MICHAEL E. SULLIVAN
City Attorney

BRADLEY J. WHITE
Assistant City Attorney

Burlington Center - Suite 305
747 North Burlington Avenue
P. O. Box 43
Hastings, Nebraska 68902-0043

Telephone: (402) 461-2320
Telecopier: (402) 462-6632

October 28, 1994

Mr. Darrell Sommerhauser, SPFD
U.S. EPA Region VII
726 Minnesota Avenue
Kansas City, KS 66101

Re: Supplemental Request for Information, Second Street Subsite
Hastings Groundwater Contamination Site
Hastings, Nebraska

Dear Mr. Sommerhauser:

I enclose herewith the response of the City of Hastings to the Supplemental Request for Information on the Second Street subsite which was sent to us by letter dated September 1, 1994. We have indicated at several places in the response, that we are continuing to investigate the matter ourselves, and we will supplement this response as information becomes available.

If you have any questions, please do not hesitate to contact us.

Very truly yours,

Michael E Sullivan /tj

Michael E. Sullivan
City Attorney

MES/tj
29.04.41
Enclosures

RESPONSE TO INFORMATION REQUEST DATED SEPTEMBER 1, 1994

SECOND STREET SUBSITE

HASTINGS GROUNDWATER CONTAMINATION SITE

HASTINGS, NEBRASKA

1. Please describe the history of the City's ownership of the property located at 109 West 2nd Street, which is known as the Second Street Subsite (the "Subsite") of the Hastings Groundwater Contamination Site in Hastings, Nebraska. The response to this question should include documents in the City's possession related to the City's ownership and activities at the Subsite. In addition, the response to this questions should include the following information:

a. the date the City acquired the Subsite;

Answer:
The deed conveying the site to the City was signed on March 30, 1942 and filed on March 31, 1942.

b. historical documents in the City's possession which address the property transfer referred to in the City's letter of September 17, 1992;

Answer:
Deed conveying the property, and newspaper articles. Copies of these were included with the City's letter of September 17, 1992.

c. a description of the types of activities carried out by the City at the Subsite since its acquisition;

Answer:
The City took possession of the site on or about April 1, 1942. The City occupied the office building on the site in connection with operation of the natural gas distribution system. The City demolished existing structures between 1942 and 1950. A large gas holder and one smaller gas holder were removed from the site by Olson Construction of Lincoln in February, 1948. The large chimney was removed in February, 1950.

Construction on the building presently used as the police station began in the spring of 1948 and was completed in the summer of 1949. The building was initially occupied by the gas department from the time of

completion until 1954, when that department was moved to another location. The Hastings Police Department moved into the building in 1957, and has continuously occupied the building since that time.

It appears that a dog kennel was constructed on the property in 1961, and that it was replaced with an animal shelter and kennel constructed in 1976. An electrical substation was constructed in 1969 in the southeast corner of the site.

d. a copy of the appraiser's report prepared for the City of Hastings prior to purchase of the old Gas Works property;

Answer:
Enclosed is a copy of the report of F. E. Devlin.

e. a description of the property's condition at the time of purchase by the City;

Answer:
To the best of the City's knowledge, there were a number of buildings upon the property as shown and described in the photographs and insurance drawings included with the letter sent to EPA on September 17, 1992. The insurance drawing for 1930 which was provided to EPA with the letter of September 17, 1992, shows a crude oil pit. We have heard that it was a common practice to dump coal tar into the crude oil pit or possibly even into some type of well on the premises. We will attempt to identify the sources of this information and supplement this response accordingly.

f. the names of persons consulted regarding your response to question 1e;

Answer:
The information is the results of research conducted by the following persons:

Barbara Bramblett
City Administrator
220 North Hastings Ave.
Hastings, NE 68901
(402) 461-2309

J. Roger Coffman
1019 North St. Joseph Ave.
Hastings, NE 68901
(402) 463-1405

Michael E. Sullivan
City Attorney
747 North Burlington
Suite 305
Hastings, NE 68901
(402) 462-2119

Marvin Schultes, Manager
Hastings Utilities
1228 North Denver Avenue
Hastings, NE 68901
(402) 463-1371

g. a description of the structures remaining at the site at the time of the City's purchase;

Answer:
See the answer to 1e above.

h. names and addresses of any individuals who can provide eye-witness accounts of site conditions at the time the City purchased the property;

Answer:
We do not currently have the names or addresses of any individuals who can provide eye witness accounts of site conditions. We will attempt to identify people who can do so, and supplement this response accordingly.

i. names and addresses of any former employees who worked at the site during demolition activities conducted by or for the City;

Answer:
We have not identified any living former employees who worked at the site during demolition activities.

j. names and addresses of contractors hired to demolish structures or perform site preparation for construction. Examples would include the contractor(s) who worked on the electrical power substation and contractors who constructed the buildings on the site.

Answer:
(i) One large gas holder and one small gas holder was demolished in February, 1948 by Olson Construction of Lincoln, Nebraska.

(ii) The electrical power substation was constructed by Crawford Electric of North Platte in 1969.

(iii) The current police station structure was constructed by Hemple Construction of Hastings in 1948 and 1949. A copy of a release dated

November 13, 1950, which pertains to that project, is attached. Hemple Construction is no longer in existence.

(iv) The animal shelter and kennel were constructed by Dick Looye Construction of Hastings in 1976. That company has subsequently been sold to Rosch Commercial Builders, 214 South Burlington Avenue, Hastings, Nebraska 68901, phone number 402-463-8886.

k. documents explaining work performed by the contractors listed in response to question 1j.

Answer:
All of the documents in the possession of the City were forwarded to EPA with the letter of September 17, 1992.

2. Please provide a description and/or any available documents relating to the activities carried out at the Subsite by any previous owners prior to the City's purchase of the Subsite property.

Answer:
The Hastings Gas Light Company was formed by C. R. Miller in 1885 for the purpose of operating a coal gasification plant. The company experienced financial difficulty, and Hastings Gas Company was formed for the purpose of taking over the operation in 1890.

Initially, gas was manufactured from coal. However, in 1908, there was a changeover to oil.

In 1925, Central Power Company of Grand Island acquired ownership of the facility. The company converted the system to natural gas on September 20, 1931.

In 1941, Consumers Public Power District acquired all of the assets of Central Power Company. It is not clear from our review of records and newspaper articles whether the Hastings gas system was included in this acquisition.

Central Power Company conveyed title to the subject real estate to Fred Grosser on January 7, 1941. Mr. Grosser and his wife conveyed the property to the City by deed executed March 30, 1941.

3. Please provide any financial documents (such as operating budgets, documents reflecting sources and amounts of revenue, etc.) which show the amount of revenue or other

funds generated annually by the City and where those funds will be spent. Please provide documents from the last three years and any documents projecting future revenues or expenditures. Please include a narrative describing the revenue generation and budget process and estimating the City's environmental expenditures for the entire period, including any projected expenditures for the Second Street Subsite.

Answer:
Attached hereto are the following documents:

a. City of Hastings Annual Budget 1992-1993

b. City of Hastings Annual Budget 1993-1994

c. City of Hastings Annual Budget 1994-1995

d. City of Hastings Budget and Financial Practices

e. Environmental Expenditures

4. Please describe in general what support the City could provide in lieu of funding, to assist in the performance of the cleanup at the Second Street Subsite. Support services could include the provision of utilities, equipment and manpower to assist in the construction and operation and maintenance of any future response action. It is understood that additional information is needed regarding the type of response action to be constructed to thoroughly answer this question. However, in general, it is anticipated that equipment will be installed at the Subsite to extract contaminated soil gas and groundwater and contain the groundwater so that further migration of contamination is minimized. EPA anticipates that operation and maintenance of this response action will be necessary over an extended time frame.

Answer:
The City could provide:

a. Personnel and equipment for operations and maintenance activities, including upkeep and maintenance, sampling, servicing of equipment, security, and the like.

b. Day to day project management of remediation activities consisting of supervision, record keeping, and reporting.

c. Utilities at the site.

ENVIRONMENTAL EXPENDITURES

Over the past 10 years, the City's environmental expenditures have been massive. Types of expenditures include construction and operational costs to comply with mandates of the Clean Water Act, the Safe Drinking Water Act, and the Clean Air Act. These mandates have increased the costs of providing municipal water, sewer, and electric utilities, and are reflected in utility rates paid by consumers.

Hastings residents and businesses, and City departments are further financially impacted by the Community Right To Know provisions of SARA Title III.

On October 1, 1994, City landfill fees were increased from $5.00/loose yard^3 and $5.25/compact yard^3 to $9.00/yard^3 to offset increased operational and construction expenses required by federal subtitle d landfill regulations.

Clearly, the City of Hastings as a governmental unit and its residents and businesses have experienced substantial increases in the amount of dollars required for environmental programs.

The City of Hastings General Fund has also been required to re-prioritize municipal programs and activities to make funds available for Superfund related activities. This required an allocation of staff and fiscal resources to become familiar with the Superfund law and its programs as well as technical and engineering assessments of our local situation.

The City has funded participation in an SVE Pilot Program and RI/FS reports.

Estimates for the requested period are as follows:

	Estimated Actual Expense FY 1992-93	Estimated Actual Expenses FY 1993-94	Budget FY 1994-95
Transaction Costs	$ 15,621	$ 13,179	$ 12,000
Technical Consultants	$112,744	$266,799	$203,000
Fax/Phone Communications	$ 1,354	$ 514	$ 1,000

In addition travel expenses have been incurred for City officials to attend EPA-related meetings, and considerable staff resources have been devoted to Superfund matters.

No funds have been identified in the 94-95 Annual Budget for Second Street activities. Funds were included to complete the City's commitments to EPA regarding other sub-sites.

The City has requested that the Nebraska Department of Health conduct an air quality investigation of the Police Station Building.

CITY OF HASTINGS

BUDGET AND FINANCIAL PRACTICES

The City keeps its books and accounting records in accordance with generally accepted accounting procedures (GAAP) for governments. This method is called fund accounting and is very different from accounting presentations used by business.

A Fund is the Basic Accounting Entity

A fund is:

- An accounting entity
- With a self balancing set of accounts
- Recording cash and al other resources together with all related liabilities
- Which are segregated for the purpose of carrying on specific activities or achieving specific objectives in accordance with special regulations or restrictions.

From time to time the City creates new funds to meet current needs. When a fund has satisfied its purpose and is no longer needed, it is closed.

Three Main Categories of Funds

Governmental Funds - are those funds that typically finance most City operations. The measurement focus is on determination of financial position and changes in financial position rather than upon net income.

Proprietary Funds - used to account for the City's operations that are similar to those of a private business. The measurement focus is on net income.

Fiduciary Funds - used to account for resources held by a government in a trustee capacity. They are custodial in nature and measure someone elses resources.

The City of Hastings Fund Types are as follows:

GOVERNMENTAL FUNDS

General Fund - is the general operating fund of the City. It is used to account for all resources not required to be accounted for in another fund. It is the largest fund, and accounts for most City services and departments. Governments should maintain only one general fund.

Special Revenue Funds - are used to account for the proceeds of specific revenue sources that are legally restricted to expenditures for specific purposes.

Capital Projects Funds - used to account for resources restricted for major capital outlays and projects other than those financed by proprietary funds, special assessments and trust funds. The proceeds from a bond issue to build a bridge (etc.) would be accounted for here. The debt service for bonds would not be accounted for here.

Debt Service Funds - used to account for resources used to repay the principal and interest on general purpose long term debt.

Special Assessment Funds - used to account for the financing of public improvements against which special assessments will be levied and the receipts of special assessment levies when paid.

PROPRIETARY FUND

Enterprise Funds - used to account for operations that are financed and accounted for similar to business enterprises.

FIDUCIARY FUNDS

Agency Funds - are funds that the City is the custodian for, with the assets belonging to someone other than the City.

Trust Funds - account for resources held by the City that have been provided through a trust agreement.

Individual Funds of the City of Hastings

General Fund

Special Revenue Funds

Street Fund
Community Redevelopment Fund (CRA)
Museum Fund
Community Development Block Grant Fund
Business Improvement District (BID) Fund
Municipal Infrastructure Redevelopment Fund (MIRF)
Drug Control Grant Fund
IMAX Fund
Keno Community Betterment Fund
Library Grant Fund
Natural Disaster Fund

Capital Projects Funds

Capital Projects Fund
1993 BAN Fund
1994 BAN Fund
1995 BAN Fund

Debt Service Funds

Various Purpose Fund
Special Assessment Fund

Enterprise Funds

Landfill Fund

Agency Funds

Self-Insured Health Fund
City Pension Fund

Trust Funds

Cemetery Perpetual Care Fund
Perpetual Housing Rehabilitation Loan Fund
Economic Development Revolving Loan Fund

Each fund has its own sources of revenue and authorized expenditures. Although the City adopts one master budget, each fund is budgeted separately.

THE BUDGET PROCESS

The Annual Budget is the most important policy document adopted by the City Council. Through resource allocation, the budget establishes the program of service that will be accomplished by the City during the fiscal period. Whether the year's emphasis is on police services or streets, the budget document is the method used to designate what projects will be done, what services will be provided, and what level of service will be delivered.

The City of Hastings budget is prepared, adopted, and implemented in accordance with the State of Nebraska Budget Act.

MULTI-PURPOSE DOCUMENT

The budget process and the subsequent adopted budget serves four purposes; planning, management, control, and communication.

Planning is the first and most critical element of the budget process. elected officials have the lead role by establishing service levels, new programs or projects, and priorities. The outcomes of the City Council's budget planning retreat are communicated to department heads in advance of the submission of departmental budget requests.

The management element of the budget is to direct the work of the various departments of the City in conformity with the program of service established by the elected officials.

By adopting the budget the Council has made decisions on what will (and will not) be done during the year. If a capital piece of equipment was not approved in the budget, it will not be purchased. If a construction project was funded, it will be built.

Control is the use of budgeting for financial accountability. The budget sets the financial roadmap for the year, premising that if income is produced as projected and expenses are at the approved level, the City's financial condition at the end of the year will be satisfactory.

After final adoption and printing the budget document is available to the public. The budget then serves as a communication tool, informing the public of the City's annual financial roadmap and program of service.

BUDGET FLOW CHART

"The budget starts with the Council and ends with the Council".

Phase 1. **City Council Retreat Planning Session**

Participants: Mayor, City Council, City Administrator

City Council sets priorities.

City Council sets financial planning parameters: cash reserve targets, willingness to increase fees or taxes.

Develop consensus on "tone" or theme of budget. The retreat is usually held in January-February.

Phase 2. **Budget Call Issued to Department Heads by City Administrator**

Participants: City Administrator, Department Heads

Budget forms are issued to department heads along with strategic guidance on what the Council thinks is important.

City Administrator provides fiscal guidance in terms of targets, and advises on general assumptions, constraints and other factors that are likely to emerge.

Phase 3. **Preparation of Budget Proposal**

Participants: City Administrator, Department Heads

City Administrator prepares revenue projections for all sources of revenue.

Department Heads submit budget requests to City Administrator.

Department Heads and City Administrator review each individual departmental budget request. Departmental goals are developed and negotiated. Budget cuts negotiated.

City Administrator evaluates City position classifications for conformity with

City Administrator evaluates City position classifications for conformity with state-mandated salary comparability requirements, and adjusts pay levels if required.

City Administrator makes further cuts necessary to balance proposed expenditures with available revenues. In this phase of the process the City Administrator takes the role of economizer. The department heads generally request for budget increases and the City Administrator has the responsibility for introducing the comprehensive view of all City needs into the budget process as well as the revenue constraint. The City Administrator is required to propose a balanced budget to the Mayor and Council.

Phase 4. **Submission of Proposed Budget to Mayor and Council**

Participants: Mayor, Council, Public, City Administrator

Budget message and written detail of proposed budget submitted to Mayor and City Council.

Oral presentation made at public meeting.

Copies of proposed budget are available to the public.

Phase 5. **Council Review, Deliberation, and Modification of Budget**

Participants: Mayor, Council, City Administrator, Department Heads

Council holds budget worksessions to discuss and review budget. Council asks questions and may request additional information. At Council request, department heads attend worksessions to address specific questions about departmental budget.

Council may take straw votes and add or delete items from budget.

Council conducts budget public hearing as required by law.

Phase 6. **City Council Adopts Budget by Ordinance**

RELEASE

Know all men by these presents, that whereas on the 25th day of March 1948, the Glens Falls Indemnity Company a New York Corporation, with principal offices at Glens Falls, New York, executed as surety, a bond in the sum of $45,502.73 for Carl J. Hempel, as principal and prime contractor, in favor of the City of Hastings, a municipal corporation, organized and existing under and by virtue of the laws of the State of Nebraska, covering the performance of a contract made and entered into by and between the said Carl J. Hempel and the said City of Hastings, Nebraska, for the construction and erection of a meter shop, office and garage building, including plumbing, heating, electrical work and power lift, in and for the said City of Hastings, Nebraska, in accordance with certain specifications furnished by Glen W. Bouton, architect, employed by said City of Hastings, Nebraska; and

Whereas, there have been various and sundry dealings and transactions by and between the City of Hastings, Nebraska, its architect Glen W. Bouton, Carl J. Hempel and the Glens Falls Indemnity Company, with reference to the performance of said contract as aforesaid, the specifications covering the construction of said building, its appurtances and otherwise; and

Whereas, disputes and differences have arisen between them, jointly and severally; and

Whereas, the said City of Hastings, Nebraska, has retained the sum of $5,134.77 on the said contract price of $45,502.73, which amount the said Glens Falls Indemnity Company, now claims is due and owing to it, as surety for the said Carl J. Hempel; and

Whereas, the City of Hastings, Nebraska, its architect, Glen W. Bouton and the Glens Falls Indemnity Company, as surety as aforesaid, have agreed to settle all the said disputes and differences by the payment of ~~$2,709.82~~ $2502.22, by the said City of Hastings, Nebraska to the said Glens Falls Indemnity Company and by the execution of this mutual release, in the manner hereinafter set forth:

NOW THEREFORE IT IS AGREED, that in pursuance of the terms of this releaae and in consideration of the sum of ~~$2,709.82~~ P.J.McD, upon the execution hereof, paid by the City of Hastings, Nebraska, the receipt whereof the said Glens Falls Indemnity Company, does hereby acknowledge, by and through, its attorney, Preston J. McDonnell and of the covenants herein contained, each of them the said City of Hastings, Nebraska and its architect Glen W. Bouton does hereby acknowledge that the said Glens Falls Indemnity Company has fully and completely performed all the terms and conditions of the bond therein mentioned, by full satisfaction of each and every condition thereof and the said Glens Falls Indemnity Company does hereby release the said City of Hastings, Nebraska from further obligation for payments of any additional sum or sums to the said Glens Falls Indemnity Company, as surety or to Carl J. Hempel its principal; and each of them the said City of Hastings, Nebraska, its architect Glen W. Bouton and the said Glens Falls Indemnity Company does hereby release the other, its heirs, administrators, successors and assigns from all sums of money, accounts, actions, claims and demands up to the date and execution of these presents.

IN WITNESS WHEREOF, we have hereunto set our hands at Hastings, Nebraska this 13 day of November, 1950.

Attest:

Edward L. Dier
City Clerk

City of Hastings, Nebraska,
A Municipal Corporation

By Carl Ratt, Sr.
Mayor

Attest:

Glens Falls Indemnity Company,
A Corporation

By _____
Its Attorney

STATE OF NEBRASKA)
) SS.
COUNTY OF ADAMS)

On this 10th day of November 1950, before me, a Notary Public in and for said county, personally appeared Carl E. Pratt, and Edward Dier, Mayor and City Clerk respectively of the City of Hastings, Nebraska, a municipal corporation and they acknowledged to me that they executed the above release on behalf of the City of Hastings, Nebraska with full power and authority so to do and as their voluntary act and deed.

Witness my hand and Notarial Seal at Hastings in said county the day and year last above written.

_____
Notary Public

STATE OF NEBRASKA)
) SS.
COUNTY OF ADAMS)

On this 10th day of November 1950, before me, a Notary Public, in and for said county, personally appeared Preston J. McDonnell, attorney in fact for the Glens Falls Indemnity Company, a corporation and he acknowledged to me that he executed the above release on behalf of said corporation with full power and authority so to do and as its legal representative.

Witness my hand and Notarial Seal at Hastings in said county the day and year last above written.

_____
Notary Public

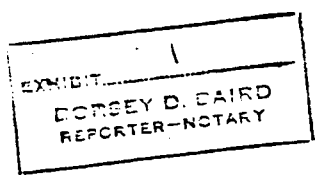
REPORT AND APPRAISAL

OF THE

HASTINGS, NEBRASKA GAS SYSTEM

FILED NOV.27,1939

RAYMOND L. CROSSON
CITY CLERK



H. D. MCGAW
CITY ENGINEER
HASTINGS, NEBRASKA

F.E. DEVLIN
CONSULTING ENGINEER
WICHITA , KANSAS

_I_N_D_E_X_

F. E. DEVLIN
CONSULTING ENGINEER

September 9, 1939

To
The Mayor and Council
Hastings, Nebraska

Gentlemen:

We submit herewith our report on your gas system.

We wish to express our appreciation to the following persons for their courteous assistance in preparing the appraisal:

Mr. A.W. Borden, District Manager of the Central Power Company
Mr. H.D. McGaw, City Engineer, Hastings
Spurrier and Wood, Accountants, Wichita, Kansas
Mr. Harold Harper, Engineer
Mr. Ted Brown

Respectfully submitted,

F. E. Devlin

Consulting Engineer.

FED:T

HISTORY OF THE HASTINGS GAS SYSTEM

This information was furnished through the courtesy of Mr. A.W. Borden, General Manager of the Central Power Company in Hastings, Nebraska.

Mr. Borden could recall nothing of the history of the gas system prior to 1895.

A man named Peterson built the original system.

Soon after 1895, bonds, issued before that year, which were held by persons residing in the State of Maine, were put into the hands of attorneys; and the mortgage on the plant was foreclosed about 1900.

From 1900 the property was operated by these bond-holders, and under their management was rebuilt and converted into a coal gas plant operated under the name of the Hastings Light and Heat Company.

In 1912 it was rebuilt by the Hastings Light and Heat Company, which was reorganized under the name of the Hastings Gas Company, and a modern carboreted water gas plant was installed.

The development of business from that time on was slowly but consistently upward, and in 1925 the plant was sold to the present owners, the Central Power Company, and operated as a water gas system until September, 1931, when natural gas was turned into the distribution system.

DESCRIPTION OF GAS SYSTEM

The gas system in Hastings was originally designed to use artificial gas. The plant was located in Block 24, Johnson's Addition, at the Southeast corner of Second and Minnesota Streets. From this location lines were extended to various parts of town which were most thickly built up.

In 1931, when natural gas was used instead of artificial, an eight-inch, high pressure, welded steel line with Dresser couplings was constructed from the main line North of town, South on Minnesota to the gas plant. An intermediate cast iron line with clamps on the joints was built from the gas plant West on First Street to the intersection of First Street and Baltimore, thence North on Baltimore to the intersection of Baltimore and Seventh Streets. A four-inch intermediate pressure line was constructed from this point to the regulator station at Ninth and Baltimore Streets. Leading from these mains, additional intermediate pressure lines have been constructed; and regulator stations built to supply the low pressure system with gas.

This system is almost entirely low pressure. However, a few services are supplied by individual regulators.

The location and sizes of the lines, and the location of the regulator stations are shown on maps which accompany this report, and are made a part of it.

GENERAL CONDITIONS.

We have made numerous excavations to examine the pipes and fittings; and have also examined all the excavations which the Central Power Company had open, and find that the soil conditions are very good. However, there are a few places where fills have been made or ashes have been placed in the street, but these are exceptional.

The cast iron low pressure mains are laid with cement joints, except where Flexi-Couple joints have been used. I do not think that the cast iron pipe with cement joints could be subjected to a pressure of more than eight inches of water or 4.6 ounces pressure without serious leaks.

The steel pipe low pressure lines of four inches and under are thread and coupled joints, except that portion laid in the last few years, which have welded joints.

The lines are laid for a low pressure system, and it is doubtful if they could be used for intermediate pressure without a large amount of leakage. Each of these lines intended for intermediate pressure would have to be tested separately.

The system is operated at present at three ounces pressure.

AUTHORITIES CONSULTED

In making this appraisal, we have consulted the following authorities:

ENGINEERING VALUATION, Marston and Agg
Data from APPRAISERS' AND ASSESSORS' MANUAL, Prouty, Collins and Prouty
ACCOUNTANTS' HANDBOOK, E.A. Sailers
Data from various published reports of the Wisconsin Railroad Commission

PIPE IN MAINS

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	QUANTITY	MATERIAL PRICE PER FT.	MATERIAL AMOUNT	LABOR PRICE PER FT.	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
12" Cast Iron	1900	75	290	$ 2.05	$ 594.50	$ .60	$ 174.00	$ 768.50	1.33	39	$ 398.82	$ 369.88
10" " "	1900	75	265	1.58	418.70	.55	145.75	564.45	1.33	39	292.78	271.67
8" " "	1928	75	5,318	1.18	6,275.24	.50	2,659.00	8,934.24	1.33	11	1,307.08	7,627.16
8" " " Flexi-couple	1936	75	2,242	1.34	3,004.28	.48	1,076.16	4,080.44	1.33	3	162.81	3,917.63
8" " " " "	1937	75	1,525	1.34	2,043.50	.48	732.00	2,775.50	1.33	2	73.83	2,701.67
8-5/8" O.D. Steel	1938	75	1,316	1.34	1,763.44	.48	631.68	2,395.12	1.33	1	31.86	2,363.26
8-5/8" " "	1930	30	2,300	.75	1,725.00	.45	1,035.00	2,760.00	3.33	9	827.17	1,932.83
8" Cast Iron	1931	30	5,363	.75	4,022.25	.45	2,413.35	6,435.60	3.33	8	1,714.44	4,721.16
6" " "	1900	75	4,595	.83	3,815.85	.32	1,470.40	5,284.25	1.33	39	2,740.98	2,543.31
6" " "	1911	75	2,910	.83	2,415.30	.32	931.20	3,346.50	1.33	28	1,246.24	2,100.26
6" " "	1916	75	265	.83	219.95	.32	84.80	304.75	1.33	23	93.22	211.53
6" " "	1921	75	214	.83	177.62	.32	68.48	246.10	1.33	18	58.92	187.18
6" " "	1923	75	1,360	.83	1,128.80	.32	435.20	1,564.00	1.33	16	332.82	1,231.18
6" " "	1926	75	1,097	.83	910.51	.32	351.04	1,261.55	1.33	13	218.12	1,043.43
6" " " Flexi-couple	1934	75	250	.95	237.50	.30	75.00	312.50	1.33	5	20.78	291.72
6" " " " "	1936	75	50	.95	47.50	.30	15.00	62.50	1.33	3	2.49	60.01
6-5/8" O.D. Steel	1920	30	1,070	.51	545.70	.29	310.30	856.00	3.33	19	541.59	314.41
6-5/8" " "	1921	30	1,460	.51	744.60	.29	423.40	1,168.00	3.33	18	700.10	467.90
4" Cast Iron	1900	50	3,315	.54	1,790.10	.25	828.75	2,618.85	2	39	2,042.70	576.15
4" " "	1901	50	550	.54	297.00	.27	148.50	445.50	2	38	335.58	106.92
4" " "	1904	50	170	.54	91.80	.27	45.90	137.70	2	35	96.39	41.31
4" " "	1908	50	1,300	.54	702.00	.27	351.00	1,053.00	2	31	652.86	400.14
4" " "	1910	50	1,800	.54	972.00	.27	486.00	1,458.00	2	29	845.64	612.36
4" " "	1911	50	740	.54	399.60	.27	199.80	599.40	2	28	335.66	263.74
4" " "	1912	50	1,460	.54	788.40	.27	394.20	1,182.60	2	27	638.60	544.00
4" " "	1916	50	4,748	.54	2,563.92	.27	1,281.96	3,845.88	2	25	1,769.10	2,076.78
4" " "	1917	50	410	.54	221.40	.27	110.70	332.10	2	22	146.12	185.98
4" " "	1923	50	1,290	.54	696.60	.27	348.30	1,044.90	2	16	334.37	710.53
4-1/2" O.D. Steel	1900	30	5,480	.35	1,918.00	.30	1,644.00	3,562.00	3.33	39	3,562.00	—
4-1/2" " "	1911	30	1,370	.35	479.50	.30	411.00	890.50	3.33	28	830.30	60.20
4-1/2" " "	1925	30	1,358	.35	475.30	.30	407.40	882.70	3.33	16	470.30	412.40
4-1/2" " "	1926	30	1,820	.35	637.00	.30	546.00	1,183.00	3.33	14	551.51	631.49
4-1/2" " "	1928	30	805	.35	281.75	.30	241.50	523.25	3.33	11	191.67	331.58
4-1/2" " "	1930	30	1,697	.35	593.95	.30	509.10	1,103.05	3.33	9	330.58	772.47
4-1/2" " "	1933	30	391	.35	136.85	.30	117.30	254.15	3.33	6	50.78	203.37
4-1/2" " "	1934	30	126	.35	44.10	.30	37.80	81.90	3.33	5	13.64	68.26
4-1/2" " "	1936	30	1,600	.35	560.00	.30	480.00	1,040.00	3.33	3	103.90	936.10
3" Cast Iron	1937	30	1,627	.35	569.45	.30	488.10	1,057.55	3.33	2	70.45	987.12
3" " "	1900	50	3,820	.48	1,833.60	.23	878.60	2,712.20	2	39	2,115.52	596.68
3-1/2" O.D. Steel	1915	50	1,338	.48	640.80	.23	307.05	948.85	2	24	454.97	492.88
3-1/2" " "	1900	20	7,660	.30	2,298.00	.18	1,378.80	3,676.80	5	39	3,676.80	—
3-1/2" " "	1901	20	1,320	.30	396.00	.18	237.60	633.60	5	38	633.60	—
3-1/2" " "	1908	20	1,340	.30	402.00	.18	241.20	643.20	5	31	643.20	—
3-1/2" " "	1909	20	1,390	.30	417.00	.18	250.20	667.20	5	30	667.20	—
3-1/2" " "	1910	20	720	.30	216.00	.18	129.60	345.60	5	29	345.60	—
3-1/2" " "	1911	20	1,422	.30	426.60	.18	255.96	682.56	5	28	682.56	—
3-1/2" " "	1912	20	105	.30	31.50	.18	18.90	50.40	5	27	50.40	—
3-1/2" " "	1914	20	430	.30	129.00	.18	77.40	206.40	5	25	206.40	—
3-1/2" " "	1915	20	4,165	.30	1,249.50	.18	749.70	1,999.20	5	24	1,999.20	—
3-1/2" " "	1916	20	9,375	.30	2,812.50	.18	1,687.50	4,500.00	5	23	4,500.00	—
3-1/2" " "	1917	20	8,541	.30	2,562.30	.18	1,537.38	4,099.68	5	22	4,099.68	—
3-1/2" " "	1918	20	5,070	.30	1,521.00	.18	912.60	2,433.60	5	21	2,433.60	—

PIPE IN MAINS (Continued)

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	QUANTITY	MATERIAL Price Per Ft.	MATERIAL AMOUNT	LABOR PRICE PER FT.	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
3-1/2" O.D. Steel	1919	20	6,137	$ .30	$1,841.10	$ .18	$ 1,104.66	$ 2,945.76	5	20	$ 2,945.76	—
3-1/2" " "	1920	20	5,246	.30	1,573.80	.18	944.10	2,517.60	5	19	2,391.72	125.88
3-1/2" " "	1921	20	2,937	.30	881.10	.18	528.66	1,409.76	5	18	1,268.78	140.98
3-1/2" " "	1922	20	4,571	.30	1,371.30	.18	822.78	2,194.08	5	17	1,864.97	329.11
3-1/2" " "	1923	20	6,012	.30	1,803.60	.18	1,082.16	2,885.76	5	16	2,308.61	577.15
3-1/2" " "	1924	20	2,320	.30	696.00	.18	417.60	1,113.60	5	15	835.20	278.40
3-1/2" " "	1925	20	2,705	.30	810.90	.18	486.54	1,297.44	5	14	908.21	389.23
3-1/2" " "	1926	20	11,275	.30	3,382.50	.18	2,029.50	5,412.00	5	13	3,517.80	1,894.20
3-1/2" " "	1927	20	7,060	.30	2,118.00	.18	1,269.00	3,384.00	5	12	2,030.40	1,353.60
3-1/2" " "	1928	20	5,985	.30	1,794.90	.18	1,076.94	2,871.84	5	11	1,579.51	1,292.33
3-1/2" " "	1929	20	2,217	.30	665.10	.18	399.06	1,064.16	5	10	532.08	532.08
3-1/2" " "	1930	20	5,263	.30	1,578.90	.18	947.34	2,526.24	5	9	1,136.81	1,389.43
3-1/2" " "	1931	20	905	.30	271.50	.18	162.90	434.40	5	8	173.76	260.64
3-1/2" " "	1933	20	751	.30	225.30	.18	135.18	360.48	5	6	108.14	252.34
3-1/2" " "	1935	20	2,592	.30	777.60	.18	466.56	1,244.16	5	4	248.83	995.33
3-1/2" " "	1936	20	690	.30	207.00	.18	124.20	331.20	5	3	49.68	281.52
3-1/2" " "	1937	20	1,085	.30	324.90	.18	194.94	519.84	5	2	51.98	467.86
3-1/2" " "	1938	20	70	.30	21.00	.18	12.60	33.60	5	1	1.68	31.92
3-1/2" " "	1939	20	2,885	.30	865.50	.18	519.30	1,384.80	5	0	—	1,384.80
2-1/2" I.D. "	1910	20	555	.23	127.65	.17	94.35	222.00	5	29	222.00	—
2-3/8" O.D. "	1909	20	2,735	.16	437.60	.14	382.90	820.50	5	39	820.50	—
2-3/8" " "	1908	20	440	.16	70.40	.14	61.60	132.00	5	36	132.00	—
2-3/8" " "	1905	20	1,544	.16	247.04	.14	216.16	463.20	5	34	463.20	—
2-3/8" " "	1906	20	1,280	.16	204.80	.14	179.20	384.00	5	33	384.00	—
2-3/8" " "	1907	20	800	.16	128.00	.14	112.00	240.00	5	32	240.00	—
2-3/8" " "	1909	20	380	.16	60.80	.14	53.20	114.00	5	30	114.00	—
2-3/8" " "	1910	20	3,080	.16	488.00	.14	427.00	915.00	5	29	915.00	—
2-3/8" " "	1911	20	920	.16	147.20	.14	128.80	276.00	5	28	276.00	—
2-3/8" " "	1912	20	3,945	.16	631.20	.14	552.30	1,183.50	5	27	1,183.50	—
2-3/8" " "	1914	20	1,520	.16	243.20	.14	212.80	456.00	5	25	456.00	—
2-3/8" " "	1915	20	1,218	.16	194.88	.14	170.52	365.40	5	24	365.40	—
2-3/8" " "	1916	20	5,044	.16	807.04	.14	706.16	1,513.20	5	23	1,513.20	—
2-3/8" " "	1917	20	4,366	.16	698.56	.14	611.24	1,309.80	5	22	1,309.80	—
2-3/8" " "	1918	20	1,510	.16	241.60	.14	211.40	455.00	5	21	455.00	—
2-3/8" " "	1919	20	385	.16	61.60	.14	53.90	115.50	5	20	115.50	—
2-3/8" " "	1920	20	865	.16	138.40	.14	119.70	258.50	5	19	245.58	12.92
2-3/8" " "	1921	20	3,625	.16	580.00	.14	507.50	1,087.50	5	18	978.75	108.75
2-3/8" " "	1922	20	2,807	.16	449.12	.14	392.98	842.10	5	17	715.79	126.31
2-3/8" " "	1923	20	1,420	.16	227.20	.14	198.80	426.00	5	16	340.80	85.20
2-3/8" " "	1924	20	1,418	.16	226.88	.14	198.52	425.40	5	15	319.05	106.35
2-3/8" " "	1925	20	2,090	.16	334.40	.14	292.60	627.00	5	14	438.90	188.10
2-3/8" " "	1926	20	1,560	.16	249.60	.14	218.40	468.00	5	13	304.20	163.80
2-3/8" " "	1927	20	1,653	.16	264.48	.14	231.42	495.90	5	12	297.54	198.36
2-3/8" " "	1928	20	804	.16	128.64	.14	112.56	241.20	5	11	132.66	108.54
2-3/8" " "	1929	20	1,363	.16	218.08	.14	190.82	408.90	5	10	204.45	204.45
2-3/8" " "	1930	20	3,985	.16	637.60	.14	557.90	1,195.50	5	9	537.98	657.52
2-3/8" " "	1932	20	530	.16	84.80	.14	74.20	159.00	5	7	53.45	105.55
2-3/8" " "	1933	20	550	.16	88.00	.14	77.00	165.00	5	6	49.50	115.50
2-3/8" " "	1935	20	1,595	.16	255.20	.14	223.30	478.50	5	4	95.70	382.80
2-3/8" " "	1936	20	1,380	.16	220.80	.14	193.20	414.00	5	3	62.10	351.90
2-3/8" " "	1937	20	780	.16	124.80	.14	109.20	234.00	5	2	23.40	210.60
2-3/8" " "	1938	20	3,671	.16	587.36	.14	513.94	1,101.30	5	1	55.07	1,046.23

[redacted]

PIPE IN MAINS (Continued)

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY	MATERIAL PRICE PER FT.	MATERIAL AMOUNT	LABOR PRICE PER FT.	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
2-3/8" O.D. Steel	1939	20	870	.16	59.20	.14	51.80	111.00	5	0	—	111.00
1-1/2" I.D. "	1906	20	520	.125	65.00	.13	67.60	132.60	5	34	132.60	—
1-1/2" " "	1911	20	250	.125	31.25	.13	32.50	63.75	5	28	63.75	—
1-1/2" " "	1912	20	150	.125	18.75	.13	19.50	38.25	5	27	38.25	—
1-1/2" " "	1915	20	110	.125	13.75	.13	14.30	28.05	5	24	28.05	—
1-1/2" " "	1916	20	730	.125	91.25	.13	94.90	186.15	5	23	186.15	—
1-1/2" " "	1918	20	219	.125	27.38	.13	28.47	55.85	5	21	55.85	—
1-1/2" " "	1920	20	640	.125	80.00	.13	83.20	163.20	5	19	155.04	8.16
1-1/2" " "	1922	20	276	.125	34.50	.13	35.88	70.38	5	16	66.30	14.08
1-1/4" " "	1926	20	142	.125	17.75	.13	18.46	36.21	5	3	5.45	30.76
1-1/4" " "	1906	20	200	.09	18.00	.11	22.00	40.00	5	35	40.00	—
1-1/4" " "	1906	20	640	.09	57.60	.11	70.40	128.00	5	34	128.00	—
1-1/4" " "	1917	20	45	.09	4.05	.11	4.95	9.00	5	22	9.00	—
1-1/4" " "	1921	20	400	.09	36.00	.11	44.00	80.00	5	18	72.00	8.00
1-1/4" " "	1923	20	396	.09	35.91	.11	43.89	79.80	5	16	63.84	15.96
1-1/4" " "	1927	20	425	.09	38.25	.11	46.75	85.00	5	12	51.00	34.00
1-1/4" " "	1932	20	740	.09	66.60	.11	81.40	148.00	5	7	51.80	96.20
					$90,748.05		$ 52,861.15	$143,589.15			$ 85,452.57	$ 59,632.21

METERS

NAME OF METERS	YEAR ACQUIRED	YEARS OF USEFUL LIFE	QUANTITY	PRICE EACH	AMOUNT	PRICE EACH	AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
American 5 LT	1906	30	1	9.20	9.20	2.00	2.00	11.20	3.33	35	11.20	—
" "	1908	30	2	9.20	18.40	2.00	4.00	22.40	3.33	31	22.40	—
" "	1909	30	1	9.20	9.20	2.00	2.00	11.20	3.33	30	11.20	—
" "	1920	30	48	9.20	441.60	2.00	96.00	537.60	3.33	19	340.14	197.46
" "	1921	30	18	9.20	165.60	2.00	36.00	201.60	3.33	18	180.64	20.96
" "	1922	30	12	9.20	110.40	2.00	24.00	134.40	3.33	17	76.08	58.32
" "	1923	30	4	9.20	36.80	2.00	8.00	44.80	3.33	16	23.87	20.93
" "	1926	30	6	9.20	55.20	2.00	12.00	67.20	3.33	15	33.57	33.63
" 5 LT	1916	30	1	9.20	9.20	2.00	2.00	11.20	3.33	23	8.58	2.62
" "	1922	30	2	9.20	18.40	2.00	4.00	22.40	3.33	17	12.68	9.72
Metric 5 LT	1906	30	1	9.20	9.20	2.00	2.00	11.20	3.33	35	11.20	—
" "	1908	30	2	9.20	18.40	2.00	4.00	22.40	3.33	34	22.40	—
" "	1907	30	4	9.20	36.80	2.00	8.00	44.80	3.33	32	44.80	—
" "	1908	30	1	9.20	9.20	2.00	2.00	11.20	3.33	31	11.20	—
" "	1918	30	1	9.20	9.20	2.00	2.00	11.20	3.33	21	7.03	3.57
" "	1919	30	3	9.20	27.60	2.00	6.00	33.60	3.33	20	22.38	11.22
" 15 S	1922	30	1	15.45	15.45	2.25	2.25	17.70	3.33	17	6.34	4.56
" 20 S	1924	30	1	20.20	20.20	2.50	2.50	22.70	3.33	7	5.05	12.04
" 25 S	1922	30	1	33.55	33.55	2.50	2.50	36.05	3.33	5	5.11	25.59
" "	1934	30	1	33.55	33.55	2.50	2.50	36.05	3.33	7	8.40	27.65
" 35 S	1930	30	2	55.75	111.50	3.10	6.20	117.70	3.33	5	6.00	30.05
" "	1936	30	2	55.75	111.50	3.10	6.20	117.70	3.33	9	35.27	82.43
" "	1938	30	1	55.75	55.75	3.10	3.10	58.85	3.33	5	11.78	106.94
" 60 S	1933	30	1	84.50	84.50	5.50	5.50	90.00	3.33	1	1.96	88.89
" "	1934	30	1	84.50	84.50	5.50	5.50	90.00	3.33	6	17.98	72.02
" 80 S	1931	30	2	108.00	216.00	10.00	20.00	236.00	3.33	5	14.98	78.01
" "	1934	30	1	108.00	108.00	10.00	10.00	118.00	3.33	8	62.87	173.13
" "	1938	30	1	108.00	108.00	10.00	10.00	118.00	3.33	5	19.65	98.35
Ironclad 15	1937	30	1	20.65	20.65	3.00	3.00	23.65	3.33	2	11.79	108.21
" 80	1937	30	1	80.00	80.00	5.50	5.50	85.50	3.33	2	1.69	79.81

METERS (Continued)

NAME OF METER	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
Metric Ironclad 250B	1939	30	1	233.00	233.00	20.00	20.00	253.00	3.33	0	—	253.00
McDonald 5 LT	1899	30	1	9.20	9.20	2.25	2.25	11.45	3.33	40	11.45	—
" "	1900	30	1	9.20	9.20	2.25	2.25	11.45	3.33	39	11.45	—
" "	1906	30	3	9.20	27.60	2.25	6.75	34.35	3.33	33	34.35	—
" "	1907	30	2	9.20	18.40	2.25	4.50	22.90	3.33	32	22.90	—
" "	1908	30	1	9.20	9.20	2.25	2.25	11.45	3.33	31	11.45	—
" 5 LT	1899	30	3	9.20	27.60	2.00	6.00	33.60	3.33	40	33.60	—
" "	1903	30	3	9.20	27.60	2.00	6.00	33.60	3.33	36	33.60	—
" "	1904	30	5	9.20	46.00	2.00	10.00	56.00	3.33	35	56.00	—
" "	1905	30	7	9.20	64.40	2.00	14.00	78.40	3.33	34	78.40	—
" "	1906	30	3	9.20	27.60	2.00	6.00	33.60	3.33	33	33.60	—
" "	1918	30	1	9.20	9.20	2.00	2.00	11.20	3.33	20	7.46	3.74
" "	1920	30	2	9.20	18.40	2.00	4.00	22.40	3.33	19	14.17	8.23
Maryland 5 LT	1925	30	7	9.20	64.40	2.00	14.00	78.40	3.33	14	36.55	41.85
" 5 LT	1908	30	3	9.20	27.60	2.00	6.00	33.60	3.33	31	33.60	—
" "	1909	30	1	9.20	9.20	2.00	2.00	11.20	3.33	30	11.20	—
" "	1916	30	1	9.20	9.20	2.00	2.00	11.20	3.33	25	8.58	2.62
" "	1919	30	5	9.20	46.00	2.00	10.00	56.00	3.33	20	37.30	18.70
" "	1925	30	11	9.20	101.20	2.00	22.00	123.20	3.33	14	87.44	65.76
Pittsburgh Ironclad No.1	1909	30	1	8.71	8.71	2.00	2.00	10.71	3.33	30	10.71	—
" " "	1922	30	1	8.71	8.71	2.00	2.00	10.71	3.33	17	6.06	4.65
" " "	1923	30	104	8.71	905.84	2.00	208.00	1,113.84	3.33	16	593.45	520.39
" " "	1926	30	1	8.71	8.71	2.00	2.00	10.71	3.33	13	5.35	5.36
" " "	1927	30	1	8.71	8.71	2.00	2.00	10.71	3.33	12	4.29	6.42
Rmco No.1	1922	30	42	12.00	504.00	2.25	94.50	598.50	3.33	7	139.51	458.99
" "	1923	30	30	12.00	360.00	2.25	67.50	427.50	3.33	6	85.41	342.09
" "	1925	30	3	12.00	36.00	2.25	6.75	42.75	3.33	4	5.68	37.08
" No.2	1922	30	2	21.45	42.90	2.50	5.00	47.90	3.33	7	11.17	36.73
" "	1923	30	2	21.45	42.90	2.50	5.00	47.90	3.33	6	9.57	38.33
" No.3	1924	30	1	94.12	94.12	6.00	6.00	100.12	3.33	5	16.67	83.45
" No.4	1924	30	1	171.78	171.78	15.00	15.00	186.78	3.33	5	31.10	155.68
" No.4-1/2	1922	30	1	190.00	190.00	20.00	20.00	210.00	3.33	7	48.96	161.05
" "	1924	30	1	190.00	190.00	20.00	20.00	210.00	3.33	5	34.97	175.03
" No.5	1926	30	1	333.00	333.00	25.00	25.00	358.00	3.33	3	35.76	322.24
" "	1927	30	1	333.00	333.00	25.00	25.00	358.00	3.33	2	23.84	334.16
Sprague 1A	1907	30	3	9.65	28.95	2.00	6.00	34.95	3.33	28	34.95	—
" "	1909	30	100	9.65	965.00	2.00	200.00	1,165.00	3.33	30	1,165.00	—
" "	1910	30	2	9.65	19.30	2.00	4.00	23.30	3.33	29	22.50	.80
" "	1911	30	112	9.65	1,080.80	2.00	224.00	1,304.80	3.33	28	1,216.80	88.20
" "	1912	30	29	9.65	279.85	2.00	58.00	337.85	3.33	27	303.76	34.09
" "	1913	30	93	9.65	897.45	2.00	186.00	1,083.45	3.33	26	938.05	145.40
" "	1914	30	29	9.65	279.85	2.00	60.00	339.85	3.33	25	290.96	48.54
" "	1915	30	12	9.65	115.80	2.00	24.00	139.80	3.33	24	111.73	28.07
" "	1916	30	73	9.65	704.45	2.00	146.00	850.45	3.33	23	681.36	169.09
" "	1917	30	38	9.65	366.70	2.00	76.00	442.70	3.33	22	324.32	118.38
" "	1918	30	5	9.65	48.25	2.00	10.00	58.25	3.33	21	40.75	17.50
" "	1919	30	15	9.65	144.75	2.00	30.00	174.75	3.33	20	116.38	58.37
" "	1920	30	20	9.65	193.00	2.00	40.00	233.00	3.33	19	147.42	85.58
" "	1921	30	18	9.65	173.70	2.00	36.00	209.70	3.33	18	125.69	84.01
" "	1922	30	50	9.65	482.50	2.00	100.00	582.50	3.33	17	329.75	252.75
" "	1923	30	23	9.65	221.95	2.00	46.00	267.95	3.33	16	142.76	125.19
" "	1924	30	105	9.65	1,013.25	2.00	210.00	1,223.25	3.33	15	611.01	612.24
" "	1925	30	159	9.65	1,534.35	2.00	318.00	1,852.35	3.33	14	863.57	988.78

METERS (Continued)

NAME OF METER	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
Sprague 1A (Ctd.)	1926	30	207	9.65	1,997.55	2.00	414.00	2,411.55	3.33	13	1,043.96	1,367.59
" "	1927	30	93	9.65	897.45	2.00	186.00	1,083.45	3.33	12	432.95	650.50
" "	1928	30	60	9.65	579.00	2.00	120.00	699.00	3.33	11	256.04	442.96
" "	1929	30	163	9.65	1,572.95	2.00	326.00	1,898.95	3.33	10	632.35	1,266.60
" "	1930	30	187	9.65	1,804.55	2.00	374.00	2,178.55	3.33	9	652.91	1,525.64
" "	1931	30	167	9.65	1,611.55	2.00	334.00	1,945.55	3.33	8	518.29	1,427.26
" "	1932	30	62	9.65	598.30	2.00	124.00	722.30	3.33	7	168.37	553.93
" "	1933	30	25	9.65	241.25	2.00	50.00	291.25	3.33	6	58.19	233.06
" "	1934	30	91	9.65	878.15	2.00	182.00	1,060.15	3.33	5	176.51	883.64
" "	1935	30	115	9.65	1,109.75	2.00	230.00	1,339.75	3.33	4	178.45	1,161.30
" "	1936	30	169	9.65	1,630.85	2.00	338.00	1,968.85	3.33	3	196.69	1,772.16
" "	1937	30	290	9.65	2,798.50	2.00	580.00	3,378.50	3.33	2	225.01	3,153.49
" "	1938	30	366	9.65	3,531.90	2.00	732.00	4,263.90	3.33	1	141.99	4,121.91
" "	1939	30	50	9.65	482.50	2.00	100.00	582.50	3.33	0	—	582.50
" No.2	1914	30	1	12.75	12.75	2.25	2.25	15.00	3.33	25	12.49	2.51
" "	1920	30	2	12.75	25.50	2.25	4.50	30.00	3.33	19	18.98	11.02
" "	1924	30	3	12.75	38.25	2.25	6.75	45.00	3.33	15	22.48	22.52
" "	1926	30	4	12.75	51.00	2.25	9.00	60.00	3.33	13	25.97	34.03
" "	1927	30	3	12.75	38.25	2.25	6.75	45.00	3.33	12	17.98	27.02
" "	1928	30	1	12.75	12.75	2.25	2.25	15.00	3.33	11	5.49	9.51
" "	1931	30	19	12.75	242.25	2.25	42.75	285.00	3.33	8	75.92	209.08
" "	1932	30	53	12.75	675.75	2.25	119.25	795.00	3.33	7	185.31	609.69
" "	1933	30	1	12.75	12.75	2.25	2.25	15.00	3.33	6	3.00	12.00
" "	1934	30	19	12.75	242.25	2.25	42.75	285.00	3.33	5	47.45	237.55
" "	1937	30	1	12.75	12.75	2.25	2.25	15.00	3.33	2	1.00	14.00
" No.3	1911	30	1	16.92	16.92	2.50	2.50	19.42	3.33	28	18.11	1.31
" "	1920	30	2	16.92	33.84	2.50	5.00	38.84	3.33	19	24.57	14.27
" "	1924	30	3	16.92	50.76	2.50	7.50	58.26	3.33	15	29.10	29.16
" "	1926	30	2	16.92	33.84	2.50	5.00	38.84	3.33	13	16.81	22.03
" "	1927	30	2	16.92	33.84	2.50	5.00	38.84	3.33	12	15.52	23.32
" "	1928	30	1	16.92	16.92	2.50	2.50	19.42	3.33	11	7.11	12.31
" "	1929	30	3	16.92	50.76	2.50	7.50	58.26	3.33	10	19.40	38.86
" "	1930	30	2	16.92	33.84	2.50	5.00	38.84	3.33	9	11.64	27.20
" "	1931	30	6	16.92	101.52	2.50	15.00	116.52	3.33	8	31.04	85.48
					$ 36,136.42		$7,108.25	$ 43,244.67			$ 15,296.63	$ 27,948.04

SERVICES

ITEM		YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL			LABOR		TOTAL VALUE	DEPRECIATION			REMAINING VALUE
				QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	QUANTITY		RATE, %	YEARS	AMOUNT	
SERVICES	No.												
3/4"	1	1899	20	37	.08	2.96	.15	5.55	8.51	5	40	8.51	—
1"	3	1899	20	111	.09	9.99	.15	16.65	26.64	5	40	26.64	—
1"	1	1900	20	37	.09	3.33	.15	5.55	8.88	5	39	8.88	—
1-1/4"	6	1900	20	222	.11	24.42	.15	33.30	57.72	5	39	57.72	—
"	10	1901	20	370	.11	40.70	.15	55.50	96.20	5	38	96.20	—
"	14	1902	20	518	.11	56.98	.15	77.70	134.68	5	37	134.68	—
3/4"	1	1903	20	37	.08	2.96	.15	5.55	8.51	5	36	8.51	—
1"	2	1903	20	74	.09	6.66	.15	11.10	17.76	5	36	17.76	—
1"	7	1904	20	259	.09	23.31	.15	38.85	62.16	5	35	62.16	—
3/4"	2	1904	20	74	.08	5.92	.15	11.10	17.02	5	34	17.02	—
1"	5	1905	20	185	.09	16.65	.15	27.75	44.40	5	34	44.40	—
1-1/4"	2	1905	20	74	.11	8.14	.15	11.10	19.24	5	34	19.24	—
1"	6	1906	20	222	.09	19.98	.15	33.30	53.28	5	33	53.28	—
1"	7	1907	20	259	.09	23.31	.15	38.85	62.16	5	32	62.16	—
1-1/4"	2	1907	20	74	.11	8.14	.15	11.10	19.24	5	32	19.24	—
1"	7	1908	20	259	.09	23.31	.15	38.85	62.16	5	31	62.16	—
1"	53	1909	20	1,961	.09	176.49	.15	294.15	470.64	5	30	470.64	—
1-1/4"	51	1909	20	1,887	.11	207.57	.15	282.05	490.62	5	30	490.62	—
"	2	1910	20	74	.11	8.14	.15	11.10	19.24	5	29	19.24	—
1"	47	1911	20	1,739	.09	156.51	.15	260.85	417.36	5	28	417.36	—
1-1/4"	30	1911	20	1,850	.11	203.50	.15	277.50	481.00	5	28	481.00	—
1-1/2"	3	1911	20	111	.13	14.43	.15	16.65	31.08	5	28	31.08	—
2"	1	1911	20	37	.16	5.92	.19	7.03	12.95	5	28	12.95	—
1"	11	1912	20	407	.09	36.63	.15	61.05	97.68	5	27	97.68	—
1-1/4"	7	1912	20	259	.11	28.49	.15	38.85	67.34	5	27	67.34	—
2"	1	1912	20	37	.16	5.92	.19	7.03	12.95	5	27	12.95	—
1"	32	1913	20	1,443	.09	129.87	.15	216.45	346.32	5	26	346.32	—
1-1/4"	45	1913	20	1,665	.11	183.15	.15	249.75	432.90	5	26	432.90	—
1-1/2"	2	1913	20	74	.13	9.62	.15	11.10	20.72	5	26	20.72	—
1"	42	1914	20	1,554	.09	139.86	.15	233.10	372.96	5	25	372.96	—
1-1/4"	26	1914	20	962	.11	105.82	.15	144.30	250.12	5	25	250.12	—
1-1/2"	2	1914	20	74	.13	9.62	.15	11.10	20.72	5	25	20.72	—
2"	1	1914	20	37	.16	5.92	.19	7.03	12.95	5	25	12.95	—
1"	23	1915	20	851	.09	76.59	.15	127.65	204.24	5	24	204.24	—
1-1/4"	17	1915	20	629	.11	69.19	.15	94.35	163.54	5	24	163.54	—
1-1/2"	5	1915	20	185	.13	24.05	.15	27.75	51.80	5	24	51.80	—
2"	1	1915	20	37	.16	5.92	.19	7.03	12.95	5	24	12.95	—
1"	51	1916	20	1,147	.09	103.23	.15	172.05	275.28	5	23	275.28	—
1-1/4"	37	1916	20	2,109	.11	231.99	.15	316.35	548.34	5	23	548.34	—
1-1/2"	5	1916	20	185	.13	24.05	.15	27.75	51.80	5	23	51.80	—
2"	2	1916	20	74	.16	11.84	.19	14.06	25.90	5	23	25.90	—
1"	28	1917	20	1,036	.09	93.24	.15	155.40	248.64	5	22	248.64	—
1-1/4"	32	1917	20	1,184	.11	130.24	.15	177.60	307.84	5	22	307.84	—
1-1/2"	5	1917	20	185	.13	24.05	.15	27.75	51.80	5	22	51.80	—
2"	2	1917	20	74	.16	11.84	.19	14.06	25.90	5	22	25.90	—
1"	20	1918	20	740	.09	66.60	.15	111.00	177.60	5	21	177.60	—
1-1/4"	23	1918	20	851	.11	93.61	.15	127.65	221.26	5	21	221.26	—
1-1/2"	3	1918	20	111	.13	14.43	.15	16.65	31.08	5	21	31.08	—
2"	2	1918	20	74	.16	11.84	.19	14.06	25.90	5	21	25.90	—

SERVICES (Ctd.)

ITEM		YEAR acquired	YEARS OF USEFUL LIFE	MATERIAL			LABOR		TOTAL VALUE	DEPRECIATION			REMAINING VALUE
SERVICES (Ctd.)	No.			QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT		RATE, %	YEARS	TOTAL	
1"	27	1919	20	999	.09	89.91	.15	149.85	239.76	5	20	239.76	—
1-1/4"	37	1919	20	1,369	.11	150.59	.15	205.35	355.94	5	20	355.94	—
1-1/2"	1	1919	20	37	.13	4.81	.15	5.55	10.36	5	20	10.36	—
2"	1	1919	20	37	.16	5.92	.19	7.03	12.95	5	20	12.95	—
1"	25	1920	20	925	.09	83.25	.15	138.75	222.00	5	19	210.90	11.10
1-1/4"	37	1920	20	1,369	.11	150.59	.15	205.35	355.94	5	19	338.14	17.80
1-1/2"	1	1920	20	37	.13	4.81	.15	5.55	10.36	5	19	9.84	.52
2"	3	1920	20	111	.16	17.76	.19	21.09	38.85	5	19	36.91	1.94
1"	19	1921	20	703	.09	63.27	.15	105.45	168.72	5	18	151.85	16.87
1-1/4"	30	1921	20	1,110	.11	122.10	.15	166.50	288.60	5	18	259.74	28.86
1-1/2"	4	1921	20	148	.13	19.24	.15	22.20	41.44	5	18	37.30	4.14
2"	2	1921	20	74	.16	11.84	.19	14.06	25.90	5	18	23.31	2.59
1"	31	1922	20	1,147	.09	103.23	.15	172.05	275.28	5	17	233.99	41.29
1-1/4"	46	1922	20	1,776	.11	195.36	.15	266.40	461.76	5	17	392.50	69.26
1-1/2"	3	1922	20	111	.13	14.43	.15	16.65	31.08	5	17	26.42	4.66
2"	3	1922	20	111	.16	17.76	.19	21.09	38.85	5	17	33.02	5.83
1"	28	1923	20	1,036	.09	93.24	.15	155.40	248.64	5	16	198.91	49.73
1-1/4"	84	1923	20	3,108	.11	341.88	.15	466.20	808.08	5	16	646.46	161.62
1-1/2"	1	1923	20	37	.13	4.81	.15	5.55	10.36	5	16	8.29	2.07
2"	2	1923	20	74	.16	11.84	.19	14.06	25.90	5	16	20.72	5.18
1"	15	1924	20	555	.09	49.95	.15	83.25	133.20	5	15	99.90	33.30
1-1/4"	106	1924	20	3,922	.11	431.42	.15	588.30	1,019.72	5	15	764.79	254.93
1-1/2"	4	1924	20	148	.13	19.24	.15	22.20	41.44	5	15	31.08	10.36
2"	1	1924	20	37	.16	5.92	.19	7.03	12.95	5	15	9.71	3.24
1-1/4"	168	1925	20	6,216	.11	683.76	.15	932.40	1,616.16	5	14	1,131.31	484.85
1-1/2"	1	1925	20	37	.13	4.81	.15	5.55	10.36	5	14	7.25	3.11
2"	2	1925	20	74	.16	11.84	.19	14.06	25.90	5	14	18.13	7.77
1-1/4"	180	1926	20	6,660	.11	732.60	.15	999.00	1,731.60	5	13	1,125.54	606.06
1-1/2"	2	1926	20	74	.13	9.62	.15	11.10	20.72	5	13	15.47	7.25
2"	2	1926	20	74	.16	11.84	.19	14.06	25.90	5	13	16.84	9.06
1-1/4"	90	1927	20	3,330	.11	366.30	.15	499.50	865.80	5	12	519.48	346.32
1-1/2"	3	1927	20	111	.13	14.43	.15	16.65	31.08	5	12	18.65	12.43
1-1/4"	99	1928	20	3,663	.11	402.93	.15	549.45	952.38	5	11	523.81	428.57
1-1/2"	3	1928	20	111	.13	14.43	.15	16.65	31.08	5	11	17.09	13.99
1-1/4"	155	1929	20	5,661	.11	622.71	.15	849.15	1,471.86	5	10	735.93	735.93
1-1/2"	3	1929	20	111	.13	14.43	.15	16.65	31.08	5	10	15.54	15.54
2"	1	1929	20	37	.16	5.92	.19	7.03	12.95	5	10	6.48	6.47
1-1/4"	140	1930	20	5,180	.11	569.80	.15	777.00	1,346.80	5	9	606.06	740.74
2"	2	1930	20	74	.16	11.84	.19	14.06	25.90	5	9	11.66	14.24
1-1/4"	136	1931	20	5,032	.11	553.52	.15	754.80	1,308.32	5	8	523.33	784.99
1-1/2"	5	1931	20	185	.13	24.05	.15	27.75	51.80	5	8	20.72	31.08
2"	6	1931	20	222	.16	35.52	.19	42.18	77.70	5	8	31.08	46.62
3"	1	1931	20	35	.40	14.00	.40	14.00	28.00	5	8	11.20	16.80
6"	1	1931	30	54	1.10	59.40	.90	48.60	108.00	3.33	8	28.77	79.23
1-1/4"	128	1932	20	4,736	.11	520.96	.15	710.40	1,231.36	5	7	430.98	800.38
1-1/2"	7	1932	20	259	.13	33.67	.15	38.85	72.52	5	7	25.38	47.14
2"	2	1932	20	74	.16	11.84	.19	14.06	25.90	5	7	9.07	16.83
3"	1	1932	20	35	.40	14.00	.40	14.00	28.00	5	7	9.80	18.20
4"	1	1932	30	50	.55	27.50	.82	26.00	53.50	3.33	7	12.47	41.03

SERVICES (Ctd.)

ITEM		YEAR	YEARS OF	MATERIAL			LABOR		TOTAL	DEPRECIATION			REMAINING
		ACQUIRED	USEFUL LIFE	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	VALUE	RATE, %	YEARS	TOTAL	VALUE
SERVICES (Ctd.)	No.												
1-1/4"	46	1932	20	1,702	.11	187.22	.15	255.30	442.52	5	6	132.76	309.76
1-1/2"	3	1932	20	111	.13	14.43	.15	16.65	31.08	5	6	9.32	21.76
2"	1	1932	20	37	.16	5.92	.19	7.03	12.95	5	6	3.89	9.06
1-1/4"	85	1934	20	3,145	.11	345.95	.15	471.75	817.70	5	5	204.43	613.27
1-1/2"	3	1934	20	111	.13	14.43	.15	16.65	31.08	5	5	7.77	23.31
2"	3	1934	20	111	.16	17.76	.19	21.09	38.85	5	5	9.71	29.14
3"	4	1934	20	148	.40	59.20	.40	59.20	118.40	5	5	29.60	88.80
4"	1	1934	20	37	.55	20.35	.52	19.24	39.59	3.33	5	6.59	33.00
1-1/4"	98	1935	20	3,626	.11	398.86	.15	543.90	942.76	5	4	188.55	754.21
2"	3	1935	20	111	.16	17.76	.19	21.09	38.85	5	4	7.77	31.08
1-1/4"	117	1936	20	4,329	.11	476.19	.15	649.35	1,125.54	5	3	168.83	956.71
1-1/2"	2	1936	20	74	.13	9.62	.15	11.10	20.72	5	3	3.11	17.61
2"	3	1936	20	111	.16	17.76	.19	21.09	38.85	5	3	5.83	33.02
3"	1	1936	20	35	.40	14.00	.40	14.00	28.00	5	3	4.20	23.80
4"	1	1936	20	50	.55	27.50	.52	26.00	53.50	3.33	3	5.34	48.16
1-1/4"	182	1937	20	5,624	.11	618.64	.15	843.60	1,462.24	5	2	146.22	1,316.02
1-1/2"	3	1937	20	111	.13	14.43	.15	16.65	31.08	5	2	3.11	27.97
2"	3	1937	20	111	.16	17.76	.19	21.09	38.85	5	2	3.89	34.96
4"	1	1937	20	50	.55	27.50	.52	26.00	53.50	3.33	2	3.56	49.94
1-1/4"	248	1938	20	9,936	.11	1,092.96	.15	1,487.40	2,578.36	5	1	128.92	2,449.44
2"	1	1938	20	37	.16	5.92	.19	7.03	12.95	5	1	.65	12.30
1-1/4"	37	1939	20	1,369	.11	150.59	.15	205.35	383.94	5	0	—	383.94
						$ 13,030.30		18,015.92	31,046.22			$ 17,769.64	13,276.58

CAST IRON FITTINGS IN MAINS

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY, LBS.	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
Cast Iron Fittings	1906	75	2,490	.06	149.40	.04	99.60	249.00	1.33	32	109.81	139.19
	1907	75	750	.06	45.00	.04	30.00	75.00	1.33	32	31.99	43.01
	1908	75	94	.06	5.64	.04	3.76	9.40	1.33	31	3.88	5.52
	1909	75	7,136	.06	428.16	.04	285.44	713.60	1.33	30	285.37	428.23
	1910	75	2,923	.06	175.38	.04	116.92	292.30	1.33	29	112.97	179.33
	1911	75	4,183	.06	250.98	.04	167.32	418.30	1.33	28	156.11	262.19
	1912	75	166	.06	9.96	.04	6.64	16.60	1.33	27	5.97	10.63
	1913	75	493	.06	29.58	.04	19.72	49.30	1.33	26	17.08	32.22
	1914	75	1,345	.06	80.70	.04	53.80	134.50	1.33	25	44.82	89.68
	1915	75	315	.06	18.90	.04	12.60	31.50	1.33	24	10.06	21.42
	1916	75	2,481	.06	148.86	.04	99.24	248.10	1.33	23	76.04	172.06

CAS IRON FITTINGS IN MAINS (Continv)

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY, LBS.	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
Cast Iron Fittings (Ctd.)	1917	75	120	.06	7.20	.04	4.80	12.00	1.33	22	3.52	8.48
	1922	75	43	.06	2.58	.04	1.72	4.30	1.33	17	.97	3.33
	1925	75	1,253	.06	75.18	.04	50.12	125.30	1.33	16	26.71	98.59
	1926	75	14	.06	.84	.04	.56	1.40	1.33	15	.28	1.12
	1928	75	1,647	.06	98.82	.04	65.88	164.70	1.33	15	28.53	136.17
	1927	75	281	.06	16.86	.04	11.24	28.10	1.33	12	4.49	23.61
	1928	75	3,231	.06	193.86	.04	129.24	323.10	1.33	11	47.37	276.73
	1929	75	86	.06	5.16	.04	3.44	8.60	1.33	10	1.15	7.45
	1930	75	48	.06	2.88	.04	1.92	4.80	1.33	9	.58	4.22
	1931	75	21	.06	1.26	.04	.84	2.10	1.33	8	.22	1.88
	1935	75	166	.06	9.96	.04	6.64	16.60	1.33	6	1.33	15.27
	1936	75	34	.06	2.04	.04	1.36	3.40	1.33	4	.18	3.22
	1936	75	238	.06	14.28	.04	9.52	23.80	1.33	3	.95	22.85
	1937	75	3,239	.06	194.34	.04	129.56	323.90	1.33	2	8.64	315.26
	1938	75	414	.06	24.84	.04	16.56	41.40	1.33	1	.55	40.85
					$ 1,992.66		$ 1,328.44	$ 3,321.10			$ 979.29	$ 2,341.81

STEEL FITTINGS IN MAINS

			QUANTITY									
2" T's	1910	20	5	.32	1.60	.45	2.25	3.85	5	19	3.85	—
2" T's	1916	20	1	.32	.32	.45	.45	.77	5	18	.77	—
2" T's	1921	20	2	.32	.64	.45	.90	1.54	5	18	1.39	.15
2" T's	1930	20	1	.32	.32	.45	.45	.77	5	9	.35	.42
2" T's	1935	20	1	.32	.32	.45	.45	.77	5	4	.15	.62
2" T's	1938	20	2	.32	.64	.45	.90	1.54	5	1	.08	1.46
3" T's	1910	20	31	.81	25.11	.60	18.60	43.71	5	19	43.71	—
3" T's	1911	20	1	.81	.81	.60	.60	1.41	5	18	1.41	—
3" T's	1916	20	6	.81	4.86	.60	3.60	8.46	5	23	8.46	—
3" T's	1922	20	1	.81	.81	.60	.60	1.41	5	17	1.20	.21
3" T's	1926	20	6	.81	4.86	.60	3.60	8.46	5	13	5.50	2.96
3" T's	1927	20	3	.81	2.43	.60	1.80	4.23	5	12	2.54	1.69
3" T's	1929	20	3	.81	2.43	.60	1.80	4.23	5	10	2.12	2.11
3" T's	1935	20	2	.81	1.62	.60	1.20	2.82	5	4	.56	2.26
3" T's	1937	20	1	.81	.81	.60	.60	1.41	5	2	.14	1.27
4" T's	1910	20	3	1.49	4.47	1.00	3.00	7.47	5.33	19	7.22	.25
4" T's	1928	20	1	1.49	1.49	1.00	1.00	2.49	5.33	11	.91	1.58
4" T's	1930	20	4	1.49	5.96	1.00	4.00	9.96	5.33	9	2.99	6.97
6" T's	1937	20	1	14.91	14.91	5.00	5.00	19.91	5.33	2	1.33	18.58
6" T's	1938	20	2	14.91	29.82	5.00	10.00	39.82	5.33	1	1.33	38.49
3" x 3" x 2" T's	1909	20	94	.90	84.60	.60	56.40	141.00	5	20	141.00	—
2" crosses	1909	20	13	.44	5.72	.70	9.10	14.82	5	20	14.82	—
2" "	1910	20	2	.44	.88	.70	1.40	2.28	5	20	2.28	—
2" "	1916	20	1	.44	.44	.70	.70	1.14	5	23	1.14	—
2" "	1917	20	1	.44	.44	.70	.70	1.14	5	22	1.14	—
2" "	1921	20	1	.44	.44	.70	.70	1.14	5	18	1.03	.11
2" "	1922	20	4	.44	1.76	.70	2.80	4.56	5	17	3.88	.68
2" "	1924	20	3	.44	1.32	.70	2.10	3.42	5	15	2.57	.85
2" "	1930	20	2	.44	.88	.70	1.40	2.28	5	9	1.03	1.25
2" "	1935	20	1	.44	.44	.70	.70	1.14	5	4	.23	.91
3" "	1909	20	55	1.08	59.40	1.00	55.00	114.40	5	20	114.40	—
3" "	1911	20	7	1.08	7.56	1.00	7.00	14.56	5	23	14.56	—
3" "	1915	20	2	1.08	2.16	1.00	2.00	4.16	5	24	4.16	—

STEEL FITTINGS IN MAINS (CONTINUED)

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	QUANTITY	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
3" crosses	1916	20	7	1.08	7.56	1.00	7.00	14.56	5	23	14.56	—
3" "	1917	20	5	1.08	5.40	1.00	5.00	10.40	5	22	10.40	—
3" "	1919	20	1	1.08	1.08	1.00	1.00	2.08	5	20	2.08	—
3" "	1922	20	2	1.08	2.16	1.00	2.00	4.16	5	17	3.54	.62
3" "	1924	20	1	1.08	1.08	1.00	1.00	2.08	5	15	1.56	.52
3" "	1925	20	1	1.08	1.08	1.00	1.00	2.08	5	14	1.46	.62
3" "	1926	20	7	1.08	7.56	1.00	7.00	14.56	5	13	9.46	5.10
3" "	1927	20	7	1.08	7.56	1.00	7.00	14.56	5	12	8.74	5.82
3" "	1928	20	5	1.08	5.40	1.00	5.00	10.40	5	11	5.72	4.68
3" "	1929	20	3	1.08	3.24	1.00	3.00	6.24	5	10	3.12	3.12
3" "	1930	20	3	1.08	3.24	1.00	3.00	6.24	5	9	2.81	3.43
3" "	1935	20	2	1.08	2.16	1.00	2.00	4.16	5	4	.83	3.33
4" "	1909	20	1	1.08	1.08	1.00	1.00	2.08	5	0	—	2.08
6" "	1928	20	5	1.95	9.75	1.60	8.00	17.75	5.33	20	17.75	—
8" "	1937	20	2	1.95	3.90	1.60	3.20	7.10	5.33	11	2.60	4.50
3" to 2" reducers	1938	20	1	29.34	29.34	7.00	7.00	36.34	5.33	2	2.42	33.92
3" to 2" "	1914	20	4	29.34	117.36	7.00	28.00	145.36	5.33	1	4.84	140.52
3" to 2" "	1916	20	35	.45	14.85	.40	13.20	28.05	5.33	26	24.31	3.74
3" to 2" "	1918	20	1	.45	.45	.40	.40	.85	5.33	25	.71	.14
3" to 2" "	1921	20	2	.45	.90	.40	.80	1.70	5.33	23	1.30	.40
3" to 2" "	1922	20	1	.45	.45	.40	.40	.85	5.33	22	.89	.26
3" to 2" "	1923	20	2	.45	.90	.40	.80	1.70	5.33	18	1.02	.68
3" to 2" "	1925	20	1	.45	.45	.40	.40	.85	5.33	17	.48	.37
3" to 2" "	1926	20	3	.45	1.35	.40	1.20	2.55	5.33	16	1.36	1.19
3" to 2" "	1928	20	2	.45	.90	.40	.80	1.70	5.33	14	.90	.45
3" to 2" "	1929	20	2	.45	.90	.40	.80	1.70	5.33	13	.74	.96
3" to 2" "	1932	20	4	.45	1.80	.40	1.60	3.40	5.33	11	.62	1.08
3" to 2" "	1937	20	1	.45	.45	.40	.40	.85	5.33	10	1.13	2.27
3" to 2" "	1939	20	2	.45	.90	.40	.80	1.70	5.33	7	.20	.65
6" to 3" "	1910	20	3	.45	1.35	.40	1.20	2.55	5.33	1	.11	1.69
6" to 4" "	1910	20	3	2.23	6.69	1.00	3.00	9.69	5.33	0	—	2.55
8" to 3" "	1910	20	4	2.23	8.92	1.00	4.00	12.92	5.33	29	9.37	.32
2" - 45° bends	1910	20	1	2.23	2.23	2.00	2.00	4.23	5.33	28	12.49	.86
2" - " "	1922	20	4	.30	1.20	.30	1.20	2.40	5	28	4.08	.32
2" - 45° "	1924	20	2	.30	.60	.30	.60	1.20	5	27	2.65	.15
2" - 45° "	1928	20	2	.30	.60	.30	.60	1.20	5	17	1.27	.15
2" - " "	1930	20	2	.30	.60	.30	.60	1.20	5	15	.90	.30
2" - " "	1933	20	4	.30	.60	.30	.60	1.20	5	11	.66	.54
2" - " "	1938	20	2	.30	1.20	.30	1.20	2.40	5	9	.54	.66
3" - " "	1918	20	6	.30	.60	.30	.60	1.20	5	6	.72	1.68
3" - " "	1911	20	1	.74	4.44	.45	2.70	7.14	5	1	.06	1.14
3" - " "	1920	20	4	.74	.74	.45	.45	1.19	5	29	7.14	—
3" - " "	1922	20	2	.74	2.96	.45	1.80	4.76	5	28	1.19	—
3" - " "	1926	20	2	.74	1.48	.45	.90	2.38	5	19	4.52	.24
3" - " "	1927	20	6	.74	1.48	.45	.90	2.38	5	16	1.90	.48
3" - " "	1928	20	2	.74	4.44	.45	2.70	7.14	5	15	1.55	.83
3" - " "	1930	20	2	.74	1.48	.45	.90	2.38	5	12	4.28	2.86
3" - " "	1935	20	1	.74	1.48	.45	.90	2.38	5	11	1.31	1.07
4" - " "	1937	20	4	.74	.74	.45	.45	1.19	5	9	1.07	1.31
4" - " "	1910	30	3	.74	2.96	.45	1.80	4.76	5	4	.24	.96
				1.56	4.68	.70	2.10	6.18	3.33	29	.48	4.22
												.21

STEEL FITTINGS IN MAINS (Continued)

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
4" - 45° bends	1928	50	5	1.36	6.80	.70	3.50	10.30	3.33	11	3.78	6.52
8" - 45° "	1936	50	2	12.09	24.18	2.00	4.00	28.18	3.33	3	2.82	25.36
					$ 585.82		$ 352.70	$ 938.52			$ 881.61	$ 356.91
VALVES FOR SERVICES												
8" gate valve and box	1939	75	1	28.00	28.00	5.00	5.00	33.00	1.33	0	—	33.00
6" plug " " "	1939	75	1	40.21	40.21	5.00	5.00	45.21	1.33	0	—	45.21
4" gate " " "	1936	75	1	17.50	17.50	4.25	4.25	21.75	1.33	3	.87	20.88
4" plug " " "	1937	75	2	12.82	25.64	4.25	8.50	34.14	1.33	2	.91	33.23
3" stop cocks	1931	20	1	5.60	5.60	3.50	3.50	9.10	5.	8	3.64	5.46
3" " "	1932	20	1	5.60	5.60	3.50	3.50	9.10	5	7	3.19	5.91
3" " "	1933	20	1	5.60	5.60	3.50	3.50	9.10	5	6	2.73	6.37
3" gate valve and box	1934	75	2	13.75	27.50	3.50	7.00	34.50	1.33	3	2.30	32.20
3" plug " " "	1936	75	1	5.58	5.58	3.50	3.50	9.08	1.33	3	.36	8.72
3" " " "	1937	75	1	5.58	5.58	3.50	3.50	9.08	1.33	2	.24	8.84
1-1/4" curb cocks	1920	20	30	.96	48.00	.50	25.00	73.00	5	19	69.35	3.65
					$ 214.51		$ 72.25	$ 287.06			$ 83.89	$ 203.17
VALVES IN MAINS												
1-1/2" plug valve	1909	75	2	1.61	3.22	.50	1.00	4.22	1.33	30	1.68	2.53
2" " "	1909	75	8	2.25	17.84	1.00	8.00	25.84	1.33	30	10.33	15.51
2" gate valve	1909	75	3	7.66	22.98	1.00	3.00	25.98	1.33	30	10.39	15.59
3" plug "	1908	75	18	5.58	100.44	3.50	63.00	163.44	1.33	30	65.36	98.08
3" gate "	1909	75	1	10.72	10.72	3.50	3.50	14.22	1.33	30	5.69	8.53
4" plug "	1909	75	10	12.82	128.20	4.25	42.50	170.70	1.33	30	68.28	102.44
4" gate "	1909	75	1	14.56	14.56	4.25	4.25	18.81	1.33	30	7.52	11.29
6" plug "	1909	75	4	37.21	148.84	5.00	20.00	168.84	1.33	30	67.52	101.32
6" gate "	1909	75	3	24.90	74.70	5.00	15.00	89.70	1.33	30	35.87	53.83
8" plug "	1909	75	1	45.36	45.36	7.00	7.00	52.36	1.33	30	20.94	31.42
8" gate "	1909	75	3	41.36	124.08	7.00	21.00	145.08	1.33	30	58.02	87.06
3" plug "	1911	75	3	5.58	16.74	3.50	10.50	27.24	1.33	23	10.17	17.07
4" " "	1916	75	1	[illegible]	12.82	4.25	4.25	17.07	1.33	23	5.23	11.84
4" dresser coupling	1916	30	5	2.04	10.20	.75	3.75	13.95	3.33	23	10.69	3.26
4" plug valve	1917	75	3	12.82	38.46	4.25	12.75	51.21	1.33	22	15.01	36.20
4" " "	1923	75	2	12.82	25.64	4.25	8.50	34.14	1.33	16	7.28	26.86
3" " "	1926	75	3	5.58	16.74	3.50	10.50	27.24	1.33	13	4.72	22.52
4" Dresser coupling	1928	30	1	2.04	2.04	.75	.75	2.79	3.33	11	1.02	1.77
4" plug valve	1931	75	2	12.82	25.64	4.25	8.50	34.14	1.33	8	5.04	29.10
4" " "	1933	75	1	12.80	12.80	4.25	4.25	17.05	1.33	6	1.36	15.69
3" Dresser coupling	1937	30	2	1.31	2.62	.65	1.30	3.92	3.33	2	.26	3.66
4" "	1937	30	4	2.04	8.16	.75	3.00	11.16	3.33	2	.74	10.42
					$ 862.80		$ 256.30	$ 1,119.10			$ 411.71	$ 707.39

CASING UNDER RAILROAD TRACKS AND PAVING

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY, FT.	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
10" casing	1938	30	285	1.30	344.50	2.00	530.00	874.50	3.33	4	116.57	757.93
6" "	1900	30	40	.65	26.00	1.55	62.00	88.00	3.33	39	88.00	—
6" "	1918	30	40	.65	26.00	1.55	62.00	88.00	3.33	23	67.45	20.55
3" "	1922	20	40	.35	14.00	1.00	40.00	54.00	5	17	45.90	8.10
6" "	1930	30	40	.65	26.00	1.55	62.00	88.00	3.33	9	26.39	61.61
					$ 456.50		$ 756.00	$ 1,192.50			$ 344.31	$ 848.19

SPECIAL PIPE AND FITTINGS USED IN CROSSING STORM SEWERS

1" Steel Pipe	1932	20	282	.09	25.38	.40	100.80	125.48	5	7	43.22	80.26
2" " "	1932	20	35	.16	5.60	.55	19.25	24.85	5	7	8.70	16.15
3" " "	1935	20	60	.30	18.00	.70	42.00	60.00	5	4	12.00	48.00
4" " "	1925	30	22	.35	7.70	1.00	22.00	29.70	3.33	14	13.85	15.85
6" " "	1931	30	26	.75	19.50	1.50	39.00	58.50	3.33	8	15.58	42.92
2" Dresser couplings	1932	20	129	1.34	13.40	2.50	25.00	38.40	3.33	8	10.23	28.17
3" " "	1935	20	24	1.51	51.44	.55	13.20	44.64	5	7	15.62	29.02
4" " "	1925	30	34	1.78	59.84	.65	22.10	81.94	5	4	16.39	65.55
6" " "	1931	30	10	2.04	20.40	.75	7.50	27.90	3.33	14	13.01	14.89
8" " "	1931	30	12	2.54	30.72	1.00	12.00	42.72	3.33	8	11.38	31.34
2" Nipples	1932	20	4	3.60	14.40	1.50	6.00	20.40	3.33	8	5.45	14.97
3" "	1935	20	24	.10	2.40	.25	6.00	8.40	5	7	2.94	5.46
4" "	1925	30	34	.20	6.80	.55	11.90	18.70	5	4	3.74	14.96
6" "	1931	30	10	.36	3.60	.50	5.00	8.60	3.33	14	4.01	4.59
8" "	1931	30	12	.80	9.60	1.00	12.00	21.60	3.33	8	5.75	15.85
2" 45° L's	1932	20	4	1.69	6.76	2.00	8.00	14.76	3.33	8	3.93	10.83
3" 45° L's	1932	20	48	.30	14.40	.30	14.40	28.80	5	7	10.08	18.72
4" 45° L's	1925	30	68	.74	50.32	.45	30.60	80.92	5	7	28.32	52.60
6" " "	1931	30	20	1.36	27.20	.70	14.00	41.20	3.33	14	19.21	21.99
8" " "	1931	30	24	3.46	83.04	1.50	36.00	119.04	3.33	8	31.71	87.33
2" Service Clamps	1932	20	8	12.11	96.88	3.00	24.00	120.88	3.33	8	32.20	88.68
3" " "	1935	20	12	.76	9.12	.60	7.20	16.32	5	7	5.71	10.61
4" " "	1925	30	17	.96	16.32	.75	12.75	29.07	5	4	5.81	23.26
6" " " , C.I.	1931	75	5	1.15	5.75	1.00	5.00	10.75	3.33	14	5.01	5.74
8" " " "	1931	75	6	3.36	20.16	1.50	9.00	29.16	1.33	8	3.10	26.06
			2	4.96	9.92	2.50	5.00	14.92	1.33	8	1.59	13.33
					$ 605.95		$ 809.70	$ 1,115.65			$ 328.82	$ 787.13

REGULATOR HOUSES, REGULATORS, VALVES AND FITTINGS

#1 - 12th and Minnesota Brick Pit 8" Wall 6x8x8'	1932	50	1	63.50	63.50	56.25	56.25	119.75	2	7	16.77	102.98
2" Chapman Regulator	1932	12	1	95.00	95.00	14.00	14.00	109.00	8.33	7	63.56	45.44
1-1/4" gate valves	1932	75	1	1.53	1.53	.30	.30	1.83	1.33	7	.17	1.66
3" gate valves	1932	75	2	10.72	21.44	1.00	2.00	23.44	1.33	7	2.18	21.26
1-1/2" plug valves	1932	75	3	.98	2.94	.30	.90	3.84	1.33	7	.36	3.48
3/8" stop cock	1932	75	1	.39	.39	.10	.10	.49	1.33	7	.05	.44

REGULATOR HOUSES, REGULATORS, VALVES AND FITTINGS (Continued)

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY	MATERIAL UNIT PRICE	MATERIAL TOTAL AM'T	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION TOTAL	REMAINING VALUE
#1 - 12th & Minnesota (Ctd.)												
2" relief valve	1932	20	1	13.30	13.30	2.00	2.00	15.30	5	7	5.36	9.94
1-1/4" pipe	1932	20	9 ft.	.12	1.08	.10	.90	1.98	5	7	.69	1.29
2" pipe	1932	20	2 "	.16	.48	.20	.60	1.08	5	7	.38	.70
3" " vent	1932	20	12 "	.26	3.12	.40	4.80	7.92	5	7	2.77	5.15
3" nipples	1932	20	12	.25	3.00	.50	6.00	9.00	5	7	3.15	5.85
3/8" fittings	1932	20	3	.05	.15	.05	.15	.30	5	7	.11	.19
1-1/4" "	1932	20	5	.16	.80	.20	1.00	1.80	5	7	.63	1.17
1-1/2" "	1932	20	2	.21	.42	.25	.50	.92	5	7	.32	.60
2" "	1932	20	20	.32	6.40	.35	7.00	13.40	5	7	4.69	8.71
3" "	1932	20	15	.81	12.15	.50	7.50	19.65	5	7	6.88	12.77
4" "	1932	20	3	1.49	4.47	.80	2.40	6.87	5.33	7	1.80	5.27
1/2" "	1932	20	3	.06	.18	.05	.15	.33	5	7	.12	.21
#2 - 14th and Colorado	1935											
2" plank sides and top, 3x4x3'		20	1	6.00	6.00	5.00	5.00	11.00	5	4	2.20	8.80
1-1/2" Esco type B Regulator		12	1	35.90	35.90	10.00	10.00	45.90	6.33	4	15.29	30.61
1-1/4" gate valves		75	1	1.53	1.53	.50	.50	1.83	1.33	4	.10	1.73
3" plug valves		75	1	5.87	5.87	1.00	1.00	6.87	1.33	4	.37	6.50
1/2" stop cock		75	1	.43	.43	.10	.10	.53	1.33	4	.02	.50
1-1/2" Grane relief valve		20	1	9.50	9.50	1.60	1.60	11.10	5	4	2.22	8.88
3/4" nipples		20	5	.05	.09	.10	.20	.29	5	4	.06	.23
1-1/4" "		20	3	.05	.15	.20	.60	.75	5	4	.15	.60
#3 - 7th and Denver	1937											
Brick Pit 8" Wall 6x7x5'		50	1	60.54	60.54	52.36	52.36	112.90	2	2	4.52	108.38
2"Chapman Regulator		12	1	93.00	93.00	14.00	14.00	109.00	6.33	2	18.16	90.84
2"gate valves		75	2	7.60	15.20	.50	1.00	16.20	1.33	2	.43	15.77
4" " "		75	1	14.55	14.55	2.00	2.00	16.55	1.33	2	.44	16.11
1"stop cock		75	1	.63	.63	.20	.20	.83	1.33	2	.02	.81
1-1/2" stop cock		75	2	1.61	3.22	.40	.80	4.02	1.33	2	.11	3.91
2" relief valve		20	1	13.30	13.30	2.00	2.00	15.30	5	2	1.53	13.77
1" pipe		20	2 ft.	.11	.22	.08	.16	.38	5	2	.04	.34
1-1/4" pipe		20	4 "	.12	.48	.10	.40	.88	5	2	.09	.79
2" pipe		20	2 "	.16	.32	.20	.40	.72	5	2	.07	.65
3" vent pipe		20	12 "	.26	3.12	.40	4.80	7.92	5	2	.79	7.13
3/8" nipples		20	2 "	.02	.04	.05	.10	.14	5	2	.01	.13
Fisher Comb. Gauge		20	1	34.63	34.63	3.00	3.00	37.63	5	2	3.76	33.87
3/8" fittings		20	3	.05	.15	.05	.15	.30	5	2	.03	.27
3/4" "		20	1	.08	.08	.10	.10	.18	5	2	.02	.16
1-1/4" "		20	7	.16	1.12	.20	1.40	2.52	5	2	.25	2.27
2" "		20	11	.32	3.52	.35	3.85	7.37	5	2	.74	6.63
3" "		20	5	.81	4.05	.50	2.50	6.55	5	2	.66	5.89
4" "		20	8	1.49	11.92	.80	6.40	18.32	3.33	2	1.22	17.10
#4 - 1st and Lincoln	1934											
Brick pit 8" wall, 6x6x5'		50	1	54.60	54.60	46.20	46.20	100.80	2	5	10.08	90.72
3" Reynolds Regulator		12	1	122.73	122.73	18.00	18.00	140.73	6.33	5	55.61	82.12
3" gate valves		75	2	10.72	21.44	1.00	2.00	23.44	1.33	5	1.56	21.88
2" relief "		20	1	13.30	13.30	.50	.50	13.80	5	5	3.45	10.35
3" vent pipe		20	12 ft.	.26	3.12	.40	4.80	7.92	5	5	1.98	5.94

REGULATOR HOUSES, REGULATORS, VALVES AND FITTINGS (Continued)

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	QUANTITY	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION TOTAL	REMAINING VALUE
# 4 -1st and Lincoln (Ctd.)	1934	50										
Fisher Comb. Gauge		20	1	34.63	34.63	3.00	3.00	37.63	5	5	9.41	28.22
3/8" nipples		20	2	.02	.04	.05	.10	.14	5	5	.04	.10
1-1/4" fittings		20	28	.16	4.48	.20	5.60	10.08	5	5	2.52	7.56
2" "		20	4	.32	1.28	.35	1.40	2.68	5	5	.67	2.01
3" "		20	16	.81	12.96	.50	8.00	20.96	5	5	5.24	15.72
4" "		30	6	1.49	8.94	.80	4.80	13.74	3.33	5	2.29	11.45
1/2" "		20	9	.06	.54	.05	.45	.99	5	5	.25	.74
# 5 - Lincoln and "A" Street	1928											
Brick pit 8" wall, 5x6.5x6'		50	1									
1-1/2" Sump Regulator		12	1	56.28	56.28	47.52	47.52	103.80	2	1	2.08	101.72
1-1/4" gate valve		75	1	35.90	35.90	10.00	10.00	45.90	5.33	1	2.32	43.08
4" " "		75	1	1.53	1.53	.30	.30	1.83	1.33	1	.02	1.81
3" plug valves		75	1	14.55	14.55	2.00	2.00	16.55	1.33	1	.22	16.33
3/4" relief valves		20	1	5.87	17.61	.70	2.10	19.71	1.33	1	.26	19.45
1-1/4" pipe		20	1	5.51	5.51	1.00	1.00	6.51	5	1	.33	6.18
1-1/2" "		20	5 ft.	.12	.60	.10	.50	1.10	5	1	.08	1.04
3" vent pipe		20	2 "	.13	.26	.14	.28	.54	5	1	.03	.51
3/8" fittings		20	12 "	.26	3.12	.40	4.80	7.92	5	1	.40	7.52
1-1/4" "		20	2	.06	.10	.05	.10	.20	5	1	.01	.19
1-1/2" "		20	25	.16	4.00	.20	5.00	9.00	5	1	.45	8.55
2" fittings		20	12	.21	3.78	.25	4.50	8.28	5	1	.41	7.87
3" "		20	6	.32	1.92	.35	2.10	4.02	5	1	.20	3.82
		20	6	.81	4.86	.50	3.00	7.86	5	1	.39	7.47
#6 - Lincoln School	1929											
Brick pit 8" wall 8x7x8'		50	1									
2" Globe Regulator		12	1	56.02	56.02	47.68	47.68	103.70	2	0	—	103.70
1-1/4" gate valves		75	1	95.80	95.00	14.00	14.00	109.00	5.33	0	—	109.00
2" gate valves		75	2	1.53	1.53	.30	.30	1.83	1.33	0	—	1.83
1-1/4" pipe		20	5 ft.	7.66	15.32	.50	1.00	16.32	1.33	0	—	16.32
3/8" fittings		20	1	.12	.60	.10	.50	1.10	5	0	—	1.10
1-1/4" "		20	11	.05	.05	.05	.05	.10	5	0	—	.10
2" fittings		20	25	.16	1.76	.20	2.20	3.96	5	0	—	3.96
3" "		20	4	.32	8.00	.35	8.75	16.75	5	0	—	16.75
		20		.81	3.24	.50	2.00	5.24	5	0	—	5.24
#7 - Lincoln and "B" Street	1928											
Brick pit 8" wall 8x7.5x8'		50	1									
2" Reynolds Regulator		12	1	57.28	57.28	48.52	48.52	105.80	2	1	2.12	103.68
3" gate valves		75	1	87.50	87.50	14.00	14.00	101.50	5.33	1	8.45	93.05
3/8" stop cock		75	1	10.72	10.72	1.00	1.00	11.72	1.33	1	.16	11.56
2" relief valve		20	1	.39	.39	.10	.10	.49	1.33	1	.01	.48
1-1/4" pipe		20	1	15.30	15.30	2.00	2.00	15.30	5	1	.77	14.53
2" pipe		20	5 ft.	.12	.60	.10	.50	1.10	5	1	.06	1.04
3" vent pipe		20	4 "	.16	.64	.20	.80	1.44	5	1	.07	1.37
3/8" fittings		20	12 "	.26	3.12	.40	4.80	7.92	5	1	.40	7.52
1-1/4" fittings		20	3	.05	.15	.05	.15	.30	5	1	.02	.28
2" fittings		20	7	.16	1.12	.20	1.40	2.52	5	1	.13	2.39
3" "		20	8	.32	2.56	.35	2.80	5.36	5	1	.27	5.09
		20	8	.81	6.48	.50	4.00	10.48	5	1	.52	9.96

REGULATOR HOUSES, REGULATORS, VALVES AND FITTINGS (Continued)

	YEAR ACQUIRED	YEARS OF USEFUL LIFE	QUANTITY	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION TOTAL	REMAINING VALUE
#8 - Hastings & "C" Street	1938											
Brick pit 8" wall - 5.6x7x5'		50	1	58.28	58.28	49.02	49.02	107.30	2	1	2.15	105.15
2" Emco balance regulator		12	1	88.00	88.00	14.00	14.00	102.00	8.33	1	8.50	93.50
2" gate valves		75	2	7.66	15.32	.50	1.00	16.32	1.33	1	.22	16.10
4" " "		75	1	14.55	14.55	2.00	2.00	16.55	1.33	1	.22	16.33
3/8" stop cocks		75	1	.39	.39	.10	.10	.49	1.33	1	.01	.48
2" relief valves		20	1	13.30	13.30	2.00	2.00	15.30	5	1	.77	14.53
1-1/4" pipe		20	6 ft.	.12	.72	.10	.60	1.32	5	1	.07	1.25
3" vent pipe		20	12 "	.26	3.12	.40	4.80	7.92	5	1	.40	7.52
3/8" fittings		20	3	.05	.15	.05	.15	.30	5	1	.02	.28
1-1/4" fittings		20	12	.16	1.92	.20	2.40	4.32	5	1	.22	4.10
2" fittings		20	13	.32	4.16	.35	4.55	8.71	5	1	.44	8.27
3" "		20	4	.81	3.24	.50	2.00	5.24	5	1	.26	4.98
#9 - Lincoln and "C" Street												
Brick pit 8" wall 5x8x7x5'	1938	50	1	58.28	58.28	49.02	49.02	107.30	2	1	2.15	105.15
2" Emco balance regulator		12	1	88.00	88.00	14.00	14.00	102.00	8.33	1	8.50	93.50
2" gate valves		75	2	7.66	15.32	.50	1.00	16.32	1.33	1	.22	16.10
3/8" stop cock		75	1	.39	.39	.10	.10	.49	1.33	1	.01	.48
2" relief valve		20	1	13.30	13.30	2.00	2.00	15.30	5	1	.77	14.53
1-1/4" pipe		20	6 ft.	.12	.72	.10	.60	1.32	5	1	.07	1.25
3" vent pipe		20	12 "	.26	3.12	.40	4.80	7.92	5	1	.40	7.52
3/8" fittings		20	3	.05	.15	.05	.15	.30	5	1	.02	.28
1-1/4" fittings		20	12	.16	1.92	.20	2.40	4.32	5	1	.22	4.10
2" fittings		20	16	.32	5.12	.35	5.60	10.72	5	1	.54	10.18
#10 - Lexington and "C" Street												
Brick pit 5.6x7x5'	1938	50	1	58.28	58.28	49.02	49.02	107.30	2	1	2.15	105.15
2" Emco balance regulator		12	1	88.00	88.00	14.00	14.00	102.00	8.33	1	8.50	93.50
1-1/4" gate valve		75	1	1.53	1.53	.30	.30	1.83	1.33	1	.02	1.81
2" gate valves		75	2	7.66	15.32	.50	1.00	16.32	1.33	1	.22	16.10
3/8" stop cock		75	1	.39	.39	.10	.10	.49	1.33	1	.01	.48
1-1/4" pipe		20	6 ft.	.12	.72	.10	.60	1.32	5	1	.07	1.25
3" vent pipe		20	12 "	.26	3.12	.40	4.80	7.92	5	1	.40	7.52
3/8" fittings		20	3	.05	.15	.05	.15	.30	5	1	.02	.28
1-1/4" fittings		20	8	.16	1.28	.20	1.60	2.88	5	1	.14	2.74
2" fittings		20	13	.32	4.16	.35	4.55	8.71	5	1	.44	8.27
3" "		20	4	.81	3.24	.50	2.00	5.24	5	1	.26	4.98
#11 - Baltimore and 2nd Street												
Brick pit 6x8x5'	1938	50	1	55.02	55.02	46.68	46.68	101.70	2	4	8.14	93.56
2" Fisher Regulator		12	1	85.00	85.00	14.00	14.00	99.00	8.33	4	32.99	66.01
2" gate valves		75	1	7.66	7.66	.50	.50	8.16	1.33	4	.43	7.73
3" plug valves		75	3	5.87	17.61	1.00	3.00	20.61	1.33	4	1.10	19.51
1-1/4" plug valves		75	3	.98	2.94	.30	.90	3.84	1.33	4	.20	3.64
3/4" Globe "		75	1	1.34	1.34	.12	.12	1.46	1.33	4	.08	1.38
1" stop cock		75	1	.63	.63	.20	.20	.83	1.33	4	.04	.79
3/4" pipe		20	4 ft.	.10	.40	.08	.32	.72	5	4	.14	.58
1-1/4" pipe		20	10 "	.12	1.20	.10	1.00	2.20	5	4	.44	1.76
2" pipe		20	2 "	.16	.32	.20	.40	.72	5	4	.14	.58
3" vent pipe		20	12 "	.26	3.12	.40	4.80	7.92	5	4	1.58	6.34

REGULATOR HOUSES, REGULATORS, VALVES AND FITTINGS (Continued)

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION TOTAL	REMAINING VALUE
#11 - Baltimore & 2nd (Ctd.)	1935											
Fisher comb. gauge		20	1	34.63	34.63	3.00	3.00	37.63	5	4	7.53	30.10
3/8" fittings		20	2	.05	.10	.05	.10	.20	5	4	.04	.16
3/4" "		20	9	.08	.72	.10	.90	1.62	5	4	.32	1.30
1-1/4" "		20	26	.16	4.16	.20	5.20	9.36	5	4	1.87	7.49
2" fittings		20	11	.32	3.52	.35	3.85	7.37	5	4	1.47	5.90
3" "		20	16	.81	12.96	.50	8.00	20.96	5	4	4.19	16.77
4" "		20	6	1.49	8.94	.80	4.80	13.74	5.33	4	1.83	11.91
1/2" "		20	1	.06	.06	.05	.05	.11	5	4	.02	.09
#12 - 4th and Baltimore	1937											
Brick pit		30	1	46.98	46.98	37.52	37.52	84.50	2	2	3.37	80.53
1-1/2" Rmco type B regulator		12	1	35.90	35.90	10.00	10.00	45.90	8.33	2	7.65	38.25
2" gate valves		75	2	7.66	15.32	.50	1.00	16.32	1.33	2	.43	15.89
3/4" plug valves		75	1	.61	.61	.12	.12	.63	1.33	2	.02	.61
1-1/4" pipe		20	2 ft.	.12	.24	.10	.20	.44	5	2	.04	.40
3" vent pipe		20	12 "	.26	3.12	.40	4.80	7.92	5	2	.79	7.13
3/4" fittings		20	1	.08	.08	.10	.10	.18	5	2	.02	.16
1-1/4" fittings		20	20	.16	3.20	.20	4.00	7.20	5	2	.72	6.48
1-1/2" "		20	10	.21	2.10	.25	2.50	4.60	5	2	.46	4.14
2" fittings		20	10	.32	3.20	.35	3.50	6.70	5	2	.67	6.03
3" "		20	4	.81	3.24	.50	2.00	5.24	5	2	.52	4.72
#13 - 7th and Baltimore	1937											
Brick pit 5.6x7x5'		30	1	58.28	58.28	49.02	49.02	107.30	2	2	4.29	103.01
2" Rmco balanse regulator		12	1	88.00	88.00	14.00	14.00	102.00	8.33	2	16.99	85.01
2" gate valves		75	2	7.66	15.32	.50	1.00	16.32	1.33	2	.43	15.89
3" " "		75	1	10.72	10.72	1.00	1.00	11.72	1.33	2	.31	11.41
1-1/4" pipe		20	6	.12	.72	.10	.60	1.32	5	2	.13	1.19
3" vent pipe		20	12	.26	3.12	.40	4.80	7.92	5	2	.79	7.13
1-1/4" fittings		20	8	.16	1.28	.20	1.60	2.88	5	2	.29	2.59
2" fittings		20	9	.32	2.88	.35	3.15	6.03	5	2	.60	5.43
4" "		30	11	1.49	16.39	.80	8.80	25.19	3.33	2	1.68	23.51
#14 - 6th and Baltimore	1937											
3" plank sides and top pit 4x4x3'		20	1	15.90	15.90	4.20	4.20	20.10	5	2	2.01	18.09
1-1/2" Rmco type B regulator		12	1	35.90	35.90	10.00	10.00	45.90	8.33	2	7.65	38.25
2" gate valve		75	1	7.66	7.66	.50	.50	8.16	1.33	2	.22	7.94
3/8" stop cock		75	1	.39	.39	.10	.10	.49	1.33	2	.01	.48
1/2" " "		75	1	.45	.45	.10	.10	.55	1.33	2	.01	.52
1" " "		75	1	.63	.63	.20	.20	.83	1.33	2	.02	.81
1-1/2" stop cock		75	1	1.38	1.38	.40	.40	1.78	1.33	2	.06	1.72
3/8" fittings		20	2	.05	.10	.05	.10	.20	5	2	.02	.18
1-1/4" fittings		20	1	.16	.16	.20	.20	.36	5	2	.04	.32
1-1/2" "		20	14	.21	2.94	.25	3.50	6.44	5	2	.64	5.80
2" fittings		20	9	.32	2.88	.35	3.15	6.03	5	2	.60	5.43
3" "		20	5	.81	4.05	.50	2.50	6.55	5	2	.66	5.89
4" "		30	5	1.49	7.45	.80	4.00	11.45	3.33	2	.76	10.69
#15 - South Street and Lincoln	1934											
2" Reynolds Regulator		12	1	87.50	87.50	14.00	14.00	101.50	8.33	5	42.27	59.23

REGULATOR HOUSES, REGULATORS, VALVES AND FITTINGS (Continued)

ITEM	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR UNIT PRICE	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION TOTAL	REMAINING VALUE
#16 - 9th and Baltimore	1937											
Brick building 9'5"x13'4"x8'8"		50	1	171.67	171.67	145.14	145.14	316.71	2	2	12.67	304.04
2" Esco balance regulator		12	1	88.00	88.00	14.00	14.00	102.00	8.33	2	16.99	85.01
1-1/4" gate valves		75	2	1.53	3.06	.30	.60	3.66	1.33	2	.10	3.56
2" gate valves		75	3	7.66	22.98	.50	1.50	24.48	1.33	2	.65	23.83
3/4" Globe valves		75	1	1.34	1.34	.12	.12	1.46	1.33	2	.04	1.42
1/2" stop cock		75	3	.43	1.29	.10	.30	1.59	1.33	2	.04	1.55
1" stop cock		75	1	.63	.63	.20	.20	.83	1.33	2	.02	.81
3/4" pipe		20	27 ft.	.10	2.70	.08	2.16	4.86	5	2	.49	4.37
1" pipe		20	13 "	.11	1.43	.08	1.04	2.47	5	2	.25	2.22
2" "		20	6 "	.16	.96	.20	1.20	2.16	5	2	.22	1.94
3" vent pipe		20	4 ft.	.26	1.04	.40	1.60	2.64	5	2	.26	2.38
3/4" fittings		20	20	.08	1.60	.10	2.00	3.60	5	2	.36	3.24
1-1/4" fittings		20	23	.16	3.28	.20	4.60	11.88	5	2	1.19	10.69
2" fittings		20	20	.32	6.40	.35	7.00	13.40	5	2	1.34	12.06
3" "		20	90	.81	72.90	.50	45.00	117.90	5	2	11.79	106.11
4" "		20	9	1.49	13.41	.80	7.20	20.61	3.33	2	1.37	19.24
1/2" "		20	16	.06	.96	.05	.80	1.76	5	2	.18	1.58
#17 - Second and Minnesota	1931											
Brick building 17x19x9		50	1	411.34	411.34	320.98	320.98	732.32	2	8	117.15	614.96
3"x6" Chapman Regulator		12	1	180.00	180.00	20.00	20.00	180.00	8.33	8	119.96	60.04
4"x6" " "		12	1	256.00	256.00	30.00	30.00	286.00	8.33	8	190.39	95.61
3" " "		12	1	122.00	122.00	18.00	18.00	140.00	8.33	8	93.30	46.70
1-1/4" gate valves		75	2	1.53	3.06	.30	.60	3.66	1.33	8	.39	3.27
2" gate valves		75	1	7.66	7.66	.50	.50	8.16	1.33	8	.87	7.29
3" " "		75	8	10.72	64.32	1.00	8.00	70.32	1.33	8	7.49	62.84
4" " "		75	8	14.55	72.75	2.00	10.00	82.75	1.33	8	8.80	73.95
6" " "		75	1	24.89	24.89	4.00	4.00	28.89	1.33	8	3.07	25.82
8" " "		75	1	41.36	41.36	7.00	7.00	48.36	1.33	8	5.15	43.21
10" " "		75	1	68.94	68.94	12.00	12.00	80.94	1.33	8	8.61	72.33
3/4" Globe valves		75	3	1.34	4.02	.12	.36	4.38	1.33	8	.47	3.91
3/8" stop cock		75	3	.39	1.17	.10	.30	1.47	1.33	8	.16	1.31
1/2" " "		75	4	.43	1.72	.10	.40	2.12	1.33	8	.23	1.89
3" relief valve		20	1	40.10	40.10	4.00	4.00	44.10	5.33	8	17.64	26.46
Water storage tank, 20-gal.		25	1	10.00	10.00	10.00	10.00	20.00	4	8	6.40	13.60
Automatic water heater, 20-gal.		25	1	40.00	40.00	15.00	15.00	55.00	4	8	17.60	37.40
Fogging equipment		20	1	120.00	120.00	—	—	120.00	5.33	8	51.07	68.93
Heating radiator		20	1	55.00	55.00	15.00	15.00	70.00	5	8	28.00	42.00
Oil heater		20	1	25.00	25.00	—	—	25.00	5	8	10.00	15.00
Steam generator		20	1	150.00	150.00	—	—	150.00	5	8	60.00	90.00
Indicating gauge		25	1	6.50	6.50	25.00	25.00	31.50	4	8	10.08	21.42
Indicating and recording gauge		25	1	12.50	12.50	—	—	12.50	4	8	4.00	8.50
					$ 4,722.01		$ 1,821.93	$ 6,544.94			$ 1,266.85	$ 5,278.09

SERVICE REGULATORS

NAME OF REGULATOR	YEAR ACQUIRED	YEARS OF USEFUL LIFE	MATERIAL QUANTITY	MATERIAL UNIT PRICE	MATERIAL AMOUNT	LABOR QUANTITY	LABOR AMOUNT	TOTAL VALUE	DEPRECIATION RATE, %	DEPRECIATION YEARS	DEPRECIATION AMOUNT	REMAINING VALUE
Grable 1"	1932	12	26	3.00	78.00	1.50	39.00	117.00	8.33	7	68.25	48.75
Reliance 1"	1932	12	8	4.00	32.00	1.50	12.00	44.00	8.33	7	25.67	18.33
Grable 1-1/4"	1935	12	13	7.50	97.50	2.50	32.50	130.00	8.33	4	43.33	86.67
Reliance 1-1/4"	1934	12	2	11.00	22.00	2.50	5.00	27.00	8.33	5	11.25	15.75
Mueller 1-1/4"	1933	12	1	12.00	12.00	2.50	2.50	14.50	8.33	6	7.25	7.25
Reed 1-1/2"	1937	12	1	12.98	12.98	3.50	3.80	16.48	8.33	2	2.75	13.73
Sprague #3	1938	12	3	95.00	285.00	8.00	24.00	309.00	8.33	1	25.75	283.25
Reynolds #3	1939	12	3	80.00	240.00	8.00	24.00	264.00	8.33	0	—	264.00
					$ 779.48		$ 142.80	$ 921.98			$ 184.25	$ 737.73

SERVICE DRIPS

There are: 8 - 2-inch
26 - 3- "
1 - 4- " pipe drips;

and 15 - 2- "
38 - 3- "
14 - 4- "
7 - 6- " barrel or pot drips.

These drips were installed at the time the system was using manufactured gas, and would be of no value to the City using natural gas. I can see no reason why the City should purchase them; and in the event the City buys the system from the Central Power Company, I would recommend that the Central Power Company be allowed to disconnect and keep these drips if they are of any use to them.

WORK DONE SINCE AUGUST 1, 1939

We have made this appraisal as of August 1. Since that date the Central Power Company has made the following extensions:

651	lin.ft. 2-3/8" O.D. pipe furnished and laid	@ $.33	$	214.83
2,080	" " " " " wrapped, furnished " "	@ .36		748.80
481	" " 1-1/4" service line " " "	@ .28		134.68
13	Taps	@ 1.50		19.50
13	meters furnished and set	@ 14.65		190.45
1	- 8" Merco-Nordstrum Spur-Gear Valve inserted in 8-in. C.I. line with 2 style 40 Dresser Couplings Brick Valve Pit 4'x4'x3'			227.65
			$	1,535.91
1	Regulator house			147.27
			$	1,683.18

INVENTORY OF MATERIAL AND EQUIPMENT ON HAND

METER REPAIR ROOM

August 1, 1939

	ITEM	UNIT	TOTAL
1 -	American meter prover 5-foot #2228	$ 275.00	$ 275.00
300 -	#1 Meter diaphragms for #1A Sprague	.65	195.00
150 -	#2 " " " Sprague	.85	127.50
12 -	#3 " " " "	1.90	22.80
50 -	" " " " Ironclad meters	.75	37.50
50 -	Main meter works for #1A Sprague	2.60	130.00
30 -	Index movements for Sprague meters	.50	15.00
12 -	3-dial indexes for Sprague	.35	4.20
5 -	4-dial " " "	.55	2.75
1-1/2	gallon of red meter paint	3.50	5.25
2 -	middle castings for #1A Sprague	3.50	7.00
1 -	Top " " " "	1.50	1.50
2 -	End " " " "	.80	1.60
22 -	Main movements for #2 Sprague	4.50	99.00
3 -	Valve seats for #2 Sprague	1.40	4.20
20 -	Index driving movements for #2 Sprague	.70	14.00
2 -	Bundles meter seals	1.00	2.00
225 -	Number plates (large)	1.25	281.25
6 -	Valve covers for # 2 Sprague meters	1.30	7.80
16 -	" " " # 1 " "	1.10	17.60
6 -	" seats " # 1 " "	1.10	6.60
24 -	Index boxes for Sprague meters	.40	9.60
75 -	Number plates (small)	.05	3.75
700 -	" plate sealing screws	.01	7.00
100 -	1" Male Iron swivels	.11	11.00
100 -	1" Connecting nuts	.08	8.00
150 -	Top gaskets for #1A Sprague meters	.12	18.00
100 -	" " " Ironclad "	.08	8.00
1 -	Gas circulating heater	8.00	8.00
1 -	" soldering furnace	4.00	4.00
1 -	4'x4' x 2' Galvanized Iron testing tank	25.00	25.00
1 -	Large waste can	2.00	2.00
2 -	Shaw-Walker 2-drawer 4"x6" index and cards (Meter test records)	4.00	8.00
1 -	Set of meter repair tools (Value approx.)	40.00	40.00
			$ 1,409.90
1 -	American Gas tester #1602		426.50
			$1,836.40

INVENTORY OF MATERIAL AND EQUIPMENT ON HAND

STORE ROOM AT PLANT
(North Building)
(All fittings wrought iron unless marked otherwise) (Malleable)
August 2, 1939

ITEM	UNIT	TOTAL
1 - 6" Nordstrom plug valve	45.22	45.22
3 - 4" " " "	23.61	70.83
2 - 3" " " "	17.20	34.40
3 - 2" " " "	8.98	26.94
2 - 1-1/2" " " "	6.36	12.72
10 - 1-1/4" " " "	6.07	60.70
6 - 1" " " "	5.15	30.90
1 - 4" gate valves	16.00	16.00
3 - 3" " "	14.00	42.00
1 - 2-1/2" gate valves	13.00	13.00
6 - 2" gate valves	12.00	72.00
2 - 1-1/2" gate valves	9.00	18.00
2 - 1-1/4" " "	8.00	16.00
16 - 8" Dresser Couplings for C.I.	3.60	57.60
40 - 4" " " " "	2.04	81.60
17 - 4" " sleeves for steel	2.04	34.68
92 - 3" " " " "	1.76	161.92
23 - 2" " " " "	1.31	30.13
26 - 1-1/4" " " " "	.69	17.94
12 - 1" " " " "	.64	7.68
6 - 6" pipe saddles	4.39	26.34
21 - 4" " "	1.15	24.15
24 - 3" " "	.96	23.04
9 - 2" " "	.76	6.84
4 - 1" " "	.68	2.72
5 - 8" " "	4.96	24.80
5 - 1-1/4" regulators	12.60	63.00
19 - 3/4" "	3.75	71.25
6 - 6" 90° Ells	2.87	17.22
1 - 6" x 3" Tee	4.08	4.08
4 - 4" x 3" Bushings	.31	1.24
10 - 4" Tees W.I.	1.55	15.50
3 - 4" (90°) Ells	1.12	3.36
6 - 4" (45°) "	1.36	8.16
2 - 4" R.R. Unions	3.28	6.56
6 - 4" x 2" Tees	1.64	9.84
21 - 4" Nipples	.24	5.04
1 - 4" Cap	.69	.69
10 - 4" Plugs	.21	2.10
3 - 4" x 3" reducing couplings	.87	2.61
7 - 4" x 2" " "	.87	6.09

16 - 3" Tees		.80	12.80
1 - 3" Cross		1.08	1.08
1 - 3" Wye		1.73	1.73
19 - 3" x 2" Bushings		.14	2.66
4 - 3" (45°) Ells		.74	2.96
6 - 3" x 2" Reducer Couplings		.45	2.70
1 - 3" x 2" Tee		.91	.91
3 - 3" Couplings		.31	.93
11 - 3" (90°) Ells		.62	6.82
15 - 3" Nipples		.13	1.95
1 - 2" Wye		.53	.53
21 - 2" Tees		.33	6.93
4 - 2" R.R. Unions		.72	2.88
8 - 2" caps		.20	1.60
15 - 2" (45°) Ells		.30	4.50
9 - 2" x 1-1/2" Bushings		.07	.63
6 - 2" x 1-1/2" Reducer Couplings		.18	1.08
17 - 2" plugs		.05	.85
12 - 2" St. Ells		.29	3.48
4 - 2" (90°) Ells		.25	1.00
17 - 2" Nipples		.06	1.02
3 - 2" x 1-1/4" Tees		.36	1.08
47 - 1-1/2" x 1-1/4" Reducing Ells		.17	7.99
1 - 1-1/2" stop cock		1.35	1.35
6 - 1-1/2" Tees		.21	1.26
1 - 1-1/2" Cross		.27	.27
9 - 1-1/2" R.R. Unions		.53	4.77
11 - 1-1/2" Caps		.11	1.21
14 - 1-1/2" Ells		.19	2.66
6 - 1-1/2" plugs		.04	.24
7 - 1-1/2" x 1-1/4" reducer couplings		.11	.77
35 - 1-1/2" Tees		.21	7.35
11 - 1-1/2" St. Ells		.18	1.98
9 - 1-1/2" (90°) Ells		.16	1.44
18 - 1-1/2" Nipples		.05	.90
142 - 1-1/4" "		.0415	5.89
24 - 1-1/4" R.R. Unions		.40	9.60
126 - 1-1/4" Tees		.16	20.16
10 - 1-1/4" St. Ells		.14	1.40
35 - 1-1/4" (90°) Ells		.13	4.55
98 - 1-1/4" Tapping Tees		2.00	196.00
211 - 1-1/4" x 1" Reducing Ells		.1359	28.67
15 - 1-1/4" Couplings		.09	1.35
40 - 1-1/4" plugs		.03	1.20
1 - 1-1/4" stop cock		.76	.76
1 - 1-1/4" Cross		.22	.22
13 - 1-1/4" Caps		.08	1.04
22 - 1-1/4" (45°) Ells		.15	3.30
17 - 1-1/4" x 1" Bushings		.04	.68

6 -	1-1/4" x 1" Tees	.18	1.08
36 -	1-1/4" x 1/2" Tees	.18	6.48
1 -	1-1/4" x 3/4" Tees	.18	.18
119 -	1-1/4" x 1" Reducing Couplings	.10	11.90
7 -	1-1/4" St. Ells	.15	1.05
20 -	1" R.R. Unions	.27	5.40
4 -	1" Nipples	.03	.12
13 -	1" Ell (90°)	.08	1.04
21 -	1" Tees	.11	2.31
18 -	3/4" x 1-1/4" Tees	.18	3.24
5 -	3/4" Tees	.08	.40
36 -	Stopper bags for pipe	1.50	54.00
1 -	Gas mask complete	20.00	20.00
1 -	Scythe	3.50	3.50
1 -	Snow shovel (Little Giant)	1.50	1.50
1 -	1A Toledo Threader and Dies	11.75	11.75
1 -	#2 " " " "	50.00	50.00
2 -	Mueller Tapping Machines	125.00	250.00
1 -	Chain pipe vice 1/4" x 4"	6.00	6.00
1 -	" tong 1" to 4"	7.00	7.00
1 -	Post hole augur 3"	1.75	1.75
2 -	Trimo pipe cutter #3	6.00	12.00
1 -	" " " #2	3.60	3.60
1 -	" " " #1	3.00	3.00
2 -	" " " #4	12.00	24.00
1 -	Barnes pipe cutter #6	27.69	27.69
1 -	" " " #4	13.67	13.67
1 -	Foxboro "Model A"; 0-60; 7" Dial indicating gauge	60.00	60.00
1 -	Rigid Pipe wrench 36"	6.40	6.40
1 -	" " " 48"	9.60	9.60
2 -	Pipe reamers 1/8" to 3"	5.60	11.20
1 -	12# sledge hammer	2.06	2.06
1 -	8# " "	1.57	1.57
1 -	2-1/2" x 12" Screw Jack	9.40	9.40
1 -	Leak Tester (Cart containing 2 blow torches, sledges, bars, etc., for locating tools	160.00	160.00
			$ 2,324.91
7 -	25# pails No.-OX-ID Paint		46.20
			$ 2,371.11

INVENTORY OF MATERIAL AND EQUIPMENT ON HAND

(Old Boiler Room)

(All fittings and pipe steel unless marked otherwise)
August 3, 1939

ITEM		UNIT	TOTAL	GRAND TOTAL
110 lin.ft. 2" pipe		.24	26.40	
3,850 " " 1-1/4" pipe		.16	616.00	
220 " " 1" pipe		.12	26.40	
378 " " 3/4" pipe		.10	37.80	
105 " " 3/8" "		.08	8.40	
154 " " 1/2" "		.09	13.86	
755 " " 2" steel pipe		.16	120.96	
1,890 " " 3" " "		.30	567.00	
42 " " 4" " "		.35	14.70	
1 - 6" (90°) Ells C.I. - weight	130			
2 - 6" Tees C.I. "	200			
3 - 6" crosses C.I. "	259			
1 - 8" C.I. tee "	372			
2 - 8" " Ells (90°) "	200			
	1,161	.06	69.66	
4 - 6" C.I. valve boxes		6.50	26.00	
9 - 2" " " "		5.70	51.30	
2 - 8" Dresser sleeves		3.60	7.20	
1 - Marmon board		10.75	10.75	
1 - Mueller tapping machine		125.00	125.00	
9 - Lanterns		1.00	9.00	
8 - Flares		1.25	10.00	
5 - Wooden barricades		4.00	20.00	
1 - "Iton" chain hoist		18.48	18.48	
				$ 1,778.91
C.I. Pipe outside				
360 lin.ft. 6" C.I. (150#) bell and spigot pipe		.85	306.00	
18 " " 8" C.I. (150#) bell and spigot pipe		1.25	22.50	328.50
				$2,107.41
2 - service blow pumps		10.00	20.00	
10-1/2 carton 6" pipe wrapping (No.-OX-ID)			105.00	125.00
				$2,232.41

INVENTORY OF MATERIAL AND EQUIPMENT ON HAND

Basement of Office

August 4, 1939

16	- 1/8" Plugs	$ .16
7	- 1/4" "	.07
19	- 3/8" "	.19
150	- 1/2" "	1.50
39	- 3/4" "	.55
25	- 1" "	.54
8	- 1/8" Caps	.15
3	- 1/4" "	.06
20	- 3/8" "	.30
5	- 1/2" "	.16
3	- 3/4" "	.15
1	- 1" "	.07
50	- 1/8" Nipples	.97
47	- 1/4" "	.92
226	- 3/8" "	4.39
65	- 1/2" "	1.47
194	- 3/4" "	5.20
123	- 1" "	4.79
8	- 1/8" R.R. Unions	.84
43	- 1/4" " "	4.52
86	- 3/8" " "	12.56
49	- 1/2" " "	7.99
80	- 3/4" " "	15.76
105	- 1" " "	27.51
27	- 1/8" St. Ells	1.00
8	- 1/4" " "	.30
115	- 3/8" " "	4.97
74	- 1/2" " "	3.70
116	- 3/4" " "	9.56
83	- 1" " "	7.71
26	- 1/8" 90° bends	.81
6	- 1/4" " "	.19
148	- 3/8" " "	5.48
56	- 1/2" " "	1.85
79	- 3/4" " "	3.73
89	- 1" " "	7.21
70	- 1/8" tees	3.03
62	- 1/4" "	2.68
55	- 3/8" "	2.72
15	- 1/2" "	.71
37	- 3/4" "	2.27
31	- 1" "	3.47
10	- 1/4" x 1/8" red couplings	.32
5	- 1/4" x 1/8" bushings	.10

26 - 3/8" 45° bends		$ 1.13
53 - 1/2" " "		2.95
22 - 3/4" " "		1.63
80 - 1" " "		7.42
61 - 3/8" x 1/4" bushings		1.16
179 - 1/2" x 3/8" reducer couplings		6.64
186 - 1/2" x 3/8" bushings		3.52
17 - 3/4" x 1/2" "		.40
85 - 3/4" x 1/2" reducer couplings		4.73
42 - 3/4" x 1/2" tees		3.91
190 - 1" x 3/4" reducer couplings		14.10
104 - 1" x 3/4" bushings		2.94
50 - 1" stop cocks		23.70
20 - 1-1/4" stop cocks		16.06
2 - 2" " "		3.60
1 - 2" gate valve		8.54
	Total - - - -	$ 261.06

TESTING EQUIPMENT

1 - Hays flue gas analyzer - - - - - - - - - - -	120.00
3 - Bristol pressure recording and indicating gauges 8" dial - @ $85.00	255.00
1 - 3 LT Metric tin test meter(Portable)- - -	15.00
1 - Bristol pressure gauge ditto of above in use in office - - - - - -	85.00
1 - Foxboro Recording Thermometer - - - - -	225.00
1 - J. M. Gas leak detector - - - - - - - - - -	80.00
1 - Friz Anemometer - - - - - - - - - - - - - -	42.50
Total - - - - -	822.50
Grand Total - - - -	$1,083.56

INVENTORY OF MATERIAL AND EQUIPMENT ON HAND

TOOLS ON TRUCKS
August 4, 1939

ITEM	UNIT	TOTAL	GRAND TOTAL
LIST OF TRUCKS			
1 - Ford Truck - 1/2 ton 1935	$	$ 195.00	
1 - " " - " " 1937		400.00	
1 - Dodge " - " " 1934		100.00	
1 - Plymouth truck - 1/2 ton - 1938		475.00	
1 - Chevrolet " - " " - 1937		400.00	
		$ 1,570.00	1,570.00
DITCH TRUCK, Ford 14-C531			
1 - Muller tapping machine	125.00	125.00	
1 - 10" Rigid pipe wrenches	.92	.92	
2 - 14" " " "	1.24	1.24	
1 - 18" " " "	1.76	1.76	
2 - 24" " " "	3.04	6.08	
1 - C5R " " threader and dies	15.00	15.00	
1 - Toledo threader and dies (small)	12.85	12.85	
1 - pipe cutter 1/4" to 2"	3.37	3.37	
1 - pr. tin snips	1.25	1.25	
1 - pistol grip hack saw	1.00	1.00	
1 - brace and bits	3.50	3.50	
3 - socket wrenches	6.80	20.40	
4 - points	.25	1.00	
2 - small chisels	.25	.50	
8 - tile spades	1.55	12.40	
6 - long handled shovels	1.40	8.40	
1 - 12# sledge	2.06	2.06	
3 - caulking hammers	1.21	3.63	
4 - lanterns	1.00	4.00	
3 - picks	1.25	3.75	
1 - augur 4"	1.75	1.75	
1 - " 2"	1.75	1.75	
1 - chain vice	6.00	6.00	
2 - box wrenches		237.61	237.61
SERVICE TRUCKS (Service men tools and equipment)			
4 - brace and bits	3.50	14.00	
4 - pistol grip hacksaws	1.00	4.00	
4 - chain pipe vices	6.00	24.00	
4 - 10" pipe wrenches	.92	3.68	
4 - 14" " "	1.24	4.96	
4 - 18" " "	1.76	7.04	
4 - #2 pipe cutters	3.37	13.48	
4 - small Toledo pipe threaders and dies	12.85	51.40	
4 - 4' ladders	1.25	5.00	

4 - pr. tin snips	1.25	5.00	
4 - caulking hammers	1.21	4.84	
		137.40	137.40
			$ 1,945.01

Smaller hand tools (screwdrivers, flash lights, etc.)

RECAPITULATION

ITEM	NEW VALUE	REMAINING VALUE
Pipe in Mains	143,389.18	59,832.21
Meters	43,244.67	27,948.04
Service Regulators	921.98	737.73
Service Lines	31,046.22	13,276.58
Cast Iron Fittings in Mains	3,321.10	2,341.81
Steel " " "	938.52	356.91
Valves in Service Lines	287.06	203.47
Valves in Mains	1,119.10	707.39
Casing under Railroads and Paving	1,192.50	848.19
Special Pipe & Fittings used in Storm Sewer Crossings	1,115.65	787.13
Regulator buildings, Regulators, Piping and Valves	6,544.94	5,278.09
Drips	-------	-------
Work completed since August 1, 1939	1,683.18	1,683.18
Total	$234,804.10	$114,000.73
Plus 5% for Engineering and Superintendents	11,740.21	5,700.04
Inventory of Materials		10,206.22
Value of Real estate owned by Central Power Company		12,750.00
Total	$246,544.31	$142,656.99

VALUE OF REAL ESTATE

A committee appointed by the Mayor appraised the total real estate and improvements of the Central Power Company at $12,750.

ASSESSED VALUATION OF REAL ESTATE

(1) All of Block #24, Johnson's Addition, Hastings, Nebraska
Located on this land is the regulator house listed as Second and Minnesota Streets, the old manufactured gas plant building with equipment removed, and one other building. The buildings with the exception of the regulator house are used for storing equipment and merchandise, with the exception of one room which is used as meter test and storage room.
There are two holders located on this block also, both of which are in very poor shape.
Assessed valuation of this land listed as - - - - - - - - - - $ 3,080.00
" " " improvements " " - - - - - - - - - - 5,000.00

(2) Lot #14 Block #1 McKnight's Addition, Hastings, Nebraska
The regulator house listed as Ninth and Baltimore Streets is located on the rear of this lot.
Assessed valuation of this land listed as - - - - - - - - - - 35.00
Improvements not listed.

(3) The total assessed value on personal property of the Central Power Co. as listed is - $ 93,364.00

TOTAL TAX PAID IN COUNTY BY CENTRAL POWER COMPANY

Year	Personal	Franchise	Real	Total
1934	$3,758.60	$ 1,269.19	$ 589.18	$ 5,616.88
1935	3,917.36	1,248.46	619.88	5,785.70
1936	3,802.92	941.00	596.78	5,340.70
1937	3,748.16	1,157.42	323.20	5,228.78
1938	3,933.72	1,162.56	320.46	5,416.74

TOTAL TAX PAID IN CITY BY CENTRAL POWER COMPANY

Year	To City fund	To School fund	Total of city and school	School levy	City levy
1934	$2,022.08	$2,864.61	$4,886.69	20.6 mills	14.50 mills
1935	1,967.14	2,950.71	4,917.85	21.8 "	14.50 "
1936	1,869.25	2,670.35	4,539.60	20.48 "	14.24 "
1937	1,882.36	2,509.81	4,392.17	19.34 "	14.24 "
1938	1,950.03	2,491.70	4,424.73	18.42 "	14.24 "
Total for 5 yrs.	9,690.86	13,487.18	23,178.04		

PIPE IN MAINS FULLY DEPRECIATED

The following quantities of pipe in mains have been fully depreciated but may have some value.

ITEM	YEAR ACQUIRED	QUANTITY
4-1/2" O.D. Steel	1900	5,480
3-1/2" " "	"	7,660
" " "	1901	1,320
" " "	1908	1,340
" " "	1909	1,390
" " "	1910	720
" " "	1911	1,422
" " "	1912	105
" " "	1914	430
" " "	1915	4,165
" " "	1916	9,375
" " "	1917	8,541
" " "	1918	5,070
2-1/2" I.D. "	1910	555
2-3/8" O.D. "	1900	2,735
" " "	1903	440
" " "	1905	1,544
" " "	1906	1,280
" " "	1907	800
" " "	1909	380
" " "	1910	3,050
" " "	1911	920
" " "	1912	3,945
" " "	1914	1,520
" " "	1915	1,218
" " "	1916	5,044
" " "	1917	4,366
" " "	1918	1,610
1-1/2" I.D. "	1905	520
" " "	1911	250
" " "	1912	150
" " "	1915	110
" " "	1916	730
" " "	1918	219
1-1/4" " "	1904	200
" " "	1905	640
" " "	1917	45

Most of these lines are laid in the older part of town where, if gas is used universally for heating, the consumption will be high and it would not be safe to use them for intermediate pressure system, so they will be very little value to the City. Many of these lines are laid under paving and it will be quite expensive to repair them if leaks occur. I do not think a main smaller than 2-3/8" has any value, as they will not carry enough gas.

METERS FULLY DEPRECIATED

There are 147 meters which have passed the age of depreciation, as follows:

YEAR ACQUIRED	NUMBER
1899	4
1900	1
1903	3
1904	7
1905	8
1906	4
1907	10
1908	7
1909	103

I do not think that a meter that has been in service for more than 30 years has much value. These meters have been used for artificial gas and may have deposits of gum in them. If the City buys this plant from the Central Power Company, I would recommend that the latter be allowed to retain all meters 30 years old or older, and that the City replace these with new meters.

SERVICE LINES FULLY DEPRECIATED

The following quantities of service line are fully depreciated, and would have a very small value.

The 3/4" and 1" lines are too small to be used for much of a heating load. Many of these lines are laid over paving and it is impossible to make inspection of them. Due to the fact that they are under paving, it would be quite expensive to repair them.

The service lines have been most difficult to place a value on, for the reason the the records are not quite as complete as they were in the case of other items.

ITEM	NUMBER	YEAR ACQUIRED	QUANTITY, FT.
3/4"	1	1899	37
1"	3	1899	111
1"	1	1900	37
1-1/4"	6	1900	222
"	10	1901	370
"	14	1902	518
3/4"	1	1903	37
1"	2	1903	74
1"	7	1904	259
3/4"	2	1905	74
1"	5	1905	185
1-1/4"	2	1905	74
1"	6	1906	222
1"	7	1907	259
1-1/4"	2	1907	74
1"	7	1908	259
1"	53	1909	1,961
1-1/4"	51	1909	1,887
1-1/4"	2	1910	74
1"	47	1911	1,739
1-1/4"	50	1911	1,850
1-1/2"	3	1911	111
2"	1	1911	37
1"	11	1912	407
1-1/4"	7	1912	259
2"	1	1916	37
1"	39	1913	1,443
1-1/4"	45	1913	1,665
1-1/2"	2	1913	74
1"	42	1914	1,554
1-1/4"	26	1914	962
1-1/2"	2	1914	74
2"	1	1914	37

1"	23	1915	851
1-1/4"	17	1915	629
1-1/2"	5	1915	185
2"	1	1915	37
1"	31	1916	1,147
1-1/4"	57	1916	2,109
1-1/2"	5	1916	185
2"	2	1916	74
1"	28	1917	1,036
1-1/4"	32	1917	1,184
1-1/2"	5	1917	185
2"	2	1917	74
1"	20	1918	740
1-1/4"	23	1918	851
1-1/2"	3	1918	111
2"	2	1918	74
1"	27	1919	999
1-1/4"	37	1919	1,369
1-1/2"	1	1919	37
2"	1	1919	37

STEEL FITTINGS IN MAINS FULLY DEPRECIATED

The following list of steel fittings in mains have been fully depreciated. These are small items.

ITEM	YEAR ACQUIRED	QUANTITY
2" T-s	1910	5
2" T-s	1916	1
3" T-s	1910	31
3" T-s	1911	1
3" T-s	1916	6
3" x 3" x 2" T-s	1909	94
2" Crosses	1909	13
2" "	1910	2
2" "	1916	1
2" "	1917	1
3" "	1909	55
3" "	1911	7
3" "	1915	2
3" "	1916	5
3" "	1919	1
4" "	1909	5
2" 45° bends	1910	4
3" " "	1910	6
3" " "	1911	7

LEAKAGE IN MAINS

It is impossible for us to determine the exact leakage in the mains. Mr. Borden has furnished us with a record of gas purchased, gas sold and gas unaccounted for from August, 1937, to July, 1939, table of which is given herewith:

Month	Gas Purchased M.C.F.	Gas Sold M.C.F.	Gas Unaccounted for M.C.F.	Percent
1937				
August	9,203	8,254	949	
Sept.	10,503	8,550	1,953	
Oct.	16,866	11,851	5,015	
Nov.	24,386	20,844	3,542	
Dec.	30,900	29,339	1,561	
1938				
Jan.	32,687	28,687	4,000	
Feb.	33,968	31,555	2,413	
Mar.	22,133	25,151	3,018	
April	20,802	21,360	558	
May	16,414	17,073	659	
June	12,891	12,864	27	
July	9,936	9,314	622	
TOTAL	240,689	234,842	15,847	6.58
August	9,944	8,939	1,005	
Sept.	12,571	10,069	2,502	
Oct.	13,928	11,144	2,784	
Nov.	26,670	21,111	5,559	
Dec.	28,843	26,623	2,220	
1939				
Jan.	31,337	30,181	1,156	
Feb.	37,224	35,669	1,555	
March	24,565	29,116	4,551	
April	25,582	24,210	1,372	
May	12,258	15,689	3,431	
June	11,550	11,189	361	
July	10,321	10,188	133	
TOTAL	244,793	234,128	10,665	4.36

The gas unaccounted for varies sharply from month to month, and the Central Power Company has spent considerable money in the last year in treating the cast iron mains to prevent leakage.

The only way accurately to determine the leakage of gas would be to block off a portion of the mains, put them under pressure, and measure the leakage. This we cannot do, as all parts of the mains are in operation.

RECOMMENDED CHANGES TO REVISE PRESENT GAS DISTRIBUTION SYSTEM.

1. Discard all mains between the west side of Minnesota Avenue and the east side of Baltimore Avenue, and from the North side of First street to the North side of 17th street, and install new mains as shown on the plans for a new system, connecting to all old pipe of the required size that lays in the right position.

Estimate of Cost

(a)	33,720 lin. ft. of 8" pipe laid	@	1.11	$37,429.20
(b)	50,525 " " " 6" " "	@	.79	39,914.75
(c)	9,580 " " " 4" " "	@	.81	5,843.80
(d)	50,830 " " " 3" " "	@	.44	22,365.20
(e)	8,905 " " " 2" " "	@	.30	2,671.50
(f)	Installing 6 regulators and regulator pits	@	700.00	4,200.00
(g)	Breaking and replacing 3015 square yards of paving	@	2.80	8,442.00
(h)	Installing 5, 8" Valves	@	112.00	560.00
(i)	Installing 5, 6" Valves	@	80.00	400.00
(j)	Installing 2, 4" Valves	@	45.00	90.00
(k)	Cutting approximately 2332 old services from old mains and reconnecting to new mains	@	5.00	11,660.00
(l)	New and larger meters and regulators necessary			20,000.00
			Cost of No. 1	$153,576.45

11. Change the portion of City South of Burlington tracks into intermediate pressure system as follows:

(a) Do away with all regulators and regulator pits.
(b) Cut 4" low pressure line at Denver Avenue and First Street from the low pressure line and tie to I. P. line on First Street and Denver Avenue.
(c) Cut 4" low pressure line at Minnesota Avenue and First street and tie to I. P. line at First Street and Minnesota Avenue.
(d) Add approximately 16,700 lin, ft. of 2" pipe and 8450 lin. ft. of 3" pipe to service houses not included in present system. Replace 2" pipe on Hastings Avenue between D & E streets with 3" pipe and tie dead ends across G, F & E streets as shown on plan for new system.
(e) Install approximately 755 individual house regulators.
(f) Install 4, 3" valves.
(g) Install 32,350 lin. ft. of new 1¼" service.
(h) Make 94 square yards of paving cuts.

Cost of Recommendation No. 2.

Items a, b & c	$ 250.00
Item d,	8,728.00
Item e,	3,775.00
Item f,	160.00
Item g,	4,470.00
Item h,	283.20
Cost of No. 3	$17,666.20

III. Change the system East of East Side Boulevard and North of the Burlington tracks to an intermediate system, as follows:

(a) Cut the 4" low pressure main at 12th Street and Minnesota Avenue and tie it into the I. P. line.
(b) Cut the 4" low pressure main at 9th Street and Minnesota Avenue and tie it into the I. P. line.
(c) Cut the 3" low pressure main at 5th street and Minnesota Avenue and tie it into the I. P. line.
(d) Cut the 4" low pressure main at 3rd Street and Minnesota Avenue and tie it into the I. P. line.
(e) Cut the 4" low pressure main at 2nd Street and Minnesota Avenue and tie it into the I. P. line on Minnesota Avenue.
(f) Tie the main on 4th Street between California Avenue and Turner Avenue into the main on California Avenue.
(g) Install approximately 800 individual house regulators.
(h) Replace the two inch lines on University Avenue from East Side Boulevard to Turner Avenue with 3" lines.
(i) Replace 2" line on 4th Street from California Avenue to East Side Boulevard with a 3" line.
(j) Run a 4" I. P. main from 9th Street to 3rd Street on East Side Boulevard and tie all dead ends on University Avenue, 7th Street, 6th Street, 5th Street and 4th Street into it.
(k) Run a 4" I. P. line to Hastings College from 9th Street and Minnesota Avenue.
(l) Run a 2" I. P. line to the Alcott School from 3rd Street and Minnesota Avenue.
(m) Install 5 valves.
(n) Paving cuts involved 280 square yards.

Cost of Recommendation No. 3.

Items a, b, c, d & e.	$ 375.00
Item f,	132.00
Item g,	4,000.00
Item h,	1,672.00
Item i,	440.00
Item j,	1,464.00
Item k,	1,708.00
Item l,	570.00
Item m,	248.00
Item n,	784.00
Total Cost of No. 3.	$11,393.00

IV. Run a 12" I. P. line from the South city limits to First Street and Minnesota Avenue and tie into 8".

(a) 5155 lin. ft. 12" pipe laid $8,969.70

Total Cost of No. 4. $ 8,969.70

V. Change the Section North of the Burlington Tracks and West of Baltimore Avenue into an Intermediate system as follows:

(a) Extend 3" pipe on Boyce Street 900 feet and tie into I. P. line on Baltimore Avenue.
(b) Tie 3" line on Crane Avenue between Boyce and 6th Street into line on 8th Street.
(c) Cut 3" line at 8th Street and Baltimore Avenue from low pressure and tie it to I. P. line on Baltimore Avenue.
(d) Tie mains on 8th Street and 7th Street together by laying a 3" main on Barnes from 7th to 8th Street.
(e) Cut 3" low pressure line at 7th Street and Baltimore Avenue and tie to 8" I. P. line on Baltimore Avenue.
(f) Extend 3" main on 6th Street from end to West Lawn Avenue.
(g) Cut 3" low pressure line at 6th Street and Baltimore Avenue and tie it to 8" I. P. on Baltimore Avenue.
(h) Cut 3" low pressure line at 5th Street and Baltimore Avenue and tie it to 8" I. P. on Baltimore Avenue.
(i) Cut 3" low pressure line at 4th Street and Baltimore Avenue and tie it to 8" I. P. on Baltimore Avenue.
(j) Cut 3" low pressure line at 3rd Street and Baltimore Avenue and tie it to 8" I. P. on Baltimore Avenue.
(k) Cut 3" low pressure line at 2nd Street and Baltimore Avenue and tie it to 8" I. P. on Baltimore Avenue.

(l) Change the 3" main on 4th Street to, two 3" mains, one on each side of paving.
(m) Install approximately 409 individual house regulators.
(n) Install 7 - 3" valves.

Cost of Recommendation No. 5.

Items c, e, g, h, i, j, k.	$ 535.00
Item a,	396.00
Item b,	88.00
Item d,	220.00
Item f,	538.00
Item l,	1,848.00
Item m,	2,045.00
Item n,	238.00
Total Cost of No. 5.	$5,868.00

Grand total of all revisions - - - - - $197,493.35

The portions to be turned into intermediate pressure must be isolated and tested to see if they will withstand the pressure before using them for such.

ACTUAL VALUE TO CITY OF HASTINGS, NEBRASKA

The appraisal report shows the total value of the property and equipment owned by the Central Power Company to be $142,656.99 for rate making purposes. However, due to the fact, they will be a large portion of the mains in the present system that cannot be used and will be a total loss to the city, we feel the actual value, to the City of Hastings, of the present gas distribution system owned by the Central Power Company is as follows:

21,570 lin. ft. of 2" pipe useable	$2473.70
67,377 " " " 3" " "	9,109.15
11,942 " " " 4" " "	4,508.98
990 " " " 6" " "	995.50
18,064 " " " 8" " "	23,263.71
Total value of pipe useable	$40,351.04
Meters (All useable)	27,948.04
Service Regulators (All useable)	737.73
Service Lines (Useable)	5,310.63
Fittings in Mains (Useable)	936.72
Valves in Service lines (Useable)	203.47
Valves in Mains (Useable)	707.39
Casings under Railroads & Pavements (Useable)	848.19
Regulator Buildings, Pits, Regulator piping and valves (Useable)	4,346.62
Work completed Since August 1, 1939	1,683.15
Total	$83,072.98

The value of the useable part of the distribution system is $83,072.98. There is a portion of the fittings, taken in the inventory that are not new, and a portion that could not be used by the city because of their size. Therefore we would not deem it a wise investment for the city to offer the Central Power Company over $100,000.00 for their entire real estate, equipment and distribution system within the city limits of the City of Hastings, Nebraska.

The above offer is intended to include:

(1) All distribution mains within the city limits of Hastings Nebraska, owned by Central Power Company.

(2) All main line regulators, valves and regulator pits and houses within the city limits of Hastings, Nebraska, owned by Central Power Company

(3) All meters within the city limits of Hastings, Nebraska, owned by Central Power Company.

(4) All service regulators and service valves and cocks within the city limits of Hastings, Nebraska, owned by Central Power Company

(5) All services within the city limits of Hastings, Nebraska, owned by Central Power Company.

(6) All pipe, valves, fittings, etc., in stock exceot those smaller in size than 1¼" within the city limits of Hastings, Nebraska, owned by Central Power Company.

(7) All testing equipment and gauges within the city limits of Hastings, Nebraska, owned by Central Power Company.

(8) All tools and safety equipment within the city limits of Hastings, Nebraska, owned by Central Power Company.

(9) All repair parts for meters, regulators, etc., within the city limits of Hastings, Nebraska, owned by Central Power Company.

(10) All trucks owned and operated by Central Power Company within the city limits of Hastings, Nebraska.

(11) All real estate owned by Central Power Company within the city limits of Hastings, Nebraska.

(12) All records pertaining to meters, location of meters, mains and services within the city limits of Hastings, Nebraska and owned by the Central Power Company.

The itemized statement above is intended to include all real estate, improvements, equipment, etc. owned by the Central Power Company within the city limits of Hastings, Nebraska, except their merchandise such as furnaces, stoves, water heaters and their repairs and accessories, the small fittings below 1¼" in size and the office equipment and supplies, such as desks, chairs, adding machines, files, stationery, etc.

ENGINEER'S REPORT ON THE PROPOSED MUNICIPAL GAS SYSTEM FOR HASTINGS, NEBRASKA.

To the Mayor and Council,
Hastings, Nebraska.

Gentlemen:-

We herewith submit you our report on the proposed Municipal Gas system, for which it will be necessary to invest the sum of $388,000.00. This report contains various tables, separately headed, and is subdivided into portions treating various parts of the report. We also show a comparison of expense to your citizens, based on the existing franchise rates as compared with rates proposed for Municipal gas, and an estimate of financing to retire the investment in the construction of the plant.

Source of Supply

The City of Hastings can obtain gas from a pipe line which would be constructed for that purpose from the gas fields in Kansas or fields in Oklahoma which has been investigated by your gas committee.

Consumption

In working up our amortization of the cost of your gas system, we have assumed that the city would be able to secure 3959 domestic and small business connections, together with the power plant, churches, schools, large industrial companies, hospitals, court house and the post office, also the commerical connections such as the Clarke Hotel, Penney Company, Hadgett Brothers, etc. within the first year.

The 3959 domestic and small business users have been divided into the following classifications in accordance with the information gained from the preliminary survey.

396	class	A	users	using	24M/year
307	"	B	"	"	50M/year
100	"	C	"	"	85M/year
200	"	D	"	"	110M/year
743	"	E	"	"	150M/year
1200	"	F	"	"	200M/year
1000	"	G	"	"	250M/year
5	"	H	"	"	350M/year
8	"	I	"	"	500M/year

Table No. 1 contained in the back of this report shows the estimated amount of gas used month by month for one customer in each classification and the revenue from same. It also shows the total yearly consumption for one customer in each classification and the yearly revenue from same.

The percentages shown for the amounts of gas used each month was derived from calculating the degree days, month by month for the last five years, totaling these results and taking their average and decreasing these amounts a small degree to allow for other than heating gas.

From the classification on page #1 and the results in table #1 the total yearly domestic and small business consumption and revenue for the city of Hastings was figured as follows:

Classification	No of Meters	Amount of gas used annually	Annual Revenue
Class A	396	9,504,000	$6,161.76
Class B	307	15,350,000	7,214.50
Class C	100	8,500,000	3,393.00
Class D	200	22,000,000	8,248.00
Class E	743	111,450,000	39,379.00
Class F	1200	240,000,000	81,120.00
Class G	1000	250,000,000	82,970.00
Class H	5	1,750,000	535.85
Class I	8	4,000,000	1,268.80
	3959	662,504,000	230,320.91

The above table shows that the 3959 domestic and small business places will use 662,504,000 cubic feet per year and it can be sold to them at the following rate, first two thousand $1.00, next eight thousand at $.35 per thousand and all over 10,000 at $.30 per thousand.

There will also be 279,839,600 cubic feet per year used by the light plant and city buildings that can be sold at cost or $.18 per thousand. The amount that would be used was compiled from coal data.

There will also be 155,116,600 cubic feet per year used by commerical houses, churches, schools and institutions and can be sold at a profit of $.05 per thousand or a rate of $.23 per thousand. The large part of this consumption data was compiled from coal data, the balance was estimated.

The total of the three amounts above shows the total estimate consumption of Hastings to be 1,097,310,200 cubic feet annually.

Design of System

In designing your distribution system, we have shown an intermediate pressure line 12" in diameter from the South City limits to Minnesota Avenue and the alley North of First street, from here it extends North on Minnesota Avenue to 12th Street and along 12th Street to the power plant as a 10" line. An intermediate pressure line 8" in size starting from the 12" intermediate pressure line on Minnesota Avenue, extends West in the alley north of First Street to Burlington Avenue, thence West on Frist Street to Baltimore Avenue, thence North on Baltimore Avenue to Ninth Street, thence East along 9th Street to Bellevue Avenue and thence North on Bellevue Avenue to 12th Street, thence East along 12th Street connecting into the 10" at the power plant. An 8" intermediate pressure line also serves the hospital, auditorium and the large buildings along Hastings Avenue. A 6" intermediate pressure line also runs to the Hastings College and a 3" intermediate pressure line to the Alcott and Longfellow schools. These intermediate pressure lines form a belt around the city and are the chief source of supply. Regulators are connected into these intermediate pressure lines at positions best suited to feed the low pressure system which will serve a large majority of the consumers. These regulators are so interconnected that if it is necessary to shut down one regulator station for repairs the system will function efficiently without it. The intermediate pressure line will carry between five and fifty pounds pressure depending upon the consumption demand. The low pressure mains will carry from four to twelve ounce pressure. All mains have been placed in alleys where possible and where it is necessary to lay the mains on paved streets they have been placed on each side of the paving in the parkings.

We have provided an intermediate pressure system for the portion of the City South of the C&S railroad tracks, and each customer will be supplied with an individual service regulator. The houses are small and farther apart in this section of the city and we do not deem it a wise investment to provide a low pressure system there.

Our estimate is based entirely on new welded pipe and the leakage should be very small for a long number of years.

Financing the System

As we have stated in an earlier portion of this report we are estimating the consumption of the probable connected domestic and small business load as 662,554,000 cubic feet per year. We have also compiled data which shows your industrial load, institutional load and commerical load will be approximately 155,116,800 cubic feet per year. The power plant and city buildings have been compiled as 379,639,600 per year and from this basis we compute your maximum earnings as follows:

Dividing the total domestic and small business income of $230,320.91 by the total domestic and small business consumption of 662,554,000 we arrive at the average price paid for gas by these consumers.

$\frac{230,320.91}{662,554,000} = 0.347$ average price paid for gas per thousand by the consumer

The average income from gas	=	0.347 per thousand
Cost of domestic gas to city	=	0.250 per thousand
Average income to City	=	0.097 per thousand

Therefore the annual gross income from domestic and small business gas would be

662,554 x 0.097 = $64,267.74 income from domestic and small business

The power plant and city buildings would use

379,639,600 @ no profit - - - - - 000,000.00

The gas used by institutional and industrial concerns has been estimated as 155,116,600 cubic feet to be sold at 0.05 profit per M

155,116,600 x 0.05 = 7,755.83 income institutional and industrial

Total gross yearly income $72,023.57

We have estimated you will incur extra expenses above present operating cost approximately as follows:

	General Manager	$3,600.00	per year
2	Meter Readers	2,400.00	" "
3	Service men	4,500.00	" "
1	Main foreman	2,000.00	" "
3	Ditch laborers	3,240.00	" "
2	Office clerks	2,400.00	" "
	Incidentals	1,860.00	" "

A total expense of $20,000.00 per year.

Deducting this from the total gross earnings leaves a net of approximately $52,023.57 for financing.

As we all know, it will take most of the first year to accomplish the connecting of services before the system will be operating near to the potential load.

We are therefore making allowances for this and figuring your income for the first year at one half of the total estaimated yearly income of $38,011.78 and the second year as 2/3 of the total yearly estimated income or $45,015.72.

The cost of the system is estimated at $388,000.00 which can be retired in 15 years at 3% interest as shown in table #4, contained in the back of this report and still leave a comfortable profit for the city as shown in table #5 contained at the back of this report.

Economics

As stated before from tables Nos. 4 and 5 we have shown that this system can be paid for in 15 years and make a substantial profit for the city. Also we have shown it will save the citizens a substantial amount on their gas bills as shown in tables Nos. 1, 2 and 3.

Table No. 6 shows the number of degree days contained in each month for the years 1934, '35, '36, '37 and 1938. It also shows the total degree days of each year and the per cent of degree days contained in each month averaged over the five years. The per cent used for consumption of gas per month is shown slightly lower than the per cent of degree days per month because the consumption percentage is for the total gas used and not for heating gas alone.

We feel that in view of the experience of other cities such as Chanute, Winfield, Lyons and Halstead, Kansas, who own and operate their municipal gas distribution systems, that this report is most conservative.

We wish to call the attention of the citizens of Hastings to the fact that there will be a large amount of hand labor involved in the construction of such a system. The specifications will require that permanent residents of the city of Hastings be employed as far as possible. This will help your unemployment at a time when they need it most.

We recommend, without hesitation, that you promptly take steps to put this improvement under way as we deem it a very valuable one.

Respectfully Submitted,

F. E. Devlin
Consulting Engineer

September 11, 1939

TABLE NO. 1

Monthly Consumption Rates	Class A 24/M 1 year		Class B 50/M 1 year		Class C 85/M 1 year		Class D 110/M 1 year		Class E 150/M 1 year		Class F 200/M 1 year		Class G 250/M 1 year		Class H 350/M 1 year		Class I 500/M 1 year	
	M	$	M	$	M	$	M	$	M	$	M	$	M	$	M	$	M	$
Jan. 22%	5.28	2.15	11.0	4.10	18.7	6.41	24.2	8.06	33.0	10.70	44.0	14.00	55.0	17.30	77.0	23.90	110.0	33.80
Febr. 20%	4.8	1.98	10.0	3.80	17.0	5.90	22.0	7.40	30.0	9.80	40.0	12.80	50.0	15.80	70.0	21.80	100.0	30.80
Mar. 12%	2.88	1.31	6.0	2.40	10.2	3.86	13.2	4.76	18.0	6.20	24.0	8.00	30.0	9.80	42.0	13.40	60.0	15.80
Apr. 6%	1.44	1.00	3.0	1.35	5.1	2.09	6.6	2.61	9.0	3.45	12.0	4.40	15.0	5.30	21.0	7.10	30.0	9.80
May 2%	.48	1.00	1.0	1.00	1.7	1.00	2.2	1.07	3.0	1.35	4.0	1.70	5.0	2.05	7.0	2.75	10.0	3.80
June 1%	.24	1.00	.5	1.00	.85	1.00	1.1	1.00	1.5	1.00	2.0	1.00	2.5	1.18	3.5	1.53	5.0	2.05
July 1%	.24	1.00	.5	1.00	.85	1.00	1.1	1.00	1.5	1.00	2.0	1.00	2.5	1.18	3.5	1.53	5.0	2.05
Aug.1%	.24	1.00	.5	1.00	.85	1.00	1.1	1.00	1.5	1.00	2.0	1.00	2.5	1.18	3.5	1.53	5.0	2.05
Sept. 1%	.24	1.00	.5	1.00	.85	1.00	1.1	1.00	1.5	1.00	2.0	1.00	2.5	1.18	3.5	1.53	5.0	2.05
Oct. 4%	.96	1.00	2.0	1.00	3.4	1.49	4.4	1.84	6.0	2.40	8.0	3.10	10.0	3.80	14.0	5.00	20.0	6.80
Nov. 10%	2.4	1.14	5.0	2.05	8.5	3.28	11.0	4.10	15.0	5.30	20.0	6.80	25.0	8.30	35.0	11.30	50.0	15.80
Dec. 20%	4.8	1.98	10.0	3.80	17.0	5.90	22.0	7.40	30.0	9.80	40.0	12.80	50.0	15.80	70.0	21.80	100.0	30.80
Total for year	24/M	15.56	50/M	23.50	85/M	33.93	110M	41.24	150M	53.00	200M	67.60	250M	82.97	350/M	113.17	500/M	158.60

Table showing gas consumed month by month and revenue from samefor one individual in each classification using rates: First two thousand @ 1.00
Next eight thousand @ $.35 per thousand
All over ten thousand @ $.30 per thousand

TABLE NO. 2

Monthly Consumption Rates	Class A 24/M 1 year		Class B 50/M 1 year		Class C 85/M 1 year		Class D 110/M 1 year		Class E 150/M 1 year		Class F 200/M 1 year		Class G 250/M 1 year		Class H 350/M 1 year		Class I 500/M 1 year	
	M	$	M	$	M	$	M	$	M	$	M	$	M	$	M	$	M	$
Jan. 22%	5.28	4.78	11.0	8.58	18.7	12.43	24.2	15.18	33.0	19.58	44.0	25.08	55.0	30.33	77.0	40.23	110.0	55.08
Febr. 20%	4.8	4.42	10.0	8.08	17.0	11.58	22.0	14.08	30.0	18.08	40.0	23.08	50.0	28.08	70.0	37.08	100.0	50.58
Mar. 12%	2.88	2.88	6.0	5.28	10.2	8.18	13.2	9.68	18.0	12.08	24.0	15.08	30.0	18.08	42.0	24.08	60.0	32.58
Apr. 6%	1.44	1.64	3.0	2.98	5.1	4.65	6.6	5.70	9.0	7.38	12.0	9.08	15.0	10.58	21.0	13.58	30.0	18.08
May 2%	.48	.75	1.0	1.23	1.7	1.89	2.2	2.34	3.0	2.98	4.0	3.78	5.0	4.58	7.0	5.98	10.0	8.08
June 1%	.24	.75	.5	.75	.85	1.08	1.1	1.32	1.5	1.70	2.0	2.18	2.5	2.58	3.5	3.38	5.0	4.58
July 1%	.24	.75	.5	.75	.85	1.08	1.1	1.32	1.5	1.70	2.0	2.18	2.5	2.58	3.5	3.38	5.0	4.58
Aug. 1%	.24	.75	.5	.75	.85	1.08	1.1	1.32	1.5	1.70	2.0	2.18	2.5	2.58	3.5	3.38	5.0	4.58
Sept. 1%	.24	.75	.5	.75	.85	1.08	1.1	1.32	1.5	1.70	2.0	2.18	2.5	2.58	3.5	3.38	5.0	4.58
Oct. 4%	.96	1.21	2.0	2.18	3.4	3.30	4.4	4.10	6.0	5.28	8.0	6.68	10.0	8.08	14.0	10.08	20.0	13.08
Nov. 10%	2.4	2.50	5.0	4.58	8.5	7.03	11.0	8.58	15.0	10.58	20.0	13.08	25.0	15.58	35.0	20.58	50.0	28.08
Dec. 20%	4.8	4.42	10.0	8.08	17.0	11.58	22.0	14.08	30.0	18.08	40.0	23.08	50.0	28.08	70.0	37.08	100.0	50.58
Total for year	24/M:	25.60	50/M:	43.99	85/M:	64.96	110M:	79.02	150M:	100.84	200M:	127.66	250M:	153.71	350/M:	202.21	500/M:	274.46

Table showing gas consumed month by month and revenue from same for one individual in each classification using existing rates.

TABLE NO. 3

Comparison of existing rate and proposed municipal rate at Hastings.

Proposed Municipal rates.	Existing Rates	
First 2000 @ 1.00	First 500	.75
Next 8000 @ $.35 per M.	Next 1500	.09½ per C
All over 10,000 @ $.30 per M.	Next 3000	.08 " C
	Next 5000	.07 " C
	Next 40,000	.05 " C
	All over 50,000	.04½ " C
Minumum rate per month $1.00 for 2000 cubic feet	Minimum rate per month .75 for 500 cubic feet.	

Amount of Gas	Cost at existing rate	Cost at Municipal Rate	Saving
First Five Hundred	.75 minimum	1.00 minimum	
First Thousand	1.23	1.00 minimum	.23
First Two Thousand	2.18	1.00 minimum	1.18
First Three Thousand	2.98	1.35	1.63
First Four Thousand	3.78	1.70	2.08
First Five Thousand	4.58	2.05	2.53
First Ten Thousand	8.08	3.80	4.28
First Fifteen Thousand	10.58	5.30	5.28
First Twenty Thousand	13.08	6.80	6.28
First Twenty-five Thousand	15.58	8.30	7.28
First Thirty Thousand	18.08	9.80	8.28
First Thirty-Five Thousand	20.58	11.30	9.28
First Forty Thousand	23.08	12.80	10.28
First Forty Five Thousand	25.58	14.30	11.28
First Fifty Thousand	28.08	15.80	12.28
First Seventy Five Thousand	39.33	23.30	16.03
First Hundred Thousand	50.58	30.80	19.78
First Two Hundred Thousand	95.58	60.80	34.78

TABLE NO. 4

Table showing Bond Retirement
$388,000.00 to be retired in 14 years @ 3% interest

End year	Unpaid Bonds	Principal	Interest	Total
1st	388,000.00		11,640.00	11,640.00
2nd	388,000.00		11,640.00	11,640.00
3rd	388,000.00		11,640.00	11,640.00
4th	388,000.00		11,640.00	11,640.00
5th	349,200.00	38,800.00	11,640.00	50,440.00
6th	310,400.00	38,800.00	10,476.00	49,276.00
7th	271,600.00	38,800.00	9,312.00	48,112.00
8th	232,800.00	38,800.00	8,148.00	46,948.00
9th	194,000.00	38,800.00	6,984.00	45,784.00
10th	155,200.00	38,800.00	5,820.00	44,620.00
11th	116,400.00	38,800.00	4,656.00	43,456.00
12th	77,600.00	38,800.00	3,492.00	42,292.00
13th	38,800.00	38,800.00	2,328.00	41,128.00
14th		38,800.00	1,164.00	39,964.00
15th				

TABLE NO. 5

End year	Gross Income	Total Expense	Amount in Gas Fund
1st	36,011.78	31,640.00	4,371.78
2nd	48,015.72	31,640.00	20,747.50
3rd	72,023.57	31,640.00	61,131.07
4th	72,023.57	31,640.00	101,514.64
5th	72,023.57	70,440.00	103,098.21
6th	72,023.57	69,276.00	105,845.78
7th	72,023.57	68,112.00	109,757.35
8th	72,023.57	66,948.00	114,832.92
9th	72,023.57	65,784.00	121,072.49
10th	72,023.57	64,620.00	128,476.06
11th	72,023.57	63,456.00	137,043.63
12th	72,023.57	62,292.00	146,775.20
13th	72,023.57	61,128.00	157,670.77
14th	72,023.57	59,964.00	169,730.34
15th	72,023.57	20,000.00	221,753.91

No allowance has been made for increase in gas after the first two years. The actual total new profit to the city after 15 years would be the amount in the gas fund at that time minus taxes that would have been paid by the Gas Company in the 15 years which amounts to between $4000.00 and $5000.00 per year.

TABLE NO. 6

Number Degree Days

	1934	1935	1936	1937	1938
Jan.	1025	1149	1401	1632	1113
Febr.	925	832	1510	1087	978
Mar.	811	609	667	909	389
Nov.	667	895	798	786	694
Dec.	1206	1075	1089	1061	1015
Total	4634	4560	5465	5465	4189

Percent of Degree Days Per Month

	1934	1935	1936	1937	1938	5 yr. average
Jan.	22.12	25.20	25.64	29.68	26.56	25.84
Febr.	19.96	18.25	27.47	19.89	23.35	21.78
Mar.	17.50	13.36	12.20	16.63	9.30	13.80
Nov.	14.39	19.63	14.60	14.38	16.57	15.91
Dec.	26.03	23.57	19.93	19.41	24.23	22.63

Estimate of New System

(1) Furnishing pipe, laying pipe, Welding pipe, backfilling trench, etc., approximately

(a)	5,155	lin. ft.	12"	pipe @	$1.74	$ 8,969.70	
(b)	5,725	"	10"	"	1.48	8,473.00	
(c)	37,420	"	8"	"	1.11	41,536.20	
(d)	5,465	"	8"	"	1.31	7,159.15	
(e)	73,225	"	6"	"	0.79	57,847.75	
(f)	53,180	"	4"	"	0.61	32,439.80	
(g)	97,245	"	3"	"	0.44	42,787.80	
(h)	75,825	"	2"	"	0.30	22,747.50	$221,960.90

(2) Furnighing pipe, laying pipe, Welding pipe, backfilling trench, etc., approximately the following services.

(a)	400	Lin. ft.	4"	pipe @	0.61	$ 244.00	
(b)	500	"	3"	"	0.44	220.00	
(c)	10,000	"	2"	"	0.30	3,000.00	
(d)	140,910	"	1¼"	"	0.20	28,182.00	31,646.00

(3) Furnishing material and constructing complete 14 regulator and regulator pits.

(a)	5 regulator pits with 6" x 6" regulators @ $700.00	3,500.00	
(b)	9 regulator pits with 4" x 4" regulators @ $500.00	4,500.00	8,000.00

(4) Furnishing and setting with valve boxes complete

(a)	1 - 10" valve and box @ $190.00	190.00	
(b)	9 - 8" valves and boxes @ $112.00	1,008.00	
(c)	7 - 6" " " " @ 80.00	560.00	
(d)	6 - 4" " " " @ 45.00	270.00	
(e)	6 - 3" " " " @ 34.00	204.00	
(f)	2 - 2" " " " @ 23.00	46.00	2,278.00

(5)	Furnishing and setting complete.			
(a)	703 - #0 meters @ $11.65		$ 8,189.95	
(b)	2544 - #1 " @ 15.00		38,160.00	
(c)	1163 - #2 " @ 23.00		26,749.00	
(d)	41 - #3½ " @ 80.00		3,280.00	
(e)	2 - #3 " @ 100.00		200.00	
(f)	7 - #4 " @ 186.78		1,307.46	
(g)	1 - Wide range-orfice meter for power plant		250.00	78,136.41
(6)	Furnishing and installing complete			
(a)	1196 - 1¼" service regulators, injector type B #1 @ $4.50		5,382.00	
(b)	16 service regulators, injector type B #2 @ $15.00		240.00	
(c)	16 service regulators, injector type B #3 @ $40.00		640.00	
(d)	3 - 2" balance type regulators @ $107.00		321.00	
(e)	1 - 3" balance type regulator @		150.00	6,733.00
(7)	Making 4124 welded service connections @		2.00	8,248.00
(8)	Cutting and replacing 2220 square yards of paving @ $2.80			6,216.00
(9)	Tunneling			
(a)	3800 lin. feet of paving @ $1.00		3,800.00	
(b)	680 lin. " " railroad crossing @ $2.50		1,700.00	5,500.00
	Total amount of estimate			$368,718.31
	Add 5% for engineering, printing and attorney fees			18,435.92
	Grand Total			$387,154.23

Comparison of Amounts of Pipe in New proposed system and the present existing system.

Size of Pipe a	Lin. ft. in the existing system	Lin. ft. in new proposed system
1¼"	2,849	None
1½"	3,037	None
2"	59,593	75,825
2½"	555	None
3"	117,382	97,245
4"	32,057	53,180
6"	13,271	73,225
8"	18,064	62,885
10"	265	5,725
12"	290	5,155

Pipe in new mains changed to equivalent of 3" pipe

1	of 2"	=	.44	feet	of 3"	in	capacity
1	of 3"	=	1.00	"	" 3"	"	"
1	of 4"	=	1.77	"	" 3"	"	"
1	of 6"	=	4.00	"	" 3"	"	"
1	of 8"	=	7.11	"	" 3"	"	"
1	of 10"	=	11.11	"	" 3"	"	"
1	of 12"	=	15.99	"	" 3"	"	"

75,825	x 0.44	=	33,363.0
97,245	x 1.00	=	97,245.0
53,180	x 1.77	=	94,128.6
73,225	x 4.00	=	292,900.0
42,885	x 7.11	=	304,912.4
5,725	x 11.11	=	63,604.8
5,155	x 15.99	=	82,428.5

Total 3" equivalent of new system 968,582.30 lin. ft.

$$\frac{968,582.30}{5280} = 183.44 \text{ miles}$$

Pipe in present system changed to equivalent of 3" pipe

2849	x 0.17	=	484.3
3039	x 0.28	=	850.9
59,593	x 0.44	=	26,220.9
555	x 0.69	=	383
117,382	x 1.00	=	117,382
32,057	x 1.77	=	56,740.9
13,271	x 4.00	=	53,084.0
18,064	x 7.11	=	128,435.0
265	x 11.11	=	2,944.2
290	x 15.99	=	4,637.1
			391,162.3

$$\frac{391,162.3}{5280} = 74.08 \text{ miles}$$

Comparison of Amounts of Pipe in New proposed system and the present existing system.

Size of Pipe q	Lin. ft. in the existing system	Lin. ft. in new proposed system
$1\frac{1}{4}$"	2,849	None
$1\frac{1}{2}$"	3,037	None
2"	59,593	75,825
$2\frac{1}{2}$"	555	None
3"	117,382	97,245
4"	32,057	53,180
6"	13,271	73,225
8"	18,064	42,885
10"	265	5,725
12"	290	5,155

Pipe in new mains changed to equivalent of 3" pipe

1	of 2"	=	.44	feet	of 3"	in	capacity	
1	of 3"	=	1.00	"	" 3"	"	"	
1	of 4"	=	1.77	"	" 3"	"	"	
1	of 6"	=	4.00	"	" 3"	"	"	
1	of 8"	=	7.11	"	" 3"	"	"	
1	of 10"	=	11.11	"	" 3"	"	"	
1	of 12"	=	15.99	"	" 3"	"	"	

75,825	x 0.44	=	33,363.0
97,245	x 1.00	=	97,245.0
53,180	x 1.77	=	94,128.6
73,225	x 4.00	=	292,900.0
42,885	x 7.11	=	304,912.4
5,725	x 11.11	=	63,604.8
5,155	x 15.99	=	82,428.5

Total 3" equivalent of new system 968,582.30 lin. ft.

$$\frac{968,582.30}{5280} = 183.44 \text{ miles}$$

Pipe in present system changed to equivalent of 3" pipe

2849	x 0.17	=	484.3
3039	x 0.28	=	850.9
59,593	x 0.44	=	26,220.9
555	x 0.69	=	383
117,382	x 1.00	=	117,382
32,057	x 1.77	=	56,740.9
13,271	x 4.00	=	53,084.0
18,064	x 7.11	=	128,435.0
265	x 11.11	=	2,944.2
290	x 15.99	=	4,637.1
			391,162.3

$$\frac{391,162.3}{5280} = 74.08 \text{ miles}$$