine  
(single engine with tandem scrapers)

GROUP 10

Boom-Type Backfilling Machine (Assistant to Engineer required)  
Bridge Crane  
Cary-Lift or similar  
Chemical Grouting Machine (Assistant to Engineer required)  
Chief of Party  
Derricks (two [2] Group 10 Operators required when swing engine  
remote from hoist)  
Derrick Barges (except excavation work)  
(Deck Engineer and Assistant to Engineer required)  
Euclid Loader and similar types (Assistant to Engineer  
required when not controlled from the Pulicat)  
Heavy Duty Rotary Drill Rigs  
Lift-Slab (Vagtborg and similar types)  
Loader (over two and one-half [2 1/2] cubic yards  
up to and including four [4] cubic yards)  
Locomotive (over one hundred [100] tons) (single or multiple units)

OPERATING ENGINEERS - CONTINUED

GROUP 10 - CONTINUED

Multiple-Engine Earthmoving Machines (Euclid Dozers, etc.)  
Pre-Stress Wire Wrapping Machine  
Rubber-Tired Scraper, Self-Loading  
Single-Engine Scraper (over thirty-five [35] cubic yards)  
Self-propelled reservoir-debris equipment floating  
(two hundred [200] h.p. and over)  
Shuttle Car (Reclaim Station)  
Train Loading Station  
Trenching Machine (Assistant to Engineer required)  
multi-engine with sloping attachments (Jefco or similar)  
Vacuum Cooling Plant  
Whirley Crane (up to and including twenty-five [25] tons)  
(Assistant to Engineer required)

GROUP 10A

Backhoe (up to and including one [1] cubic yard hydraulic)  
(Assistant to Engineer required)  
Backhoe (up to and including one [1] cubic yard) (Cable)  
(Assistant to Engineer required)  
CMI dual lane auto-grader SP30 or similar  
(Assistant to Engineer required)  
Cranes (not over twenty-five [25] tons) (hammerhead and gantry)  
(Assistant to Engineer required)  
Gradalls (up to and including one [1] cubic yard)  
(Assistant to Engineer required)  
Motor Patrol Operator  
Power Shovels, Clamshells, Draglines, Cranes  
(up to and including one [1] cubic yard)  
(Assistant to Engineer required)  
Rubber-Tired scraper, Self-Loading (twin engine)  
Self-Propelled Boom-type Lifting Device (center mount)  
(over ten [10] tons up to and including 25 tons)

OPERATING ENGINEERS - CONTINUED

GROUP 11

- Automatic Asphalt or Concrete Slip-Form Paver  
(Gradesetter, Screedman and Assistant to Engineer required)
- Automatic Railroad Car Dumper
- Canal Trimmer (two [2] Assistants to Engineer required)
- Cary Lift, Campbell or similar
- Cranes (over twenty-five [25] tons) (Assistant to Engineer required)
- Euclid Loader when controlled from the Pulicat
- Highline Cableway Operator
- Loader (over four [4] cubic yards up to and including twelve [12] cubic yards)
- Multi-Engine Earthmoving Equipment (up to and including seventy-five [75] cubic yards "struck" m.r.c.)
- Multi-Engine Scrapers (when used to push pull)
- Power Shovels, Clamshells, Draglines, Backhoes, Gradalls  
(over one [1] cubic yard and up to and including seven [7] cubic yards m.r.c.) (Assistant to Engineer required)
- (Two [2] Assistants to Engineers required on 1208, similar or larger)
- Self-Propelled Boom-Type Lifting Device (center mount)  
(over 25 tons m.r.c.) (Assistant to Engineer required)
- Self-propelled Compactor (with multiple-propulsion power units)
- Single-Engine Rubber-Tired Earthmoving Machine (with Tandem Scraper)
- Slip-Form Paver (concrete or asphalt)  
(one [1] Operator and two [2] Screedman)
- Tandem Cats and Scraper
- Tower Crane Mobile (Assistant to Engineer required)  
(including rail-mounted)
- Truck mounted hydraulic crane when remote control equipped  
(over 10 tons up to and including 25 tons)
- Universal Liebherr and Tower Cranes (and similar types)  
(in the erection, dismantling and moving of equipment there shall be an additional Operating Engineer at Group 8 rates)
- Wheel Excavator (up to and including seven hundred fifty [750] cubic yards per hour) (Assistant to Engineer required)
- Whirley Cranes (over twenty-five [25] tons)  
(Assistant to Engineer required)

OPERATING ENGINEERS - CONTINUED

GROUP 11A

Band Wagons (in conjunction with Wheel Excavators)  
Operator of Helicopter (when used in construction work)  
Loader (over twelve [12] cubic yards)  
Multi-Engine Earthmoving Equipment (over seventy-five [75] cubic yard "struck" m.r.c.)  
Power Shovels, Clamshells, Draglines, Backhoes and Gradalls (over seven [7] cubic yards m.r.c.) (Assistant to Engineer required; an additional Assistant to Engineer is required if the shovel or dragline is electrically powered)  
Remote-Controlled Earthmoving Equipment  
Wheel Excavator (over seven hundred fifty [750] cubic yards per hour) (two [2] Group 11A Operators and one [1] Assistant to Engineer required; any additional assistance shall be an Assistant to Engineer)

GROUP 11B

Holland Loader or similar or Loader (over 18 cubic yards)

OPERATING ENGINEER CLASSIFICATIONS FOR STEEL FABRICATORS & ERECTORS

GROUP 1

Cranes over 100 tons (Assistant to Engineer required)  
Derrick over 100 tons  
Self Propelled Boom Type Lifting Devices over 100 tons  
Truck Crane Oiler for Group 1  
Oiler for Group 1

GROUP 2

Cranes over 45 tons up to and including 100 tons (Assistant to Engineer required)  
Derrick, 100 tons and under  
Self Propelled Boom Type Lifting Device, over 45 tons  
Truck Crane Oiler for Group 2  
Oiler for Group 2

OPERATING ENGINEER CLASSIFICATIONS FOR STEEL FABRICATORS & ERECTORS  
- CONTINUED

GROUP 3

Cranes, 45 tons and under (Assistant to Engineer required)  
Self Propelled Boom Type Lifting Device, 45 tons and under  
Tower Crane  
Oiler and Truck Crane Oiler for Group 3  
Hydraulic Oiler for Group 3

GROUP 4

Chicago Boom  
Forklift, 10 tons and over  
Heavy Duty Repairman/Welder

GROUP 5

Boom Cat

OPERATING ENGINEERS - PILEDRIVERS CLASSIFICATIONS

GROUP 1

Derrick Barge Pedestal mounted over 100 tons  
(Assistant to the Engineer or Assistant to Operator  
in lieu of Assistant to Engineer required)  
Clamshells over 7 cubic yards.  
Self Propelled Boom Type Lifting Device over 100 tons  
Truck Crane or Crawler, land or barge mounted over 100 tons  
(Assistant to Engineer or Assistant to Operator  
in lieu of Assistant to Engineer required)  
Truck Crane Oiler for Group 1  
Oiler for Group 1

OPERATING ENGINEER CLASSIFICATIONS - PILEDRIVERS - CONTINUED

GROUP 2

Derrick Barge Pedestal mounted 45 tons up to and including 100 tons  
(Assistant to the Engineer or Assistant to Operator  
in lieu of Assistant to Engineer required)  
Clamshells up to and including 7 cubic yards.  
Self Propelled Boom Type Lifting Device over 45 tons  
Truck Crane or Crawler, land or barge mounted, over 45 tons  
up to and including 100 tons (Assistant to Engineer or  
Assistant to Operator in lieu of Assistant to Engineer required)  
Truck Crane Oiler for Group 2  
Oiler for Group 2

GROUP 3

Derrick Barge Pedestal mounted under 45 tons  
(Assistant to the Engineer or Assistant to Operator  
in lieu of Assistant to Engineer required)  
Self Propelled Boom Type Lifting Device 45 tons and under  
Skid/Scow Piledriver, any tonnage  
Truck Crane or Crawler, land or barge mounted, 45 tons and under  
(Assistant to Engineer or Assistant to Operator  
in lieu of Assistant to Engineer required)  
Truck Crane Oiler for Group 3  
Oiler for Group 3

GROUP 4

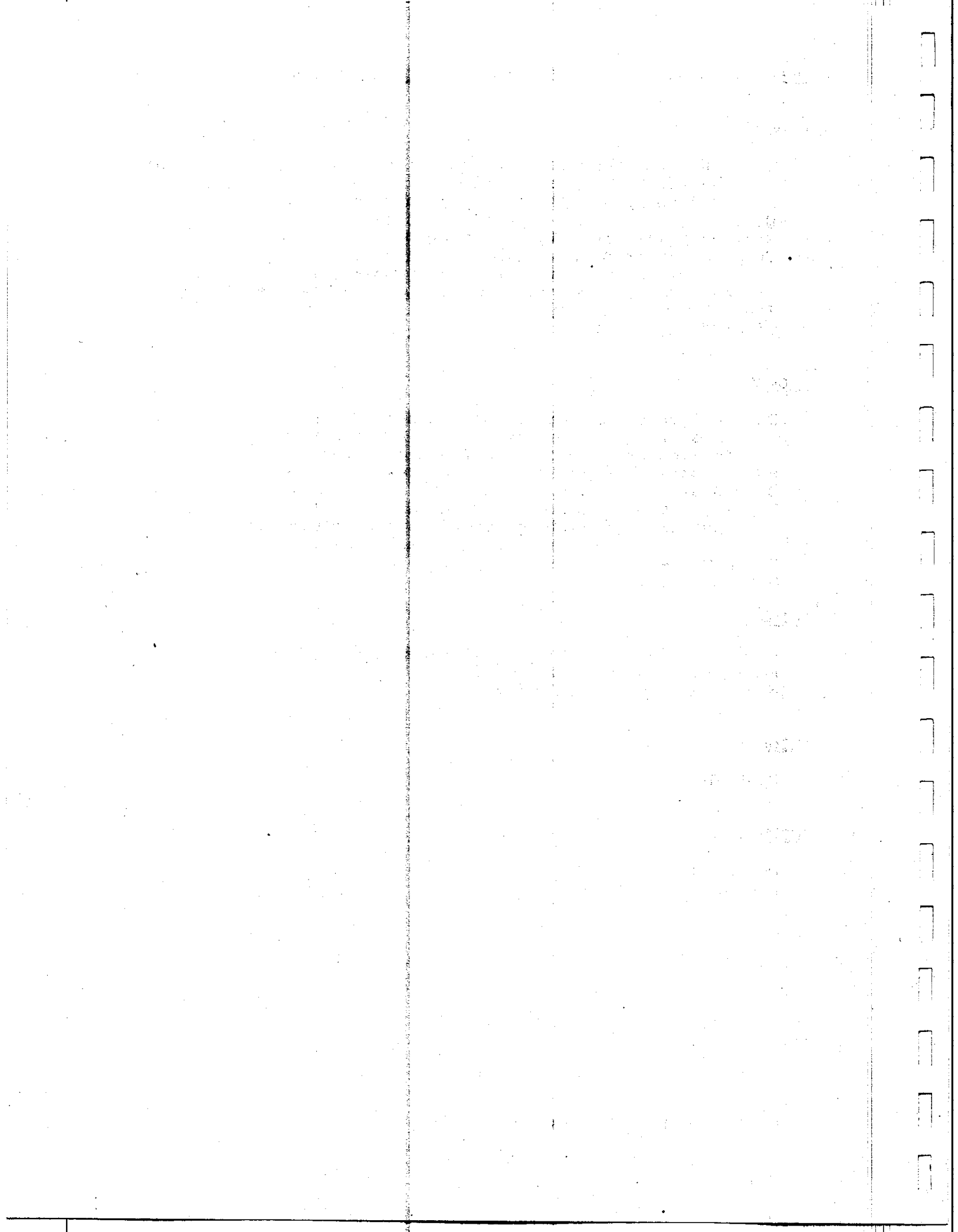
Assistant Operator in lieu of Assistant to Engineer  
Forklift, 10 tons and over  
Heavy Duty Repairman/Welder

GROUP 5

Deck Engineer

GROUP 6

Deckhand  
Fireman





OFFICE OF  
LABOR COMMISSIONER

MEMORANDUM

RECEIVED

DEC 19 1988

Engineering Div

TO: All Interested Parties  
FROM: Jana Wiggins, Chief Assistant *JWC*  
SUBJECT: Prevailing Wage Rate Changed - 10-1-88 thru 9-30-89  
DATE: December 15, 1988

Due to clerical errors, the following changes are in effect as of December 13, 1988:

For Churchill, Douglas, Elko, Eureka, Lyon, Pershing, Storey and Washoe Counties;  
replace the wage rates for Carpenters with:

	<u>BASE</u>	<u>FRINGE</u>	<u>TOTAL</u>
Carpenter-----	18.10	2.25	20.35
Carpenter Foreman-----	20.58	2.25	22.83
Pile Driver -----	22.53	8.53	31.06
Pile Driver Foreman-----	23.53	8.53	32.06

For Churchill, Douglas, Elko, Eureka, Lander, Humboldt, Lyon, Mineral, Pershing,  
Storey, Washoe and White Pine counties;  
replace the wage rates for Drywallers with:

	<u>BASE</u>	<u>FRINGE</u>	<u>TOTAL</u>
Drywallers-----	18.10	2.25	20.35

Included in the above changes, the zone rates have been modified. The wording that  
will be used is attached.

CARPENTERS & DRYWALLERS ZONE RATES

BUILDING & CONSTRUCTION ONLY

In addition to the Carpenter rates on Page \_ and Drywaller rates on Page \_, for Building & Construction only (not Highway or Dam projects), add the following applicable amounts:

Zone #1 -

Free Zone within 15 road miles from the County Courthouse of:

Elko, Ely, Fallon, Hawthorne, Reno, Eureka, Lovelock, Minden, Winnemucca, Yerington, Battle Mountain, Virginia City.

Free Zone within 35 miles of the employee's permanent residence in the State of Nevada.

Zone #2 - Beyond the Free Zone = \$2.50 per hour.

HIGHWAY & DAM PROJECTS

In additions to the Carpenter rates on Page \_ and the Drywaller rates on Page \_, for Highway and Dam projects only (not Building and Construction), add the following applicable amounts:

Area #1 - 0 to 50 road miles from the Carson City Courthouse = Free Zone

- 0 to 50 road miles from the Washoe County Courthouse = Free Zone

- Within 35 miles of the employee's permanent residence in the State of Nevada = Free Zone

Area #2 - 50 to 150 road miles from the Washoe County Courthouse = \$1.25 per hour

Area #3 - 150 to 300 road miles from the Washoe County Courthouse = \$1.75 per hour

Area #4 - In excess of 300 road miles from the Washoe County Courthouse = \$2.50 per hour