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### REINFORGED CONGRESS: PIPE COMPANY OWNERS AND PATENTEES

LOCKJOINT SEWER AND WATER PIPE

SIXTH AND UTAH STREETS

LOS ANGELES, CALIFORNIA.

February 15, 1918. 5:00 P. M.

Mr. Thomas P. Ellis, Engineer, Volcan Land & Water Co., Pletcher Bldg. . San Diego, California.

Dear Sir:

Answering your favor of yesterday, in regard to 42" and 34" reinforced concrete pipe for your proposed upper and lower conduit.

When in San Diego on the 29th of last month, we figured on 42" and 30" pipe. We can furnish 42" and 33" pipe, but have no forms for 34" pipe.

Kindly advise us if you can use the 35" pipe, and also the heads to which this pipe would be subjected, in order that we may figure the reinforcement required. We understand that only portions of the pipe would be subjected to much head. If you can state the lengths approximately, of the pipe required for the different heads, it will be of assistance to us in giving you. a caoser approximation to the cost of the pipe.

Yours very truly,

Western Reinforced Concrete Pipe Co.

Western Binfored Come Pipe Co

assention vowskier

please wire our comments price 22" emerelet our made and baid Ex mission Valley half mile : " 48 ft hield

WWB/G



## HEINCORGED CONGRESE PRECOMPANY

OWNERS AND PATENTEES

LOCKJOINT SEWER AND WATER PIPE

SIXTH AND UTAH STREETS

LOS ANGELES, CALIFORNIA,

November 24, 1919 3:30 P.M.

Cuyamaca Water Company San Diego, California

Gentlemen:

Attention Col. Ed. Fletcher

We propose to make and lay for you near El Cajon, California 1300 lineal feet of 39 inch reinforced concrete pipe, replacing a flume with an inverted siphone at \$5.95 per lineal foot.

You are to furnish all materials for concrete for the making and laying of said pipe. The required amount of materials will be 400 barrels of cement, 125 cubic yards of sand and 150 cubic yards of rock, 1/4" to 3/4".

You are to furnish us making ground at a point selected by us in the vicinity of the proposed work and also to furnish us water under pressure. You are to furnish and maintain a trench to a true grade and do all necessary back-filling after the pipe has been laid. Trench to be maintained free from water.

The pipe shall be made with a mixture of one part of Portland Cement to two parts of sand and three parts of rock or gravel. The reinforcement shall be sufficient to withstand the pressure due to the heads shown on the profile submitted to us. All steel to be Bright Bessemer Round Wire having an elastic limit of 75.000 to 80.000 pounds. The maximum working stress shall be 16,000 pounds. Look bars and tie bands shall be used in the manufacture of the pipe.

The pipe shall be laid within forty working days after receiving Our usual year guarantee shall be furnished you.

Yours very truly,

Western Reinforced Concrete Pipe Company

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No State	郷川し港
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words) this is a day mose wise its obsersor is indi	age, Other-

NEWCOMB CARLTON, PRESIDENT

1919 NOV 25 PM 5 03

NIGHT LETTER

RECEIVED AT

A548GS 8

AR LOSANGELES CALIF 440P 25

COL ED FLETCHER

CUYAMACA WATER CO SANDIEGO CALIF

LEAVE ON MIDNIGHT TRAIN IN SANDIEGO TOMORROW MORNING

W W BRIER.

RECEIVER'S NO.

TIME FILED

## FEDERAL TELEGRAPH COMPANY

## TELEGRAM

R. P. SCHWERIN, PRES.

CHECK

RATE DESIRED INDICATE BY Send the following message, subject to the terms and conditions printed on the DAY MESSAGE back hereof, which are hereby agreed to. DAY LETTER NIGHT MESSAGE

San Diego, Calif., November 25, 1919

Western Reinforced Concrete Pipe Co., 6th & Utah Streets. Los Angeles, Calif.

Your offer November twenty fourth accepted Ship forms immediately Come today if possible CUYAMACA WATER COMPANY

CHG CUYAMACA WATER CO.

November 25,1919

Western Reinforced Concrete Pipe Co., Sixth & Utah Sts., Los Angeles, Calif.

Gentilemen :-

Attention Mr. Brier:

Please keep in mind that we want the heaviest reinforced pipe made first. This is only a suggestion.

Yours very truly,

EF/bm

### Laying Reinforced Concrete Pipe

To Engineers and Contractors:

Reinforced concrete pipe is easier and nesse economically laid than bell-end pipe, either cement or vitrified.

Reinforced concrete pipe is cylindrical in shape and can be rolled and handled from trucks to the trench at less expense than a pipe having a projecting bell.

Bell-end pipe takes up more room in the trench on account of the projecting bell. The bottom of the trench must be gouged to receive the bell. If too little excavation is made to receive the bell, the pipe will ride on the bell end and is likely to be broken at the neck of the bell. If too much excavation is made to receive the bell, the weight of the earth covering in the trench will be carried by the bell of the pipe without any support underneath. Removing earth in the bottom of a trench is expensive and it is almost impossible to get accurate work.

When reinforced concrete pipe is laid, the poured joints will be waterproof. If the joints are not pointed correctly on the inside, you will know it at once when you come to pour the joints on the outside. You can be satisfied with your job when it is done and know that you won't have to come back and make good any defective work.

Concrete shrinks in setting. The band joint used in laying reinforced concrete pipe shrinks closer to the pipe. The mortar used in laying bell-end pipe shrinks away from the inside surface of the bell, causing it to leak.

You will find enclosed complete Laying, Handling, Loading and Hauling Instructions, and approximate estimates of the cost of laying reinforced concrete pipe. We shall be pleased to furnish additional copies of these instructions upon request.

Yours very truly,

WESTERN REINFORCED CONCRETE PIPE COMPANY.

By W.W. Brier

Los Angeles, California

# Cost of Hauling Reinforced Concrete Pipe for Culverts, Storm Drains and Sewers

Five Ton Trucks with Five Ton Trailers should be used where the haul is over four or five miles.

Contracts for hauling can usually be made, over good roads, at the following rates. Prices include loading and unloading and responsibility for damage to the pipe:

Hauling two to five miles, \$1.00 to \$1.25 per ton Hauling five to seven miles, \$1.25 to \$1.50 per ton Hauling seven to ten miles, \$1.50 to \$2.00 per ton Hauling ten to fifteen miles, \$2.00 to \$2.50 per ton

We have contracted hauling from Los Angeles to Long Beach, 22 miles, at \$1.90 per ton. Los Angeles to Santa Monica, 17 miles, at \$2.00 per ton. Los Angeles to Walnut, 26 miles, for \$2.50 per ton. These prices are for hauling over good roads, but include loading and unloading.

# Cost of Laying Reinforced Concrete Pipe for Culverts, Storm Drains and Sewers



Cost of laying reinforced concrete pipe, including cost of handling from alongside trench into the trench, laying the pipe, cost of materials and labor for making the joint varies according to location, quantity of pipe, etc.

The cost of laying reinforced concrete pipe is proportional to the diameter of the pipe. We have found this true for all practical purposes for all diameters.

The cost per foot of laying reinforced concrete pipe will be between one cent per inch of diameter and two cents per inch of diameter. For example. The extremes of laying cost for 36" inch pipe would be between 36 cents and 72 cents per lineal foot of pipe. These costs have been the extremes during our experience of several years.

If there is a straight run of at least 500 to 1000 feet, the laying cost should not be over 1½ cents per inch of diameter, and we consider it safe to estimate that a reasonable profit can be made at that price.

If all conditions are against you, and, for example, if you are to lay a short culvert or several culverts at a considerable distance from each other, the cost might amount to 2 cents per inch of diameter.

The above estimates are based on the pipe being delivered close to the trench. No excavating or backfilling is included in the above estimates.

WESTERN REINFORCED CONCRETE PIPE COMPANY.

Los Angeles, California.

## LAYING INSTRUCTIONS FOR LAYING REINFORCED CONCRETE PIPE

The sections shall be laid with spigot or collar ends towards the outlet.

If pipe is to be used for sewers, culverts, or storm drains, the reinforcement will be placed elliptically in the pipe and the letter "T" will be stencilled on the inside of the pipe, indicating that part of the circumference of the pipe which should be placed either at the top or the bottom in the trench.

If a derrick is to be used to lay the pipe, the laying hook should take hold of the pipe either at the letter "T" or directly opposite. If a derrick is not to be used, the pipe should be rolled in the trench until the letter "T" is either uppermost or at the bottom and then the pipe should be shoved endwise into place, using bars.

If Lock Bars and Tie Bands are used in the pipe, the Tie Bands should be placed in the joint so that it will pass through all the hooks of the Lock Bars.

All joints should be carefully pointed on the inside with cement mortar which should be allowed to set before the joint is poured on the outside. A trustworthy man should be employed for this purpose, because if the joint is not properly pointed on the inside, the joint can not be poured successfully on the outside.

A joint shield should be placed around the pipe at the joint and the joint thoroughly flushed with water. The joint shield may be of two ply roofing paper, cut in strips of width sufficient to fully cover the joint. Six inches in width is sufficient except for pipe having a greater diameter than 48 inches. If galvanized iron shields are used, these should be recovered or pulled within two hours after the joint is poured, and the shields should then be thoroughly cleaned. If roofing paper is used, the shields need not be recovered, and pouring of joints can proceed up to the end of the working day, thus avoiding overtime work for men recovering shields.

Earth should be tamped around the pipe at the joint to hold the shields tightly against the pipe to prevent leakage. Grout, mixed one part of cement to two parts of clean sand, can then be poured in the joint and the shields left in place until the grout has set. Care must be used to completely fill the joint with grout. Pouring should be done from one side of the pipe and the grout permitted to rise on the other side of the pipe by gravity, thus insuring complete filling of the joint. A flexible rod should be worked in the joint to eliminate voids. The portion of the joint at the top of the pipe may be plastered with mortar of a drier consistency.

# INSTRUCTIONS FOR HAULING AND HANDLING REINFORCED CONCRETE PIPE

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The pipe, being a true cylinder, without projecting bell, can be rolled and hand-

led easily. The pipe is made in three foot lengths except for diameters greater than 60 inches, which are in lengths of four feet. Sixty-inch pipe is made in three or four

ing across the truck, which will require a truck about six feet four inches in width, yond the three-foot length. Pipe should be securely blocked on the trucks. The extra width is made necessary on account of the extra length of the collars, be-In hauling the three-foot lengths, the pipe should be loaded in two rows extend-

Skids should be used for unloading pipe. Care should be used in unloading so that pipe will not strike together. A plank or piece of board should be placed in an upright position, leaning against the pipe that has been unloaded, so that if a pipe should get beyond control on the skids, it will not damage the pipe that has alsirable for hauling pipe. If roads are rough, burlap or sacking should be placed be-Pipe should never stand on end on a truck. A truck having high speed is not detween the pipe. foot lengths, weigh 4.97 tons, the full capacity of the truck can be easily obtained. except that only one row in width can be hauled. Since two 60-inch pipe, in four Four foot lengths of pipe should be rolled on to the truck in the same manner,

ready been unloaded.

WESTERN REINFORCED CONCRETE PIPE CO.

Los Angeles, California

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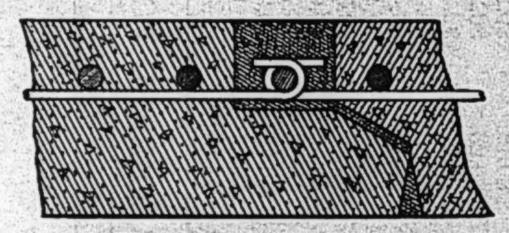
PER FOOT OF PIPE FOR HAILING

COST/TER FOOT OF FIFE FOR HAULING							
SIZE	WEIGHT PER FOOT.	AT \$1.00 Per ton.	AT \$1.25 Per ton.	AT \$1.50 Per ton.	AT \$1.75 Per ton.	AT \$2.00 Per ton.	AT \$2.50 Per ton.
12"	90 lbs.	\$0.05	\$0.06	\$0.07	\$0.08	\$0.09	\$0.11
16"	132 lbs.	\$0.07	\$0.08	\$0.10	\$0.11	\$0.13	\$0.16
18"	146 lbs.	\$0.08	\$0.09	\$0.11	\$0.13	\$0.15	\$0.19
20"	157 lbs.	\$0.08	\$0.10	\$0.12	\$0.14	\$0.16	\$0.20
22"	188 lbs.	\$0.10	\$0.12	\$0.14	\$0.17	\$0.19	\$0.24
24"	200 lbs.	\$0.10	\$0.13	\$0.15	\$0.18	\$0.20	\$0.25
27"	290 lbs.	\$0.15	\$0.18	\$0.22	\$0.26	\$0.29	\$0.36
30"	355 lbs.	\$0.18	\$0.23	\$0.27	\$0.32	\$0.36	\$0.45
33"	430 lbs.	\$0.22	\$0.27	\$0.32	\$0.38	\$0.43	\$0.54
36"	507 lbs.	\$0.26	\$0.32	\$0.38	\$0.45	\$0.51	\$0.64
39"	575 lbs.	\$0.29	\$0.37	\$0.44	\$0.51	\$0.58	\$0.73
42"	652 lbs.	\$0.33	\$0.41	\$0.49	\$0.57	\$0.65	\$0.81
45"	773 lbs.	\$0.39	\$0.49	\$0.58	\$0.68	\$0.77	\$0.96
48"	842 lbs.	\$0.42	\$0.53	\$0.63	\$0.74	\$0.84	\$1.05
54"	1000 lbs.	\$0.50	\$0.63	\$0.75	\$0.88	\$1.00	\$1.25
60"	1243 lbs.	\$0.62	\$0.78	\$0.94	\$1.10	\$1.25	\$1.56
66" .	1514 lbs.	\$0.76	\$0.95	\$1.14	\$1.33	\$1.52	\$1.90
72"	1750 lbs.	\$0.88	\$1.10	\$1.31	\$1.53	\$1.75	\$2.19

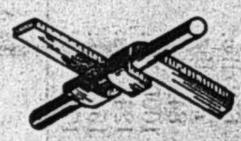
### MATERIAL REQUIRED FOR LAYING PIPE

SIZE.	SACKS OF CEMENT.	YARDS OF SAND.
12"	About 3 sacks to 100 feet	1/4 yard to 100 feet
16"	About 4 sacks to 100 feet	1/3 yard to 100 feet
18"	About 5 sacks to 100 feet	1/2 yard to 100 feet
20"	About 6 sacks to 100 feet	1/2 yard to 100 feet
24"	About 7 sacks to 100 feet	1/2 yard to 100 feet
30"	About 8½ sacks to 100 feet	3/4 yard to 100 feet
36"	About 10 sacks to 100 feet	3/4 yard to 100 feet
48"	About 14 sacks to 100 feet	1 yard to 100 feet
54"	About 21 sacks to 100 feet	1 2/3 yds. to 100 feet
60"	About a sack to a joint.	2 cubic feet per joint.

VIEW SHOWING SHIELDS AND JOINT



CROSS SECTION OF JOINT



DETAILS SHOWING MECHANI-CAL LOCK

WESTERN REINFORCED CONCRETE PIPE COMPANY
Los Angeles, California

December 16, 1919.

Western Reinforced Pipe Company, Sixth and Utah Streets, Los Angoles, California.

Gentlemen: --

I am sonding by express profile of line as per instructions of Colonel Fletcher. You will note there is about 15,500 feet of this line which will not exceed a 50-foot head. Complete specifications for concrete line are not available at this time but your reinforcing system must be satisfactory and the pipe designed to withstand the required pressure with a factor of safety of 5.

All the pipe will be 18" inside diameter and will be laid in a ditch 3-1/2 feet in depth, which will be provided by the Company. The Company will also also distribute the pipe. You will backfill sufficiently to protect the pipe and the company will complete the back-filling.

The line must guaranteed for one year. The leakage under working conditions, not including scepage, shall not be at a greater rate that I cubic foot per 24 hours for each 300 feet of pipe.

I was unable to wire cost of send and cruched rock in San Diego and cannot get quotations until to-morrow morning. I om under the impression that you can obtain gravel and probably sand sufficiently cheaper in Los Angeles than in San Diego to justify shipping down in carload lots. I will wire quotations, however, when I receive them.

m Yours truly,

THK:K

Engineer

December 17, 1919

Western Reinforced Concrete Pipe Co., Sixth & Wtah Sts., Los Ingeles, California.

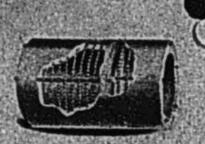
Gentlemen:-

Attention Mr. Brier:

The 18" pipe line at Del Mar should be laid within four or five months at the latest. This in answer to your telephone inquiry. I am sorry not to have seen Mr. Brier today.

Yours very truly,

mr/bm



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OWNERS AND PATENTEES

LOCKJOINT SEWER AND WATER PIPE SIXTH AND UTAH STREETS LOS ANGELES, CALIFORNIA,

> December 19, 1919 8:30 A.M.

Mr. W.H. Judy, Manager of Operation City of San Diego City Hall, San Diego, California

Dear Sire

Re 18" Pipe for San Dieguito Mutual Water Co.

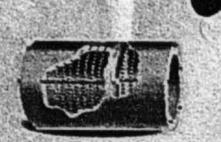
Confirming telephone quotation of yesterday to Mr. Thomas H. King, engineer for San Dieguito Mutual Water Company, San Diego, California.

We propose to manufacture alongside railroad spur at Del Mar or any other convenient Santa Fe Railroad Spur or siding between Del Mar and San Diego about 15,500 lineal feet of 18 inch reinforced concrete pipe. We will provide all labor and materials and lay the pipe in trench provided by the San Dieguito Matual Water Company and will backfill the trench with six inches of covering over the pipe.

All pipe shall be sufficiently reinforced to withstand the various heads shown on the profile, in range from 20 feet to 60 feet, and the pipe line then completed shall be guaranteed for one year with our usual guarantee against leakage.

The San Dieguito Mutual Water Company will furnish us making ground alongside Santa Fe Railroad Spur and water free under pressure and shall haul all pipe from making ground and distribute same alongside of trench convenient for laying. The San Dieguito Mutual Water Company will furnish and maintain, free from water, a trench to a true grade and 40 inches in width, and complete the backfilling so that the pipe will have at least 18 inches cover.

The price of the pipe made and laid by us under the above conditions is Two Dollars and Twenty-five Cents (\$2.25) per lineal foot of pipe laid; measurement to be the center of the pipe as laid. The foregoing price is made for your early acceptance



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### ---VIDSTED BROW REINFORGED CONGRESS; PERE COMPANY

OWNERS AND PATENTEES

LOCKJOINT SEWER AND WATER PIPE

SIXTH AND UTAH STREETS

LOS ANGELES, CALIFORNIA

Mr. W.HL Judy. #2

December 19, 1919

and the line is to be completed ready for use May First. 1920.

Trusting that we may receive your order for the work, we reman,

Yours very truly.

WESTERN REINFORCED CONCRETE PIPE COMPANY

DICT WWB/M

Carbon Copy to Colonel Ed. Fletcher.

REINFORGED CONGRESE; RIPE; COMPANY

OWNERS AND PATENTEES

LOCKJOINT SEWER AND WATER PIPE

SIXTH AND UTAH STREETS

LOS ANGELES, CALIFORNIA,

December 20, 1919 5:00 P.M.

Mr. W.HL Judy, Manager of Operation City of San Diego Ban Diego, California

Dear Sir:

Re 18" pipe for San Dieguito Mutual Water Co.

At the suggestion of the San Dieguito Mutual Water Company we are giving you the following specifications of reinforcement for the 18 inch line at Del Mar.

For heads up to 25 feet, .093 American Steel & Wire Company Triangular wire mesh. (.093 designates the effective area of steel per lineal foot of pipe and equals .279 for the three foot section of pipe.

For heads from 25 to 45 feet, 6 and 1/3 coils 5/16"round Bright Bessemer Steel wire in each three foot section of pipe.

For heads from 45 to 50 feet, 7 am 1/3 coils 5/16" round Bright Bessemer Steel wire in each three foot section of pipe.

For heads from 50 to 60 feet, 8 and 1/3 coils 5/16" round Bright Bessemer Steel wire in each three foot section of pipe.

The wire coils will be spaced with three longitudinal space bars in each cage. Bright Bessemer Steel wire has an elastic limit of 80,000 pounds per square inch. We have used a working stress of 12,000 pounds in all reinforcement specified above.

6136 25 6

We are unable to obtain quarter inch bright Bessemer steel and have therefore used \$2.5/16 inch in the foregoing specifications.

Pipe joints will be poured with a mortar mixture of one part of Portland Cement to one and a half partsoof sand. The concrete mixture in making the pipe will be 1:2:3.

Yours very truly,

WESTERN RE INFORMED CONCRETE PIPE COMPANY

WIB/I

Carbon copy to Col. Ed Fletcher

to Br. Thomas H. King



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OWNERS AND PATENTEES

LOCKJOINT SEWER AND WATER PIPE

SIXTH AND UTAH STREETS

LOS ANGELES, CALIFORNIA,

December 20, 1919 5:00 Palls

Mr. W.H. Judy. Memager of Operation City of San Diego San Diego. California

Dear Sir:

Re 18" pipe for San Diegnite Mutual Water Co.

At the suggestion of the San Diegnito Entual Water Company we are giving you the following specifications of reinforcement for the 18 inch line at Del Har-

For heads up to 25 feet, .093 American Stool & Wire Company Triangular wire mesh. (.093 designates the effective area of steel per lineal foot of pipe and equals .279 for the three foot section of pipe.

For heads from 25 to 45 feet, 6 and 1/3 coils 5/16 round Bright Bessemer Steel wire in each three foot section of pipe.

For heads from 45 to 50 feet, 7 and 1/3 coils 5/16" round Bright Bessemer Steel wire in each three foot section of pipe.

For heads from 50 to 60 feet, 8 and 1/3 coils 5/16" round Bright Bessemer Steel wire in each three foot section of pipe.

The wire coils will be spaced with three longitudinal space bars in each cage. Bright Bussamer Steel wire has an elabtic limit of 80,000 pounds per square inch. We have used a working stress of 12,000 pounds in all reinforcement specified above.

We are unable to obtain quarter inch bright Bessemer Steel and have therefore used in 5/16 inch in the foregoing specifications.

Pipe joints will be poured with a mortar mixture of one part of Portland Coment to one and a half partsoof sand. The comercte mixture in making the pipe will be 1:2:5.

Yours very traly.

WESTERN RE INFORCED CONCRETE PIPE COMPANY

MATAGUR

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Carbon copy to Col. Ed Flatcher to Er. Thomas H. King



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OWNERS AND PATENTEES

BIXTH AND UTAH STREETS

LOS ANGELES, CALIFORNIA.

December 20, 1919 5:00 P.M.

Colonel Ed. Fletcher Fletcher Building San Diego, California

Dear Sir:

If we are awarded the contract for the eighteen inch line at Del Mar, we will of course use Riverside Portland cement.

Yours very truly,

WESTERN REINFORCED CONCRETE PIPE COMPANY

MANAGER

DICT WWB/M 26 December 1919

Western Reinforced Concrete Pipe Co., 6th & Utah Sts., Los Angenes, Calif.

Gentlemen:

Enclosed herewith find a check from the Cuyamaca Water Company for \$1,000.00, and . check from Jas. A. Murray for \$4,000.00, making a total of the \$5,000.00, due you as per agreement.

Yours very truly.

EF:KIM

MANAGER

Mr. W. W. Brier. Western Reinforced Concrete Pipe Co., 6th & Utah Streets. Los Angeles, Calif.

My dear Mr. Brier:

0

Will you please give us an estimate of the cost of constructing about 30 miles of conduit to carry 34 second feet of water, the same size as your 39" pipe line, we to dig the ditch and you to furnish sement, and all.

The grade is 4-3/4 ft. to the mile.

Mr. Harritt, the next time you are down will furnish you the profile of the different portions of the flume under pressure that would have to be put into a pipe.

We would like the price per foot for a conduit, or the price per foot for a pipe line in place of a conduit. What we want is a tentative estimate from you for the cost of replacing our present wooden flume with a conduit the entire distance, and a letter from you giving your estimate of the cost. One estimate will be just for the pipe, or conduit alone, and the other will be for the excavation and back filling.

Mr. Harritt will explain what we want this information for and we are very anxious that you should come down before the 10th of January and look this matter over. Let Mr. Harritt know a day or two shead of the time when you are coming down.

Yours very truly,

EF:KIM

San Diego, Calif., January 10, 1920

Cuyamaca Water Company, San Diego, Calif.

Gentlemen:

You are authorized to turn the water through the 39" concrete pipe at the old Sweetwater trestle location on Monday, January 12th. If there are any leaks, we will come back and repair them.

Yours truly,

WESTERN REINFORCED CONCRETE PIPE CO

By Joseph Bon E. Z. Greenfield.

16 January 1920

Western Reinforced Concrete Pipe Co., 6th & Utah Streets, Los Angeles, California.

Centlemen:

This is to notify you that the Sweetwater siphon is in bad condition, and there are many leaks to be repaired. and we request that you send an expert down here immediately to put it in first class condition, according to contract.

If you do not have a man down here by Monday, we will be compelled to fix it ourselves and charge your account with it.

Yours very truly,

CUYAMACA WATER COMPANY

By

Secretary

F:KM



## 

REINFORCED CONCRETE PIPE FOR SEWERS, STORM DRAINS, CULVERTS, IRRIGATION SYSTEMS

SIXTH AND UTAH STREETS

LOS ANGELES, CALIFORNIA

February 10, 1922 3:00 P.M.

Mr. T.H. King

Engineer for Volcan Water Company Fletcher Building

San Diego, California

Dear Sir:

Replying to your letter of February 9th; in regard to cost of 40000 feet of concrete pipe, 27" to 36" diameter, to be laid in an accesible location near San Diego, we quote approximate prices as follows:

	Price per foot at making yard	Hauling at \$2.00 per ton	Laying per foot including material	Total
27"	\$2.20	\$0.29	\$0.40	\$2.89
30"	\$2.46	\$0.36	\$0.45	\$3.27
33"	\$2.94	\$0.43	\$0.50	\$3.87
36"	\$3.21	\$0.51	\$0.55	\$4.27

The foregoing prices for laying do not include any excavating or backfilling.

The prices given are approximate and are based on an estimate of cost of reinforced concrete pipe made at Lakeside, in which estimate we used the following prices for materials. Cement \$3.71 per barrel net (same as quoted to City of San Diego on Barrett Dam), Sand \$1.30 per ton f.o.b. cars Lakeside, Rock \$2.15 per ton f.o.b. cars Lakeside. We have reduced the reinforcement from that estimated in this case. These material prices may not be the same for the project you have in mind but the prices quoted will give you a general idea for comparing the different sizes. We shall be pleased to give you exact prices when you have the complete data.

Yours very truly,

WESTERN REINFORCED CONCRETE PIPE COLIPANY

11111111

MANAGER

4:27-

750

### **Ed Fletcher Papers**

1870-1955

**MSS.81** 

Box: 33 Folder: 20

### **General Correspondence - Western Reinforced Concrete Pipe Company**



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